

MP1552B
SDH/PDH/ATM Analyzer
Operation Manual
Vol.4
MP0123A ATM Unit

Second Edition

Read this manual before using the equipment.
Keep this manual with the equipment.

Measuring Instruments Division
Measurement Group
ANRITSU CORPORATION

DEC.
1998


Document No.: M-W1506AE-2.0


Safety Symbols

To prevent the risk of personal injury or loss related to equipment malfunction, Anritsu Corporation uses the following safety symbols to indicate safety-related information. Insure that you clearly understand the meanings of the symbols BEFORE using the equipment.

Some or all of the following symbols may not be used on all Anritsu equipment. In addition, there may be other labels attached to products which are not shown in the diagrams in this manual.

Symbols Used in Manual

WARNING  This indicates a very dangerous procedure that could result in serious injury or death if not performed properly.

CAUTION  This indicates a hazardous procedure that could result in serious injury or death if not performed properly.

NOTE: This indicates supplementary informations for operation.

Safety Symbols Used on Equipment and/or in Manual

The following safety symbols are used inside or on the equipment near operation locations, and/or in manual to provide information about safety items and operation precautions. Insure that you clearly understand the meanings of the symbols and take the necessary precautions BEFORE using the equipment.



This indicates a prohibited operation. The prohibited operation is indicated symbolically in or near the barred circle.



This indicates an obligatory safety precaution. The obligatory operation is indicated symbolically in or near the circle.



This indicates warning or caution. The contents are indicated symbolically in or near the triangle.



This indicates a note. The contents are described in the box.



These indicate that the marked part should be recycled.

MP1552B SDH/PDH/ATM Analyzer
Operation Manual Vol.4
MP0123A ATM Unit

1 July 1998 (First Edition)
1 October 1998 (Second Edition)

Copyright © 1998, ANRITSU CORPORATION.

All rights reserved. No part of this manual may be reproduced without the prior written permission of the publisher.

The contents of this manual may be changed without prior notice.

Printed in Japan

For Safety

WARNING



1. ALWAYS refer to the operation manual when working near locations at which the alert mark shown on the left is attached. If the operation, etc., is performed without heeding the advice in the operation manual, there is a risk of personal injury. In addition, the equipment performance may be reduced.
Moreover, this alert mark is sometimes used with other marks and descriptions indicating other dangers.



2. When supplying power to this equipment, connect the accessory 3-pin power cord to a 3-pin grounded power outlet. If a grounded 3-pin outlet is not available, before supplying power to the equipment, use a conversion adapter and ground the green wire, or connect the frame ground on the rear panel of the equipment to ground. If power is supplied without grounding the equipment, there is a risk of receiving a severe or fatal electric shock.

Repair

WARNING 

3. This equipment cannot be repaired by the user. DO NOT attempt to open the cabinet or to disassemble internal parts. Only Anritsu-trained service personnel or staff from your sales representative with a knowledge of electrical fire and shock hazards should service this equipment. There are high-voltage parts in this equipment presenting a risk of severe injury or fatal electric shock to untrained personnel. In addition, there is a risk of damage to precision parts.

Falling Over

4. This equipment should be used in the correct position. If the cabinet is turned on its side, etc., it will be unstable and may be damaged if it falls over as a result of receiving a slight mechanical shock.

For Safety

WARNING

Replacing Battery



Battery Fluid

LCD

5. When replacing the battery, use the specified battery and insert it with the correct polarity. If the wrong battery is used, or if the battery is inserted with reversed polarity, there is a risk of explosion causing severe injury or death.
 6. DO NOT short the battery terminals and never attempt to disassemble it or dispose of it in a fire. If the battery is damaged by any of these actions, the battery fluid may leak.
This fluid is poisonous.
DO NOT touch it, ingest it, or get in your eyes. If it is accidentally ingested, spit it out immediately, rinse your mouth with water and seek medical help. If it enters your eyes accidentally, do not rub your eyes, irrigate them with clean running water and seek medical help. If the liquid gets on your skin or clothes, wash it off carefully and thoroughly.
 7. This instrument uses a Liquid Crystal Display (LCD); DO NOT subject the instrument to excessive force or drop it. If the LCD is subjected to strong mechanical shock, it may break and liquid may leak.
This liquid is very caustic and poisonous.
DO NOT touch it, ingest it, or get in your eyes. If it is ingested accidentally, spit it out immediately, rinse your mouth with water and seek medical help. If it enters your eyes accidentally, do not rub your eyes, irrigate them with clean running water and seek medical help. If the liquid gets on your skin or clothes, wash it off carefully and thoroughly.
-

For Safety

CAUTION

Changing Fuse

1. Before changing the fuses, ALWAYS remove the power cord from the poweroutlet and replace the blown fuses. ALWAYS use new fuses of the type and rating specified on the fuse marking on the side panel of the cabinet.

CAUTION

___T indicates a time-lag fuse.

___A or F___A indicate a normal fusing type fuse.

There is risk of receiving a fatal electric shock if the fuses are replaced with the power cord connected.

Cleaning

2. Keep the power supply and cooling fan free of dust.
 - Clean the power inlet regularly. If dust accumulates around the power pins, there is a risk of fire.
 - Keep the cooling fan clean so that the ventilation holes are not obstructed. If the ventilation is obstructed, the cabinet may over-heat and catch fire.

Disposing of the product

3. The MP1552B employs a Poly-carbomonofluoride Lithium Battery. Also, the MP0111A, MP0112A, MP0113A and MP0122B use PD/LD modules and IC including arsenic. Should the MP1552B be discarded for any reason, an adequate care should be taken so that it is disposed of according to the waste disposal laws of your own country.

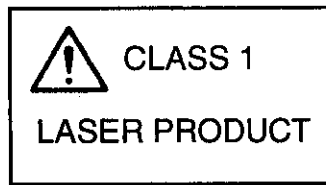
Laser Safety

The MP1552B SDH/PDH/ATM Analyzer uses laser light with the MP0111A, MP0112A, MP0113A and MP0122B optical unit. All of these light sources are intrinsically safe and it meets the class 1 of the standards below.

These laser light sources meet following standards.

Model	Standard	Class
MP0111A, MP0112A, MP0113A, MP0122B	IEC825-1	Class 1
	21CFR1040.10	Class I

The labels shown below are attached to front panel of the unit to indicate conformance to these standards.



Equipment Certificate

Anritsu Corporation certifies that this equipment was tested before shipment using calibrated measuring instruments with direct traceability to public testing organizations recognized by national research laboratories including the Electrotechnical Laboratory, the National Research Laboratory of Metrology and the Communications Research Laboratory, and was found to meet the published specifications.

Anritsu Warranty

Anritsu Corporation will repair this equipment free-of-charge if a malfunction occurs within 1 year after shipment due to a manufacturing fault, provided that this warranty is rendered void under any or all of the following conditions.

- The fault is outside the scope of the warranty conditions described in the operation manual.
- The fault is due to misoperation, misuse, or unauthorized modification or repair of the equipment by the customer.
- The fault is due to severe usage clearly exceeding normal usage.
- The fault is due to improper or insufficient maintenance by the customer.
- The fault is due to natural disaster including fire, flooding and earthquake, etc.
- The fault is due to use of non-specified peripheral equipment, peripheral parts, consumables, etc.
- The fault is due to use of a non-specified power supply or in a non-specified installation location.

In addition, this warranty is valid only for the original equipment purchaser. It is not transferable if the equipment is resold.

Anritsu Corporation will not accept liability for equipment faults due to unforeseen and unusual circumstances, nor for faults due to mishandling by the customer.

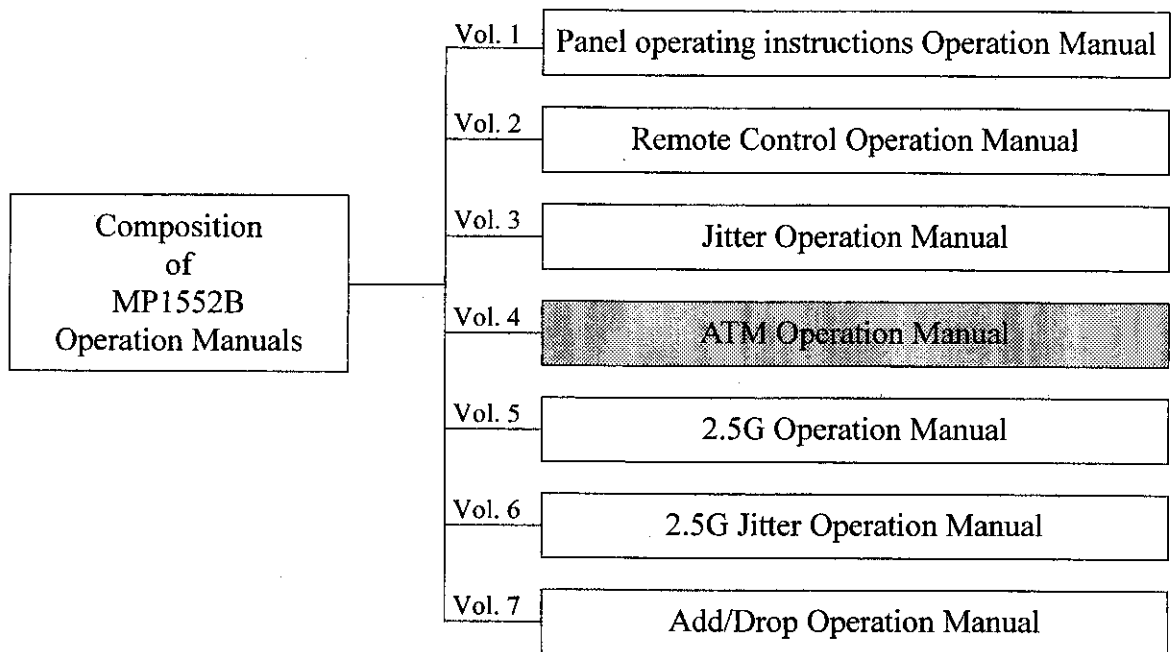
Anritsu Corporation Contact

If this equipment develops a fault, contact Anritsu Corporation or its representatives at the address in this manual.

ABOUT THIS MANUAL

Composition of MP1552B Operation Manuals

The MP1552B SDH/PDH/ATM Analyzer Operation Manuals are composed of the following 7 documents. Use them properly according to the usage purpose.



- Panel operating instructions Operation Manual:** Provides an outline of the MP1552B, and described preparation before use, manual operation (local operation: panel description, basic operating instructions, detailed operating instructions), measurement examples, performance tests, and storage and transportation.
- Remote Control Operation Manual:** Describes the remote control and program examples used for GP-IB and RS-232C interfaces. (The MP1552B complies with SCPI.)
- Jitter Operation Manual:** Describes the outline, contents of screens, operation procedures and remote control for a Jitter (Tx)/Freq. offset, jitter (Rx) and Wander.
- ATM Operation Manual:** Describes the outline, contents of screen, operation procedure, and remote control for generation and analysis of the ATM signal in the MP0123A ATM Unit.
- 2.5G Operation Manual:** Describes the outline, contents of screen, operation procedure, and remote control for generation and analysis of the 2.5G signal.
- 2.5G Jitter Operation Manual:** Describes the outline, contents of screen, operation procedure, and remote control for generation and analysis of the 2.5G Jitter.
- Add/Drop Operation Manual:** Describes the outline, contents of screen, operation procedure, and remote control for generation and analysis of the Add/Drop.

Contents

For Safety	iii
ABOUT THIS MANUAL	I
SECTION 1 OVERVIEW	1-1
1.1 Product Description	1-3
1.2 Specifications.....	1-4
1.3 Panel Description.....	1-5
SECTION 2 DESCRIPTION OF EACH SCREEN.....	2-1
2.1 Screen Configuration	2-3
2.1.1 Screen configuration	2-3
2.2 Setup Main Screen.....	2-6
2.2.1 Mapping subscreen	2-6
2.2.2 OH Preset data subscreen	2-8
2.2.3 Cell edit subscreen	2-11
2.3 Test Menu Main Screen	2-17
2.3.1 Manual subscreen (Tclayer)	2-17
2.3.2 Manual subscreen (Tx Cell)	2-18
2.3.3 Manual subscreen (Rx Cell)	2-25
2.3.4 1-point CDV subscreen	2-28
2.3.5 2-point CDV subscreen	2-29
2.4 Result Main Screen	2-30
2.4.1 Error/Alarm subscreen	2-30
2.4.2 1-point CDV subscreen	2-37
2.4.3 2-point CDV subscreen	2-38
2.5 Analyze Main Screen	2-39
2.5.1 Error/Alarm subscreen	2-39
2.5.2 OH monitor subscreen	2-40
2.5.3 CALL monitor subscreen	2-41
2.5.4 Live Monitor subscreen	2-42
2.5.5 Traffic monitor subscreen	2-46
2.5.6 Cell capture subscreen	2-48
2.5.7 1-point CDV subscreen	2-50
2.5.8 2-point CDV subscreen	2-52
2.5.9 Recall subscreen	2-54
SECTION 3 OPERATION EXAMPLES	3-1
3.1 Measurement	3-3
3.1.1 Error/Alarm test	3-3
3.1.2 1-point CDV measurement	3-6

SECTION 4	REMOTE CONTROL	4-1
4.1	Common Commands	4-3
4.2	Status Report	4-4
4.2.1	Status register configuration of MP1552B	4-4
4.2.2	Status registers specific to the MP1552B	4-5
4.3	Device Message Details	4-12
4.4	Device Specific Commands	4-13
APPENDIX A	SELF-TEST ERROR CODE LIST	A-1
A.1	Self-test Error Codes	A-3
APPENDIX B	TEXT FILE FORMAT	B-1
B.1	Test File Format	B-3
B.1.1	Live monitor analysis data	B-4
B.1.2	Traffic monitor analysis data	B-8
B.1.3	Cell capture analysis data	B-9
B.1.4	1-point CDV measurement analysis data	B-10
B.1.5	2-point CDV measurement analysis data	B-11
B.1.6	Memorized analysis data	B-12
B.1.7	AAL3/4 and AAL5 payload set data	B-13
APPENDIX C	LIST OF INITIAL VALUES	C-1
C.1	Initial value of OH Preset Data	C-3
APPENDIX D	CORRESPONDENCE BETWEEN COMMANDS AND SCREEN	D-1
D.1	Command Correspondence of the Test Menu Main Screen	D-3
D.1.1	Manual subscreen	D-3
D.1.2	1-point CDV subscreen	D-6
D.1.3	2-point CDV subscreen	D-6
D.2	Command Correspondence of the Result Main Screen	D-7
D.2.1	Error/Alarm subscreen	D-7
D.2.2	Zoom subscreen	D-8
D.2.3	Performance subscreen	D-8
D.2.4	1-point CDV subscreen	D-9
D.2.5	2-point CDV subscreen	D-9
D.3	Command Correspondence of the Analyze Main Screen	D-10
D.3.1	Error/Alarm subscreen	D-10
D.3.2	OH monitor subscreen	D-11
D.3.3	Cell monitor subscreen	D-11
D.3.4	Live monitor subscreen	D-12
D.3.5	Traffic monitor subscreen	D-13
D.3.6	Cell capture subscreen	D-14
D.3.7	1-point CDV subscreen	D-15
D.3.8	2-point CDV subscreen	D-16
D.3.9	Recall subscreen	D-17

D.4 Command Correspondence of the Setup Main screen	D-19
D.4.1 Mapping subscreen	D-19
D.4.2 OH Preset data subscreen	D-20
D.4.3 Cell edit subscreen	D-21
D.5 Command Correspondence of the Front Panel and Other Commands	D-23

SECTION 1 OVERVIEW

Table of Contents

1.1	Product Description	1-3
1.2	Specifications.....	1-4
1.3	Panel Description.....	1-5

SECTION 1 OVERVIEW

1.1 Product Description

The MP1552B SDH/PDH/ATM analyzer can generate and analyze ATM signals between 1.5 Mb/s and 622 Mb/s when the ATM unit is installed. The MP0121A 2/8/34/139/156M (CMI) unit, MP0122A/B 1.5/45/52M unit, and interface unit must be installed depending on the signal to be evaluated.

[Features]

- ATM measurement function

The following four types of AAL protocol and 0.191 are currently supported in measurement:

- 0.191
- AAL1
- AAL2
- AAL3/4
- AAL5

- Delay fluctuation measurement function

The fluctuation between received cells and cell delay fluctuation from cell transmission to cell reception can be measured.

- 1 point-CDV
- 2 point-CDV

- Live monitoring function

The cell flow rates of up to 1,023 channels can be monitored at one time.

- Traffic monitoring function

The average, maximum, and minimum values of one cell data are displayed with a bar graph and line graph.

Note when using the MP1552B SDH/PDH/ATM Operation Manual:

- When the ATM unit is used, the MP0121A 2/8/34/139/156M (CMI) unit or MP0122A/B 1.5/45/52M unit must also be used. Also refer to the operation manual for the MP0121A 2/8/34/139/156M (CMI) unit or MP0122A/B 1.5/45/52M unit.
- This operation manual describes the evaluation of the ATM signal using the MP1552B as the main body.
If the MP1552A is used as the main body instead of the MP1552B, the same measurement can be performed. In this case, read the MP1552B in this manual as the MP1552A.

SECTION 1 OVERVIEW

1.2 Specifications

Number	Item	Specifications
1	Tx cell	
1.1	STM4/1/0	
1.1.1	Frame	SOH Preset (Except B1, B2, H1, H2 and H3) POH Preset (Except B3)
1.1.2	Pointer	AU Pointer +/-Justification
1.1.3	Path Trace	J0, J1
1.1.4	Error Addition	FAS, B1, B2, B3, MS-REI, HP-REI
1.1.5	Alarm Addition	LOF, MS-AIS, MS-RDI, AU-AIS, AU-LOP, HP-RDI
1.2	139M	
1.2.1	Clock	According to MP0121A
1.2.2	Frame	G.832
1.2.3	Path Trace	OH Preset (Except Error Monitor)
1.2.4	Error Addition	TR
1.2.5	Alarm Addition	Bit All, BIP-8, REI, FAS AIS, LOF
1.3	34M	
1.3.1	Clock	According to MP0121A
1.3.2	Frame	G.832
1.3.3	Path Trace	OH Preset (Except Error Monitor)
1.3.4	Error Addition	TR
1.3.5	Alarm Addition	Bit All, BIP-8, REI, FAS AIS, LOF
1.4	2M	
1.4.1	Clock	According to MP0121A
1.4.2	Frame	G.704
1.5	45M	
1.5.1	Clock	According to MP0122A
1.5.2	Frame	G.704
1.6	PLCP	
1.6.1	Frame	G.832 OH Preset
1.6.2	Error Addition	B1, FEBE, FAS, POI
1.6.3	Alarm Addition	LOF

Number	Item	Specifications
1.7	1.5M	
1.7.1	Clock	According to MP0122A
1.7.2	Frame	G.704
1.8	Foreground Cell	
1.8.1	Distribution	CBR, Burst, CBR with CDV, Poisson, Sawtooth
1.8.2	Header Pattern	Arbitray
1.8.3	Payload Pattern	O.191
		User 16bit Word Pattern,Single PRBS9,Cross PRBS9/15/23 Edit Pattern,Time Stamp AAL1 16bit Word Pattern,Single PRBS9,Cross PRBS9/15/23 Edit Pattern,Time Stamp AAL2 CPS-PACKT: 8bit Word Pattern,Single PRBS7,Edit Pattern CPS-PDU: Time Stamp AAL3/4 CPCS-PDU: 16bit Word Pattern,Single PRBS9, Cross PRBS9/15/23 Edit Pattern SAR-PDU: Time Stamp AAL5 16bit Word Pattern,Single PRBS9,Cross PRBS9/15/23 Edit Pattern
1.8.4	Error Addition	
		Cell HEC Error(1 bit),HEC Error(2bit),User Program O.191 Lost Cell,Misinserted Cell,Errored Cell,SECB User Bit Error AAL1 Lost Cell,SNP Error,Bit Error AAL2 P Error,SN Error,OFS Error,HEC(CRC5) Error,Bit Error AAL3/4 SN Error,CRC10 Error,Segment Type Error,LI Error, Abort,CPI Error,Btag/Etag Error,Basize Error,AL Error, Length Error,Bit Error AAL5 Length Error,CRC32 Error,Abort,Bit Error

SECTION 1 OVERVIEW

Number	Item	Specifications
1.8.5	Alarm Addition	LCD, VP-AIS, VP-RDI, VC-AIS, VC-RDI, VP-CC, VC-CC
1.8.6	OAM Cell(I.610)	AIS Cell Timing : 0.1 to 10s RDI Cell Timing : 0.1 to 10s CC Cell Timing : 0.1 to 10s Loopback Cell Timing : Single User Cell Timing : 0.1 to 10s Forward Monitoring Cell Timing : 1 Cell Block Error : Lost Cell, Misinserted Cell, BIPV, SECB Backward Reporting Cell Timing : 0.1 to 1s Error : Lost Cell, Misinserted Cell, BIPV, SECB
1.8.7	Background Cell 1-10	Header, Payload Pattern : Arbitrary Distribution : 0 to 100%
1.8.8	Fill Cell	Idle Cell / Unassigned Cell

Number	Item	Specifications
2	Rx cell	
2.1	STM4/1/0	
2.1.1	Error Detection	-
2.1.2	Alarm Detection	-
2.2	139M	
2.2.1	Error Detection	FAS, BIP-8, REI
2.2.2	Alarm Detection	LOF, RDI
2.2.3	Performance Measurement	G.826
2.3	34M	
2.3.1	Error Detection	FAS, BIP-8, REI
2.3.2	Alarm Detection	LOF, RDI
2.3.3	Performance Measurement	G.826
2.4	2M	
2.4.1	Error Detection	-
2.4.2	Alarm Detection	-
2.5	45M	
2.5.1	Error Detection	-
2.5.2	Alarm Detection	-
2.6	PLCP	
2.6.1	Error Detection	FAS, B1, FEBE, EB
2.6.2	Alarm Detection	OOF, LOF, Yellow
2.7	1.5M	
2.7.1	Error Detection	-
2.7.2	Alarm Detection	-
2.8	Foreground Cell	
2.8.1	Filter	Header 4 bytes with 4-byte Mask Payload 1 byte at any Position (when AAL1 or ATM) CID (when AAL2) MID (when AAL3/4)

SECTION 1 OVERVIEW

Number	Item	Specifications
2.8.2	Measurement	<p>O.191 Cell Count,Correctable HEC Error,Uncorrectable HEC Error Non-comforming Cell, Errored Cell, Lost Cell, Misinserted Cell, SECB</p> <p>User Cell Count,Correctable HEC Error,Uncorrectable HEC Error Non-comforming Cell, PRBS/Word Error</p> <p>AAL1 Correctable HEC Error,Uncorrectable HEC Error, Non-comforming Cell,CPS-PDU Count,Lost Cell, SNP Error, Uncorrectable SNP Error,PRBS/Word Error</p> <p>AAL2 Correctable HEC Error,Uncorrectable HEC Error, Non-comforming Cell,CPS-PDU Count,P Error,OSF Error, SN Error,CPS-Packet Count,HEC Error, PRBS/Word Error</p> <p>AAL3/4 Correctable HEC Error,Uncorrectable HEC Error, Non-Comforming Cell,SAR-PDU Count,CRC10 Error, MID Count,SN Error,Segment type Error,LI Error, Abort,Discarded PDU(SN Error,LI Error,Abort,COM ST Error, or EOM ST Error)CPCS-PDU Count,CPI Error,B/Etag mismatch, BA Size Error,AL Error,Length Error,Undelivered PDU, (CPI Error,B/E tag mismatch,BA Size Error,AL Error, or Length Error),PRBS/Word Error</p> <p>AAL5 Correctable HEC Error,Uncorrectable HEC Error, Non-comforming Cell,CPCS-PDU Count,Frame Size Error, Length Error,CRC32 Error,Abort,Discard PDU(Frame Size Error, Length Error,CRC32 Error,or Abort),PRBS/Word Error</p> <p>Forward Monitoring Cell Correctable HEC Error,Uncorrectable HEC Error,Lost Cell, Misinserted Cell,BIPV,SECB</p> <p>Backward Reporting Cell Correctable HEC Error,Uncorrectable HEC Error,Lost Cell, Misinserted Cell,BIPV,SECB</p>

Number	Item	Specifications
2.8.4	Alarm Detection	E3-LOF,E3-RDI (Only when 34M) E4-LOF, E4-RDI (Only when 139M) PLCP-LOF, PLCP-RAI (Only when PLCP) LCD, VP-Segment-AIS, VP-Segment-RDI, VP-Segment-LOC VP-ENDtoEND-AIS, VP-ENDtoEND-RDI, VP-ENDtoEND-LOC, VC-Segment-AIS, VC-Segment-RDI, VC-Segment-LOC, VC-ENDtoEND-AIS, VC-ENDtoEND-RDI, VC-ENDtoEND-LOC Pattern Sync. Loss (Only when PRBS/Word/Cross Cell)
2.8.5	Cell Monitor	Displays Header (5 bytes) Displays Cell Data (53 bytes)
2.8.6	Live Monitor	Cell Count Data speed (cell/s, bit/s, %) of every VP/VC Non-comforming Cell Count Number of Non-comforming Cells (cell/s) of every VP/VC Forward Monitoring Cell Displays Number of Misinserted/Lost Cells (cell) or SECB of every VP/VC Displays Alarm (AIS, RDI, LOC)
2.8.7	Cell Capture	Capture of 1 to 2016 cells Trigger : Error/Alarm of ATM Layer Trigger Point : 1 to 2016
2.8.8	1 point CDV	CDV Measurement : +/-15000 cells
2.8.9	2 point CDV	CDV Measurement : +/-15000 cells
3	Through	
3.1	Loopback point	ATM Layer
3.2	Alarm Addition	VP-AIS, VP-RDI, VC-AIS, VC-RDI
4	General	
4.1	Dimensions, mass	MP0123A : 21(H) x 255(W) x 167.6(D) mm (Excluding projections), Approx. 1kg
4.2	Temperature	0 to 50°C Operating -20 to 60°C Storage

SECTION 1 OVERVIEW

1.3 Panel Description

1.3.1 MP0123A unit (for ATM)

The panel layout is shown below. The MP0123A has no input/output connectors.



Fig. 1-3-1 MP0123A Unit

SECTION 2

DESCRIPTION OF EACH SCREEN

Table of Contents

2.1	Screen Configuration	2-3
2.1.1	Screen configuration	2-3
2.2	Setup Main Screen	2-6
2.2.1	Mapping subscreen	2-6
2.2.2	OH Preset data subscreen	2-8
2.2.3	Cell edit subscreen	2-11
2.3	Test Menu Main Screen	2-17
2.3.1	Manual subscreen (Tclayer)	2-17
2.3.2	Manual subscreen (Tx Cell)	2-18
2.3.3	Manual subscreen (Rx Cell)	2-25
2.3.4	1-point CDV subscreen	2-28
2.3.5	2-point CDV subscreen	2-29
2.4	Result Main Screen	2-30
2.4.1	Error/Alarm subscreen	2-30
2.4.2	1-point CDV subscreen	2-37
2.4.3	2-point CDV subscreen	2-38
2.5	Analyze Main Screen	2-39
2.5.1	Error/Alarm subscreen	2-39
2.5.2	OH monitor subscreen	2-40
2.5.3	Cell monitor subscreen	2-41
2.5.4	Live Monitor subscreen	2-42
2.5.5	Traffic monitor subscreen	2-46
2.5.6	Cell capture subscreen	2-48
2.5.7	1-point CDV subscreen	2-50
2.5.8	2-point CDV subscreen	2-52
2.5.9	Recall subscreen	2-54

SECTION 2 DESCRIPTION OF EACH SCREEN

2.1 Screen Configuration

2.1.1 Screen configuration

The MP1552B uses the following configuration of main screens and subscreens. In this manual, each screen is shown in "main screen:subscreen" format.

Main screen name	Subscreen name	Screen function
Setup	Mapping	Sets interface conditions for measurement target and basic items for measurement.
	Memory	Stores and reads measurement conditions and graph data on Analyze main screen.
	Print	Sets items for automatic printing.
	OH preset data	Sets overhead initial value of the send signal.
	Cell edit	Sets cell pattern, and edits and checks payload. The ATM unit must be installed to use this screen.
	System	Sets the buzzer, clock, screen color, GPIB, RS-232C, etc.
	Floppy disk	Stores and reads measurement conditions and graph data on Analyze main screen.
	Selftest	Conducts a self-test.
	Customer	Performs settings for items that cannot be set on other Setup screens.
Test menu	Trouble search	Sets trouble search measurement conditions.
	Manual	Sets manual measurement conditions.
	1-point CDV	Sets items for measuring fluctuation between received cells. The ATM unit must be installed to use this screen.
	2-point CDV	Sets items for measuring cell fluctuation from cell transmission to cell reception. The ATM unit must be installed to use this screen.

SECTION 2 DESCRIPTION OF EACH SCREEN

Main screen name	Subscreen name	Screen function
Result	Trouble search	Displays results of trouble search measurement.
	Error/Alarm	Displays results of Error/Alarm measurement.
	Justification	Displays results of justification measurement.
	Zoom	Enlarges display of Error/Alarm measurement results.
	Performance	Displays results of performance measurement.
	1-point CDV	Displays results of measuring the fluctuation between received cells. The ATM unit must be installed to use this screen.
	2-point CDV	Displays results of measuring the cell fluctuation from cell transmission to cell reception. The ATM unit must be installed to use this screen.
	B2 error	Displays B2 error measurement results.
Analyze	Trouble search	Analyzes results of trouble search measurement.
	Error/Alarm	Displays a graph of Error/Alarm measurement results.
	OH monitor	Displays results of overhead monitoring. The results of path trace monitoring are also displayed on this screen.
	Cell monitor	Monitors cells received or sent. The ATM unit must be installed to use this screen.
	Live monitor	Automatically detects cells on 1,023 channels to measure each cell. Analyzes results and displays a graph for selected 30 channels. The ATM unit must be installed to use this screen.
	Traffic monitor	Displays a graph of the number of cells that have passed the reception filter, and performs monitoring. The ATM unit must be installed to use this screen.
	Cell capture	Triggers 1 to 2,016 cells to display and analyze cell information. The ATM unit must be installed to use this screen.
	1-point CDV	Displays a graph for analyzing the results of measuring fluctuation between received cells. The ATM unit must be installed to use this screen.
	2-point CDV	Displays graph for analyzing results of measuring cell delay fluctuation from cell transmission to cell reception. The ATM unit must be installed to use this screen.
	Opt. power meter	Displays the monitoring results for optical received power.
	SOH 64frame	Captures 64 bytes by triggering set by one SOH byte or two K1 and K2 bytes.
	Recall	Displays a graph from data stored in memory or floppy disk.

Main screen name	Subscreen name	Screen function
Install	_____	Drive conditions for installation processing and guidance messages are displayed by turning the power on while pressing the History+Reset keys.
Option/ Revision	_____	This screen appears when power is turned on while pressing the Local key. The MP1552B revision number and option insertion condition are displayed.
Install (Installer program)	_____	Displayed when power is turned on while pressing Print Now key + Feed key. Installation procedure and guidance message are displayed for upgrading the installer on the Install screen.

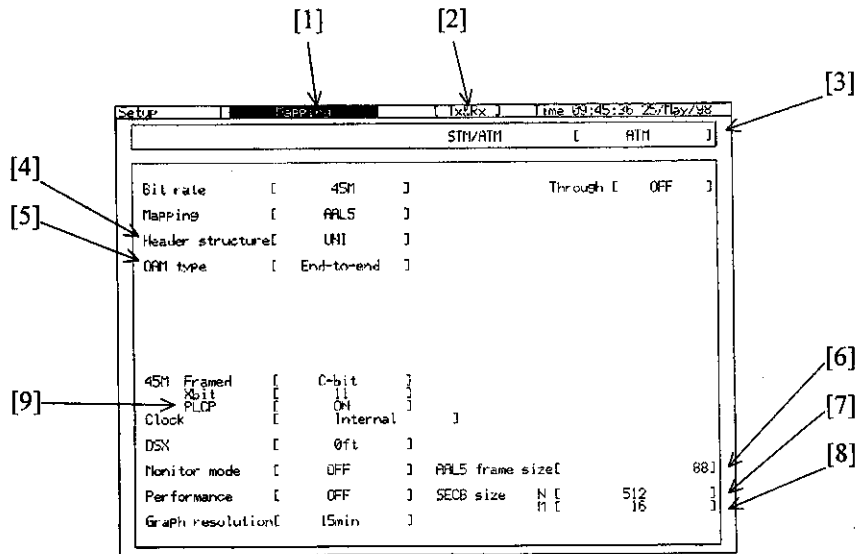
SECTION 2 DESCRIPTION OF EACH SCREEN

2.2 Setup Main Screen

2.2.1 Mapping subscreen

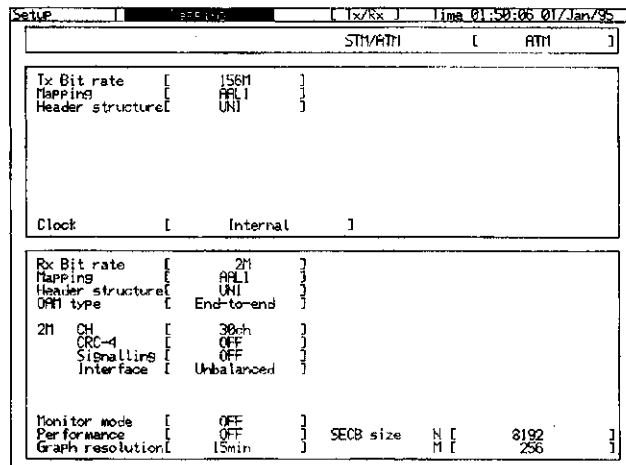
This screen performs initialization for measurement. If a setting is changed on this screen during measurement, measuring restarted. The setting for transmission and reception can be performed together under Tx&Rx or separately under Tx/Rx.

● For Tx&Rx



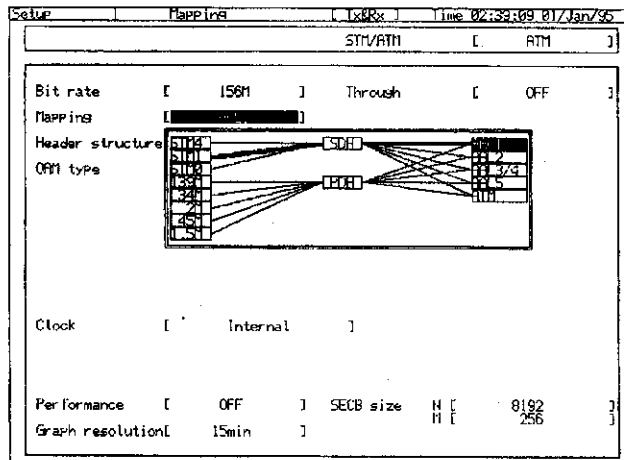
No	Display	Description
[1]	[Select subscreen]	Selects a subscreen of the Setup main screen. Select a subscreen at this position for other screens.
[2]		Selects the setting method. Tx&Rx: Makes same setting for transmission and reception. Tx/Rx: Makes separate settings for transmission and reception.
[3]	STM/ATM	Selects STM or ATM. The ATM unit must be installed to use this item.
[4]	Header Structure	Selects cell header type (UNI or NNI). The ATM unit must be installed to use this item.
[5]	OAM type	Selects OAM type (end-to-end or segment). The ATM unit must be installed to use this item.
[6]	AAL5 frame size	Sets AAL5 frame size and error threshold. Displayed when AAL5 selected for Mapping. The ATM unit must be installed to use this item.
[7]	SECB size N	Sets block size for SECB. When N is changed, M changes to the corresponding value. The ATM unit must be installed to use this item.
[8]	SECB size M	Sets threshold for SECB. When M is changed, N changes to the corresponding value. The ATM unit must be installed to use this item.
[9]	PLCP	Sets ON/OFF of PLCP at measurement with bit rate 45 M.

- When Condition = Tx/Rx



Set transmission items on the upper of the screen and reception items on the lower of the screen. The display contents are the same as Tx&Rx.

- When the mapping selection window is open

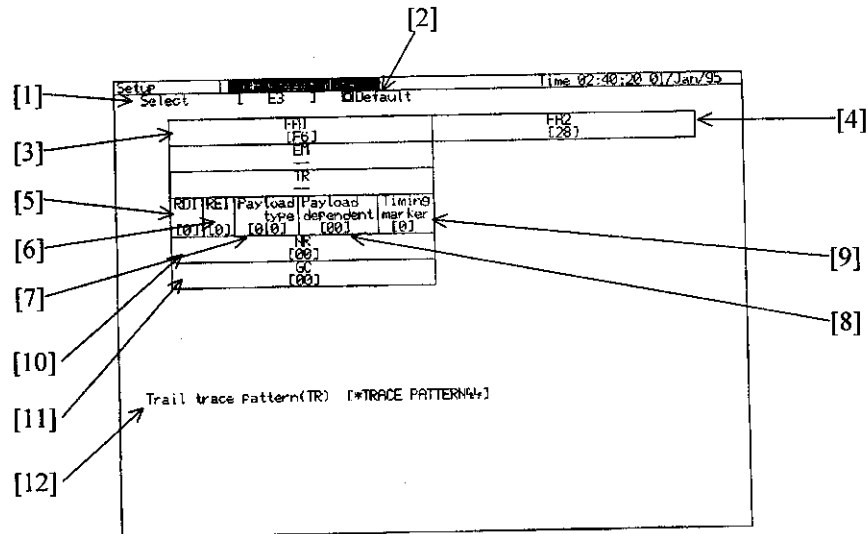


SECTION 2 DESCRIPTION OF EACH SCREEN

2.2.2 OH Preset data subscreen

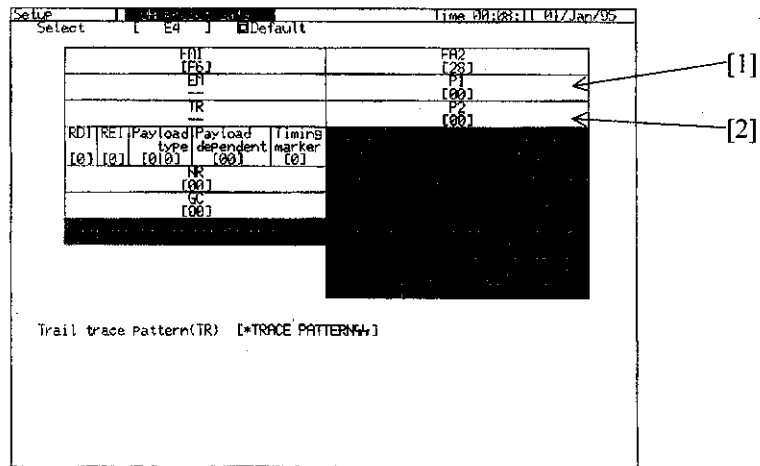
This screen sets the transmission overhead value.

- When Select = E3



No	Display	Description
[1]	Select	Selects overhead. The ATM unit must be installed to use items other than STM. E3 and E4 are displayed only when the 2/8/34/139/156 (CMI) unit is installed. DS3 PLCP is displayed only when the 1.5/45/52M (B3ZS) unit is installed.
[2]	Default	Initializes the send data.
[3]	FA1	Sets FA1.
[4]	FA2	Sets FA2.
[5]	RDI	Sets RDI.
[6]	REI	Sets REI.
[7]	Payload type	Sets payload type. Binary setting performs the changes to concurrent plain-language setting.
[8]	Payload dependent	Sets the payload.
[9]	Timing marker	Sets Timing marker.
[10]	NR	Sets NR.
[11]	GC	Sets GC.
[12]	Trail trace pattern	Sets Trail trace pattern in an ASCII character string (16 characters).

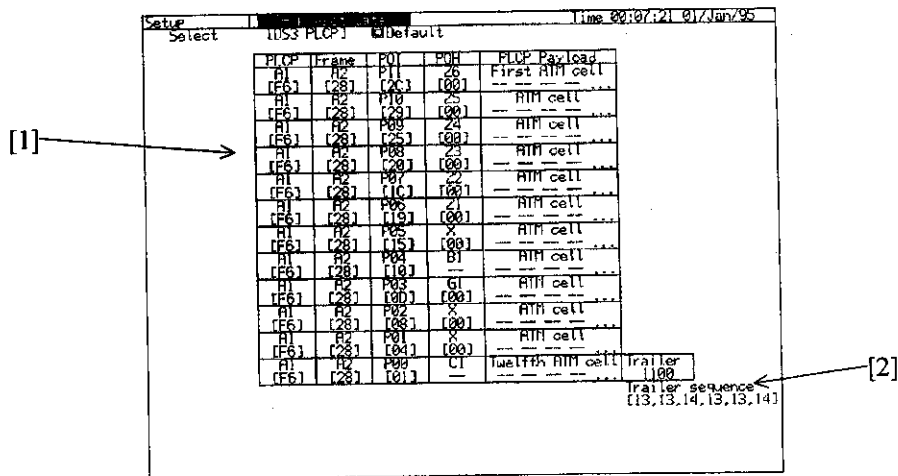
- When Select = E4



No	Display	Description
[1]	P1	Sets P1.
[2]	P2	Sets P2.

SECTION 2 DESCRIPTION OF EACH SCREEN

- When Select = DS3 PLCP

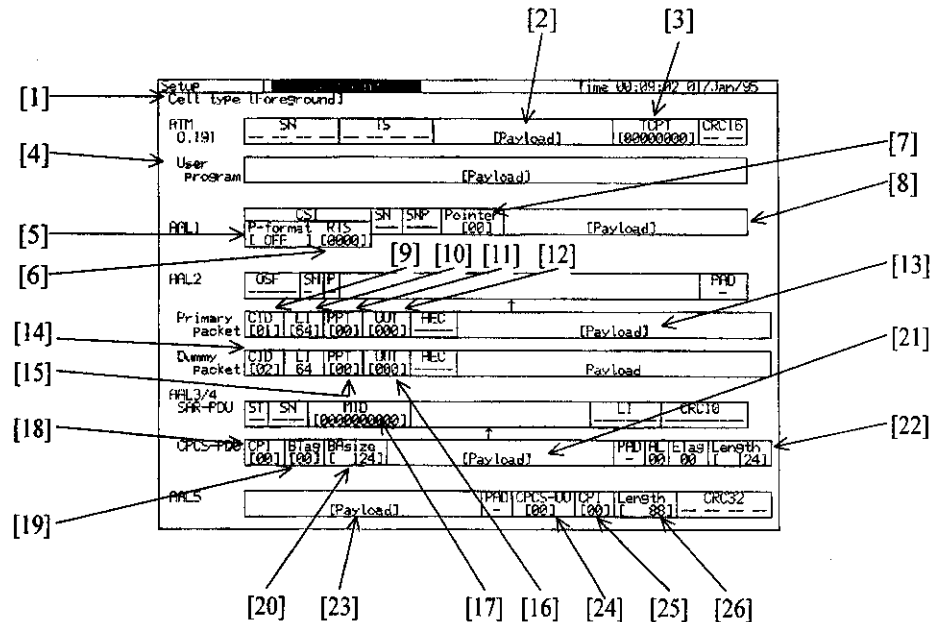


No	Display	Description
[1]		Sets overhead. B1 and C1 cannot be set.
[2]	Trailer sequence	Sets Trailer.

2.2.3 Cell edit subscreen

This screen sets the cell pattern and edits the payload.

- When Cell type = Forward

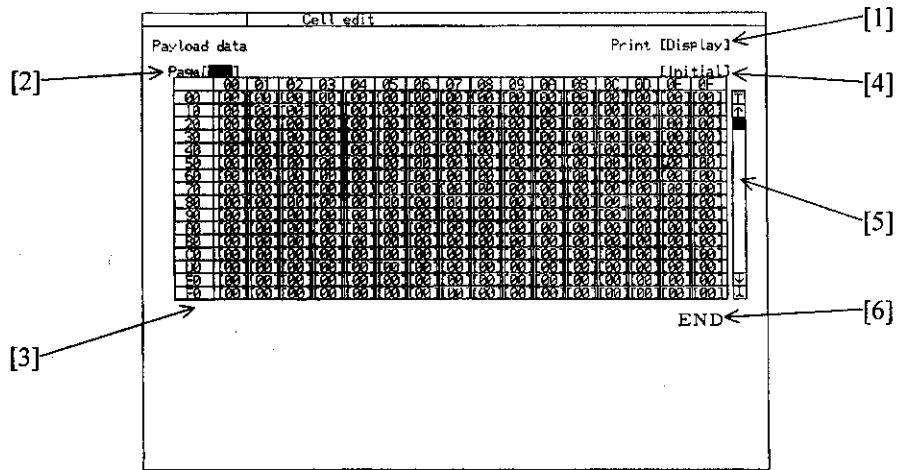


No	Display	Description
[1]	Cell type	Selects edit cell type.
[2]	Payload	Edits the payload (38 bytes) for ATM:0.191. Move the cursor to Payload and click the Set key to display the editing window. Move the cursor to a desired byte position using the cursor keys, then click the Set key to open the numeric value input window. Input a desired value in binary notation.
[3]	TCPT	Edits TCPT for ATM:0.191.
[4]	Payload	Edits payload (48 bytes) for User program. Move the cursor to Payload and click the Set key to display the editing window. Move the cursor to a desired byte position using the cursor keys, then click the Set key to open the numeric value input window. Input a desired value in binary notation.
[5]	P-format	Edits CSI P-format for AAL1.
[6]	RTS	Edits CSI RTS for AAL1.
[7]	Pointer	Sets Pointer for AAL1.

SECTION 2 DESCRIPTION OF EACH SCREEN

No	Display	Description
[8]	Payload	Edits the payload (47 bytes) for AAL1. Move the cursor to Payload and click the Set key to display the editing window. Move the cursor to a desired byte position using the cursor keys, then click the Set key to open the numeric value input window. Input a desired value in binary notation.
[9]	CID	Sets Primary packet CID for AAL2.
[10]	LI	Sets Primary packet LI for AAL2.
[11]	PPT	Sets Primary packet PPT for AAL2.
[12]	UUI	Sets Primary packet UUI for AAL2.
[13]	Payload	Sets Primary packet Payload for AAL2.
[14]	CID	Sets Dummy packet CID for AAL2.
[15]	PPT	Sets Dummy packet PPT for AAL2.
[16]	UUI	Sets Dummy packet UUI for AAL2.
[17]	MID	Edits SAR-PDU MID for AAL3/4.
[18]	CPI	Edits CPCS-PDU CPI for AAL3/4.
[19]	PTag	Edits CPCS-PDU PTag and ETag for AAL3/4.
[20]	BASize	Edits CPCS-PDU BAsize for AAL3/4.
[21]	Payload	Edits the payload for AAL3/4. Perform editing on another screen. Move the cursor to Payload and click the Set key to display the Payload data screen.
[22]	Length	Edits CPCS-PDU Length for AAL3/4.
[23]	Payload	Edits the payload for AAL5. Perform editing on another screen. Move the cursor to Payload and click the Set key to display the Payload data screen.
[24]	CPCS-UU	Edits CPCS-UU for AAL5.
[25]	CPI	Edits CPI for AAL5.
[26]	Length	Edits Length for AAL5.

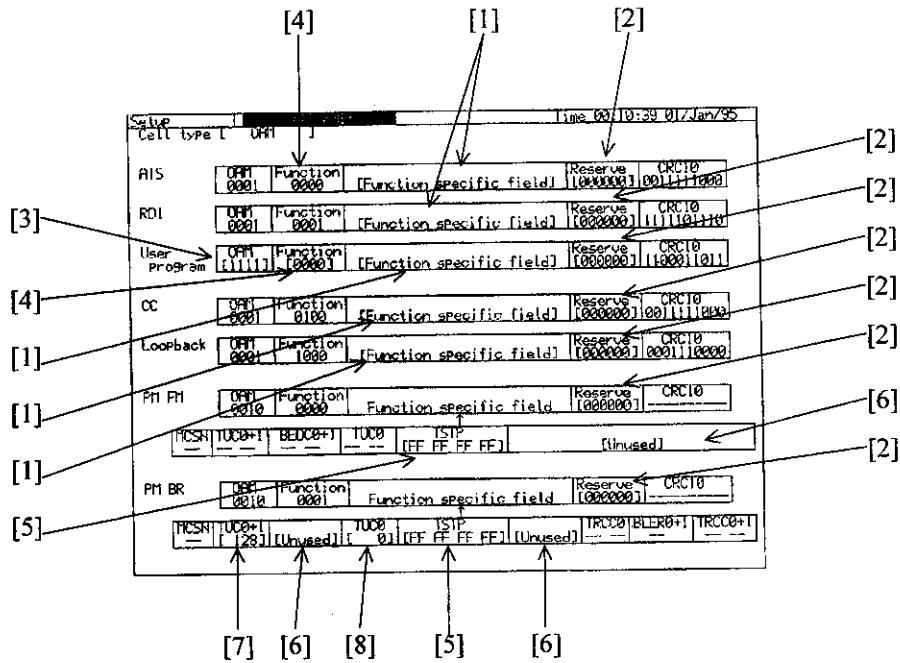
● Payload data display screen (AAL3/4, AAL5)



No	Display	Description
[1]	Print	Sets printing range.
[2]	Page	Selects page to be displayed.
[3]	(Payload)	Sets 65,535 bytes. This data is commonly used for AAL3/4 and ALL5.
[4]	Initial	Initializes data.
[5]	(Scroll)	Changes the data page displayed. ⊞ : Displays the first page. ⊥ : Displays the last page. ↑ : Scrolls the screen to display the previous page. ↓ : Scrolls the screen to display the next page.
[6]	END	Move the cursor to this item and click the Set key to redisplay the Foreground Cell display screen.

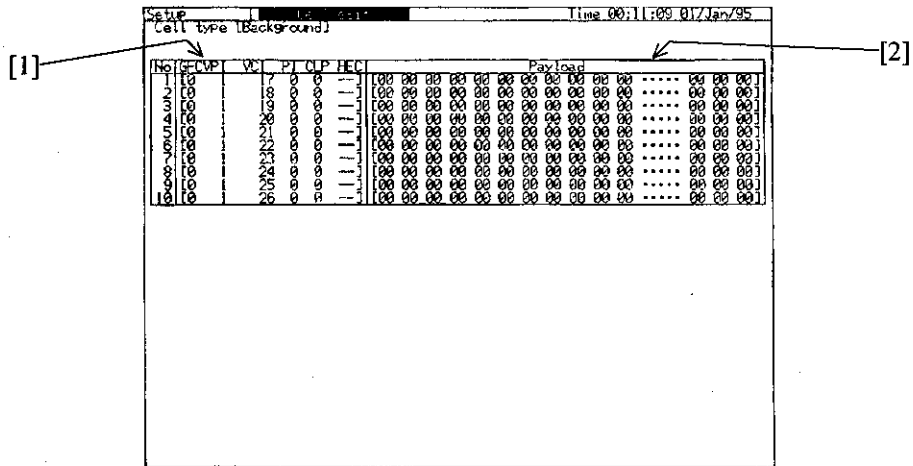
SECTION 2 DESCRIPTION OF EACH SCREEN

- When Cell type = OAM



No	Display	Description
[1]	Function Specific field	Edits the function specific fields of AIS, RDI, User program, CC, and Loopback. Move the cursor to Function Specific field and click the Set key to display the editing window.
[2]	Reserve	Edits RES of AIS, RDI, User program, CC, Loopback, PM FM, and PM BR.
[3]	OAM	Edits User program.
[4]	Function	Edits User program Function.
[5]	TSTP	Sets TSTP of PM FM and PM BR.
[6]	(Unused)	Edits Unused of PM FM and PM BR. Move the cursor to Unused and click the Set key to display the editing window.
[7]	TUCO+1	Sets TUCO+1 of PM Backward Report. Move the cursor to TUCO+1 of PM BR and click the Set key to display the editing window.
[8]	TUCO	Sets TUCO of PM Backward Report. Move the cursor to TUCO of PM BR and click the Set key to display the editing window.

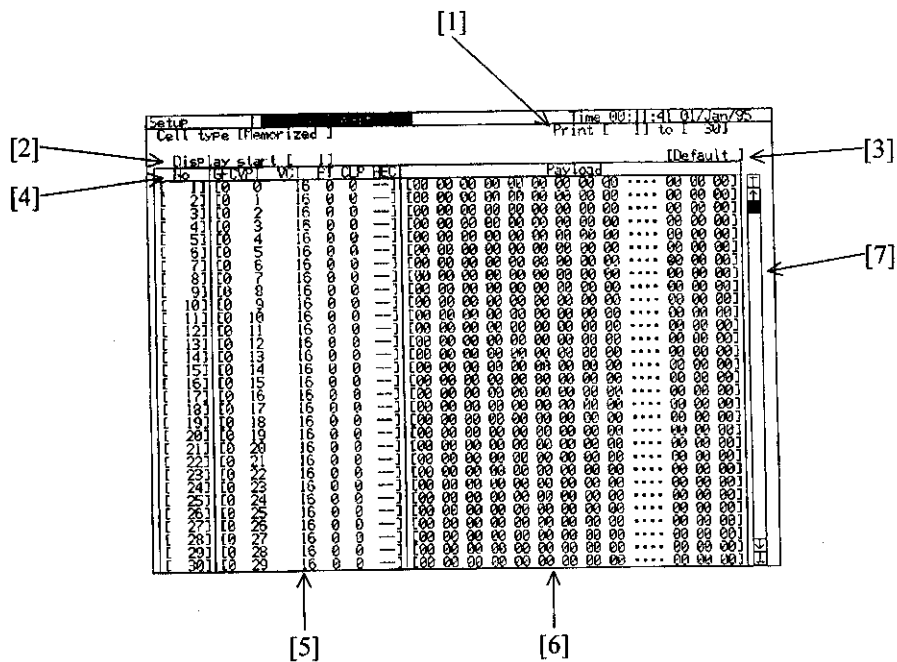
● When Cell type = Background



No	Display	Description
[1]	(Header)	Edits header pattern. Move the cursor to the header to be edited and click the Set key to display a window. The setting range is as follows: GFC : 0 to f/1 (HEX) VPI : 0 to 255/1, 04 to 095/1 VCI : 0 to 65535/1 PT : 000 to 111/1 (BIN) CLP : 0, 1
[2]	(Payload)	Edits payload pattern (48 bytes). Move the cursor to the payload to be edited and click the Set key to display a window.

SECTION 2 DESCRIPTION OF EACH SCREEN

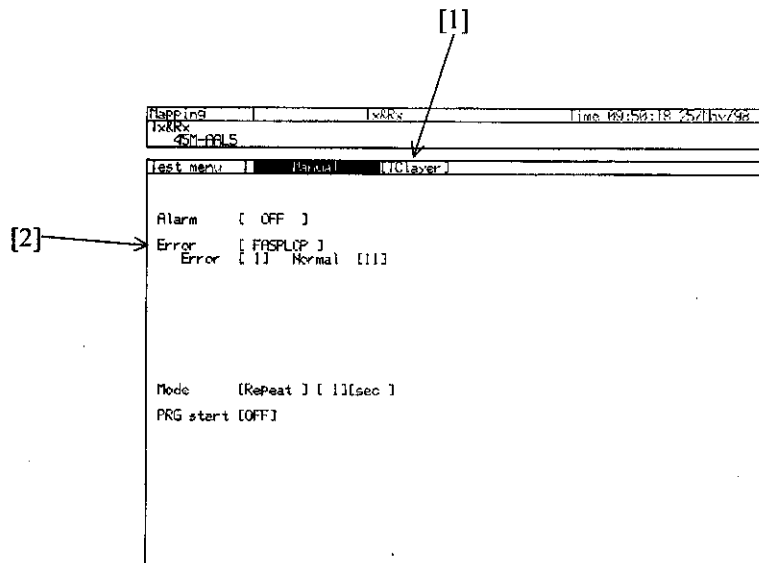
- When Cell type = Memorized



No	Display	Description
[1]	Print	Sets printing start position and end position.
[2]	Display start	Sets display start cell number (1 to 2016).
[3]		Selects data read method. Captured can be selected only when Capture data exists.
[4]	No.	Selects line-based edit operation. Move the cursor of the NO item and click the Set key to open the edit operation selection window.
[5]	(Header)	Edits the No.1 to No.2016 header patterns. Move the cursor to the header to be edited and click the Set key to open a window.
[6]	Payload	Edits the No.1 to No.2016 payload patterns. Move the cursor to the payload to be edited and click the Set key to open a window.
[7]	(Scroll)	Changes the data page displayed. ⊥ : Displays the first page. ⊤ : Displays the last page. ↑ : Scrolls the screen to display the previous page. ↓ : Scrolls the screen to display the next page.

2.3 Test Menu Main Screen

2.3.1 Manual subscreen (Tclayer)



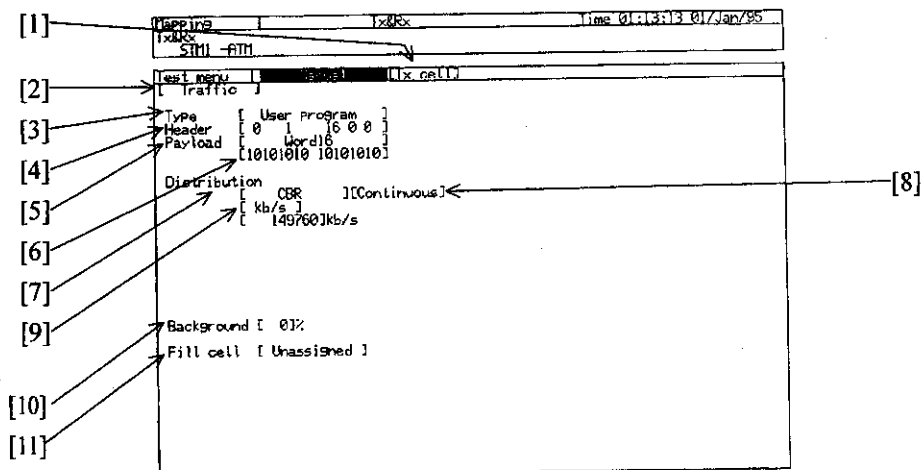
No	Display	Description
[1]		Switches the Manual subscreen. Tclayer : SDH, PDH, ATM Tx cell : ATM transmission Rx cell : ATM reception
[2]	Error	Selects the error item to be added. Error addition timing is selected from a fixed rate, single, or burst. Burst can be selected only at ATM measurement. In burst, set the number of error bits. The selected error is added when the Error key on the front panel is pressed.

SECTION 2 DESCRIPTION OF EACH SCREEN

2.3.2 Manual subscreen (Tx Cell)

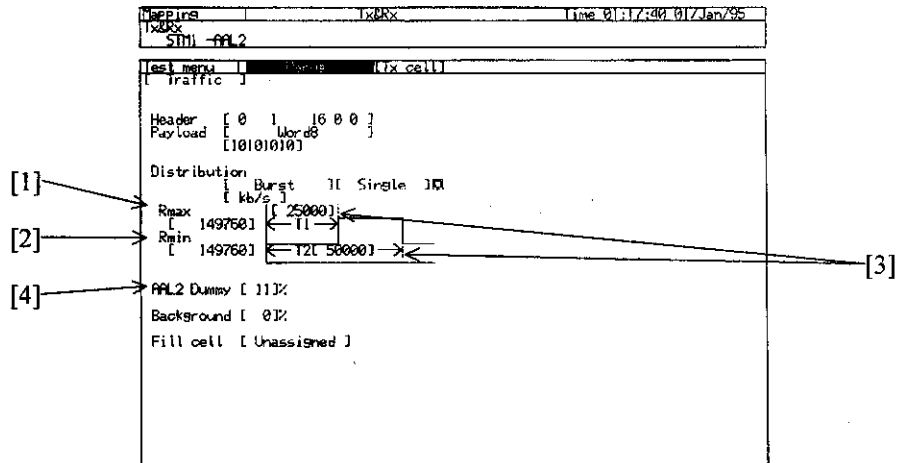
This screen sets the items for cell measurement. (Transmission)

- When (Select) = Traffic and Distribution = CBR



No	Display	Description
[1]		Switches the Manual subscreen. TClayer: SDH, PDH Tx cell: ATM transmission Rx cell: ATM reception
[2]	(Select)	Selects Manual measurement.
[3]	Type	Selects the ATM cell type. When selecting Memorized, set the number of repetitions of Memorized cells on the right. Displayed when ATM selected for Mapping.
[4]	Header	Edits header pattern. Click the Set key to open the editing window.
[5]	Payload	Sets payload type.
[6]	(Word16)	Sets word pattern when Word16 or Word8 is selected for Payload.
[7]	Distribution	Sets cell traffic type.
[8]		Selects transmission type. When Single is selected, the cell is sent by using the one-shot button. The cell sent by the one-shot button is one cell for Distribution = CBR, and are cells of one period for Distribution = Burst, CBR with CDV, and Sawtooth. One period for Distribution = CBR with CDV is 2000 cell-times.
[9]		Sets the unit (kb/s, cell/s, or %)of the Distribution setting parameter. The value is set under the unit. No parameter selection when Distribution = Poisson.
[10]	Background	Sets background cell traffic. This can be set for each the 10 background cells.
[11]	Fill cell	Selects cell (Unsigned or Idle) for Fill cell.

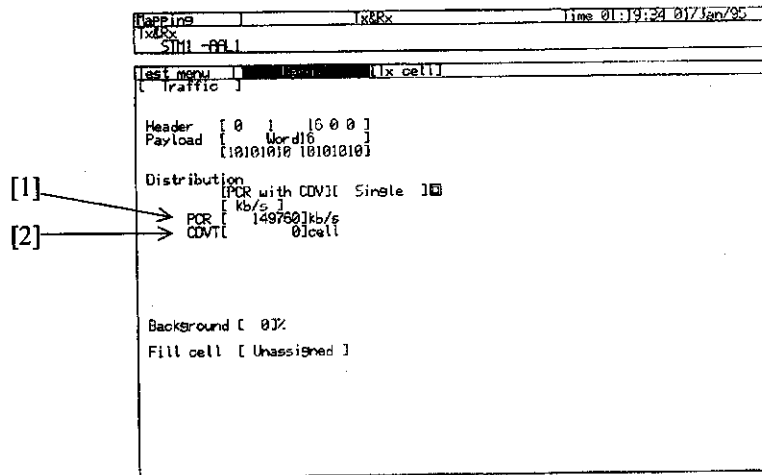
- When (Select) = Traffic and Distribution = Burst, Mapping= AAL2



No	Display	Description
[1]	Rmax	Sets Rmax. If Rmin is greater than Rmax, the same value as Rmin is set.
[2]	Rmin	Sets Rmin. If Rmax is less than Rmin, the same value as Rmax is set.
[3]	T1, T2	Sets parameter values.
[4]	AAL2 Dummy	Sets the occupied ratio of Dummy packet in the AAL2 CPS packet. Displayed when AAL2 selected for Mapping.

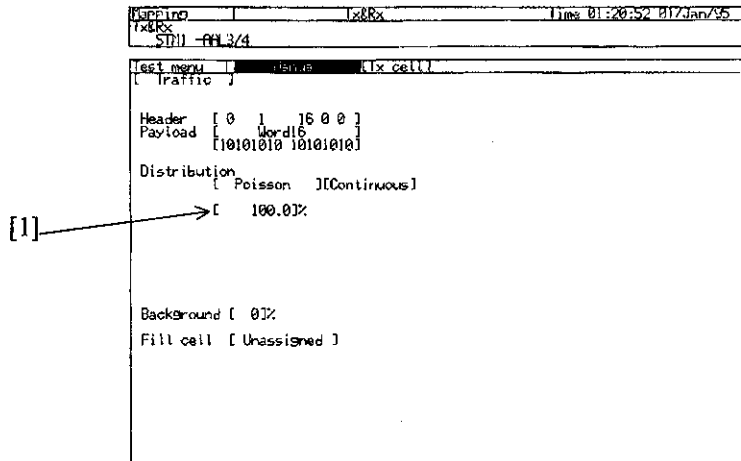
SECTION 2 DESCRIPTION OF EACH SCREEN

- When (Select) = Traffic ,Distribution = PCR with CDV, and Mapping = other than ATM/AAL2



No	Display	Description
[1]	PCR	Sets PCR.
[2]	CDVT	Sets CDVT.

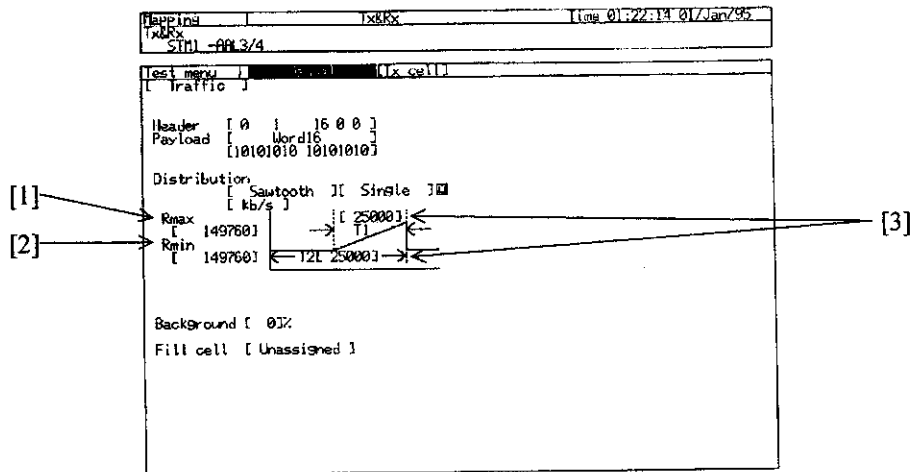
- When (Select) = Traffic ,Distribution = Poisson, and Mapping = other than ATM/AAL2



No	Display	Description
[1]	(%)	Sets Poisson.

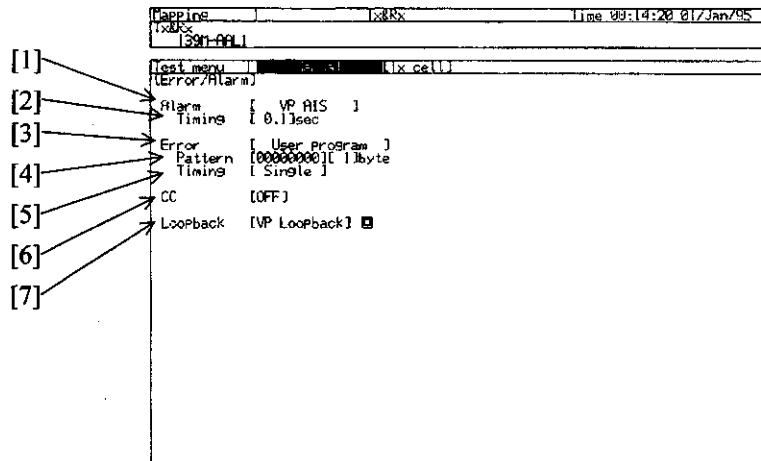
SECTION 2 DESCRIPTION OF EACH SCREEN

- When (Select) = Traffic, Distribution = Sawtooth, and Mapping = other than ATM/AAL2



No	Display	Description
[1]	Rmax	Sets Rmax. If Rmin is greater than Rmax, the same value as Rmin is set.
[2]	Rmin	Sets Rmin. If Rmax is less than Rmin, the same value as Rmax is set.
[3]	T1,T2	Sets parameter values.

- When (Select) = Error/Alarm

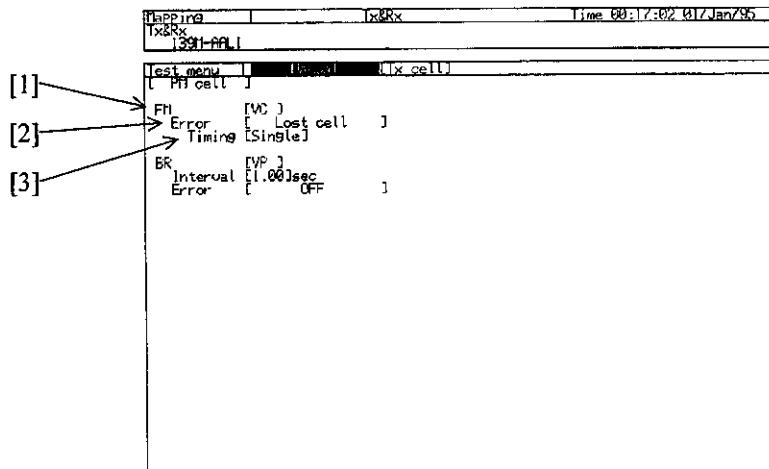


No	Display	Description
[1]	Alarm	Sets alarm addition item.
[2]	Timing	Sets alarm addition timing.
[3]	Error	Sets error addition item. Sets only when Error = User program selected.
[4]	Pattern	Sets error addition pattern.
[5]	Timing	Sets error addition timing.
[6]	CC	Sets CC cell addition.
[7]	Loopback	Sets Loopback cell type. The Loopback test starts when the one-shot button is clicked.

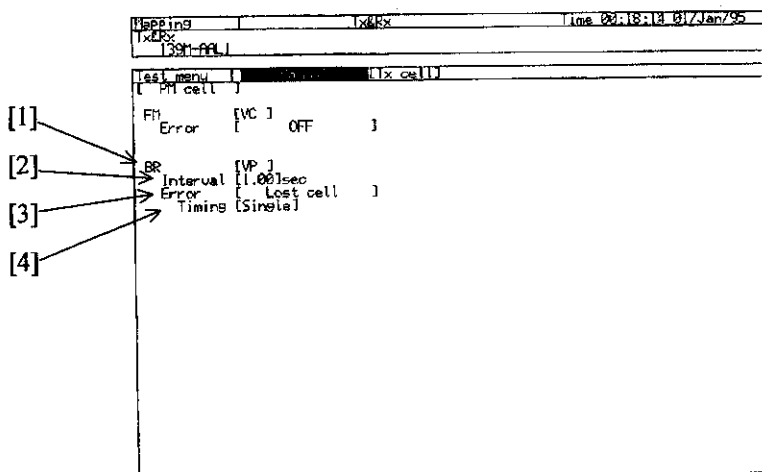
Note: The results of the Loopback test are displayed as "OK/NG/--" to the right of the item.

SECTION 2 DESCRIPTION OF EACH SCREEN

- When (Select) = PM cell



No	Display	Description
[1]	FM	Sets PM Forward Monitoring cell addition.
[2]	Error	Sets error addition item.
[3]	Timing	Sets error addition timing. Error addition is executed when the Error key is clicked.

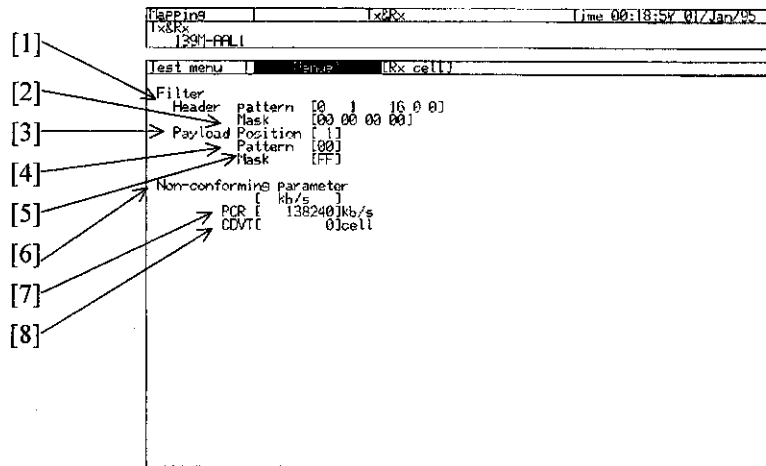


No	Display	Description
[1]	BR	Sets PM Backward Report cell addition.
[2]	Interval	Sets interval. The interval value is restricted according to the number of send cells.
[3]	Error	Sets error addition item.
[4]	Timing	Sets error addition timing. Error addition is executed when the Error key is clicked.

2.3.3 Manual subscreen (Rx Cell)

This screen sets the items for cell measurement. (Reception)

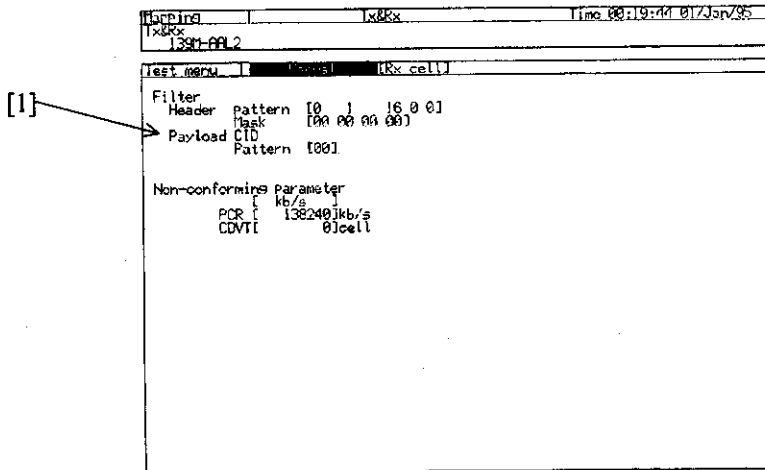
- Mapping: AAL1, AAL5, ATM



No	Display	Description
[1]	Header Pattern	Edits header filter and pattern. Move the cursor and click the Set key to open the edit operation window.
[2]	Header Mask	Edits header filter and Mask. Move the cursor and click the Set key to open the edit operation window.
[3]	Payload Position	Sets payload filter position. (AAL1, ATM)
[4]	Payload Pattern	Sets payload filter pattern. (AAL1, ATM)
[5]	Payload Mask	Sets payload filter mask. (AAL1, ATM)
[6]	Non-conforming Parameter	Specifies a Non-conforming parameter.
[7]	PCR	Sets PCR.
[8]	CDVT	Sets CDVT.

SECTION 2 DESCRIPTION OF EACH SCREEN

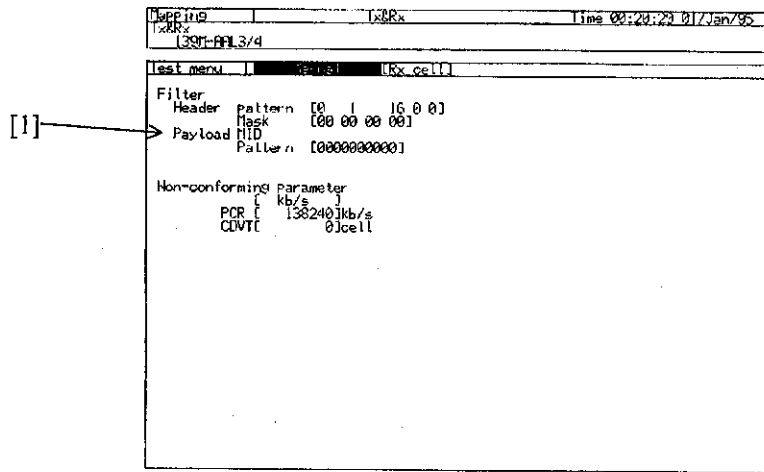
- Mapping: AAL2



No	Display	Description
[1]	Payload CID	Sets CID.

Note: CID cannot be set when the Payload setting is Time stamp on the Manual screen of the Tx cell.

● Mapping: AAL3/4



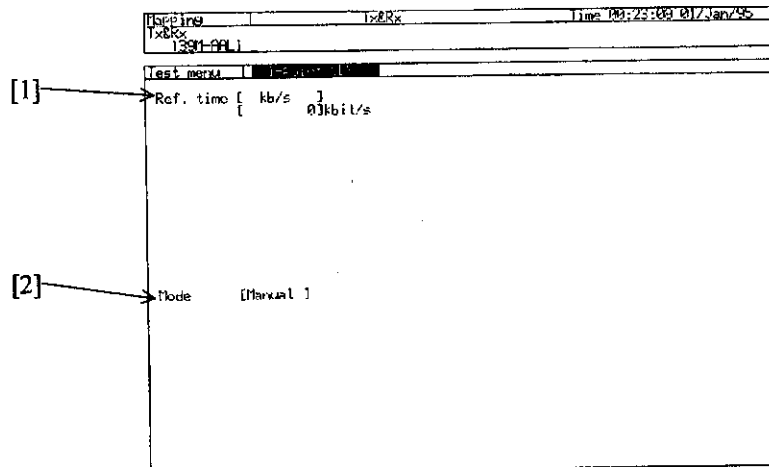
No	Display	Description
[1]	Payload MID	Sets MID.

Note: MID cannot be set when the Payload setting is Time stamp on the Manual screen of the Tx cell.

SECTION 2 DESCRIPTION OF EACH SCREEN

2.3.4 1-point CDV subscreen

This screen sets the items for measuring fluctuation between received cells.



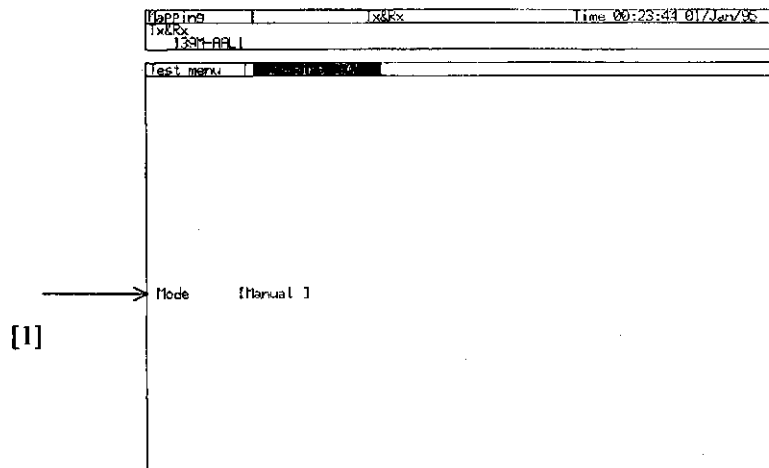
No	Display	Description
[1]	Ref.time **	Sets cell interval used as the reference in 1-point CDV measurement.
[2]	Mode **	Sets measurement mode. When setting Single, set the measurement gating period time and unit.

**
Note: When any item is changed during measurement, the 1-point CDV measurement is restarted.

When the 1-point CDV measurement is performed while setting an error insertion item on the Test menu:Manual subscreen; the inserted error becomes invalid.

2.3.5 2-point CDV subscreen

This screen sets the items for measuring cell delay fluctuation from cell transmission to cell reception.



No	Display	Description
[1]	Mode **	Sets measurement mode. When setting Single or Repeat, set the gating period time and unit.

**

Note:

When any item is changed during measurement, the 2-point CDV measurement is restarted.

- This measurement can be conducted only when the Time Stamp is inserted in Payload of Manual subscreen of Tx cell.
- When the 2-point CDV measurement is performed while setting an error insertion item on the Test menu:Manual subscreen; the inserted error becomes invalid.

SECTION 2 DESCRIPTION OF EACH SCREEN

2.4 Result Main Screen

2.4.1 Error/Alarm subscreen

This screen displays the results of Error/Alarm measurement.

- In single screen mode:

[1]

Mapping		x&Bx		Time 02:59:18 01/Jan/95	
STM1 - PLL2					
Result		Error/Alarm		Start 02:58:57 01/Jan/95	
Alarm [Second] Error [Rate] Display data [Current]					
Section	HP(HU)	Information			
P-fail	0dAIS	0d			
LOS	0dLOP	0d			
LOF	0dRDI	0d			
OP	0dSLM	0d			
AIS	0d				
RDI	0d				
B1	0.1E-03B3	0.4E-03d			
B2	0.2E-03d				
REI	0.3E-03REI	0.5E-03d			
Alarm		Error			
EVP-AIS	0dEVC-AIS	0d	SHR-PDU3.7E-03	CPS-PK14.3E-03	
EVP-RDI	0dEVC-RDI	0d	Correct2.0E-03d	CPS-HEC4.4E-03d	
EVP-LOC	0dEVC-LOC	0d	Discard3.0E-03d	4.0E-03d	4.5E-03d
EVP-AIS	0dEVC-AIS	0d	Discard3.1E-03d	4.1E-03d	
EVP-RDI	0dEVC-RDI	0d	Lost3.0E-03d	4.2E-03d	
EVP-LOC	0dEVC-LOC	0d	F1Mis1.1E-03d		
			F1BIPW3.2E-03d		
			F1SEC5.3E-03d		
			BRLog16.4E-03d	Bit	3.6E-03d
			Rising3E-03d		
LCD	0dSync.	0d	BIPW3.2E-03d		
			BRSEC5.7E-03d		

- In multiple screen mode:

[2]

Mapping		x&Bx		Time 02:59:53 01/Jan/95	
STM1 - PLL2					
Test menu		[Tx cell]			
(Error/Alarm)					
Alarm	[OFF]				
Error	[OFF]				
CC	[OFF]				
Loopback	[VP Loopback] <input type="checkbox"/>				
Result		Error/Alarm		Start 02:58:57 01/Jan/95	
Alarm [Second] Error [Rate] Display data [Current] [Tclayer/Cell]					
Section	HP(HU)	Information			
P-fail	0dAIS	0d			
LOS	0dLOP	0d			
LOF	0dRDI	0d			
OP	0dSLM	0d			
AIS	0d				
RDI	0d				
B1	0.1E-03B3	0.4E-03d			
B2	0.2E-03d				
REI	0.3E-03REI	0.5E-03d			

No	Display	Description
[1]	Alarm	Sets display alarm format.
[2]	TClayer/Cell	Switches between TClayer and Cell. TClayer goes on when STM items are displayed, Cell goes on when ATM items are displayed. Switching is accomplished by pressing a one-shot button.

Note: Alarm and the STM/ATM switch (TClayer/Cell one-shot button) is displayed only in multiple screen mode.

When the Alarm display format is set to Count, TClayr alarm cannot be displayed in Count format. Then, the label is not displayed.

When the mask is set on entire VCI of Header Mask at Manual subscreen (Rx Cell); the measurements of FM cell, BR cell, CC cell, Loop Back cell, AIS cell, and RDI cell are performed at VP.

When the mask is not set on entire VCI of Header Mask at Manual subscreen (Rx Cell); the measurements of FM cell and BR cell are performed at VC, and CC cell, Loop Back cell, AIS cell, and RDI cell are performed at VP and VC.

SECTION 2 DESCRIPTION OF EACH SCREEN

Describes the addition/detection of error related to AAL, below:

- Addition/detection of error related to AAL1

Error addition

Item to be selected	Description
LOST Cell	Skips the value at SN field.
SNP	Inverts one bit at SNP field.

Error detection

Display	Description
SAR-PDU	Counts SAR-PDU.
LOST	Counts the lost SAR-PDU calculated from SN field.
SNP	Counts SAR-PDU which involves error at SNP field.
UCorSNP	Counts SAR-PDU which involves invalid SNP field. "SAR-PDU which involves invalid SNP field" means the SAR-PDU which involves the multiple bit errors at SNP field in correction mode of AAL1 state transition, or one or multiple bit errors at SNP field in detection mode.

- Addition/detection of error related to AAL2

Error addition

Item to be selected	Description
P	Inverts the value at P field.
OSF	Sets all bits of OSF field to 1.
SN	Skips the value at SN field.
HEC(Packet)	Inverts all bits of HEC field.

Error detection

Display	Description
SAR-PDU	Counts SAR-PDU.
P	Counts SAR-PDU which involves error at P field.
OSF	Counts SAR-PDU which involves OSF field of ≥ 48 .
SN	Counts SAR-PDU which involves SN field with unexpected SN value.
CPS-PKT	Counts CPS-Packet with CID which is set at Manual subscreen (Rx Cell).
CPS-HEC	Counts CPS-Packet which involves error at HEC field. Rate display indicates the rate to the number of all CPS-Packets.

SECTION 2 DESCRIPTION OF EACH SCREEN

- Addition/detection of error related to AAL3/4

Error addition

Item to be selected	Description
CRC10	Inverts all the bits at CRC10 field.
Segment Type	Changes EOM to SSM or SSM to EOM at ST field.
Length Indicator	Sets LI = 48.
SN	Skips the value at SN field. Not inserted at SAR-PDU of ST = BOM/SSM.
Abort	Sets all the bits of LI field of SAR-PDU with ST = EOM to 1.
CPI	Sets all the bits of CPI field to 1.
B/ETag	Inverts all the bits at BTag field.
BASize	Sets all the bits of BASize field to 0.
AL	Sets all the bits of AL field to 1.
Length	Adds 1024 to the value of Length field.

Error detection

Display	Description
SAR-PDU	Counts SAR-PDU.
MID	Counts SAR-PDU with MID which is set at Manual subscreen (Rx Cell). For other than CRC10, SAR-PDU counted here becomes the measurement object, and the rate displays of SN/DiscPDU/ST/LI/Abort become the rates for SAR-PDU counted here.
CRC10	Counts SAR-PDU which involves error at CRC10 field. Rate display indicates the rate to the number of SAR-PDUs.
ST	Counts SAR-PDU which involves ST field with unexpected ST value.
LI	Counts SAR-PDU which involves error at LI field. "SAR-PDU which involves error at LI field" means the SAR-PDU in which LI is not 44 for ST = BOM/COM, other than $4 \leq LI \leq 44$ for ST = EOM, and other than $8 \leq LI \leq 44$ for ST = SSM.
SN	Counts SAR-PDU which involves SN field with unexpected SN value. Measures the continuity of SN value of SAR-PDU which composes CPCS-PDU. Does not measure the continuity of SN value between continuous SAR-PDUs which belong to the different CPCS-PDU.
Abort	Counts Abort SAR-PDU. Abort SAR-PDU is the SAR-PDU with ST = EOM and LI = 63.
DiscPDU	Counts SAR-PDU to be discarded. The "SAR-PDU to be discarded" means the SAR-PDU with ST error of BOM/EOM, SN error, or LI error, or Abort SAR-PDU.
CPCS	Counts CPCS-PDU.
CPI	Counts CPCS-PDU with none zero CPI.
B/ETag	Counts CPCS-PDU in which BTag field is not the same as ETag field.

Display	Description
BASize	Counts CPCS-PDU in which the payload length of CPCS-PDU is over the value of BASize field.
AL	Counts CPCS-PDU in which the AL field not 0.
Length	Counts CPCS-PDU in which the payload length of CPCS-PDU is different from the value of Length field.
UDevPDU	Counts CPCS-PDU with CPI error, BETag error, BASize error, AL error, or Length error.

SECTION 2 DESCRIPTION OF EACH SCREEN

- Addition/detection of error related to AAL5

Error addition

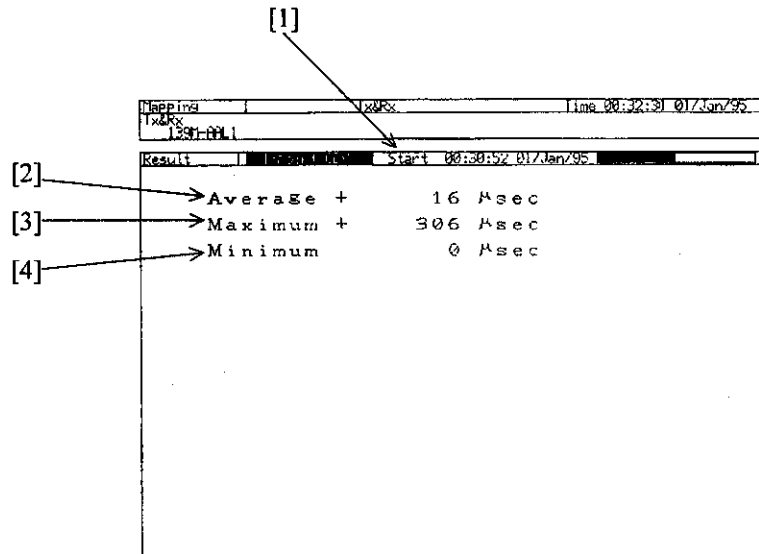
Item to be selected	Description
Length	Adds 1024 to the value of Length field.
CRC32	Inverts all the bits at CRC32 field.
Abort	Sets all the bits of Length field to 0.

Error detection

Display	Description
CPCS	Counts CPCS-PDU.
DiscPDU	Counts CPCS-PDU with none zero CPI, FRMsize error, Length error, or CRC32 error, or Abort CPCS-PDU.
FRMsize	Counts CPCS-PDU in which ALL5 frame size set at Mapping subscreen is different from the value of Length field.
Length	Counts CPCS-PDU in which the payload length of CPCS-PDU is different from the value of Length field.
CRC32	Counts CPCS-PDU which involves error at CRC32 field.
Abort	Counts Abort CPCS-PDU. Abort CPCS-PDU is the CPCS-PDU with Length = 0.

2.4.2 1-point CDV subscreen

This screen displays the results of measuring fluctuation between received cells.



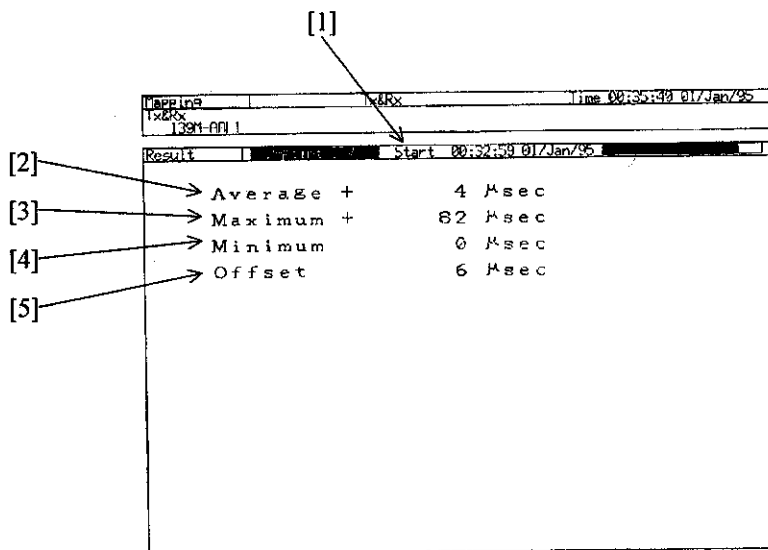
No	Display	Description
[1]	Start	Indicates measurement start time.
[2]	Average	Indicates average value.
[3]	Maximum	Indicates maximum value.
[4]	Minimum	Indicates minimum value.

Note: The display condition is held until a data erasure condition (measurement restart etc.) occurs.
When any data erasure condition is occurred, "-----" is displayed.

SECTION 2 DESCRIPTION OF EACH SCREEN

2.4.3 2-point CDV subscreen

This screen displays the results of measuring cell delay fluctuation from cell transmission to cell reception.



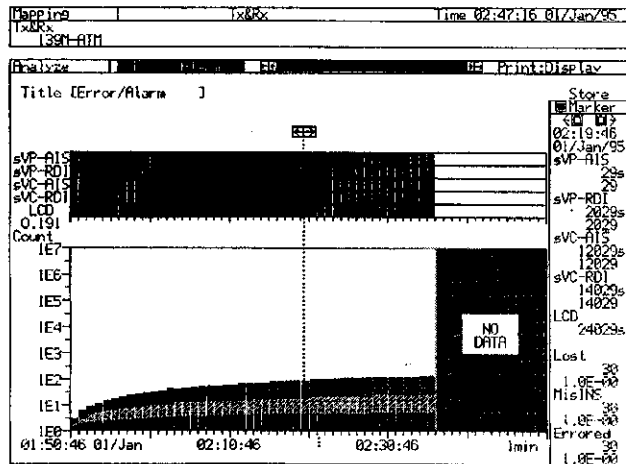
No	Display	Description
[1]	Start	Indicates measurement start time.
[2]	Average	Indicates average value.
[3]	Maximum	Indicates maximum value.
[4]	Minimum	Indicates minimum value.
[5]	Offset	Indicates offset value.

Note: The screen display is retained till the data erase condition (measurement restart etc.) is occurred.
When any data erasure condition is occurred, "-----" is displayed.

2.5 Analyze Main Screen

2.5.1 Error/Alarm subscreen

This screen analyzes the results of Error/Alarm measurement.



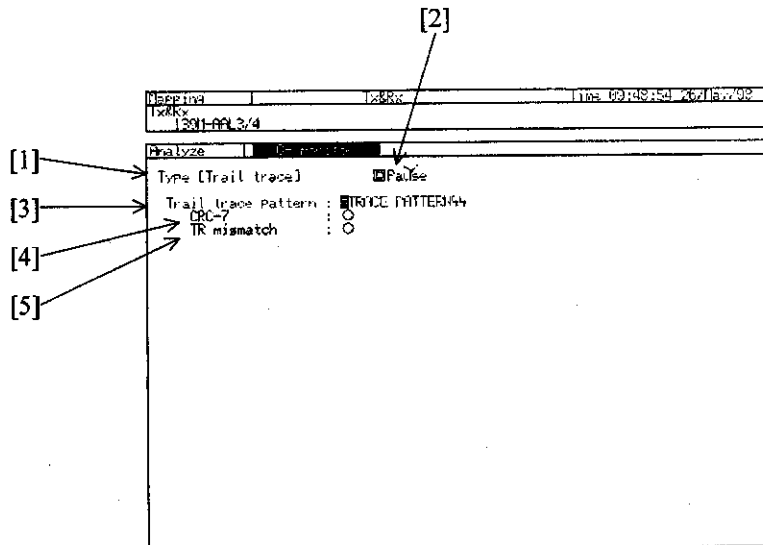
- When the ATM error item is selected to O.191, graphs are overlapped in order of Lost (red), Misinserted (green), and Errored (yellow). Color coding is based on proportions and not on measured values.
- In remote operation, the total values can be read.

SECTION 2 DESCRIPTION OF EACH SCREEN

2.5.2 OH monitor subscreen

This screen displays the monitored value for overhead.

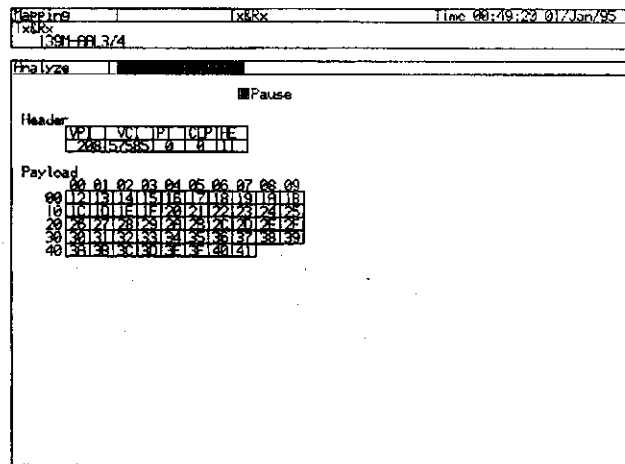
- Type = Trail trace



No	Display	Description
[1]	Type	Sets the channel to be monitored.
[2]	Pause	Turns ON/Off the display update. <input checked="" type="checkbox"/> : Disables the screen update. Press Set key to ON. <input type="checkbox"/> : Ables the screen update. Press Set key to OFF.
[3]	Trail trace pattern	Displays Trail trace to be monitored.
[4]	CRC-7	Assuming CRC-7, calculates CRC-7 to indicate the presence of error. <input checked="" type="radio"/> :CRC-7 error exists. <input type="radio"/> :CRC-7 error does not exist.
[5]	TR mismatch	Displays TR error. <input checked="" type="radio"/> : TR mismatch error exists. <input type="radio"/> : TR mismatch error does not exist.

2.5.3 Cell monitor subscreen

This screen monitors cells received or sent.



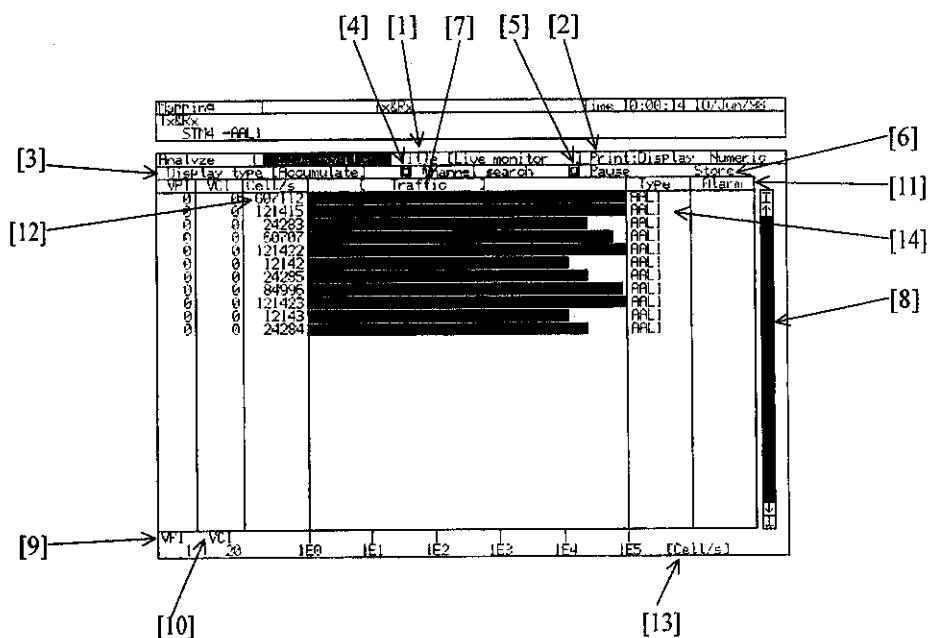
Note: • Monitoring value can be stopped by executing Pause.

SECTION 2 DESCRIPTION OF EACH SCREEN

2.5.4 Live Monitor subscreen

This screen analyzes Traffic and FM Cell measurement.

- When the monitor item is Traffic



No	Display	Description
[1]	Title	The graph title can be input. This button is effective only in single screen mode.
[2]	Print	Sets printing range and print data. Display: Prints the current displayed data. All: Prints all the data from the top to the end. After: Prints the data from the current displayed data to the end. Before: Prints the previous data from the top to the current displayed data.
[3]	Display type	Sets display type. Individual: Displays the latest data. Accumulate: Displays the accumulated data from the measurement start.
[4]	Channel Search	Starts channel search. Search starts when the one-shot button is clicked.
[5]	Pause	Pause can be executed by clicking the one-shot button. This button is not effective in 3-screen mode.
[6]	Store	Stores graph data in memory. This button is effective only in single screen mode. Clicking the Set key here opens the character string input window. Input the name assigned to the data there. The input name is stored in memory. Effective when Accumulate is selected at [3]Display type.
[7]		Selects monitor item.

No	Display	Description
[8]	(Scroll)	Moves the displayed graph. ┐ : Displays top line of the graph. └ : Displays bottom line of the graph. ↑ : Scrolls half screen up. ↓ : Scrolls half screen down.
[9]	VPI	Sets VPI. This button is not effective in multi-screen mode.
[10]	VCI	Sets VCI. This button is not effective in multi-screen mode.
[11]	Alarm	Displays one alarm item of the highest-rank receive alarm.
[12]		Displays the data of the parameter selected at No. 13.
[13]		Selects parameter. Effective at monitor item: Traffic.
[14]	TYPE	Displays AAL type of cell. (May differ from the actual type.)

Note: When Display type is Accumulate at measurement, the successive monitor can be performed in the following monitor items:

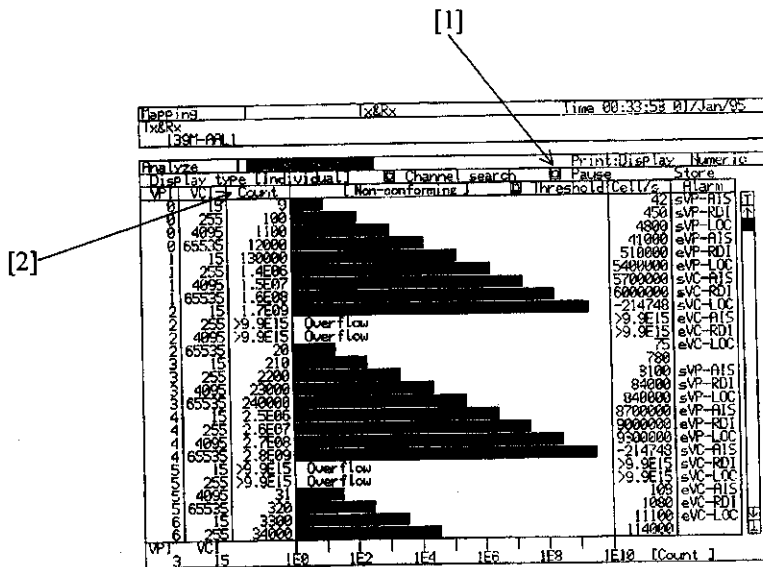
- → FM Misinserted cell ↔ FM Lost cell ↔ FM Mis/Lost cell ←

When any monitor item (except the aboves) is changed during measurement, the measurement is restarted.

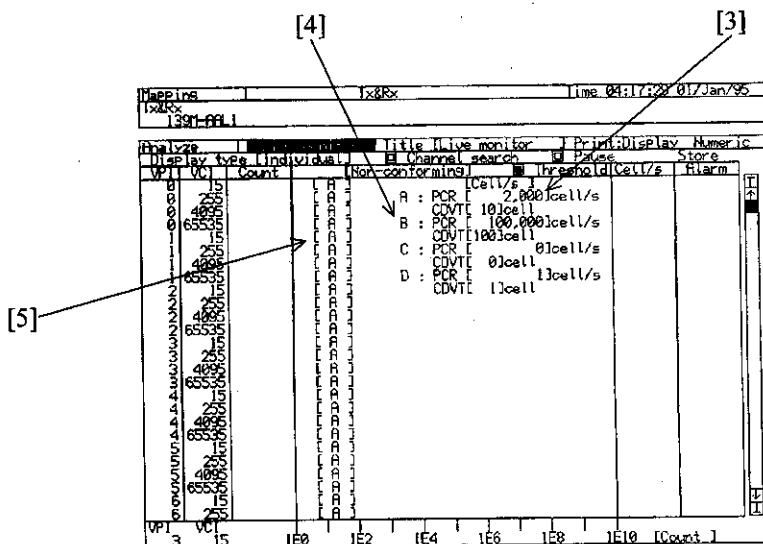
Also, when Display type is changed from Individual to Accumulate; the measurement is restarted, and the acquired data is lost.

SECTION 2 DESCRIPTION OF EACH SCREEN

- When the monitor item is Non-conforming or FM SECB

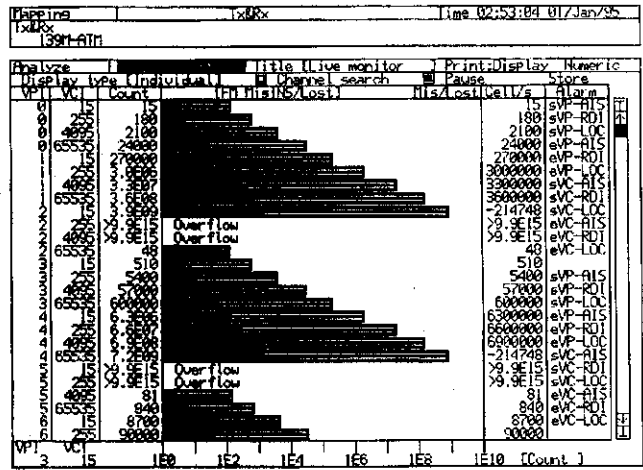


- When monitor item is Non-conforming, and Threshold is pressed



No	Display	Description
[1]	Threshold	Displays condition setting screen when the one-shot button is clicked. Settable at Non-conforming.
[2]	Count	Displays the summed value.
[3]		Sets parameters.
[4]		Sets threshold. Corresponds to SECB Size M of Setup Mapping. 4 type of thresholds can be set.
[5]		Can specify anyone of the 4 thresholds set at No. 4.

- When the monitor item is FM Mis/lost

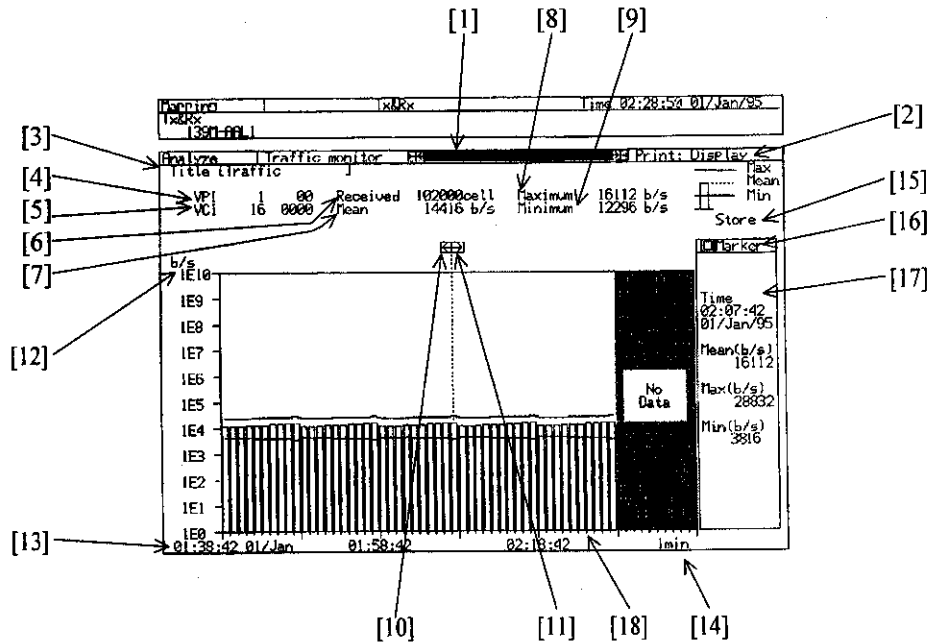


Note: Graphs are displayed in order of Misinserted (red) and Lost (green) from the left. Color coding is based on proportion, not on measured values.

SECTION 2 DESCRIPTION OF EACH SCREEN

2.5.5 Traffic monitor subscreen

This screen analyzes the measurement results displayed in a graph.



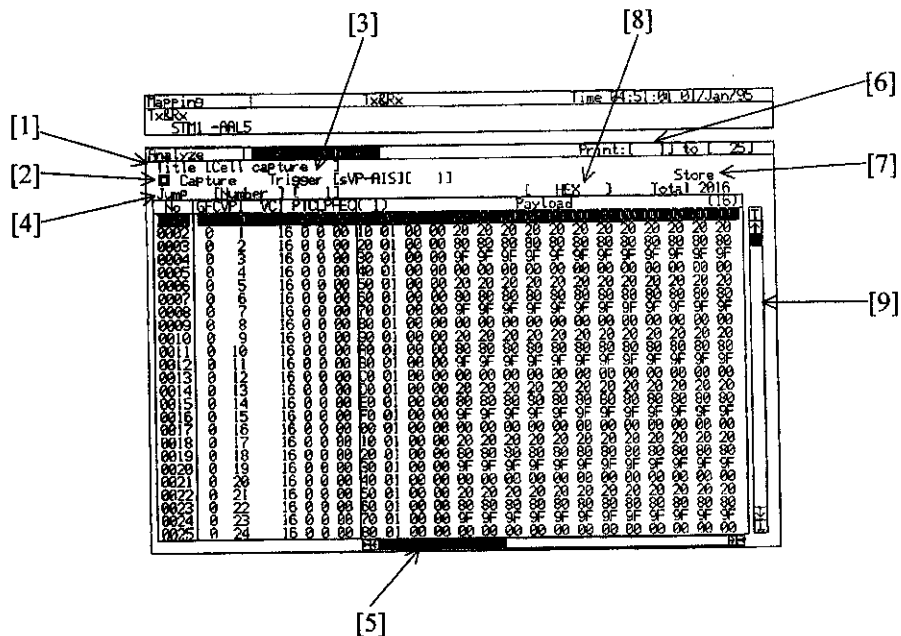
No	Display	Description
[1]	(Scroll)	Scrolls the graph. ┆ : Displays measurement start position. ← : Scrolls graph to the left. → : Scrolls graph to the right. ┆ : Displays measurement end position.
[2]	Print	Sets printing range and print data. Display: Prints the current displayed data. All: Prints all the data from the top to the end. After: Prints the data from the current displayed data to the end. Before: Prints the previous data from the top to the current displayed data.
[3]	Title	The graph title can be input. Move the cursor to Title and click the Set key to open a window. This button is effective only in single screen mode.
[4]	VPI	Indicates VPI filter value and mask value.
[5]	VCI	Indicates VCI filter value and mask value.
[6]	Received	Indicates total number of received cells.
[7]	mean	Indicates average cell reception rate.
[8]	Maximum	Indicates maximum number of received cells.
[9]	Minimum	Indicates minimum number of received cells.
[10]	←	Sets marker movement to the left by one-shot input. This button is effective only in single screen mode.

No	Display	Description
[11]	→	Sets marker movement to the right by one-shot input. This button is effective only in single screen mode.
[12]		Sets vertical scale unit.
[13]	(Graph Start)	Sets display start time.
[14]	(interval)	Sets time axis interval of analysis graph.
[15]	Store	Stores graph data. Move the cursor to Store and click the Set key to open a window. Input the name assigned to the data there. The input name is stored in memory. This button is effective only in single screen mode.
[16]	Marker	Turns marker on and off. This button is effective only in single screen mode. <input type="checkbox"/> : The marker is OFF. Click the Set key to turn on the marker. <input checked="" type="checkbox"/> : The marker is ON. Click the Set key to turn off the marker. (One-shot input) This button is effective only in single screen mode.
[17]		Indicates detailed data of the marked graph.
[18]	(graph)	Displays average value of each bar in a bar chart. Displays maximum and minimum values of each bar in a line graph.

SECTION 2 DESCRIPTION OF EACH SCREEN

2.5.6 Cell capture subscreen

This screen analyzes the cell information of captured cells.



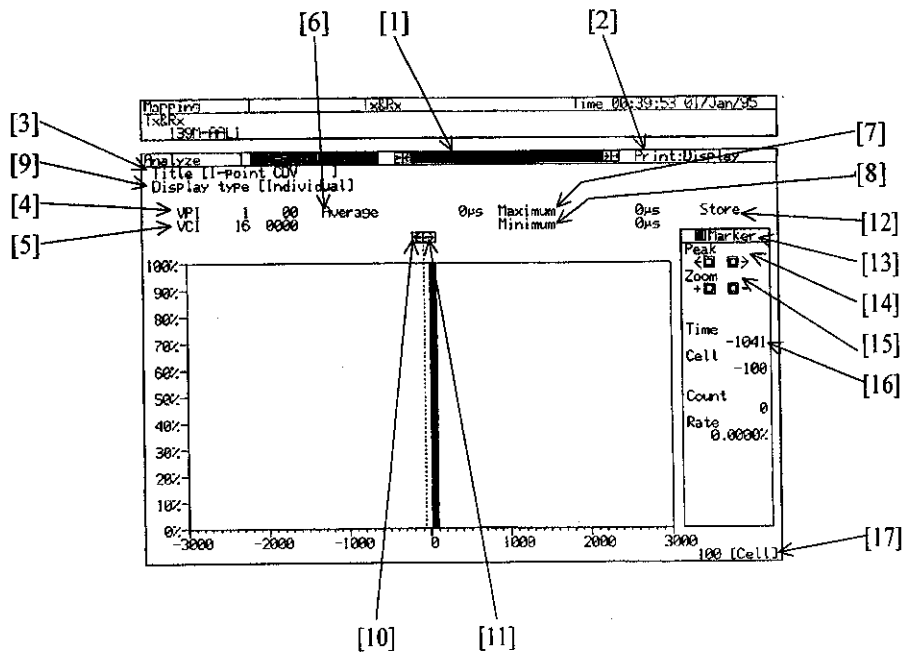
No	Display	Description
[1]	Title	The graph title can be input. Move the cursor to Title and click the Set key to open a window. This button is effective only in single screen mode.
[2]	Capture	Sets capture timing. Capture can be accomplished by clicking the one-shot button.
[3]	Trigger	Sets Trigger item. Set Trigger position on the right. When captured, the trigger select data is reverse-displayed.
[4]	Jump	Selects display start position. When selecting Number, the 1/last No./other Nos. set the display position to top/last/center, respectively.
[5]	(Scroll)	Moves data in horizontal axis direction. ┌ : Displays start position of horizontal axis. ← : Scrolls horizontal axis eight bytes to the left. → : Scrolls horizontal axis eight bytes to the right. └ : Displays end position of horizontal axis.
[6]	Print	Sets print start position and end position (1 to 2016). Display: Prints the current displayed data. All: Prints all the data from the top to the end. After: Prints the data from the current displayed data to the end. Before: Prints the previous data from the top to the current displayed data.

No	Display	Description
[7]	Store	<p>Stores graph data.</p> <p>Move the cursor to Store and click the Set key to open a window.</p> <p>Input the name assigned to the data there. The input name is stored in memory.</p> <p>This button is effective only in single screen mode.</p>
[8]	(Select)	Sets the Payload display format.
[9]	(Scroll)	<p>Moves data in vertical axis direction.</p> <p>└ : Displays start position of vertical axis.</p> <p>↑ : Scrolls data half screen up.</p> <p>↓ : Scrolls data half screen down.</p> <p>┘ : Displays end position of the vertical axis.</p>

SECTION 2 DESCRIPTION OF EACH SCREEN

2.5.7 1-point CDV subscreen

This screen analyzes the results of measuring fluctuation between received cells.



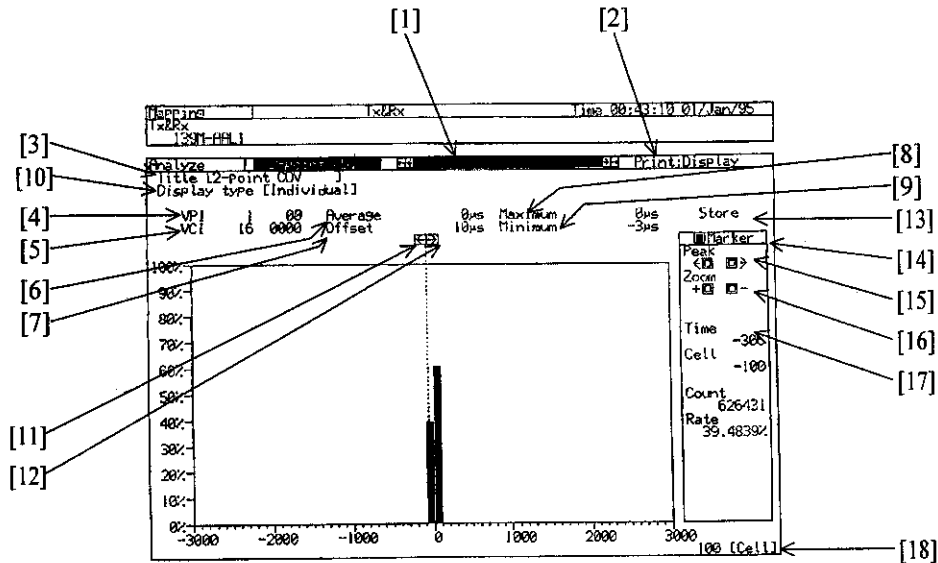
No	Display	Description
[1]	(Scroll)	Scrolls the graph. ┆ : Displays measurement start position. ← : Scrolls graph to the left. → : Scrolls graph to the right. ┆ : Displays measurement end position.
[2]	Print	Sets printing range and print data. Display: Prints the current displayed data. All: Prints all the data from the top to the end. After: Prints the data from the current displayed data to the end. Before: Prints the previous data from the top to the current displayed data.
[3]	Title	The graph title can be input. Move the cursor to Title and click the Set key to open a window. This button is effective only in single screen mode.
[4]	VPI	Indicates VPI filter value and mask value. This button is displayed only in single screen mode.
[5]	VCI	Indicates VCI filter value and mask value. This button is displayed only in single screen mode.
[6]	Average	Indicates average cell reception rate.
[7]	Maximum	Indicates maximum number of received cells.
[8]	Minimum	Indicates minimum number of received cells.

No	Display	Description
[9]	Display type	Sets display data type. Individual: Displays the latest data. Accumulate: Displays the accumulated data from the measurement start.
[10]	←	Sets marker movement to the left by one-shot input. This button is effective only in single screen mode.
[11]	→	Sets marker movement to the right by one-shot input. This button is effective only in single screen mode.
[12]	Store	Stores graph data. Move the cursor to Store and click the Set key to open a window. Input the name assigned to the data there. The input name is stored in memory. This button is effective only in single screen mode.
[13]	Marker	Turns marker on and off. This button is effective only in single screen mode. <input type="checkbox"/> : The marker is OFF. Click the Set key to turn on the marker. <input checked="" type="checkbox"/> : The marker is ON. Click the Set key to turn off the marker. (One-shot input) This button is effective only in single screen mode.
[14]	Peak	Searches for peak point. < <input type="checkbox"/> : Moves marker to peak point in forward direction. <input type="checkbox"/> > : Moves marker to peak point in reverse direction.
[15]	Zoom	Centers data at marker point to redraw the graph. The display interval changes when the one-shot button is clicked. in : Zooms in on marker point. out : Zooms out on marker point.
[16]		Indicates detailed data of the marked graph.
[17]	(interval)	Sets horizontal axis of analysis graph.

SECTION 2 DESCRIPTION OF EACH SCREEN

2.5.8 2-point CDV subscreen

This screen analyzes the results of measuring cell delay fluctuation from cell transmission to cell reception.



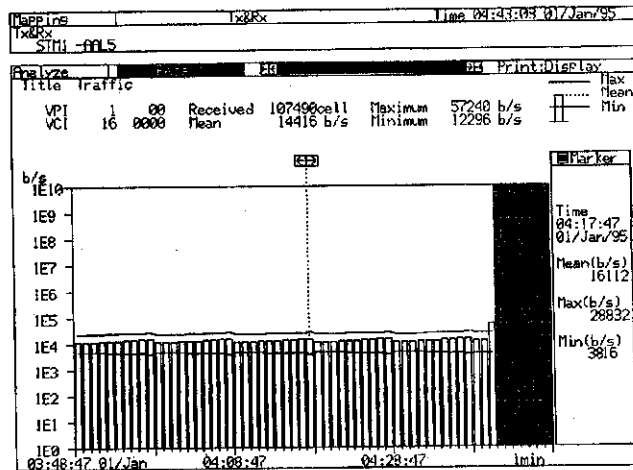
No	Display	Description
[1]	(Scroll)	Scrolls the graph. ┆ : Displays measurement start position. ← : Scrolls graph to the left. → : Scrolls graph to the right. ┆ : Displays measurement end position.
[2]	Print	Sets printing range and print data. Display: Prints the current displayed data. All: Prints all the data from the top to the end. After: Prints the data from the current displayed data to the end. Before: Prints the previous data from the top to the current displayed data.
[3]	Title	The graph title can be input. Move the cursor to Title and click the Set key to open a window. This button is effective only in single screen mode.
[4]	VPI	Indicates VPI filter value and mask value. This button is displayed only in single screen mode.
[5]	VCI	Indicates VCI filter value and mask value. This button is displayed only in single screen mode.
[6]	Average	Indicates average number of received cells.
[7]	Offset	Indicates offset value.
[8]	Maximum	Indicates maximum number of received cells.

No	Display	Description
[9]	Minimum	Indicates minimum number of received cells.
[10]	Display type	Sets display data type. Individual: Displays the latest data. Accumulate: Displays the accumulated data from the measurement start.
[11]	←	Sets marker movement to the left by one-shot input. This button is effective only in single screen mode.
[12]	→	Sets marker movement to the right by one-shot input. This button is effective only in single screen mode.
[13]	Store	Stores graph data. Move the cursor to Store and click the Set key to open a window. Input the name assigned to the data there. The input name is stored in memory. This button is effective only in single screen mode.
[14]	Marker	Turns marker on and off. This button is effective only in single screen mode. <input type="checkbox"/> : The marker is OFF. Click the Set key to turn on the marker. <input checked="" type="checkbox"/> : The marker is ON. Click the Set key to turn off the marker. (One-shot input) This button is effective only in single screen mode.
[15]	Peak	Searches for peak point. < <input type="checkbox"/> : Moves marker to peak point in forward direction. <input type="checkbox"/> > : Moves marker to peak point in reverse direction.
[16]	Zoom	Centers data at marker point to redraw the graph. The display interval changes when the one-shot button is clicked. in : Zooms in on marker point. out : Zooms out on marker point.
[17]		Indicates detailed data of the marked graph.
[18]	(interval)	Sets horizontal axis of analysis graph.

SECTION 2 DESCRIPTION OF EACH SCREEN

2.5.9 Recall subscreen

This screen displays the analysis graph data read on the Setup:Memory or Setup:Floppy disk screen.



The operation is the same as on the Live monitor, Traffic monitor, Cell capture, 1-point CDV, and 2-point CDV subscreens.

Title input and storage are disabled, however.

SECTION 3

OPERATION EXAMPLES

Table of Contents

3.1	Measurement	3-3
3.1.1	Error/Alarm test	3-3
3.1.2	1-point CDV measurement	3-6

SECTION 3 OPERATION EXAMPLES

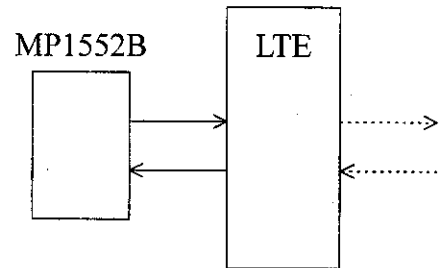
3.1 Measurement

3.1.1 Error/Alarm test

The operation is explained using an example of monitoring the output of the 139M LTE (Line Terminal Equipment).

(1) Connection

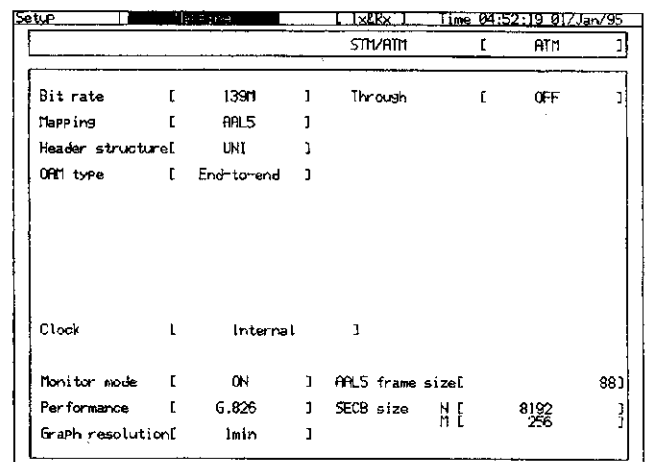
Connect the MP1552B and LTE as shown in the figure on the right, and turn the power on.



(2) Initial setting

Specify the Setup: Mapping screen as shown in the figure on the right.

In case a signal is received using the monitor point as shown in the example, turn the Monitor mode on.



(3) Manual measurement

In the manual measurement, an Error/Alarm test can be carried out for one channel.

(a) Starting measurement

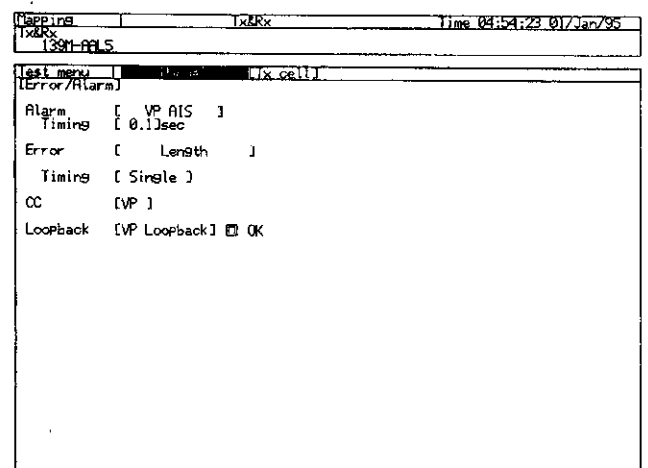
Select Manual in the Test menu main screen.

Specify the cell header and cell amount using the Tx cell menu.

Set the Manual measurement type to Error/Alarm, and specify the addition of Error, Alarm, timing, and CC cell.

Specify the cell filter conditions to be received in the Rx cell menu.

Press the Start/Stop key to start measurement.



SECTION 3 OPERATION EXAMPLES

(b) Measurement results (Error/Alarm)

Select Error/Alarm in the Result main screen, then the screen shown on the right is displayed.

Select the display with the error numbers or with rate express.

For error addition/detection, see paragraph 2.4.1 Error/Alarm subscreen.

Specify the display data for current to obtain the halfway result of the measurement.

Select the Analyze:Cell monitor to monitor the cell during measurement.

Mapping		Time 04:56:52 01/Jan/95	
1391-PA1.5			
Result			
Alarm [Second] Error [Count] Display data [Current]			
Input		RS1391	10d
P-fail	2d	DE1391	13d
LOS	10d	RDI1391	10d
Code	32d	RS1391	20d
		RE1391	38d
			BIPB 48d
Alarm		Error	
Vp-RIS	0dVC-RIS	VdCell	56
Vp-RDI	0dVC-RDI	0dCorrect	58d
Vp-LOC	0dVC-LOC	0dDiscard	50d
Vp-RIS	0dVC-RIS	0dNonconf	82d
Vp-RDI	0dVC-RDI	0dFI Lost	120d
Vp-LOC	0dVC-LOC	0dFMisin	122d
		FM BIPV	124d
		FM SECB	126d
		BR Lost	128d
		BR Lstin	30d
		BR BIPV	32d
		BR SECB	34d
LCD	0dSync.		
			Bit 72d
			DPCS 84
			DiscFDU 100d
			FRSize 116d
			Length 92d
			CR32 118d
			Abort 104d

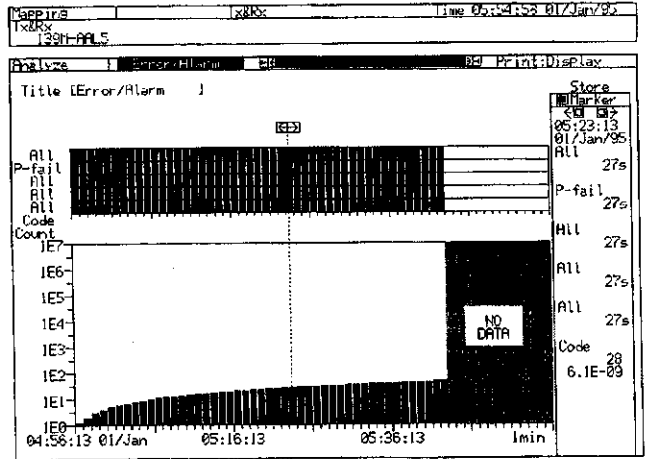
(c) Analysis

Select the Error/Alarm in the Analyze main screen, then the graph shown on the right is displayed.

Also, select the Analyze:Live monitor to monitor VPI, VCI, and Cell/s graphs.

When the error item is set to O.191, the three types of Lost (red) / MisINS (green) / Errored (yellow) are accumulated in the graph for monitoring. Each measured value is displayed by the ratio.

In the Traffic monitor, the number of cells that have passed the reception filter is displayed in graphs.



(d) Analysis

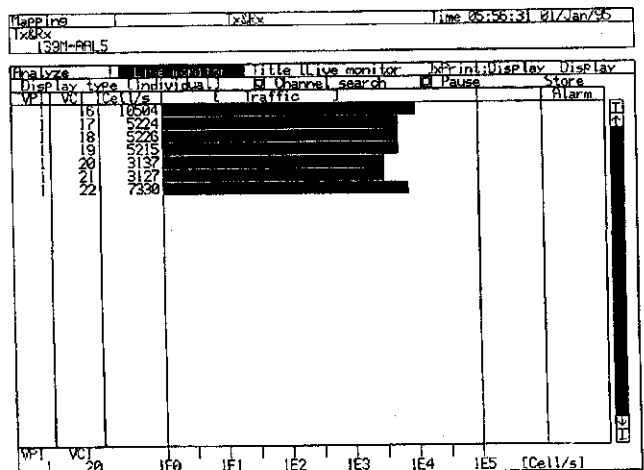
Select the Analyze:Live monitor to monitor VPI, VCI and Cell/s graphs.

When the monitor item is set to FM MisINS/Lost, the graph is displayed in the order of MisINS (red) and Lost (green). Each colored partition of the measured value is displayed by the ratio.

When the monitor item is other than Traffic, the summed value is displayed at the Count field.

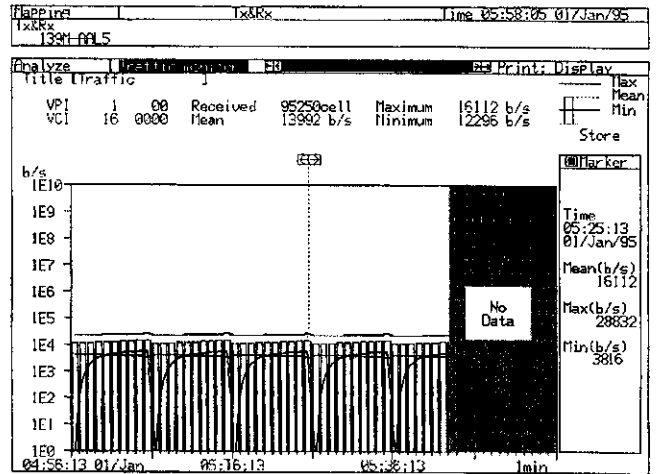
Press the one-shot key of the Channel Search to start searching.

Only one item of the top rank of the reception alarm is displayed.



(e) Analysis

Select the Analyze:Traffic monitor to display in graphs the number of cells that have passed the reception filter.



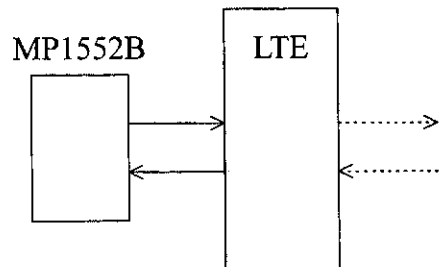
SECTION 3 OPERATION EXAMPLES

3.1.2 1-point CDV measurement

Describes the output of 139M LTE (Line Terminal Equipment) using 1-point CDV measurement example.

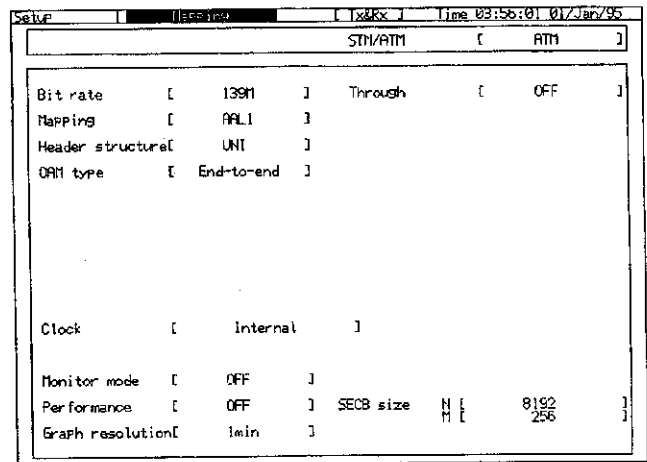
(1) Connection

Connect as shown on the right, and turn the power on.



(2) Initial setting

Set the Setup:Mapping screen as shown in the figure on the right.



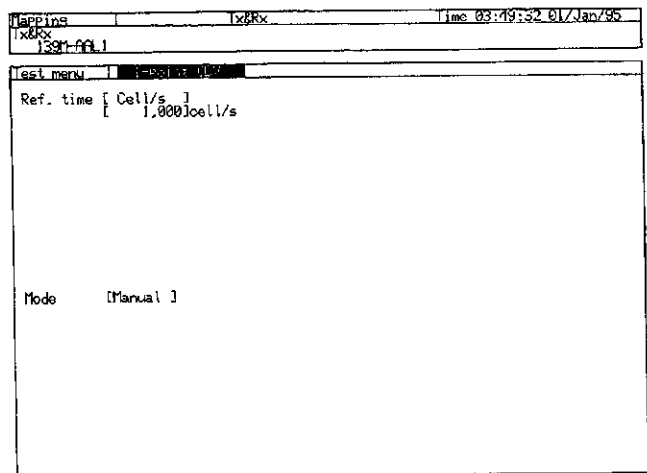
(3) 1-point CDV measurement

Fluctuation between the reception cells is measured in the 1-point CDV measurement.

(a) Starting measurement

Select the 1-point CDV in the Test menu main screen.

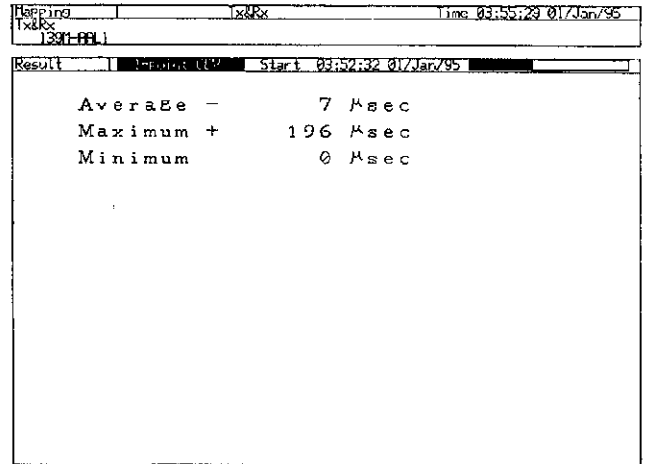
Select PCR and measurement mode, and press the Start/Stop key to start measurement.



(b) Measured results

Select the 1-point CDV in the Test menu main screen to display the 1-point CDV sub screen in the Result main screen.

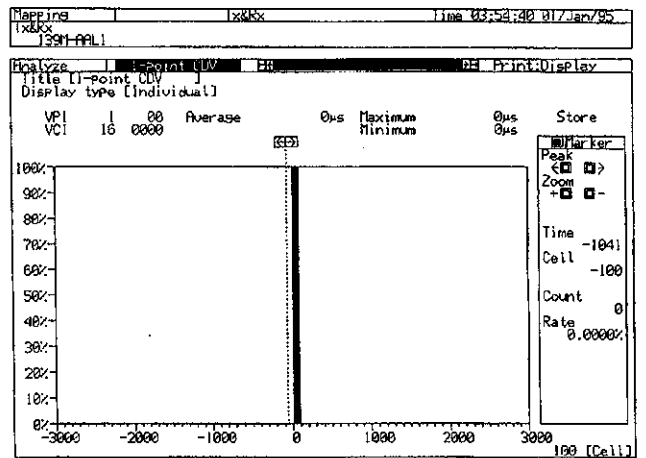
In this screen, average cell-reception ratio, maximum number of cell receptions, and minimum number of cell receptions are displayed.



(c) Analysis

Select the 1-point CDV in the Analyze main screen, then a graph shown as shown in the figure on the right is displayed. The measured result can be analyzed.

Marker displays the numeric data at the measuring point.



SECTION 3 OPERATION EXAMPLES

SECTION 4

REMOTE CONTROL

Table of Contents

4.1	Common Commands	4-3
4.2	Status report	4-4
4.2.1	Status register configuration of MP1552B	4-4
4.2.2	Status registers specific to the MP1552B	4-5
4.3	Device Message Details	4-12
4.4	Device Specific Commands	4-13

SECTION 4 REMOTE CONTROL

4.1 Common Commands

This section explains the IEEE488.2 common commands supported by this instrument. The common commands can be used with either GPIB interface or RS-232C interface. This instrument only supports sequential commands.

The table below lists the IEEE488.2 common commands supported by this instrument.

Table 4-1 IEEE488.2 Common Commands

Mnemonic	Command name
*IDN?	Identification Query
*RST	Reset Command
*TST?	Self Test Query
*OPC	Operation Complete Command
*OPC?	Operation Complete Query
*WAI	Wait Continue Command
*CLS	Clear Status Command
*ESE	Standard Event Status Enable Command
*ESE?	Standard Event Status Enable Query
*ESR?	Standard Event Status Register Query
*SRE	Service Request Enable Command
*SRE?	Service Request Enable Query
*STB?	Read Status Byte Query
*TRG	Trigger Command
*PSC	Power On Status Clear Command
*PSC?	Power On Status Clear Query
*SAV	Save Command
*RCL	Recall Command
*OPT?	Option Identification Query

Note: For other commands, refer to Vol.2 of the MP1552B SDH/PDH/ATM Analyzer Operation Manual.

SECTION 4 REMOTE CONTROL

4.2 Status report

4.2.1 Status register configuration of MP1552B

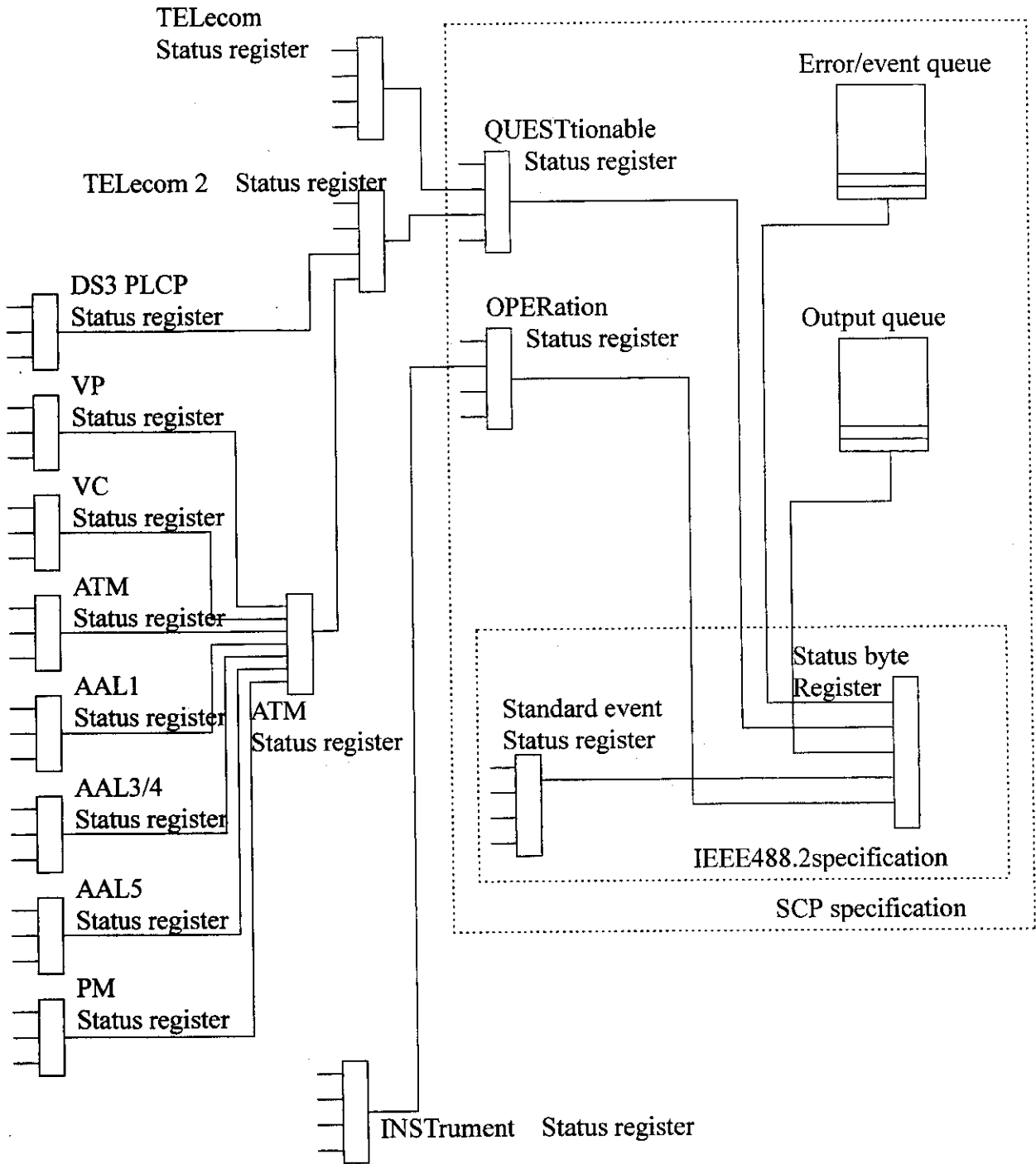
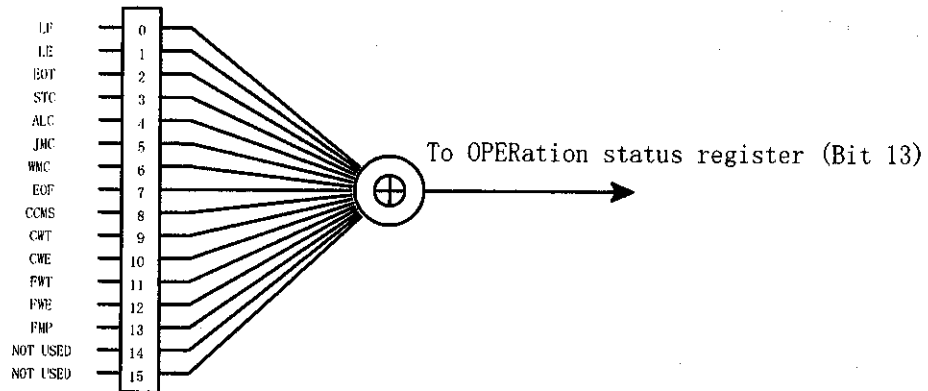


Fig. 4-1 Status register configuration

4.2.2 Status registers specific to the MP1552B

INSTRument status register



Bit definition of INSTRument status register

DB8	CCMS(Cell Ch Monitor Search)	Indicates that Cell CH minitor search ended.
DB9	CWT(Cell Waiting for Trigger)	Indicates that capture trigger waited for.
DB10	CWE(Cell Waiting for capture End)	Indicates that capture end waited for.

SECTION 4 REMOTE CONTROL

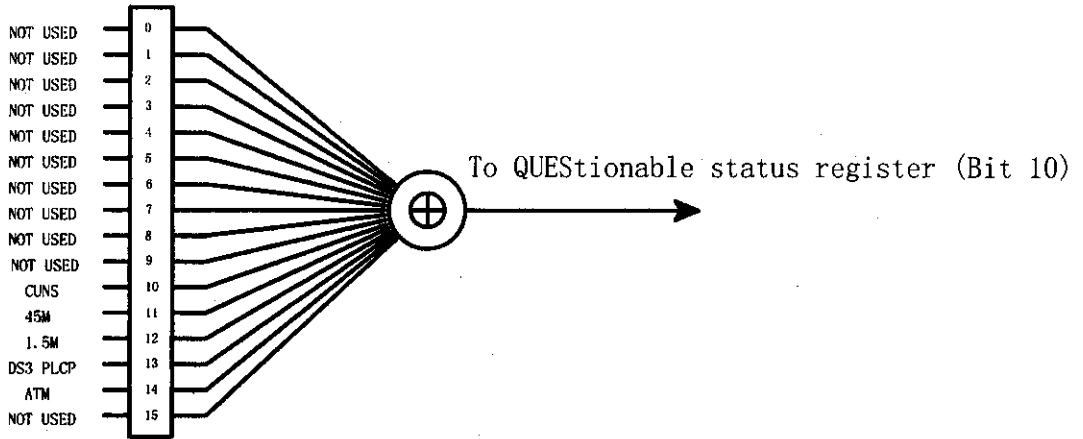
Bit definition of TELcom2 status register

DB10	CONS(Cell ch monitor search UNSuccessed)	Indicates that search failed in Live monitor.
DB13	DS3 PLCP(DB3 PLCP status register summary)	DS3 PLCP status register summary
DB14	ATM(ATM status register summary)	ATM status register summary

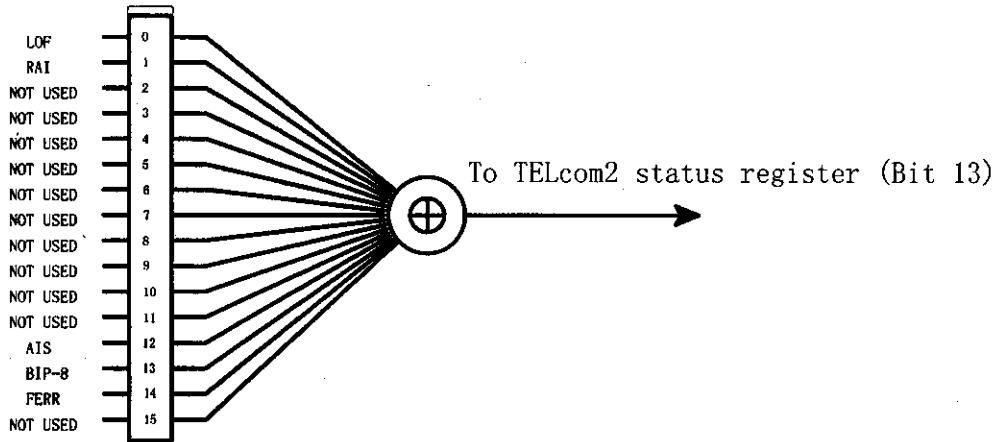
Bit definition of DS3 PLCP status register

DB0	LOF(Loss Of Frame)	Indicates that LOF occurred.
DB1	RAI(remote Alarm Indication)	Indicates that RAI occurred.
DB12	AIS(Alarm Indication Signal)	Indicates that AIS occurred.
DB13	BIP-8(BIP-8 error)	Indicates that BIP-8 was occurred.
DB14	FERR(Frame Error)	Indicates that a frame error was detected.

TELcom2 status register



DS3 PLCP status register



SECTION 4 REMOTE CONTROL

Bit definition of ATM status register

DB0	LCD(Lost of cell sync)	Indicates that Lost of cell sync occurred.
DB1	Correct(Corrected cell count)	Indicates that Corrected cell error.
DB2	Discard(Discarded cell count)	Indicates that Discarded cell error.
DB3	Nonconf(Non conforming cell error)	Indicates that Non-Conforming cell error occurred.
DB6	VP(VP status register summary)	VP status summary
DB7	VC(VC status register summary)	VC status summary
DB8	0.191(0.191 status register summary)	0.191 status summary
DB9	AAL1(AAL1 status register summary)	AAL1 status summary
DB10	AAL2(AAL2 status register summary)	AAL2 status summary
DB11	AAL34(AAL34 status register summary)	AAL34 status summary
DB12	AAL5(AAL5 status register Summary)	AAL5 status summary
DB13	PM(PM status register summary)	PM status summary

Bit definition of VP status register

DB0	sVP-AIS(VP-SegmentAIS)	Indicates that VP-segmentAIS occurred.
DB1	sVP-RDI(VP-segmentRDI)	Indicates that VP-segmentRDI occurred.
DB2	sVP-LOC(VP-segmentLO)	Indicates that VP-segmentLOC occurred.
DB3	eVP-AIS(VP-end-to-endAIS)	Indicats that VP-end-to-endAIS occurred.
DB4	eVP-RDI(VP-end-to-endRDI)	Indicats that VP-end-to-endRDI occurred
DB5	eVP-LOC(vp-end-to-endLOC)	Indicats that VP-end-to-endLOC occurred

Bit definition of VC status register

DB0	sVC-AIS(VC-segmentAIS)	Indicates that VC-segmentAIS occurred.
DB1	sVC-RDI(VC-SegmentRDI)	Indicates that VC-segmentRDI occurred.
DB2	sVC-LOC(VC-segmentLOC)	Indicates that VC-segmentLOC occurred.
DB3	eVC-AIS(VC-end-to-endAIS)	Indicates that VC-end-to-endAIS occurred.
DB4	eVC-RDI(VC-end-to-endRDI)	Indicates that VC-end-to-endRDI occurred
DB5	eVC-LOC(VC-end-to-endLOC)	Indicates that VC-end-to-endLOC occurred

Bit definition of 0.191 status register

DB0	LOST(Lost cell)	Indicates that a lost cell occurred.
DB1	MISINS(Misinserted cell)	Indicates that a misinserted cell occurred.
DB2	Errored(Errored cell)	Indicates that an errored cell occurred.
DB3	SECB(SECB)	Indicats that an SECB error occurred.

Bit definition of ALL1 status register

DB0	LOST(Lost cell)	Indicates that a lost cell occurred.
DB1	SNP-P(Parity)	Indicates that a Parity error occurred.

Bit definition of AAL2 status register

DB0	P(P error)	Indicates that a P error occurred.
DB1	OSF(OSF error)	Indicates that an OSF error occurred.
DB2	SN(SN error)	Indicates that an SN error occurred.
DB8	CPS HEC(HEC error)	Indicates that a HEC CPS error occurred.
DB9	LI(LI error)	Indicates that an LI error occurred.

Bit definition of AAL3/4 status register

DB0	CRC10(CRC10 error)	Indicates that a CRC10 occurred.
DB1	SN(SN error)	Indicates that an SN error occurred.
DB2	DiscPDU(Discarded PDU count)	Indicates that a Discarded PDU occurred.
DB3	ST(Segment type error)	Indicates that a Segment type error occurred.
DB4	LI(Length indicator error)	Indicates that a Length indicator error occurred.
DB5	Abort(Abort cell count)	Indicates that an Abort cell occurred.
DB8	UDlvPDU(Undelivered PDU count)	Indicates that an Undelivered PDU occurred.
DB9	CPI(CPI)	Indicates that a CPI error occurred.
DB10	B/ETag(BTag/ETag)	Indicates that a BTag/ETag mismatch error occurred.
DB11	BAsize(BAsize error)	Indicates that a BAsize error occurred.
DB12	AL(AL error)	Indicates that an AL error occurred.
DB13	Length(Length error)	Indicates that a Length error occurred.

Bit definition of AAL5 status register

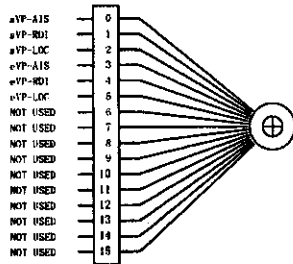
DB8	DiscPDU(Discarded PDU count)	Indicates that a Discarded PDU occurred.
DB9	FRMsize(Frame size error)	Indicates that a Frame size error occurred.
DB10	Length(Length error)	Indicates that a Length error occurred.
DB11	CRC32(CRC32 error)	Indicates that a CRC32 error occurred.
DB12	Abort(Abort cell count)	Indicates that an Abort cell occurred.

Bit definition of PM status register

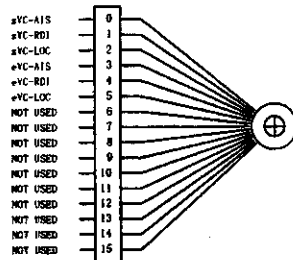
DB0	FM Lost(FM Lost cell)	Indicates that an FM Lost cell occurred.
DB1	FMMisIN(FM Misinserted cell)	Indicates that an FM Misinserted cell occurred.
DB2	FM BIPV(FM BIPV error)	Indicates that an FM BIPV error occurred.
DB3	FM SECB(FM SECB error)	Indicates that an FM SECB error occurred.
DB8	BR Lost(BR Lost cell)	Indicates that a BR Lost cell occurred.
DB9	BRMisIN(BR Misinserted cell)	Indicates that a BR Misinserted cell occurred.
DB10	BR BIPV(BR BIPV error)	Indicates that a BR BIPV error occurred.
DB11	BR SECB(BR SECB error)	Indicates that a BR SECB error occurred.

SECTION 4 REMOTE CONTROL

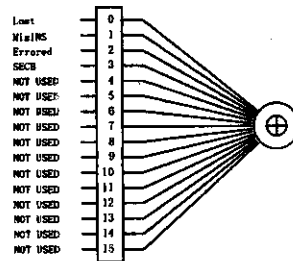
VP status register



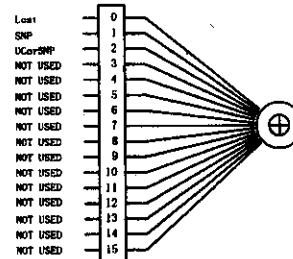
VC status register



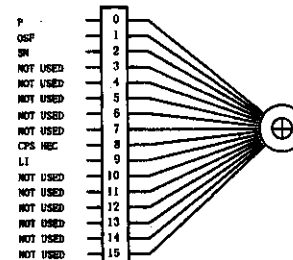
0.191 status register



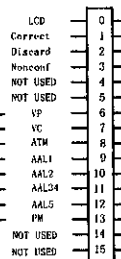
AAL1 status register



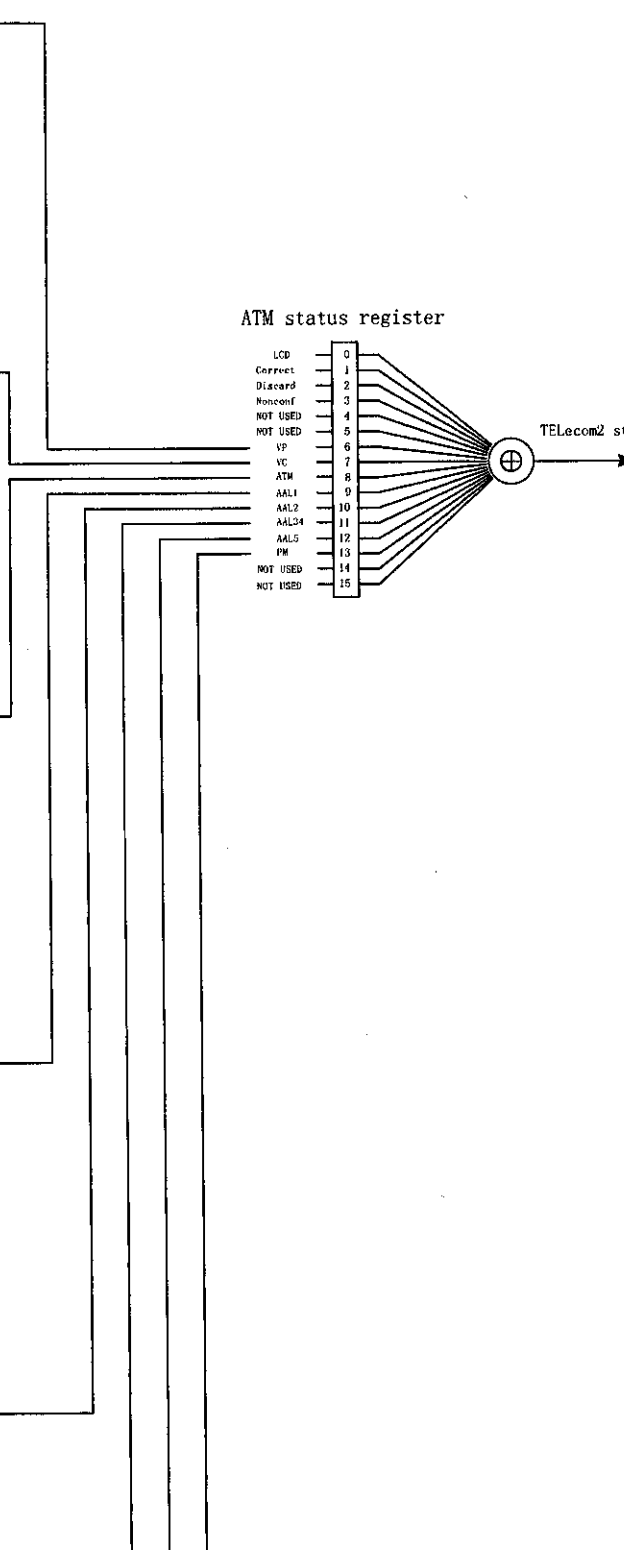
AAL2 status register



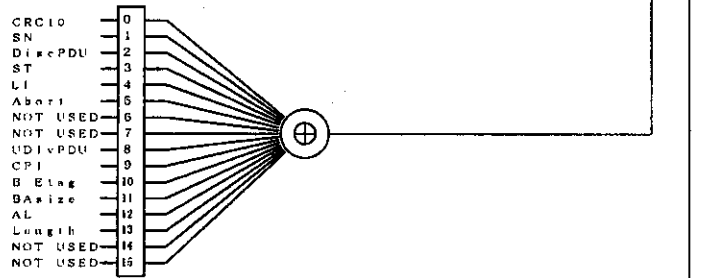
ATM status register



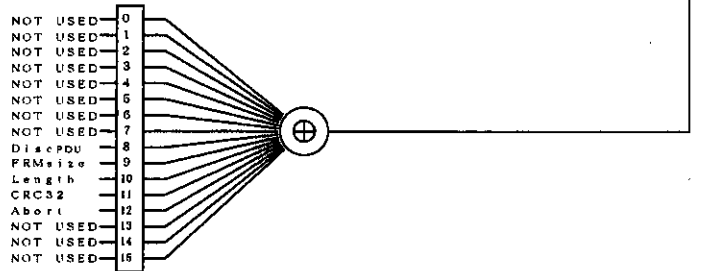
TELEcom2 status register



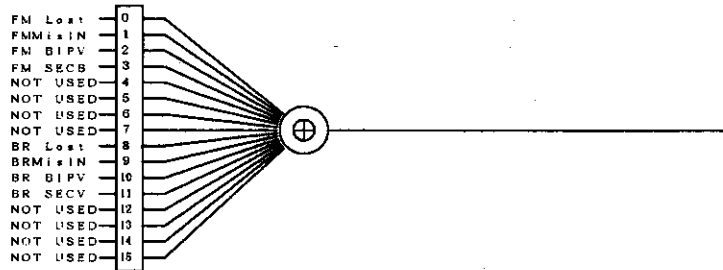
AAL3/4 status register



AAL5 status register



PM status register



Note:

For other registers, refer to Vol.2 of the MP1552B SDH/PDH/ATM Analyzer operation manual.

SECTION 4 REMOTE CONTROL

4.3 Device Message Details

This section explains details on device messages.

For non-ATM commands, refer to Vol.2 of the MP1552B SDH/PDH/ATM Analyzer Operation Manual.

4.4 Device Specific Commands

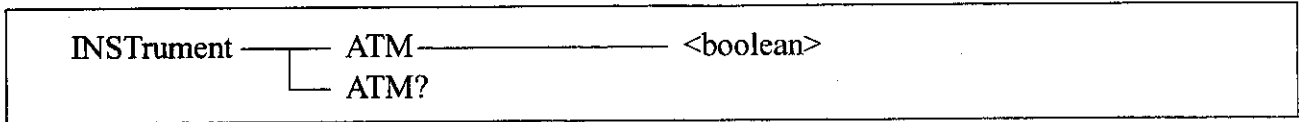
This section explains details on device specific commands.

For non-ATM commands, refer to Vol. 2 of the MP1552B SDH/PDH/ATM Analyzer Operation Manual.

SECTION 4 REMOTE CONTROL

(1) INSTRUMENT subsystem

In the INSTRUMENT subsystem, select the same setting for transmission and reception or separate settings.



:INSTRUMENT:ATM <boolean>

Parameter: <boolean> = <BOOLEAN PROGRAM DATA>
 OFF or 0 SDH/PDH measurement
 ON or 1 ATM measurement

Function: Switches between STM and ATM measurements.

Example use: To select ATM measurement:
 > INSTRUMENT:ATM ON

:INSTRUMENT:ATM?

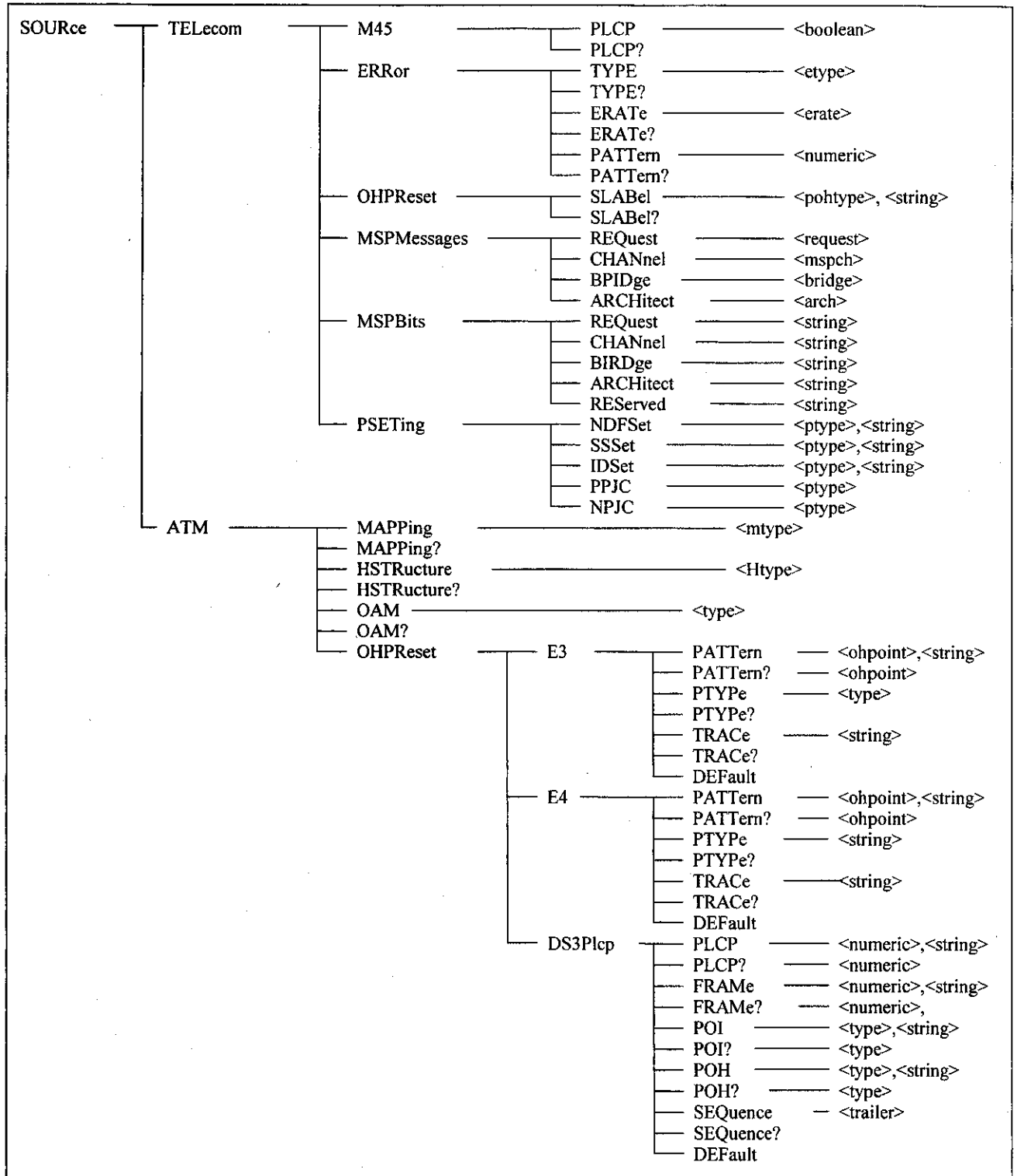
Response <boolean> = <NR1 NUMERIC RESPONSE DATA>
 0 SDH/PDH measurement
 1 ATM measurement

Function: Queries SDH/PDH or ATM measurement.

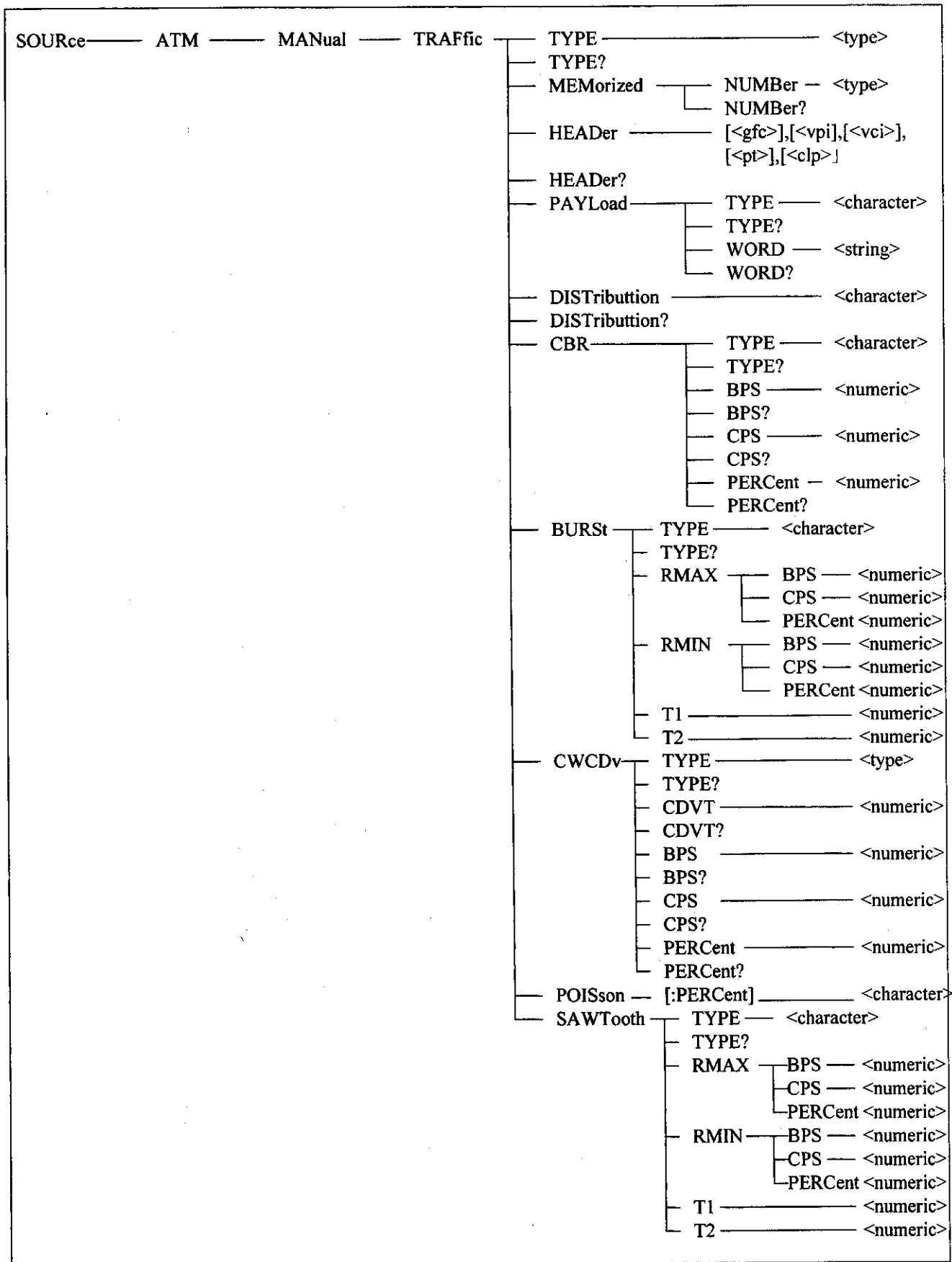
Example use: > :INSTRUMENT:ATM?
 < 1

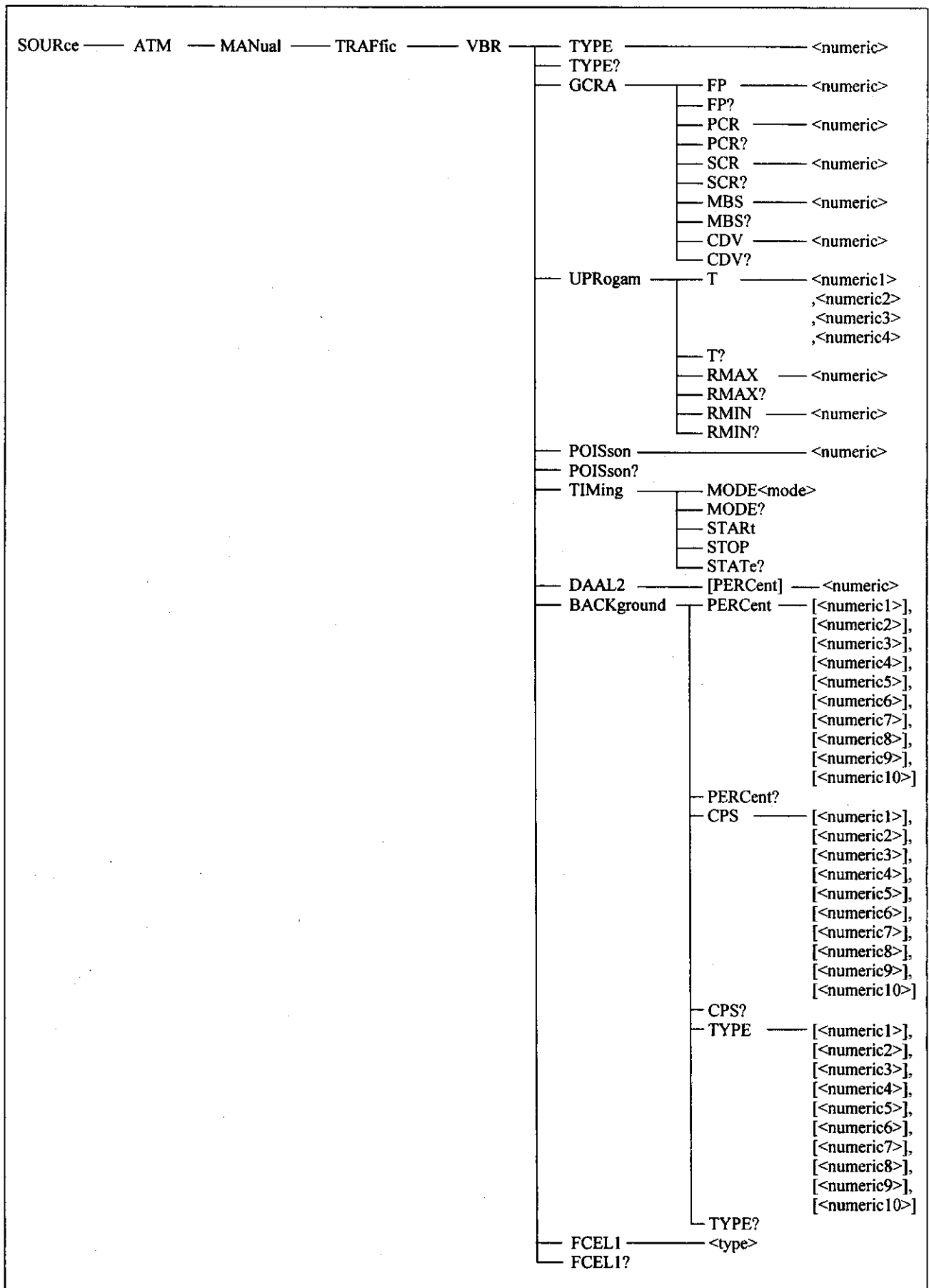
(2) SOURCE subsystem

In the SOURCE subsystem, set the transmission side.

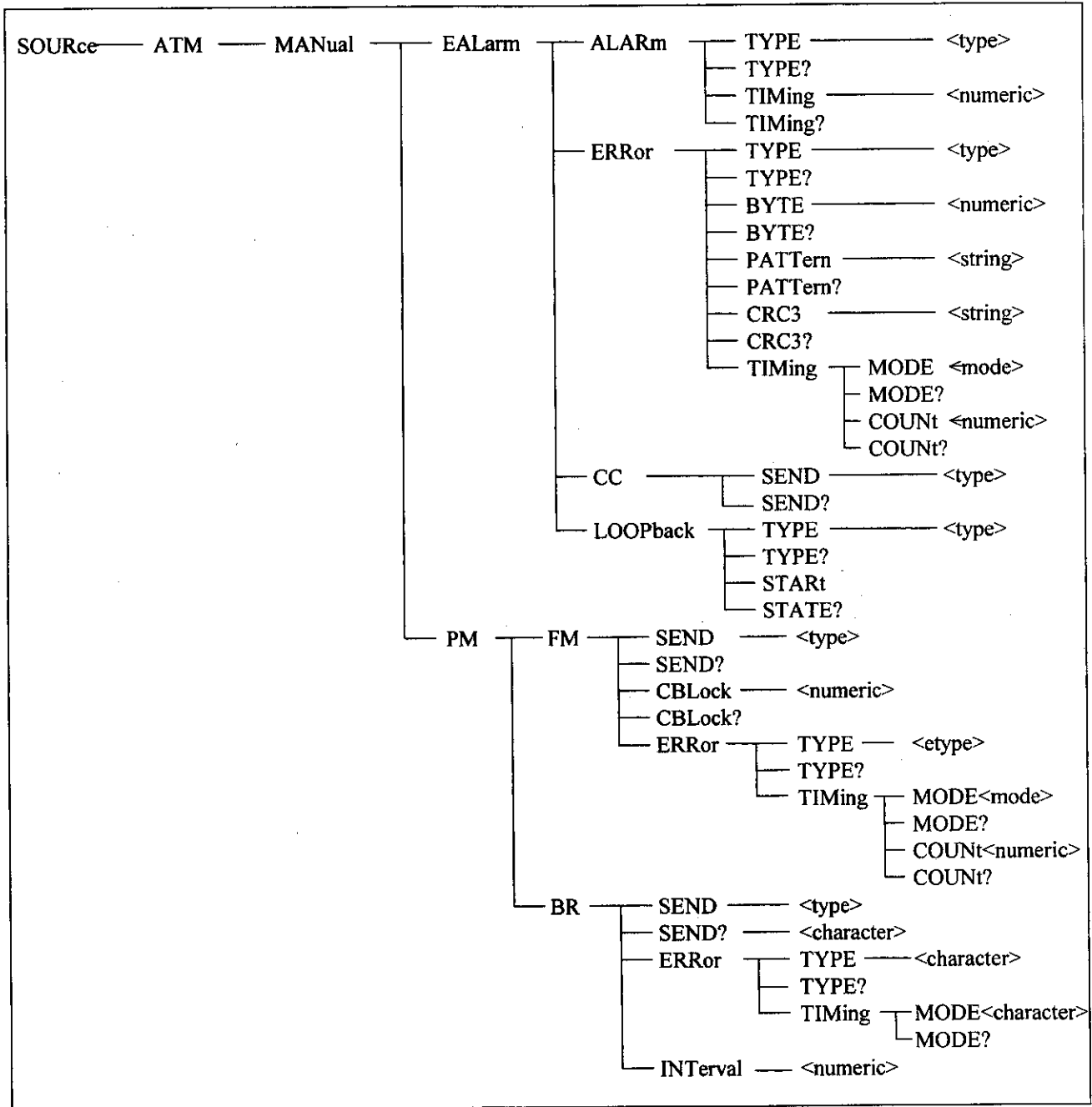


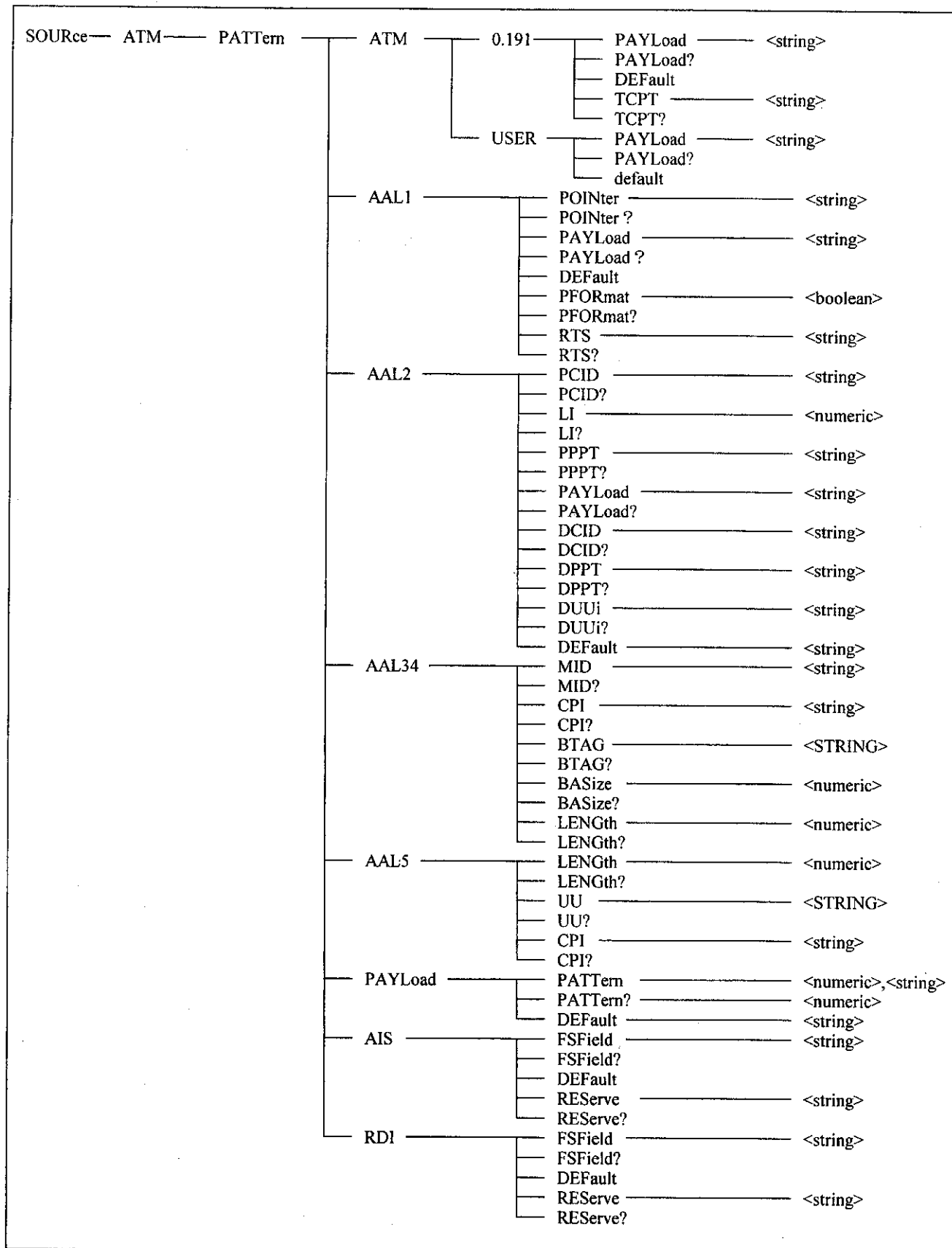
SECTION 4 REMOTE CONTROL



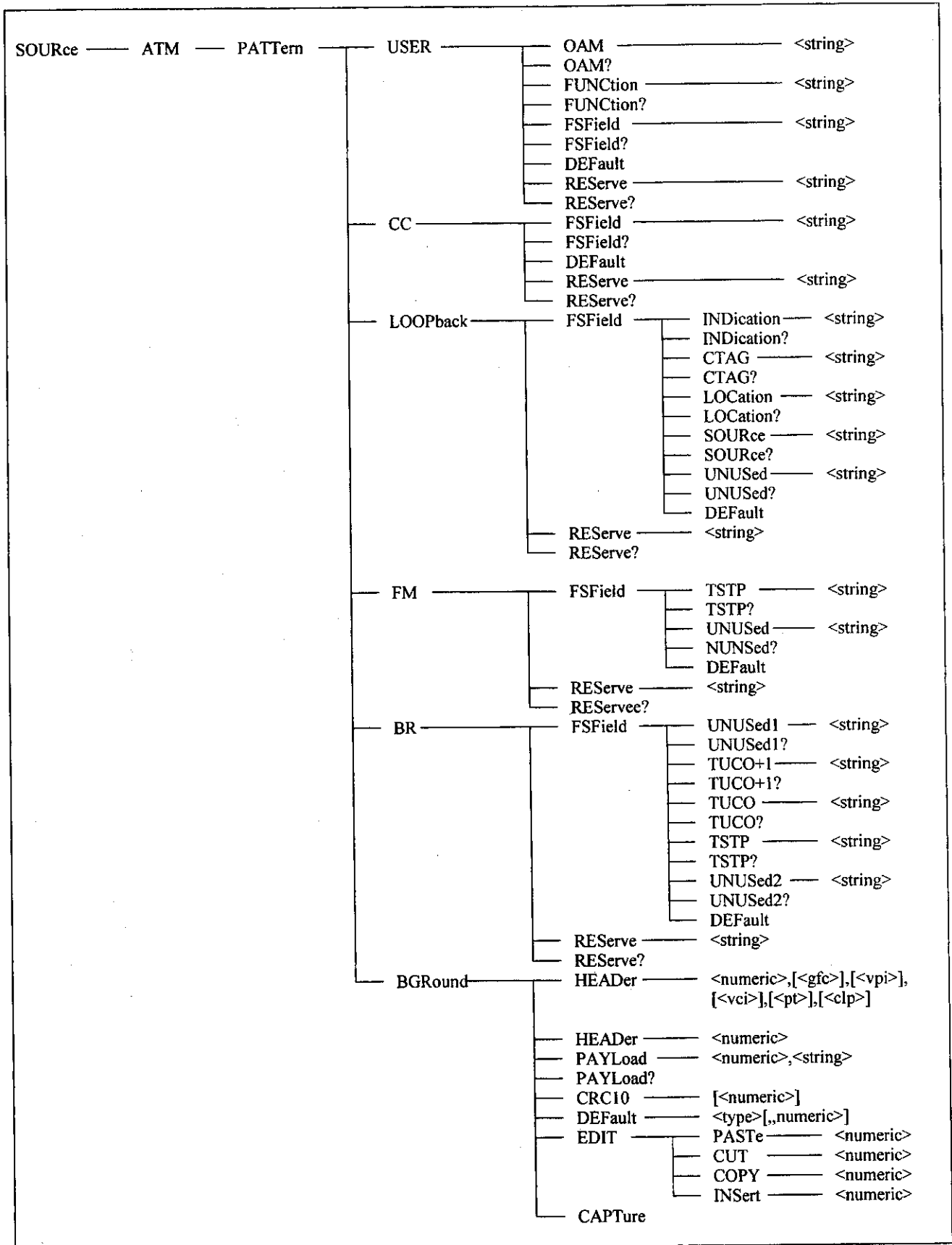


SECTION 4 REMOTE CONTROL





SECTION 4 REMOTE CONTROL



:SOURCE:TELEcom:M45:PLCP <boolean>

Parameter: <boolean> = <BOOLEAN PROGRAM DATA>
OFF or 0
ON or 1

Function: Sets the PLCP for 45M signals.

Restriction: Invalid in the following cases:

- When the 1.5/45/52M unit is not installed.
- When the ATM unit is not installed.
- When :INSTRument:ATM is <OFF>.
- When :SOURCE:TELEcom:BRATe is other than <M45>.

Example use: To set the PLCP for 45M signals to OFF:
>:SOURCE:TELEcom:M45:PLCP OFF

:SOURCE:TELEcom:M45:PLCP ?

Response: <boolean> = <NR1 NUMERIC RESPONSE DATA>
0
1

Function: Queries the PLCP for 45M signals.

Example use: > :SOURCE:TELEcom:M45:PLCP ?
< 0

SECTION 4 REMOTE CONTROL

:SOURCE:TELEcom:ERRor:TYPE <etype>

Parameter: <etype> = <CHARACTER PROGRAM DATA>

OFF	No errors are inseted
B1	Enters an error data to B1.
B2	Enters an error data to B2.
HB3	Enters an error to HP-B3.
LB3	Enters an error to LP-B3.
BIP2	Enters an error to BIP-2.
MREI	Enters an MS-REI error.
HREI	Enters an HP-REI error.
LREI	Enters an LP-REI error.
FAS	Enters an (SDH)FAS error.
BALL	Bit all
BIT139	Enters a bit error to 139Mb/s signal.
BIT45	Enters a bit error to 45Mb/s signal.
BIT34	Enters a bit error to 34Mb/s signal.
BIT8	Enters a bit error to 8Mb/s signal.
BIT2	Enters a bit error to 2Mb/s signal.
BIT1_5	Enters a bit error to 1.5Mb/s signal.
BINF	Bit Info.
CODE	Enters a code error.
EBIT	Enters an E-bit error.
FAS139	Enters an FAS error to 139Mb/s signal.
FAS45	Enters an FAS error to 45Mb/s signal.
FAS34	Enters an FAS error to 34Mb/s signal.
FAS8	Enters an FAS error to 8Mb/s signal.
FAS2	Enters an FAS error to 2Mb/s signal.
FAS1_5	Enters an FAS error to 1.5Mb/s signal.
REI139	Enters an REI error to 139Mb/s signal.
REI45	Enters an REI error to 45Mb/s signal.
REI34	Enters an REI error to 34Mb/s signal.
PLCPREI	Enters a REI PLCP error.
PARITY	Enters a Parity error.
CRC6	Enters a CRC-6 error.
CBIT	Enters a CBIT error.
BIP8	Enters a BIP8 error.
PLCPFAS	Enters a FAS PLCP error.
POI	Enters a POI error.

Function: Sets the type of error to be inseted against transmission signals.

Example use: To insert a FAS PLCP error.

```
> :SOURCE:TELEcom:ERRor:TYPE PLCPFAS
```

:SOURCE:TELEcom:ERRor:TYPE ?

Response: <etype> = <CHARACTER RESPONSE DATA>

Function: Queries the type of error inserted against transmission signals.

Example use:> :SOURCE:TELEcom:ERRor:TYPE ?
< PLCPFAS

:SOURCE:TELEcom:ERRor:ERATe <erate>

Parameter: <erate> = <CHARACTER PROGRAM DATA>

ONCE	Single error
R1E_3	1E-3
R1E_4	1E-4
R1E_5	1E-5
R1E_6	1E-6
R1E_7	1E-7
R1E_8	1E-8
R1E_9	1E-9
R1IN16	1 in 16
R2IN16	2 in 16
R3IN16	3 in 16
R4IN16	4 in 26
ALL	ALL
R5E_3	5E-3
R5E_4	5E-4
R5E_5	5E-5
R5E_6	5E-6
R5E_7	5E-7
R5E_8	5E-8
R5E_9	5E-9
BURST	Burst

Function: Sets the rate of error insertion.

Restriction: Invalid in the following cases:

- When <BURST> is set while the ATM unit is not installs.

Example use: To insert errors at Burst intervals:

> :SOURCE:TELEcom:ERRor:ERATe BURST

:SOURCE:TELEcom:ERRor:ERATe ?

Response: <erate> = <CHARACTER RESPONSE DATA>

Function: Queries the error insertion rate.

Example use: > :SOURCE:TELEcom:ERRor:ERATe ?
< BURST

SECTION 4 REMOTE CONTROL

:SOURce:TELEcom:ERRor:PATtern <numeric>

Parameter: <numeric> = <DECIMAL NUMERIC DATA>

1 to 8 (B1)
1 to 384 (B2)
1 to 8 (HP-B3)
1 to 8 (LP-B3)
1 to 2 (BIP-2)
1 to 8 (MS-REI)
1 to 8 (HP-REI)
1 to 8 (LP-REI)

* : The range of B2 depends in the bit rate.

* : The range of LP-REI changes in the following cases:

- When INSTRument:ATM is <OFF>.

The mapping type in the following cases: 1to8

VC4-ASY, VC4-BLK, VC3-ASY, VC3-SYN, VC3-45MASY, VC3-BLK

In other cases : 1to2

- When INSTRument:ATM is <ON>: 1to8

Function: Sets the number of error insertion bit.

Restriction: Invalid in the following cases:

- When :SOURce:TELEcom:ERRor:ERATe is other than <BURST>.

Example use: To set the number of repeated error frames of a B1 error to 5.

> :SOURce:TELEcom:ERRor:PATtern 5

:SOURce:TELEcom:ERRor:PATtern ?

Response: <numeric> = <NR1 NUMERIC RESPONSE DATA>

Function: Queries the number of error insertion bits.

Example use: > :SOURce:TELEcom:ERRor:PATtern ?

< 5

:SOURCE:TELEcom:OHPReset:SLABel<pohtype>,<string>

Parameter: <pohtype> = <CHARACTER PROGRAM DATA>

VC4 POH VC4 pattern

VC3 POH VC3 pattern

<string> = <STRING PROGRAM DATA>

C2(b1-8) can be set by the plain language, as follows:

"Unequipped"	"UNEQ"	(0000 0000)
"Equipped-non-specific"	"non-specific"	(0000 0001)
"TUG structure"	"TUG"	(0000 0010)
"Locked TU"	"Locked TU"	(0000 0011)
"Async. 34M or 45M(C-3)"	"34M" or "45M"	(0000 0100)
"Async. 139M(C-4)"	"139M"	(0001 0010)
"ATM mapping"	"ATM"	(0001 0011)
"MAN(DQDB) mapping"	"MAN" or "DQDB"	(0001 0100)
"FDDI mapping"	"FDDI"	(0001 0101)
"O.181 mapping"	"O.181"	(1111 1110)
"VC-AIS"	"VC-AIS"	(1111 1111)

Function: Sets C2 data of POH preset data of transmission signal. (Plain-language format)

Example use: To set the preset data of POH VC3 C2, as follows:

> :SOURCE:TELEcom:OHPReset:SLABel VC3,"Unequipped"

:SOURCE:TELEcom:OHPReset:SLABel?<pohtype>

Parameter: <pohtype> = <CHARACTER PROGRAM DATA>

Response: <string> = <STRING PROGRAM DATA>

Function: Queries plain-language data of C2 of POH preset data of transmission signal.

Example use: Queries plain-language preset data of C2 of POH VC3.

> :SOURCE:TELEcom:OHPReset:SLABel? VC3

< "Unequipped"

SECTION 4 REMOTE CONTROL

:SOURCE:TELEcom:MSPMessages:REQuest <request>

Parameter:	<request> = <CHARACTER PROGRAM DATA>
	NREQ No request(0000)
	DNR Do not revert(0001)
	RREQ Reverse request(0010)
	UUS3 Unused(0011)
	EXER Exercise(0100)
	UUS5 Unused(0101)
	WTR Wait to restore(0110)
	UUS7 Unused(0111)
	MSW Manual switch(1000)
	UUS9 Unused(1001)
	SDLP Signal degrade low priority(1010)
	SDHP Signal degrade high priority(1011)
	SFLP Signal fall low priority(1100)
	SFHP Signal fall high priority(1101)
	FSW Forced switch(1110)
	LOPR Lockout of protection(1111)

Function: Sets K1 (bits 1 to 4). (Plain-language format)

Restriction: Invalid in the following case:

- When :DISPLAY:TMENU[:NAME] is other than <"MANual[:JOFF]">, <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, and <"MANual:RCEL1">.

Example use: To set bits 1 to 4 of K1 to "1011":
 > :SOURCE:TELEcom:MSPMessages:REQuest SDHP

:SOURCE:TELEcom:MSPMessages:CHANnel <mspch>

Parameter:	<mspch> = <CHARACTER PROGRAM DATA>
	NCH Null channel(0000)
	WC1 Working channel1(0001)
	WC2 Working channel2(0010)
	WC3 Working channel3(0011)
	WC4 Working channel4(0100)
	WC5 Working channel5(0101)
	WC6 Working channel6(0110)
	WC7 Working channel7(0111)
	WC8 Working channel8(1000)
	WC9 Working channel9(1001)
	WC10 Working channel10(1010)
	WC11 Working channel11(1011)
	WC12 Working channel12(1100)
	WC13 Working channel13(1101)
	WC14 Working channel14(1110)
	ETCH Extra traffic channel(1111)

Function: Sets K1 (bits 5 to 8). (Plain-language format)

Restriction: Invalid in the following case:

- When :DISPLAY:TMENU[:NAME] is other than <"MANual[:JOFF]">, <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, and <"MANual:RCEL1">.

Example use: To set bits 5 to 8 of K1 to "1110":
 > :SOURCE:TELEcom:MSPMessages:CHANnel WC14

:SOURCE:TELEcom:MSPMessages:BRIDGE <bridge>

Parameter: <bridge> = <CHARACTER PROGRAM DATA>

NCH	Null channel(0000)
WC1	Working channel1(0001)
WC2	Working channel2(0010)
WC3	Working channel3(0011)
WC4	Working channel4(0100)
WC5	Working channel5(0101)
WC6	Working channel6(0110)
WC7	Working channel7(0111)
WC8	Working channel8(1000)
WC9	Working channel9(1001)
WC10	Working channel10(1010)
WC11	Working channel11(1011)
WC12	Working channel12(1100)
WC13	Working channel13(1101)
WC14	Working channel14(1110)
ETCH	Extra traffic channel(1111)

Function: Sets K2 (bits 1 to 4). (Plain-language format)

Restriction: Invalid in the following case:

- When :DISPlay:TMENu[:NAME] is other than <"MANual[:JOFF]">, <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, and <"MANual:RCEL1">.

Example use: To set bits 1 to 4 of K2 to "1110":

> :SOURCE:TELEcom:MSPMessages:BRIDGE WC14

:SOURCE:TELEcom:MSPMessages:ARCHitect <arch>

Parameter: <arch> = <CHARACTER PROGRAM DATA>

OPOA	1+1 architecture(0)
OCNA	1:n architecture(1)

Function: Sets K2 (bit 5). (Plain-language format)

Restriction: Invalid in the following case:

- When :DISPlay:TMENu[:NAME] is other than <"MANual[:JOFF]">, <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, and <"MANual:RCEL1">.

Example use: To set bit 5 of K2 to "1":

> :SOURCE:TELEcom:MSPMessages:ARCHitect OCNA

:SOURCE:TELEcom:MSPBits:REQuest <string>

Parameter: <string> = <STRING PROGRAM DATA>
"0000" to "1111"

Function: Sets K1 (bits 1 to 4). (Bit format)

Restriction: Invalid in the following case:

- When :DISPlay:TMENu[:NAME] is other than <"MANual[:JOFF]">, <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, and <"MANual:RCEL1">.

Example use: To set bits 1 to 4 of K1 to "1011":

> :SOURCE:TELEcom:MSPBits:REQuest "1011"

SECTION 4 REMOTE CONTROL

:SOURCE:TELEcom:MSPBits:CHANnel <string>

Parameter: <string> = <STRING PROGRAM DATA>
"0000" to "1111"

Function: Sets K1 (bits 5 to 8). (Bit format)

Restriction: Invalid in the following case:

- When :DISPlay:TMENu[:NAME] is other than <"MANual[:JOFF]">, <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, and <"MANual:RCEL1">.

Example use: To set bits 5 to 8 of K2 to "1110":

> :SOURCE:TELEcom:MSPBits:CHANnel "1110"

:SOURCE:TELEcom:MSPBits:BRIDge <string>

Parameter: <string> = <STRING PROGRAM DATA>
"0000" to "1111"

Function: Sets K2 (bits 1 to 4). (Bit format)

Restriction: Invalid in the following case:

- When :DISPlay:TMENu[:NAME] is other than <"MANual[:JOFF]">, <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, and <"MANual:RCEL1">.

Example use: To set bits 1 to 4 of K2 to "1110":

> :SOURCE:TELEcom:MSPBits:BRIDge "1110"

:SOURCE:TELEcom:MSPBits:ARCHitect <string>

Parameter: <string> = <STRING PROGRAM DATA>
"0" to "1"

Function: Sets K2 (bit 5). (Bit format)

Restriction: Invalid in the following case:

- When :DISPlay:TMENu[:NAME] is other than <"MANual[:JOFF]">, <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, and <"MANual:RCEL1">.

Example use: To set bit 5 of K2 to "1":

> :SOURCE:TELEcom:MSPBits:ARCHitect "1"

:SOURCE:TELEcom:MSPBits:REServed <string>

Parameter: <string> = <STRING PROGRAM DATA>
"000" to "101"

Function: Sets K2 (bits 6 to 8). (Bit format)

Restriction: Invalid in the following case:

- When :DISPlay:TMENu[:NAME] is other than <"MANual[:JOFF]">, <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, and <"MANual:RCEL1">.

Example use: To set bits 6 to 8 of K2 to "101":

> :SOURCE:TELEcom:MSPBits:REServed "101"

:SOURCE:TELEcom:PSETting:NDFSet <ptype>,<string>

Parameter: <ptype> = <CHARACTER PROGRAM DATA>
 AU AU-PTR
 TU TU-PTR
<string> = <STRING PROGRAM DATA>
 "0000" to "1111"

Function: Sets the pointer value (NDF).

Restriction: Invalid in the following cases:

- When :DISPlay:TMENu[:NAME] is other than <"MANual[:JOFF]">, <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, and <"MANual:RCEL1">.
- When <TU> is set while :INSTrument:ATM is <ON>.

Example use: To set AU PTR NDF to "1011":
> :SOURCE:TELEcom:PSETting:NDFSet AU,"1011"

:SOURCE:TELEcom:PSETting:SSSet <ptype>,<string>

Parameter: <ptype> = <CHARACTER PROGRAM DATA>
 AU AU-PTR
 TU TU-PTR
<string> = <STRING PROGRAM DATA>
 "00" to "11"

Function: Sets pointer value (SS).

Restriction: Invalid in the following cases:

- When :DISPlay:TMENu[:NAME] is other than <"MANual[:JOFF]">, <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, and <"MANual:RCEL1">.
- When <TU> is set while :INSTrument:ATM is <ON>.

Example use: To set AU PTR SS to "10":
> :SOURCE:TELEcom:PSETting:SSSet AU,"10"

:SOURCE:TELEcom:PSETting:IDSet <ptype>,<numeric>

Parameter: <ptype> = <CHARACTER PROGRAM DATA>
 AU AU-PTR
 TU TU-PTR
<numeric> = <DECIMAL NUMERIC PROGRAM DATA>
 0 to 1023

Function: Sets pointer value (ID).

Restriction: Invalid in the following cases:

- When :DISPlay:TMENu[:NAME] is other than <"MANual[:JOFF]">, <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, and <"MANual:RCEL1">.
- When <TU> is set while :INSTrument:ATM is <ON>.

Example use: To set AU PTR ID to "10" (decimal notation)
> :SOURCE:TELEcom:PSETting:IDSet AU,10

SECTION 4 REMOTE CONTROL

:SOURCE:TELEcom:PSETting:PPJC <ptype>

Parameter: <ptype> = <CHARACTER PROGRAM DATA>
 AU AU-PTR
 TU TU-PTR

Function: Inserts +PJC one time for send signal.

Restriction: Invalid in the following cases:

- When :DISPlay:TMENu[:NAME] is other than <"MANual[:JOFF]">, <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, and <"MANual:RCEL1">.
- When <TU> is set while :INSTrument:ATM is <ON>.

Example use: To insert +PJC one time to AU pointer.
> :SOURCE:TELEcom:PSETting:PPJC AU

:SOURCE:TELEcom:PSETting:NPJC <ptype>

Parameter: <ptype> = <CHARACTER PROGRAM DATA>
 AU AU-PTR
 TU TU-PTR

Function: Inserts -PJC one time for send signal.

Restriction: Invalid in the following cases:

- When :DISPlay:TMENu[:NAME] is other than <"MANual[:JOFF]">, <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, and <"MANual:RCEL1">.
- When <TU> is set while :INSTrument:ATM is <ON>.

Example use: To insert -PJC one time to AU pointer.
> :SOURCE:TELEcom:PSETting:NPJC AU

:SOURce:ATM:MAPPING <mtype>

Parameter: <mtype> = <CHARACTER PROGRAM DATA>
AAL1
AAL2
AAL34
AAL5
ATM

Function: Sets ATM mapping of the send signal.

Restriction: Invalid in the following case:

- When :INSTrument:ATM is <OFF>.

Example use: To set the ATM mapping of send signal to AAL1.
> :SOURce:ATM:MAPPING AAL1

:SOURce:ATM:MAPPING?

Response <mtype> = <CHARACTER RESPONSE DATA>
Function: Quiries ATM mapping of send signal.
Example use: > :SOURce:ATM:MAPPING?
< AAL1

:SOURce:ATM:HSTRUcture <htype>

Parameter: <htype> = <CHARACTER PROGRAM DATA>
UNI
NNI

Function: Sets the header structure of send signal.

Restriction: Invalid in the following case:

- When :INSTrument:ATM is <OFF>.

Example use: To set the ATM mapping of send signal to AAL1
> :SOURce:ATM:OHPReset:E3:PTYPe "Unequipped"
or
> :SOURce:ATM:HSTRUcture UNI

:SOURce:ATM:HSTRUcture?

Response <htype> = <CHARACTER RESPONSE DATA>
Function: Quiries the header structure of send signal.
Example use: > Header:SOURce:ATM:HSTRUcture?
< UNI

SECTION 4 REMOTE CONTROL

:SOURce:ATM:OAM <type>

Parameter: <type> = <CHARACTER PROGRAM DATA>
 SEGMENT Segment
 END End-to-end

Function: Sets a OAM type for the transmission signals.

Restriction: Invalid in the following cases:

- When the ATM unit is not installed.
- When :INSTRument:ATM is <OFF>.

Example use: To set the OAM type for transmission signals:
> :SOURce:ATM:OAM END

:SOURce:ATM:OAM ?

Response <type> = <CHARACTER RESPONSE DATA>
 SEGM Segment
 END End-to-end

Function Queries the OAM type for transmission signals.

Example use: > :SOURce:ATM:OAM ?
< END

:SOURce:ATM:OHPReset:E3:PATtern <ohpoint>,<string>

Parameter: <ohpoint> = <CHARACTER PROGRAM DATA>
FA1, FA2, RDI, REI, PTYPE, PDEP, TMARK, NR, GC
<string> = <STRING PROGRAM DATA>
"00" to "FF" (HEX format) When <ohpoint> is FA1, FA2, NR, or GC
"0" to "1" (BIN format) When <ohpoint> is RDI, REI, or TMARK
"00" to "11" (BIN format) When <ohpoint> is PDEP
"000" to "011" (BIN format) When <ohpoint> is PTYPE

Function: Sets the E3 preset data of send signal.

Restriction: Invalid in the following cases:
• When the 2/8/34/139/156M (CMI) unit is not installed.
• When :INSTrument:ATM is <OFF>.

Example use: To set E3 FA1 preset data to "FF":
> :SOURce:ATM:OHPReset:E3:PATtern FA1,"FF"

:SOURce:ATM:OHPReset:E3:PATtern? <ohpoint>

Parameter: <ohpoint> = <CHARACTER PROGRAM DATA>

Response: <string> = <STRING RESPONSE DATA>

Function: Queries the E3 preset data of send signal.

Example use: To query the FA1 preset data of E3:
> :SOURce:ATM:OHPReset:E3:PATtern? FA1
< "AB"

:SOURce:ATM:OHPReset:E3:PTYPE <string>

Parameter: <string> = <STRING PROGRAM DATA>
"Unequipped" "UNEQ" (000)
"Equipped-non-specific" "non-specific" (001)
"ATM" "ATM" (010)
"SDH TU-12s" "TU12" (011)

Note : Abbreviated format is at right.

Function: Sets the plain-language of the E3 preset data (Payload type) of send signal.

Restriction: Invalid in the following cases:
• When the 2/8/34/139/156M (CMI) unit is not installed.
• When :INSTrument:ATM is <OFF>.

Example use: To set the preset data of the E3 Payload type to "Unequipped".
> :SOURce:ATM:OHPReset:E3:PTYPE "Unequipped"

SECTION 4 REMOTE CONTROL

:SOURce:ATM:OHPReset:E3:TRACe <string>

- Parameter:** <string> = <STRING PROGRAM DATA>
The characterstring must consist of 0 to 16 characters. "" is allowed.
- Function:** Sets Trail trace pattern of E3 preset data of the send signal.
Data is in ASCII.
- Restriction:** Invalid in the following cases:
- When the 2/8/34/139/156M(CMI) unit is not installed.
 - When :INSTrument:ATM is <OFF>.
- Example use:** To set E3 Trail trace to "*MP1550C SDH/PDH":
> :SOURce:ATM:OHPReset:E3:TRACe " MP1550C SDH/PDH"

:SOURce:ATM:OHPReset:E3:TRACe?

- Response** <string> = <STRING RESPONSE DATA>
- Function:** Queries Trail trace pattern of E3 preset data of the send signal.
- Example use:** To query Trail trace pattern of E3 FA1 preset data:
> :SOURce:ATM:OHPReset:E3:TRACe?
< "*MP1550C SDH/PDH"

:SOURce:ATM:OHPReset:E3:DEFault

- Parameter:** None
- Function:** Initializes E3 preset data of the send signal.
- Restriction:** Invalid in the following cases:
- When the 2/8/34/139/156M(CMI) unit is not installed.
 - When :INSTrument:ATM is <OFF>.
- Example use:** > :SOURce:ATM:OHPReset:E3:DEFault

:SOURce:ATM:OHPReset:E4:PATtern <ohpoint>,<string>

- Parameter:** <ohpoint> = <CHARACTER PROGRAM DATA>
FA1, FA2, P1, P2, RDI, REI, PTYPE, PDEP, TMARK, NR, GC
<string> = <STRING PROGRAM DATA>
"00" to "FF" (HEX format) When <ohpoint> is FA1, FA2, P1, P2, NR, or GC
"0" to "1" (BIN format) When <ohpoint> is RDI, REI, or TMARK
"00" to "11" (BIN format) When <ohpoint> is PDEP
"000" to "100" (BIN format) When <ohpoint> is PTYPE
- Function:** Sets E4 preset data of the send signal.
- Restriction:** Invalid in the following cases:
- When the 2/8/34/139/156M(CMI) unit is not installed.
 - When :INSTrument:ATM is <OFF>.
- Example use:** To set E4 FA1 preset data to "FF":
> :SOURce:ATM:OHPReset:E4:PATtern FA1,"FF"

:SOURce:ATM:OHPReset:E4:PATtern? <ohpoint>

- Parameter:** <ohpoint> = <CHARACTER PROGRAM DATA>
- Response** <string> = <STRING RESPONSE DATA>
- Function:** Queries E4 preset data of the send signal.
- Example use:** To query E4 FA1 preset data:
> :SOURce:ATM:OHPReset:E4:PATtern? FA1
< "AB"

:SOURCE:ATM:OHPReset:E4:PTYPE <string>

Parameter: <string> = <STRING PROGRAM DATA>
"Unequipped" "UNEQ" (000)
"Equipped-non-specific" "non-specific" (001)
"ATM" "ATM" (010)
"TUG-2" "TUG-2" (011)
"TUG-3 & TUG-2" "TUG-3 & TUG-2" (100)

Note : Abbreviations are shown on the right.

Function: Sets plain-language of E4 preset data (payload type) of the send signal.

Restriction: Invalid in the following cases:

- When the 2/8/34/139/156M(CMI) unit is not installed.
- When :INSTRUMENT:ATM is <OFF>.

Example use: To set preset data of E4 Payload type to "Unequipped":
> :SOURCE:ATM:OHPReset:E4:PTYPE "Unequipped"

:SOURCE:ATM:OHPReset:E4:PTYPE?

Response <string> = <STRING RESPONSE DATA>

Function: Queries E4 preset data (Payload type) of the send signal.

Example use: To query preset data of E3 Payload type:
> :SOURCE:ATM:OHPReset:E4:PTYPE?
< "Unequipped"

:SOURCE:ATM:OHPReset:E4:TRACe <string>

Parameter <string> = <STRING PROGRAM DATA>
"ABCDEFGH01234abcd"

The character string must consist of 0 to 16 characters.

Function: Sets Trail trace pattern of E4 preset data of the send signal.
Data is expressed in ASCII.

Restriction: Invalid in the following cases:

- When the 2/8/34/139/156M(CMI) unit is not installed.
- When :INSTRUMENT:ATM is <OFF>.

Example use: To set E4 Trail trace to "*MP1550C SDH/PDH":
> :SOURCE:ATM:OHPReset:E4:TRACe " MP1550C SDH/PDH"

:SOURCE:ATM:OHPReset:E4:TRACe?

Response <string> = <STRING RESPONSE DATA>

Function: Queries Trail traced pattern of E4 preset data of the send signal.

Example use: To query Trail trace pattern of E4:
> :SOURCE:ATM:OHPReset:E4:TRACe?
< "*MP1550C SDH/PDH"

:SOURCE:ATM:OHPReset:E4:DEFault

Parameter: None

Function: Initializes E4 preset data of the send signal.

Restriction: Invalid in the following cases:

- When the 2/8/34/139/156M(CMI) unit is not installed.
- When :INSTRUMENT:ATM is <OFF>.

Example use: > :SOURCE:ATM:OHPReset:E4:DEFault

SECTION 4 REMOTE CONTROL

:SOURCE:ATM:OHPReset:DS3Plcp:PLCP <numeric>,<string>

Parameter: <numeric> = <DECIMAL NUMERIC PROGRAM DATA>
1 to 12 Step value: 1
<string> = <STRING PROGRAM DATA>
"00" to "FF"

Function: Sets PLCP of DS3 PLCP preset data of the send signal.
Represent <string> in hexadecimal notation.

Restriction: Invalid in the following cases:

- When the 1.5/45/52M unit is not installed.
- When :INSTrument:ATM is <OFF>.

Example use: To set fourth PLCP A1 of DS3 PLCP to "FF":
> :SOURCE:ATM:OHPReset:DS3Plcp:PLCP 4,"FF"

:SOURCE:ATM:OHPReset:DS3Plcp:PLCP? <numeric>

Parameter: <numeric> = <DECIMAL NUMERIC PROGRAM DATA>

Response <string> = <STRING RESPONSE DATA>

Function: Queries PLCP of DS3 DS3 PLCP preset data of the send signal.
Represent <string> in hexadecimal notation.

Example use: To query fourth PLCP A1 of DS3 PLCP:
> :SOURCE:ATM:OHPReset:DS3Plcp:PLCP? 4
< "FF"

:SOURCE:ATM:OHPReset:DS3Plcp:FRAME <numeric>,<string>

Parameter: <numeric> = <DECIMAL NUMERIC PROGRAM DATA>
1 to 12 Step value: 1
<string> = <STRING PROGRAM DATA>
"00" to "FF"

Function: Sets frame of DS3 PLCP preset data of the send signal.
Represent <string> in hexadecimal notation.

Restriction: Invalid in the following cases:

- When the 1.5/45/52M unit is not installed.
- When :INSTrument:ATM is <OFF>.

Example use: To set fourth frame A2 of DS3 PLCP to "FF":
> :SOURCE:ATM:OHPReset:DS3Plcp:FRAME 4,"FF"

:SOURCE:ATM:OHPReset:DS3Plcp:FRAME? <numeric>

Parameter: <numeric> = <DECIMAL NUMERIC PROGRAM DATA>

Response <string> = <STRING RESPONSE DATA>

Function: Queries frame of DS3 PLCP preset data of the send signal.
Represent <string> in hexadecimal notation.

Example use: To query fourth frame A2 of DS3 PLCP:
> :SOURCE:ATM:OHPReset:DS3Plcp:FRAME? 4
< "FF"

:SOURCE:ATM:OHPReset:DS3Plcp:POI <type>,<string>
Parameter: <type> = <CHARACTER PROGRAM DATA>
P11, P10, P09, P08, P07, P06, P05, P04, P03, P02, P01, P00
<string> = <STRING PROGRAM DATA>
"00" to "FF"
Function: Sets PIO of DS3 PLCP preset data of the send signal.
Represent <string> in hexadecimal notation.
Restriction: Invalid in the following cases:

- When the 1.5/45/52M is not installed.
- When :INSTrument:ATM is <OFF>.

Example use: To set PIO P11 of DS3 PLCP to "FF":
> :SOURCE:ATM:OHPReset:DS3Plcp:POI P11,"FF"

:SOURCE:ATM:OHPReset:DS3Plcp:POI? <type>
Parameter: <type> = <CHARACTER PROGRAM DATA>
Response <string> = <STRING RESPONSE DATA>
Function: Queries PIO of DS3 PLCP preset data of the send signal.
Represent <string> in hexadecimal notation.
Example use: To query PIO P11 of DS3 PLCP:
> :SOURCE:ATM:OHPReset:DS3Plcp:POI? 4
< "FF"

:SOURCE:ATM:OHPReset:DS3Plcp:POH <type>,<string>
Parameter: <type> = <CHARACTER PROGRAM DATA>
Z6, Z5, Z4, Z3, Z2, Z1, X7, G1, X10, X11
<string> = <STRING PROGRAM DATA>
"00" to "FF"
Function: Sets POH of DS3 PLCP preset data of the send signal.
Represent <string> in hexadecimal notation.
Restriction: Invalid in the following cases:

- When the 1.5/45/52M is not installed.
- When :INSTrument:ATM is <OFF>.

Example use: To set POH Z6 of DS3 PLCP to "FF":
> :SOURCE:ATM:OHPReset:DS3Plcp:POH Z6,"FF"

:SOURCE:ATM:OHPReset:DS3Plcp:POH? <type>
Parameter: <type> = <CHARACTER PROGRAM DATA>
Response <string> = <STRING RESPONSE DATA>
Function: Queries POH of DS3 PLCP preset data of the send signal.
Represent <string> in hexadecimal notation.
Example use: To query POH Z6 of DS3 PLCP:
> :SOURCE:ATM:OHPReset:DS3Plcp:POH? Z6
< "FF"

SECTION 4 REMOTE CONTROL

:SOURCE:ATM:OHPReset:DS3Plcp:DEFault

Parameter: None

Function: Initializes DS3 PLCP preset data of the send signal.

Restriction: Invalid in the following cases:

- When the 1.5/45/52M is not installed.
- When :INSTrument:ATM is <OFF>.

Example use: > :SOURCE:ATM:OHPReset:DS3Plcp:DEFault

:SOURCE:ATM:MANual:TRAFfic:TYPE <type>

Parameter: <type> = <CHARACTER PROGRAM DATA>

O.191	0.191
USER	User program
MEMorized	Memorized cell

Function: Sets ATM cell type.

Restriction: Invalid in the following cases:

- When :INSTrument:ATM is <OFF>.
- When :DISPlay:TMENu[:NAME] is other than <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCELI">, and <"MANual:RCELL1">.
- When :SOURCE:ATM:MAPPING is <AAL1>, <AAL2>, <AAL34>, or <AAL5>.

Example use: To set ATM cell type to 0.191:

> :SOURCE:ATM:MANual:TRAFfic:TYPE 0.191

:SOURCE:ATM:MANual:TRAFfic:TYPE?

Response <type> = <CHARACTER RESPONSE DATA>

O191	O.191
USER	User program
MEM	Memorized cell

Function: Queries ATM cell type.

Example use: > :SOURCE:ATM:MANual:TRAFfic:TYPE?

< 191

:SOURce:ATM:MANual:TRAFfic:MEMorized:NUMBer <numeric>

Parameter: <numeric> = <DECIMAL NUMERIC PROGRAM DATA>
1 to 2016 Step value: 1

Function: Sets number of Memorized cell repetitions.

Restriction: Invalid in the following cases:

- When :INSTrument:ATM is <OFF>.
- When :DISPlay:TMENu[:NAME] is other than <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCELI">, and <"MANual:RCELI">.
- When :SOURce:ATM:MAPPing is <AAL1>, <AAL2>, <AAL34>, or <AAL5>.
- When :SOURce:ATM:MANual:TRAFfic:TYPE is <0191> or <USER>.

Example use: To set number of Memorized cell repetitions to 2016:

> :SOURce:ATM:MANual:TRAFfic:MEMorized:NUMBer 2016

:SOURce:ATM:MANual:TRAFfic:MEMorized:NUMBer?

Response <numeric> = <NR1 NUMERIC RESPONSE DATA>

Function: Queries number of Memorized cell repetitions.

Example use: > :SOURce:ATM:MANual:TRAFfic:MEMorized:NUMBer?
< 2016

:SOURce:ATM:MANual:TRAFfic:HEADer [<gfc>],[<vpi>],[<vci>],[<pt>],[<clp>]

Parameter: <gfc> = <STRING PROGRAM DATA>
"0" to "F" (HEX format)
<vpi> = <DECIMAL NUMERIC PROGRAM DATA>
0 to 255 At UNI
0 to 4095 At NNI
<vci> = <DECIMAL NUMERIC PROGRAM DATA>
0 to 65535
<pt> = <STRING PROGRAM DATA>
"000" to "111" (BIN format)
<clp> = <STRING PROGRAM DATA>
"0" to "1" (BIN format)

Function: Sets header pattern.

Restriction: Invalid in the following cases:

- When all parameters are omitted.
- When :INSTrument:ATM is <OFF>.
- When :DISPlay:TMENu[:NAME] is other than <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCELI">, and <"MANual:RCELI">.

Example use: To set header pattern to GFC:F and VPI:255:

> :SOURce:ATM:MANual:TRAFfic:HEADer "F",255,,,

:SOURce:ATM:MANual:TRAFfic:HEADer?

Response <gfc> = <STRING RESPONSE DATA>
<vpi> = <NR1 NUMERIC RESPONSE DATA>
<vci> = <NR1 NUMERIC RESPONSE DATA>
<pt> = <STRING RESPONSE DATA>
<clp> = <STRING RESPONSE DATA>

Note : <gfc> is output as "" at NNI.

Function: Queries header pattern.

Example use: > :SOURce:ATM:MANual:TRAFfic:HEADer?
< "F",255,4095,"001","1"

SECTION 4 REMOTE CONTROL

:SOURce:ATM:MANual:TRAFfic:PAYLoad:TYPE <type>

Parameter: <type> = <CHARACTER PROGRAM DATA>

WORD8	Word8
WORD16	Word16
SCPRbs7	Single cell PRBS7
SCPRbs9	Single cell PRBS9
CCPRbs	Cross cell PRBS9
CCPRbs15	Cross cell PRBS15
CCPRbs23	Cross cell PRBS23
EDIT	Edit pattern
TSTamp	Time stamp

Function: Sets payload type.

Restriction: Invalid in the following cases:

- When :INSTrument:ATM is <OFF>.
- When :DISPlay:TMENu[:NAME] is other than <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, and <"MANual:RCEL1">.
- When :SOURce:ATM:MAPPing is <ATM> and :SOURce:ATM:MANual:TRAFfic:TYPE is <0191> or <MEMorized>.
- When <WORD8> or <SCPRbs7> is set while:SOURce:ATM:MAPPing is <ATM>, <AAL1>, <AAL34>, or <AAL5>.
- When <WORD16>, <SCPRbs9>, <CCPRbs9>, <CCPRbs15> or <CCPRbs23> is set while:SOURce:ATM:MAPPing is <AAL2>.
- When <TSTamp> is set while:SOURce:ATM:MAPPing is <AAL5>.

Example use: To set payload type to Word16:

```
> :SOURce:ATM:MANual:TRAFfic:PAYLoad:TYPE WORD16
```

:SOURce:ATM:MANual:TRAFfic:PAYLoad:TYPE?

Response <type> = <CHARACTER RESPONSE DATA>

WORD8	Word8
WORD16	Word16
SCPR7	Single cell PRBS7
SCPR9	Single cell PRBS9
CCPR9	Cross cell PRBS9
CCPR15	Cross cell PRBS15
CCPR23	Cross cell PRBS23
EDIT	Edit pattern
TST	Time stamp

Function: Queries payload type.

Example use: > :SOURce:ATM:MANual:TRAFfic:PAYLoad:TYPE?
< WORD16

:SOURCE:ATM:MANual:TRAFfic:PAYLoad:WORD <string>
Parameter: <string> = <STRING PROGRAM DATA>
"0000000000000000" to "1111111111111111"
Function: Sets word pattern.
Represent <string> in binary notation.
Restriction: Invalid in the following cases:

- When :INSTrument:ATM is <OFF>.
- When :DISPlay:TMENu[:NAME] is other than <"MANual:JON">,
<"MANual:TCLayer">, <"MANual:TCEL1">, and <"MANual:RCEL1">.

Example use: To set word pattern to "01000111 00001111":
> :SOURCE:ATM:MANual:TRAFfic:PAYLoad:WORD "0100011100001111"

:SOURCE:ATM:MANual:TRAFfic:PAYLoad:WORD?
Response <string> = <STRING RESPONSE DATA>
Function: Queries word pattern.
Example use: > :SOURCE:ATM:MANual:TRAFfic:PAYLoad:WORD?
< "0100011100001111"

:SOURCE:ATM:MANual:TRAFfic:DISTriBution <type>
Parameter: <type> = <CHARACTER PROGRAM DATA>
CBR CBR
BURSt Burst
CWCDv CBR with CDV
POISSon Poisson
SAWTooth Sawtooth
Function: Sets cell traffic type.
Restriction: Invalid in the following cases:

- When :INSTrument:ATM is <OFF>.
- When :DISPlay:TMENu[:NAME] is other than <"MANual:JON">,
<"MANual:TCLayer">, <"MANual:TCEL1">, and <"MANual:RCEL1">.

Example use: To set cell traffic type to CBR:
> :SOURCE:ATM:MANual:TRAFfic:DISTriBution CBR

:SOURCE:ATM:MANual:TRAFfic:DISTriBution?
Response <type> = <CHARACTER RESPONSE DATA>
CBR
BURS
CWCD
POIS
SAWT
Function: Queries cell traffic type.
Example use: > :SOURCE:ATM:MANual:TRAFfic:DISTriBution?
< CBR

SECTION 4 REMOTE CONTROL

:SOURCE:ATM:MANual:TRAFfic:CBR:TYPE <type>

Parameter: <type> = <CHARACTER PROGRAM DATA>
BPS kb/s
CPS cells/sec
PERCent %

Function: Sets CBR type.

Restriction: Invalid in the following cases:

- When :INSTrument:ATM is <OFF>.
- When :DISPlay:TMENu[:NAME] is other than <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, and <"MANual:RCEL1">.
- When :SOURce:ATM:MANual:TRAFfic:DISTRibution is other than <CBR>.

Example use: To set CBR type to kb/s:

> :SOURce:ATM:MANual:TRAFfic:CBR:TYPE BPS

:SOURCE:ATM:MANual:TRAFfic:CBR:TYPE?

Response <type> = <CHARACTER RESPONSE DATA>
BPS kb/s
CPS cells/sec
PERC %

Function: Queries CBR type.

Example use: > :SOURce:ATM:MANual:TRAFfic:CBR:TYPE?
< BPS

:SOURCE:ATM:MANual:TRAFfic:CBR:BPS <numeric>

Parameter: <numeric> = <DECIMAL NUMERIC PROGRAM DATA>
0 to 99999 Step value: 1

Function: Sets cell traffic (kb/s) at CBR.

Restriction: Invalid in the following cases:

- When :INSTrument:ATM is <OFF>.
- When :DISPlay:TMENu[:NAME] is other than <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, and <"MANual:RCEL1">.
- When :SOURce:ATM:MANual:TRAFfic:DISTRibution is other than <CBR>.

Example use: To set cell traffic (kb/s) at CBR to 100 kb/s:

> :SOURce:ATM:MANual:TRAFfic:CBR:BPS 100,BPS

:SOURCE:ATM:MANual:TRAFfic:CBR:BPS?

Response <numeric> = <NR1 NUMERIC RESPONSE DATA>
<suffix> = <CHARACTER RESPONSE DATA>

Function: Queries cell traffic (kb/s) at CBR.

Example use: > :SOURce:ATM:MANual:TRAFfic:CBR:BPS?
< 100,BPS

:SOURce:ATM:MANual:TRAFfic:CBR:CPS <numeric>

Parameter: <numeric> = <DECIMAL NUMERIC PROGRAM DATA>
0 to 1412830 Step value: 1

Function: Sets cell traffic (Cells/sec) at CBR.

Invalid in the following cases:

- When :INSTrument:ATM is <OFF>.
- When :DISPlay:TMENu[:NAME] is other than <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, and <"MANual:RCEL1">.
- When :SOURce:ATM:MANual:TRAFfic:DISTRibution is other than <CBR>.

Example use: To set cell traffic (Cells/sec) at CBR to 100:

> :SOURce:ATM:MANual:TRAFfic:CBR:CPS 100

:SOURce:ATM:MANual:TRAFfic:CBR:CPS?

Response <numeric> = <NR1 NUMERIC RESPONSE DATA>

Function: Queries cell traffic (Cells/sec) at CBR.

Example use: > :SOURce:ATM:MANual:TRAFfic:CBR:CPS?
< 100

:SOURce:ATM:MANual:TRAFfic:CBR:PERCent <numeric>

Parameter: <numeric> = <DECIMAL NUMERIC PROGRAM DATA>
0.0 to 100.0 Step value: 1

Function: Sets cell traffic (%) at CBR.

Restriction: Invalid in the following cases:

- When :INSTrument:ATM is <OFF>.
- When :DISPlay:TMENu[:NAME] is other than <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, and <"MANual:RCEL1">.
- When :SOURce:ATM:MANual:TRAFfic:DISTRibution is other than <CBR>.

Example use: To set cell traffic (%) at CBR to 50:

> :SOURce:ATM:MANual:TRAFfic:CBR:PERCent 50

:SOURce:ATM:MANual:TRAFfic:CBR:PERCent?

Response <numeric> = <NR1 NUMERIC RESPONSE DATA>

Function: Queries cell traffic (%) at CBR.

Example use: > :SOURce:ATM:MANual:TRAFfic:CBR:PERCent?
< 50

SECTION 4 REMOTE CONTROL

:SOURCE:ATM:MANual:TRAFfic:BURSt:TYPE <type>

Parameter: <type> = <CHARACTER PROGRAM DATA>
BPS kb/s
CPS cells/sec
PERCent %

Function: Sets BURSt type.

Restriction: Invalid in the following cases:

- When :INSTrument:ATM is <OFF>.
- When :DISPlay:TMENu[:NAME] is other than <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, and <"MANual:RCEL1">.
- When :SOURce:ATM:MANual:TRAFfic:DISTriBution is other than <BURSt>.

Example use: To set BURSt type to kb/s:

> :SOURce:ATM:MANual:TRAFfic:BURSt:TYPE BPS

:SOURCE:ATM:MANual:TRAFfic:BURSt:TYPE?

Response <type> = <CHARACTER RESPONSE DATA>

Function: Queries BURSt type.

Example use: > :SOURce:ATM:MANual:TRAFfic:BURSt:TYPE?
< BPS

:SOURCE:ATM:MANual:TRAFfic:BURSt:RMAX:BPS <numeric>

Parameter: <numeric> = <DECIMAL NUMERIC PROGRAM DATA>
0 to 99999 Step value: 1

Function: Sets cell traffic (kb/s) at BURSt:RMAX.

Restriction: Invalid in the following cases:

- When :INSTrument:ATM is <OFF>.
- When :DISPlay:TMENu[:NAME] is other than <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, and <"MANual:RCEL1">.
- When :SOURce:ATM:MANual:TRAFfic:DISTriBution is other than <BURSt>.

Example use: To set cell traffic (kb/s) at BURSt:RMAX to 100 kb/s:

> :SOURce:ATM:MANual:TRAFfic:BURSt:RMAX:BPS 100,BPS

:SOURCE:ATM:MANual:TRAFfic:BURSt:RMAX:BPS?

Response <numeric> = <NR1 NUMERIC RESPONSE DATA>
<suffix> = <CHARACTER RESPONSE DATA>

Function: Queries cell traffic (kb/s) at BURSt:RMAX.

Example use: > :SOURce:ATM:MANual:TRAFfic:BURSt:RMAX:BPS?
< 100,BPS

:SOURce:ATM:MANual:TRAFfic:BURSt:RMIN:BPS <numeric>

Parameter: <numeric> = <DECIMAL NUMERIC PROGRAM DATA>
0 to 99999 Step value: 1

Function: Sets cell traffic (%) at BURSt:RMIN.

Restriction: Invalid in the following cases:

- When :INSTrument:ATM is <OFF>.
- When :DISPlay:TMENu[:NAME] is other than <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, and <"MANual:RCEL1">.
- When :SOURce:ATM:MANual:TRAFfic:DISTriBution is other than <BURSt>.

Example use: To set cell traffic (kb/s) at BURSt:RMIN to 100 kb/s:

> :SOURce:ATM:MANual:TRAFfic:BURSt:RMIN:BPS 100,BPS

:SOURce:ATM:MANual:TRAFfic:BURSt:RMIN:BPS?

Response <numeric> = <NR1 NUMERIC RESPONSE DATA>
<suffix> = <CHARACTER RESPONSE DATA>

Function: Queries cell traffic (kb/s) at BURSt:RMIN.

Example use: > :SOURce:ATM:MANual:TRAFfic:BURSt:RMIN:BPS?
< 100,BPS

:SOURce:ATM:MANual:TRAFfic:BURSt:CPS <numeric>

Parameter: <numeric> = <DECIMAL NUMERIC PROGRAM DATA>
0 to 1412830 Step value: 1

Function: Sets cell traffic (Cells/sec) at BURSt.

Restriction: Invalid in the following cases:

- When :INSTrument:ATM is <OFF>.
- When :DISPlay:TMENu[:NAME] is other than <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, and <"MANual:RCEL1">.
- When :SOURce:ATM:MANual:TRAFfic:DISTriBution is other than <BURSt>.

Example use: To set cell traffic (Cells/sec) at BURSt to 100:

> :SOURce:ATM:MANual:TRAFfic:BURSt:CPS 100

:SOURce:ATM:MANual:TRAFfic:BURSt:CPS?

Response <numeric> = <NR1 NUMERIC RESPONSE DATA>

Function: Queries cell traffic (Cells/sec) at BURSt.

Example use: > :SOURce:ATM:MANual:TRAFfic:BURSt:CPS?
< 100

SECTION 4 REMOTE CONTROL

:SOURCE:ATM:MANual:TRAFfic:BURSt:RMAX:PERCent <numeric>

Parameter: <numeric> = <DECIMAL NUMERIC PROGRAM DATA>
0.0 to 100.0 Step value: 1

Function: Sets cell traffic (%) at BURSt:RMAX.

Restriction: Invalid in the following cases:

- When :INSTrument:ATM is <OFF>.
- When :DISPlay:TMENu[:NAME] is other than <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, and <"MANual:RCEL1">.
- When :SOURce:ATM:MANual:TRAFfic:DISTriBution is other than <BURSt>.

Example use: To set cell traffic (%) at BURSt:RMAX to 50:

> :SOURce:ATM:MANual:TRAFfic:BURSt:RMAX:PERCent 50

:SOURCE:ATM:MANual:TRAFfic:BURSt:RMAX:PERCent?

Response <numeric> = <NR1 NUMERIC RESPONSE DATA>

Function: Queries cell traffic (%) at BURSt:RMAX :

Example use: > :SOURce:ATM:MANual:TRAFfic:BURSt:RMAX:PERCent?
< 50

:SOURCE:ATM:MANual:TRAFfic:BURSt:RMIN:PERCent <numeric>

Parameter: <numeric> = <DECIMAL NUMERIC PROGRAM DATA>
0.0 to 100.0 Step value: 1

Function: Sets cell traffic (%) at BURSt:RMIN.

Restriction: Invalid in the following cases:

- When :INSTrument:ATM is <OFF>.
- When :DISPlay:TMENu[:NAME] is other than <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, and <"MANual:RCEL1">.
- When :SOURce:ATM:MANual:TRAFfic:DISTriBution is other than <BURSt>.

Example use: To set cell traffic (%) at BURSt:RMIN to 50:

> :SOURce:ATM:MANual:TRAFfic:BURSt:RMIN:PERCent 50

:SOURCE:ATM:MANual:TRAFfic:BURSt:RMIN:PERCent?

Response <numeric> = <NR1 NUMERIC RESPONSE DATA>

Function: Queries cell traffic (%) at BURSt:RMIN.

Example use: > :SOURce:ATM:MANual:TRAFfic:BURSt:RMIN:PERCent?
< 50

:SOURce:ATM:MANual:TRAFfic:BURSt:T1 <numeric>

Parameter: <numeric> = <DECIMAL NUMERIC PROGRAM DATA>
1000 to 128000 Step value: 1000

Function: Sets cell traffic (cell) at BURSt.

Restriction: Invalid in the following cases:

- When :INSTrument:ATM is <OFF>.
- When :DISPlay:TMENu[:NAME] is other than <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, and <"MANual:RCEL1">.
- When :SOURce:ATM:MANual:TRAFfic:DISTRibution is other than <BURSt>.

Example use: To set cell traffic (cell) at BURSt to 1000:
> :SOURce:ATM:MANual:TRAFfic:BURSt:T1 1000

:SOURce:ATM:MANual:TRAFfic:BURSt:T1?

Response <numeric> = <NR1 NUMERIC RESPONSE DATA>

Function: Queries cell traffic (cell) at BURSt :

Example use: > :SOURce:ATM:MANual:TRAFfic:BURSt:T1?
< 1000

:SOURce:ATM:MANual:TRAFfic:BURSt:T2 <numeric>

Parameter: <numeric> = <DECIMAL NUMERIC PROGRAM DATA>
1000 to 128000 Step value: 1000

Function: Sets cell traffic (cell) at BURSt.

Restriction: Invalid in the following cases:

- When :INSTrument:ATM is <OFF>.
- When :DISPlay:TMENu[:NAME] is other than <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, and <"MANual:RCEL1">.
- When :SOURce:ATM:MANual:TRAFfic:DISTRibution is other than <BURSt>.
- When $T1 \geq T2$.

Example use: To set cell traffic (cell) at BURSt to 10000:
> :SOURce:ATM:MANual:TRAFfic:BURSt:T2 10000

:SOURce:ATM:MANual:TRAFfic:BURSt:T2?

Response <numeric> = <NR1 NUMERIC RESPONSE DATA>

Function: Queries cell traffic (cell) at BURSt.

Example use: > :SOURce:ATM:MANual:TRAFfic:BURSt:T2?
< 10000

SECTION 4 REMOTE CONTROL

:SOURCE:ATM:MANual:TRAFfic:CWCDv:TYPE <type>

Parameter: <type> = <CHARACTER PROGRAM DATA>
 BPS kb/s
 CPS cells/sec
 PERCent %

Function: Sets CBR with CDV type.

Restriction: Invalid in the following cases:

- When :INSTrument:ATM is <OFF>.
- When :DISPlay:TMENu[:NAME] is other than <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, and <"MANual:RCEL1">.
- When :SOURce:ATM:MANual:TRAFfic:DISTRibution is other than <PWCDv>.

Example use: To set CBR with CDV type to kb/s:

> :SOURce:ATM:MANual:TRAFfic:CWCDv:TYPE BPS

:SOURce:ATM:MANual:TRAFfic:CWCDv:TYPE?

Response <type> = <CHARACTER RESPONSE DATA>

Function: Queries CBR with CDV type.

Example use: > :SOURce:ATM:MANual:TRAFfic:CWCDv:TYPE?
< BPS

:SOURce:ATM:MANual:TRAFfic:CWCDv:CDVT <numeric>

Parameter: <numeric> = <DECIMAL NUMERIC PROGRAM DATA>
 0 to 999 step value

Function: Sets the CDVT(Cell) for CBR with CDV.

Restriction: Invalid in the following cases:

- When INSTrument:ATM is <OFF>.
- When :DISPlay:TMENu[:NAME] is other than <"MANual:TCLayer">, <"MANual:TCEL1"> or <"MANual:RCEL1">.
- When :SOURce:ATM:MANual:TRAFfic:DISTRibution is other than <CWCDv>.
- When :SOURce:ATM:MANual:TRAFfic:CWCDv:TYPE is <BPS> or <PERCent>.

Example use: To set the CDVT (Cell) for CBR with CDV to 100:

> :SOURce:ATM:MANual:TRAFfic:CWCDv 100

:SOURce:ATM:MANual:TRAFfic:CWCDv:CDVT ?

Response: <numeric> = <NR1 NUMERIC RESPONSE DATA>

Function: Queries the CDVT (Cell) for CBR with CDV.

Example use: > :SOURce:ATM:MANual:TRAFfic:CWCDv:CDVT ?
< 100

:SOURce:ATM:MANual:TRAFfic:CWCDv:BPS <numeric>

Parameter: <numeric> = <DECIMAL NUMERIC PROGRAM DATA>
 0 to 99999 Step value: 1

Function: Sets cell traffic (kb/s) at CWCDv.

Restriction: Invalid in the following cases:

- When :INSTrument:ATM is <OFF>.
- When :DISPlay:TMENu[:NAME] is other than <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, and <"MANual:RCEL1">.
- When :SOURce:ATM:MANual:TRAFfic:DISTRibution is other than <PWCDv>.

Example use: To set cell traffic (kb/s) at CWCDv to 100 kb/s:

> :SOURce:ATM:MANual:TRAFfic:CWCDv:BPS 100,BPS

:SOURCE:ATM:MANual:TRAFfic:CWCDv:BPS?

Response <numeric> = <NR1 NUMERIC RESPONSE DATA>
<suffix> = <CHARACTER RESPONSE DATA>

Function: Queries cell traffic (kb/s) at CWCDv.

Example use: > :SOURCE:ATM:MANual:TRAFfic:CWCDv:BPS?
< 100,BPS

:SOURCE:ATM:MANual:TRAFfic:CWCDv:CPS <numeric>

Parameter: <numeric> = <DECIMAL NUMERIC PROGRAM DATA>
0 to 1412830 Step value: 1

Function: Sets cell traffic (Cells/sec) at CWCDv.

Restriction: Invalid in the following cases:

- When :INSTrument:ATM is <OFF>.
- When :DISPlay:TMENu[:NAME] is other than <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, and <"MANual:RCEL1">.
- When :SOURCE:ATM:MANual:TRAFfic:DISTRibution is other than <PWCDv>.

Example use: To set cell traffic (Cells/sec) at CWCDv to 100:
> :SOURCE:ATM:MANual:TRAFfic:CWCDv:CPS 100

:SOURCE:ATM:MANual:TRAFfic:CWCDv:CPS?

Response <numeric> = <NR1 NUMERIC RESPONSE DATA>

Function: Queries cell traffic (Cells/sec) at CWCDv.

Example use: > :SOURCE:ATM:MANual:TRAFfic:CWCDv:CPS?
< 100

:SOURCE:ATM:MANual:TRAFfic:CWCDv:PERCent <numeric>

Parameter: <numeric> = <DECIMAL NUMERIC PROGRAM DATA>
0.0 to 100.0 Step value: 1

Function: Sets cell traffic (%) at CWCDv.

Restriction: Invalid in the following cases:

- When :INSTrument:ATM is <OFF>.
- When :DISPlay:TMENu[:NAME] is other than <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, and <"MANual:RCEL1">.
- When :SOURCE:ATM:MANual:TRAFfic:DISTRibution is other than <PWCDv>.

Example use: To set cell traffic (%) at CWCDv to 50:
> :SOURCE:ATM:MANual:TRAFfic:CWCDv:PERCent 50

:SOURCE:ATM:MANual:TRAFfic:CWCDv:PERCent?

Response <numeric> = <NR1 NUMERIC RESPONSE DATA>

Function: Queries cell traffic (%) at CWCDv.

Example use: > :SOURCE:ATM:MANual:TRAFfic:CWCDv:PERCent?
< 50

SECTION 4 REMOTE CONTROL

:SOURCE:ATM:MANual:TRAFfic:POISson[:PERCent] <numeric>

Parameter: <numeric> = <DECIMAL NUMERIC PROGRAM DATA>
0.0 to 100.0 Step value: 1

Function: Sets cell traffic (%) at POISson.

Restriction: Invalid in the following cases:

- When :INSTrument:ATM is <OFF>.
- When :DISPlay:TMENu[:NAME] is other than <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, and <"MANual:RCEL1">.
- When :SOURce:ATM:MANual:TRAFfic:DISTriBution is other than <POISson>.

Example use: To set cell traffic (%) at POISson to 50:
> :SOURce:ATM:MANual:TRAFfic:POISson:PERCent 50

:SOURCE:ATM:MANual:TRAFfic:POISson[:PERCent]?

Response <numeric> = <NR1 NUMERIC RESPONSE DATA>

Function: Queries cell traffic (%) at POISson.

Example use: > :SOURce:ATM:MANual:TRAFfic:POISson:PERCent?
< 50

:SOURCE:ATM:MANual:TRAFfic:SAWTooth:TYPE <type>

Parameter: <type> = <CHARACTER PROGRAM DATA>
BPS kb/s
CPS cells/sec
PERCent %

Function: Sets CBR type.

Restriction: Invalid in the following cases:

- When :INSTrument:ATM is <OFF>.
- When :DISPlay:TMENu[:NAME] is other than <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, and <"MANual:RCEL1">.
- When :SOURce:ATM:MANual:TRAFfic:DISTriBution is other than <SAWTooth>.

Example use: To set CBR type to kb/s:
> :SOURce:ATM:MANual:TRAFfic:SAWTooth:TYPE BPS

:SOURCE:ATM:MANual:TRAFfic:SAWTooth:TYPE?

Response <type> = <CHARACTER RESPONSE DATA>

Function: Queries CBR type.

Example use: > :SOURce:ATM:MANual:TRAFfic:SAWTooth:TYPE?
< BPS

:SOURce:ATM:MANual:TRAFfic:SAWTooth:RMAX:BPS <numeric>

Parameter: <numeric> = <DECIMAL NUMERIC PROGRAM DATA>
0 to 99999 Step value: 1

Function: Sets cell traffic (kb/s) at SAWTooth:RMAX.

Restriction: Invalid in the following cases:

- When :INSTrument:ATM is <OFF>.
- When :DISPlay:TMENu[:NAME] is other than <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, and <"MANual:RCEL1">.
- When :SOURce:ATM:MANual:TRAFfic:DISTriBution is other than <SAWTooth>.

Example use: To set cell traffic (kb/s) at SAWTooth:RMAX to 100 kb/s:
> :SOURce:ATM:MANual:TRAFfic:SAWTooth:RMAX:BPS 100,BPS

:SOURce:ATM:MANual:TRAFfic:SAWTooth:RMAX:BPS?

Response <numeric> = <NR1 NUMERIC RESPONSE DATA>
<suffix> = <CHARACTER RESPONSE DATA>

Function: Queries cell traffic (kb/s) at SAWTooth:RMAX.

Example use: > :SOURce:ATM:MANual:TRAFfic:SAWTooth:RMAX:BPS?
< 100,BPS

:SOURce:ATM:MANual:TRAFfic:SAWTooth:RMIN:BPS <numeric>

Parameter: <numeric> = <DECIMAL NUMERIC PROGRAM DATA>
0 to 99999 Step value: 1

Function: Sets cell traffic (kb/s) at SAWTooth.

Restriction: Invalid in the following cases:

- When :INSTrument:ATM is <OFF>.
- When :DISPlay:TMENu[:NAME] is other than <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, and <"MANual:RCEL1">.
- When :SOURce:ATM:MANual:TRAFfic:DISTriBution is other than <SAWTooth>.

Example use: To set cell traffic (kb/s) at SAWTooth:RMIN to 100 kb/s:
> :SOURce:ATM:MANual:TRAFfic:SAWTooth:RMIN:BPS 100,BPS

:SOURce:ATM:MANual:TRAFfic:SAWTooth:RMIN:BPS?

Response <numeric> = <NR1 NUMERIC RESPONSE DATA>
<suffix> = <CHARACTER RESPONSE DATA>

Function: Queries cell traffic (kb/s) at SAWTooth:RMIN.

Example use: > :SOURce:ATM:MANual:TRAFfic:SAWTooth:RMIN:BPS?
< 100,BPS

SECTION 4 REMOTE CONTROL

:SOURCE:ATM:MANual:TRAFfic:SAWTooth:CPS <numeric>

Parameter: <numeric> = <DECIMAL NUMERIC PROGRAM DATA>
0 to 1412830 Step value: 1

Function: Sets cell traffic (Cells/sec) at SAWTooth.

Restriction: Invalid in the following cases:

- When :INSTrument:ATM is <OFF>.
- When :DISPlay:TMENu[:NAME] is other than <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, and <"MANual:RCEL1">.
- When :SOURce:ATM:MANual:TRAFfic:DISTriBution is other than <SAWTooth>.

Example use: To set cell traffic (Cells/sec) at SAWTooth to 100:
> :SOURce:ATM:MANual:TRAFfic:SAWTooth:CPS 100

:SOURCE:ATM:MANual:TRAFfic:SAWTooth:CPS?

Response <numeric> = <NR1 NUMERIC RESPONSE DATA>

Function: Queries cell traffic (Cells/sec) at SAWTooth:RMAX.

Example use: > :SOURce:ATM:MANual:TRAFfic:SAWTooth:CPS?
< 100

:SOURCE:ATM:MANual:TRAFfic:SAWTooth:RMAX:PERCent <numeric>

Parameter: <numeric> = <DECIMAL NUMERIC PROGRAM DATA>
0.0 to 100.0 Step value: 1

Function: Sets cell traffic (%) at SAWTooth:RMAX.

Restriction: Invalid in the following cases:

- When :INSTrument:ATM is <OFF>.
- When :DISPlay:TMENu[:NAME] is other than <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, and <"MANual:RCEL1">.
- When :SOURce:ATM:MANual:TRAFfic:DISTriBution is other than <SAWTooth>.

Example use: To set cell traffic (%) at SAWTooth:RMAX to 50:
> :SOURce:ATM:MANual:TRAFfic:SAWTooth:RMAX:PERCent 50

:SOURCE:ATM:MANual:TRAFfic:SAWTooth:RMAX:PERCent?

Response <numeric> = <NR1 NUMERIC RESPONSE DATA>

Function: Queries cell traffic (%) at SAWTooth:RMAX.

Example use: > :SOURce:ATM:MANual:TRAFfic:SAWTooth:RMAX:PERCent?
< 50

:SOURce:ATM:MANual:TRAFfic:SAWTooth:RMIN:PERCent <numeric>

Parameter: <numeric> = <DECIMAL NUMERIC PROGRAM DATA>
0.0 to 100.0 Step value: 1

Function: Sets cell traffic (%) at SAWTooth:RMIN.

Restriction: Invalid in the following cases:

- When :INSTrument:ATM is <OFF>.
- When :DISPlay:TMENu[:NAME] is other than <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, and <"MANual:RCEL1">.
- When :SOURce:ATM:MANual:TRAFfic:DISTRibution is other than <SAWTooth>.

Example use: To set cell traffic (%) at SAWTooth:RMIN to 50:

> :SOURce:ATM:MANual:TRAFfic:SAWTooth:RMIN:PERCent 50

:SOURce:ATM:MANual:TRAFfic:SAWTooth:RMIN:PERCent?

Response <numeric> = <NR1 NUMERIC RESPONSE DATA>

Function: Queries cell traffic (%) at SAWTooth:RMIN.

Example use: > :SOURce:ATM:MANual:TRAFfic:SAWTooth:RMIN:PERCent?
< 50

:SOURce:ATM:MANual:TRAFfic:SAWTooth:T1 <numeric>

Parameter: <numeric> = <DECIMAL NUMERIC PROGRAM DATA>
1000 to 98000 Step value: 1000

Function: Sets cell traffic (cell) at SAWTooth.

Restriction: Invalid in the following cases:

- When :INSTrument:ATM is <OFF>.
- When :DISPlay:TMENu[:NAME] is other than <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, and <"MANual:RCEL1">.
- When :SOURce:ATM:MANual:TRAFfic:DISTRibution is other than <SAWTooth>.

Example use: To set cell traffic (cell) at SAWTooth to 1000:

> :SOURce:ATM:MANual:TRAFfic:SAWTooth:T1 1000

:SOURce:ATM:MANual:TRAFfic:SAWTooth:T1?

Response <numeric> = <NR1 NUMERIC RESPONSE DATA>

Function: Queries cell traffic (cell) at SAWTooth.

Example use: > :SOURce:ATM:MANual:TRAFfic:SAWTooth:T1?
< 1000

SECTION 4 REMOTE CONTROL

:SOURCE:ATM:MANual:TRAFfic:SAWTooth:T2 <numeric>

Parameter: <numeric> = <DECIMAL NUMERIC PROGRAM DATA>
1000 to 128000 Step value: 1000

Function: Sets cell traffic (cell) at SAWTooth.

Restriction: Invalid in the following cases:

- When :INSTrument:ATM is <OFF>.
- When :DISPlay:TMENu[:NAME] is other than <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, and <"MANual:RCEL1">.
- When :SOURCE:ATM:MANual:TRAFfic:DISTriBution is other than <SAWTooth>.
- When $T1 \geq T2$.

Example use: To set cell traffic (cell) at SAWTooth to 1000:

> :SOURCE:ATM:MANual:TRAFfic:SAWTooth:T2 10000

:SOURCE:ATM:MANual:TRAFfic:SAWTooth:T2?

Response <numeric> = <NR1 NUMERIC RESPONSE DATA>

Function: Queries cell traffic (cell) at SAWTooth.

Example use: > :SOURCE:ATM:MANual:TRAFfic:SAWTooth:T2?
< 10000

:SOURCE:ATM:MANual:TRAFfic:TIMing:MODE <mode>

Parameter: <mode> = <CHARACTER PROGRAM DATA>
SINGLE
CONTinuous

Function: Sets transmission type.

Restriction: Invalid in the following cases:

- When :INSTrument:ATM is <OFF>.
- When :DISPlay:TMENu[:NAME] is other than <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, and <"MANual:RCEL1">.
- When <SINGLE> is set while:SOURCE:ATM:MANual:TRAFfic:DISTriBution is <CBR> or <POISSon> or :SOURCE:ATM:MANual:TRAFfic:VBR:TYPE is <GCRA>.

Example use: To set transmission type to SINGLE:

> :SOURCE:ATM:MANual:TRAFfic:TIMing:MODE SINGLE

:SOURCE:ATM:MANual:TRAFfic:TIMing:MODE?

Response <mode> = <CHARACTER RESPONSE DATA>
SING
CONT

Function: Queries transmission type.

Example use: > :SOURCE:ATM:MANual:TRAFfic:TIMing:MODE?
< SING

:SOURCE:ATM:MANual:TRAFfic:TIMing:START

Parameter: None

Function: Requests the start of Single cell transmission.

Restriction: Invalid in the following cases:

- When :INSTrument:ATM is <OFF>.
- When :DISPlay:TMENu[:NAME] is other than <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, and <"MANual:RCEL1">.
- When :SOURCE:ATM:MANual:TRAFfic:TIMing:MODE is <CONTinuous>.

Example use: > :SOURCE:ATM:MANual:TRAFfic:TIMing:START

:SOURCE:ATM:MANual:TRAFfic:TIMing:STOP

Parameter: None

Function: Requests the stop of Single cell transmission.

Restriction: Invalid in the following cases:

- When :INSTrument:ATM is <OFF>.
- When :DISPlay:TMENu[:NAME] is other than <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, and <"MANual:RCEL1">.
- When :SOURCE:ATM:MANual:TRAFfic:TIMing:MODE is <CONTinuous>.

Example use: > :SOURCE:ATM:MANual:TRAFfic:TIMing:STOP

:SOURCE:ATM:MANual:TRAFfic:TIMing:STATe?

Response <numeric> = <NR1 NUMERIC RESPONSE DATA>

0 Transmission has stopped.

1 Transmission is in progress.

Function: Queries Single cell transmission condition.

Example use: > :SOURCE:ATM:MANual:TRAFfic:TIMing:STATe?
< 0

:SOURCE:ATM:MANual:TRAFfic:BACKground:PERCent <traffic>

Parameter: <traffic> = <STRING PROGRAM DATA>
" [<numeric1>],[<numeric2>],[<numeric3>],[<numeric4>],[<numeric5>],
[<numeric6>],[<numeric7>],[<numeric8>],[<numeric9>],[<numeric10>]"
<numeric1> to <numeric10> must be 0 to 99 in 1 steps.

When the part after a value is completely omitted, commas can also be omitted.

Function: Sets Traffic (%) of Background cell.

Restriction: Invalid in the following cases:

- When all parameters are omitted.
- When :INSTrument:ATM is <OFF>.
- When :DISPlay:TMENu[:NAME] is other than <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, and <"MANual:RCEL1">.
- When total of 1 to 10 exceeds the result of the following expression:
- When total of 1 to 10 exceeds the result of the following expression:

$$100 - (((FP - (PCR \times MBS)) / SCR) + MBS) / FP \times 100$$

Example use: To set No.1 and No.3 of Background cell Traffic (%) to 30% and 20%:
> :SOURCE:ATM:MANual:TRAFfic:BACKground:PERCent "30,,20"

:SOURCE:ATM:MANual:TRAFfic:BACKground:PERCent?

Response "<numeric1>,<numeric2>,<numeric3>,<numeric4>,<numeric5>,<numeric6>,
<numeric7>,<numeric8>,<numeric9>,<numeric10>,<total>"
= <STRING RESPONSE DATA>

Function: Queries Background cell Traffic (%) (1 to 10, total).

Example use: > :SOURCE:ATM:MANual:TRAFfic:BACKground:PERCent?
< "30,0,20,0,0,0,0,0,0,0,50"

SECTION 4 REMOTE CONTROL

:SOURCE:ATM:MANual:TRAFfic:BACKground:CPS <traffic>

Parameter: <traffic> = <STRING PROGRAM DATA>
" [<numeric1>],[<numeric2>],[<numeric3>],[<numeric4>],[<numeric5>],
[<numeric6>],[<numeric7>],[<numeric8>],[<numeric9>],[<numeric10>]"
<numeric1> to <numeric10> must be 0 to 1398701 in 1 steps.
When the part after a value is completely omitted, commas can also be omitted.

Function: Sets Traffic(Cell/s) of Background cell.

Restriction: Invalid in the following cases:

- When all parameters are omitted.
- When :INSTrument:ATM is <OFF>.
- When :DISPlay:TMENu[:NAME] is other than <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, and <"MANual:RCEL1">.
- When total cps of 1 to 10 exceeds (Max cps (determined by Bit rate) minus Test cell cps).

Example use: To set No.1 and No.3 of Background cell Traffic to 100 and 2000:
> :SOURCE:ATM:MANual:TRAFfic:BACKground:CPS "100,,2000"

:SOURCE:ATM:MANual:TRAFfic:BACKground:CPS?

Response "<numeric1>,<numeric2>,<numeric3>,<numeric4>,<numeric5>,<numeric6>,
<numeric7>,<numeric8>,<numeric9>,<numeric10>,<total>"
= <STRING RESPONSE DATA>

Function: Queries Background cell Traffic (cell/s) (1 to 10, total).

Example use: > :SOURCE:ATM:MANual:TRAFfic:BACKground:CPS?
< "100,0,2000,0,0,0,0,0,0,0,2100"

:SOURCE:ATM:MANual:TRAFfic:BACKground:TYPE <type>

Parameter: <type> = <STRING PROGRAM DATA>
" [<type1>],[<type2>],[<type3>],[<type4>],[<type5>],
[<type6>],[<type7>],[<type8>],[<type9>],[<type10>]"
<type1>,<type2>,<type3>,<type4>,<type5>,<type6>,<type7>,<type8>,
<type9>,<type10> = <CHARACTER PROGRAM DATA>
CONStant

When all part after a value is completely omitted, commas can also be omitted.

Function: Sets Traffic (type) of Background cell.

Restriction: Invalid in the following cases:

- When all parameters are omitted.
- When :INSTrument:ATM is <OFF>.
- When :DISPlay:TMENu[:NAME] is other than <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, and <"MANual:RCEL1">.

Example use: To set No.2 of Background cell Traffic to Constant:
> :SOURCE:ATM:MANual:TRAFfic:BACKground:TYPE ",CONStant"

:SOURCE:ATM:MANual:TRAFfic:BACKground:TYPE?

Response "<type1>,<type2>,<type3>,<type4>,<type5>,<type6>,<type7>,<type8>,
<type9>,<type10>" = <STRING RESPONSE DATA>
CONS

Function: Queries Background cell Traffic (type) (1 to 10).

Example use: > :SOURCE:ATM:MANual:TRAFfic:BACKground:TYPE?
< "CONS,CONS,CONS,CONS,CONS,CONS,CONS,CONS,CONS,CONS"

:SOURCE:ATM:MANual:TRAFfic:FCELI <type>

Parameter: <type> = <CHARACTER PROGRAM DATA>
UNASsigned
IDLE

Function: Sets Fill cell type.

Restriction: Invalid in the following cases:

- When :INSTrument:ATM is <OFF>.
- When :DISPlay:TMENu[:NAME] is other than <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCELI1">, and <"MANual:RCELI1">.

Example use: To set Fill cell type to IDLE:
> :SOURCE:ATM:MANual:TRAFfic:FCELI IDLE

:SOURCE:ATM:MANual:TRAFfic:FCELI?

Response <type> = <CHARACTER RESPONSE DATA>
UNAS
IDLE

Function: Queries Fill cell type.

Example use: > :SOURCE:ATM:MANual:TRAFfic:FCELI?
< IDLE

:SOURCE:ATM:MANual:EALarm:ALARm:TYPE <type>

Parameter: <type> = <CHARACTER PROGRAM DATA>

OFF	Insert no alarm.
LCD	Inserts LCD alarm.
VPAIS	Inserts VP-AIS alarm.
VPRDI	Inserts VP-RDI alarm.
VCAIS	Inserts VC-AIS alarm.
VCRDI	Inserts VC-RDI alarm.
USER	Inserts User program.

Function: Sets alarm type to be inserted for the send signal.

Restriction: Invalid in the following cases:

- When :INSTrument:ATM is <OFF>.
- When :DISPlay:TMENu[:NAME] is other than <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCELI1">, and <"MANual:RCELI1">.

Example use: To insert VP-AIS:
> :SOURCE:ATM:MANual:EALarm:ALARm:TYPE VPAIS

:SOURCE:ATM:MANual:EALarm:ALARm:TYPE?

Response <type> = <CHARACTER RESPONSE DATA>

Function: Queries alarm type to be inserted for the send signal.

Example use: > :SOURCE:ATM:MANual:EALarm:ALARm:TYPE?
< VPAIS

SECTION 4 REMOTE CONTROL

:SOURce:ATM:MANual:EALarm:ALARm:TIMing <numeric>

Parameter: <numeric> = <NON-DECIMAL NUMERIC PROGRAM DATA>
0.1 to 10.0 Step value: 0.1

Function: Sets alarm addition timing.

Restriction: Invalid in the following cases:

- When :INSTRument:ATM is <OFF>.
- When :DISPlay:TMENu[:NAME] is other than <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, and <"MANual:RCEL1">.
- When :SOURce:ATM:MANual:EALarm:ALARm:TYPE is <OFF>.

Example use: To set alarm addition timing to 1.0:

> :SOURce:ATM:MANual:EALarm:ALARm:TIMing 1.0

:SOURce:ATM:MANual:EALarm:ALARm:TIMing?

Response <numeric> = <NR2 NUMERIC RESPONSE DATA>

Function: Queries alarm addition timing.

Example use: > :SOURce:ATM:MANual:EALarm:ALARm:TIMing?
< 1.0

:SOURCE:ATM:MANual:EALarm:ERRor:TYPE <type>

Parameter: <type> = <CHARACTER PROGRAM DATA>

OFF	Inserts no error.
HEC1	HEC error(1bit)
HEC2	HEC error(2bit)
USER	User program (1 to 53 bytes position specification)
LOST	Lost cell
MISINS	Misinserted cell
ERRORED	Errored cell
SECB	SECB
WORD	Word
SNP1	SNP(1bit)
SNP2	SNP(2bit)
P	P
SN	SN
OSF	OSF
HCPS	HEC(CPS-packet)
LI	Length indicator
CRC10	CRC10
ST	Segment type
ABORT	Abort
CPI	CPI
BETAG	B/ETag
BASIZE	BAsize
AL	AL
LENGTH	Length
CRC32	CRC32
PLCPFAS	PLCP FAS
POI	POI error

Function: Sets error type to be inserted for the send signal.

Restriction: Invalid in the following cases:

- When :INSTRument:ATM is <OFF>.
- When :ROUTe:THROUGH is <ON>.
- When :DISPlay:TMENU[:NAME] is other than <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, and <"MANual:RCEL1">.

The following error items can be added:

Addition always allowed	HEC error(1bit)	HEC error(2bit)	User program
ATM:0.191	Lost cell SECB	Misinserted cell	Errored cell
ATM:Word16	Word		
ATM:PRBS**	PRBS		
AAL1	Lost cell	WORD(Word16)	OSF SNP(1bit) SNP(2bit)
AAL2	P HEC(CPS-packet) WORD(at Word8)	SN PRBS(at Single cell PRBS7)	
AAL3/4	SN (at Length36) Length indicator Abort BAsize Length (cannot be selected for AAL3/4:Time stamp) PRBS (to PRBS * *)	CRC10 CPI AL	Segment type B/ETag WORD (at Word16)
AAL5	Abort	Length WORD (at Word16)	CRC32 PRBS (to PRBS**)

Example use: To insert HEC error (1 bit):

> :SOURCE:ATM:MANual:EALarm:ERRor:TYPE HEC1

SECTION 4 REMOTE CONTROL

:SOURCE:ATM:MANual:EALarm:ERRor:TYPE?

Response <type> = <CHARACTER RESPONSE DATA>
Function: Queries error type to be inserted for the send signal.
Example use: > :SOURCE:ATM:MANual:EALarm:ERRor:TYPE?
< HEC1

:SOURCE:ATM:MANual:EALarm:ERRor:BYTE <numeric>

Parameter: <numeric> = <DECIMAL NUMERIC PROGRAM DATA>
1 to 48

Function: Sets error addition byte.

Invalid in the following cases:

- When :INSTrument:ATM is <OFF>.
- When :ROUTe:THROUGH is <ON>.
- When :DISPlay:TMENu[:NAME] is other than <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, and <"MANual:RCEL1">.
- When :SOURCE:ATM:MANual:EALarm:ERRor:TYPE is other than <HUSER> and <PUSER>.
- When <6> to <48> is set while:SOURCE:ATM:MANual:EALarm:ERRor:TYPE is <HUSER>.

Example use: To set error addition byte to 5.

> :SOURCE:ATM:MANual:EALarm:ERRor:BYTE 5

:SOURCE:ATM:MANual:EALarm:ERRor:BYTE?

Response <numeric> = <NR1 NUMERIC RESPONSE DATA>
Function: Queries error addition byte.
Example use: > :SOURCE:ATM:MANual:EALarm:ERRor:BYTE?
< 5

:SOURCE:ATM:MANual:EALarm:ERRor:PATtern <string>

Parameter: <string> = <STRING PROGRAM DATA>
"00000000" to "11111111"

Function: Sets error addition pattern (bit format).

Restriction: Invalid in the following cases:

- When :INSTrument:ATM is <OFF>.
- When :ROUTe:THROUGH is <ON>.
- When :DISPlay:TMENu[:NAME] is other than <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, and <"MANual:RCEL1">.
- When :SOURCE:ATM:MANual:EALarm:ERRor:TYPE is other than <HUSER>, <PUSER>, and <WORD>.

Example use: To set error addition pattern to "00001011":

> :SOURCE:ATM:MANual:EALarm:ERRor:PATtern "00001011"

:SOURCE:ATM:MANual:EALarm:ERRor:PATtern?

Response <string> = <STRING RESPONSE DATA>
Function: Queries error addition pattern (bit format).
Example use: > :SOURCE:ATM:MANual:EALarm:ERRor:PATtern?
< "00001011"

:SOURCE:ATM:MANual:EALarm:ERRor:CRc3 <string>

Parameter: <string> = <STRING PROGRAM DATA>
"000" to "111"

Function: Sets CRC3 error addition pattern (bit format).

Restriction: Invalid in the following cases:

- When :INSTrument:ATM is <OFF>.
- When :ROUTe:THROUGH is <ON>.
- When :DISPlay:TMENu[:NAME] is other than <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, and <"MANual:RCEL1">.
- When :SOURce:ATM:MAPPing is <AAL1> and :SOURce:ATM:MANual:EALarm:ERRor:TYPE is other than <ERROred>.

Example use: To set CRC3 error addition pattern to "001":
> :SOURce:ATM:MANual:EALarm:ERRor:CRc3 "001"

:SOURce:ATM:MANual:EALarm:ERRor:CRc3?

Response <string> = <STRING RESPONSE DATA>

Function: Queries CRC3 error addition pattern (bit format).

Example use: > :SOURce:ATM:MANual:EALarm:ERRor:CRc3?
< "001"

:SOURce:ATM:MANual:EALarm:ERRor:TIMing:MODE <mode>

Parameter: <mode> = <CHARACTER PROGRAM DATA>

ONCE	Single error
R1E_3	1E-3
R1E_4	1E-4
R1E_5	1E-5
R1E_6	1E-6
R1E_7	1E-7
R1E_8	1E-8
R1E_9	1E-9
SEQuence	Sequence
R5E_3	5E-3
R5E_4	5E-4
R5E_5	5E-5
R5E_6	5E-6
R5E_7	5E-7
R5E_8	5E-8
R5E_9	5E-9

Function: Sets error insertion rate.

Restriction: Invalid in the following cases:

- When :INSTrument:ATM is <OFF>.
- When :ROUTe:THROUGH is <ON>.
- When :DISPlay:TMENu[:NAME] is other than <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, and <"MANual:RCEL1">.
- When :SOURce:ATM:MANual:EALarm:ERRor:TYPE is <OFF>.
- When <SEQuence> is set while :SOURce:ATM:MANual:EALarm:ERRor:TYPE is <LOST> or <MISINS>.

Example use: To insert errors with 1E-3 rate:
> :SOURce:ATM:MANual:EALarm:ERRor:TIMing:MODE R1E_3

SECTION 4 REMOTE CONTROL

:SOURce:ATM:MANual:EALarm:ERRor:TIMing:MODE?

Response <mode> = <CHARACTER RESPONSE DATA>

ONCE	Single error
R1E_3	1E-3
R1E_4	1E-4
R1E_5	1E-5
R1E_6	1E-6
R1E_7	1E-7
R1E_8	1E-8
R1E_9	1E-9
SEQ	Sequence
R5E_3	5E-3
R5E_4	5E-4
R5E_5	5E-5
R5E_6	5E-6
R5E_7	5E-7
R5E_8	5E-8
R5E_9	5E-9

Function: Queries error insertion rate.

Example use: > :SOURce:ATM:MANual:EALarm:ERRor:TIMing:MODE?
< R1E_3

:SOURce:ATM:MANual:EALarm:ERRor:TIMing:COUNT <numeric>

Parameter: <numeric> = <DECIMAL NUMERIC PROGRAM DATA>
1 to 64

Function: Sets successive error addition count.

Restriction: Invalid in the following cases:

- When :INSTrument:ATM is <OFF>.
- When :ROUTE:THROUGH is <ON>.
- When :DISPlay:TMENU[:NAME] is other than <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, and <"MANual:RCEL1">.
- When :SOURce:ATM:MANual:EALarm:ERRor:TYPE is <OFF>.
- When :SOURce:ATM:MANual:EALarm:ERRor:TIMing:MODE is other than <SEquence>.

Example use: To set successive error addition count to 5:

> :SOURce:ATM:MANual:EALarm:ERRor:TIMing:COUNT 5

:SOURce:ATM:MANual:EALarm:ERRor:TIMing:COUNT?

Response <numeric> = <NR1 NUMERIC RESPONSE DATA>

Function: Queries successive error addition count.

Example use: > :SOURce:ATM:MANual:EALarm:ERRor:TIMing:COUNT?
< 5

:SOURCE:ATM:MANual:EALarm:CC:SEND <type>

Parameter: <type> = <CHARACTER PROGRAM DATA>
 OFF Adds no CC cell.
 VP VP CC
 VC VC CC

Function: Sets CC cell addition.

Restriction: Invalid in the following cases:

- When :INSTRument:ATM is <OFF>.
- When :DISPlay:TMENu[:NAME] is other than <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, and <"MANual:RCEL1">.

Example use: To add VP CC cell:

> :SOURCE:ATM:MANual:EALarm:CC:SEND VP

:SOURCE:ATM:MANual:EALarm:CC:SEND?

Response <type> = <CHARACTER RESPONSE DATA>

Function: Queries CC cell addition condition.

Example use: > :SOURCE:ATM:MANual:EALarm:CC:SEND?
< VP

:SOURCE:ATM:MANual:EALarm:LOOPback:TYPE <type>

Parameter: <type> = <CHARACTER PROGRAM DATA>
 VP VP Loopback
 VC VC Loopback

Function: Sets Loopback cell type.

Restriction: Invalid in the following cases:

- When :INSTRument:ATM is <OFF>.
- When :DISPlay:TMENu[:NAME] is other than <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, and <"MANual:RCEL1">.

Example use: To set Loopback cell to VP:

> :SOURCE:ATM:MANual:EALarm:LOOPback:TYPE VP

:SOURCE:ATM:MANual:EALarm:LOOPback:TYPE?

Response <type> = <CHARACTER RESPONSE DATA>

Function: Queries Loopback cell type.

Example use: > :SOURCE:ATM:MANual:EALarm:LOOPback:TYPE?
< VP

:SOURCE:ATM:MANual:EALarm:LOOPback:START

Parameter: None

Function: Sends Loopback cell.

Restriction: Invalid in the following cases:

- When :INSTRument:ATM is <OFF>.
- When :DISPlay:TMENu[:NAME] is other than <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, and <"MANual:RCEL1">.

Example use: > :SOURCE:ATM:MANual:EALarm:LOOPback:START

SECTION 4 REMOTE CONTROL

:SOURCE:ATM:MANual:EALarm:LOOPback:STATe?

Response <numeric> = <NR1 NUMERIC RESPONSE DATA>
 0 Loopback Transmission has stopped.
 1 Loopback Transmission is in progress.

Function: Queries Loopback cell transmission condition.

Example use: > :SOURCE:ATM:MANual:EALarm:LOOPback:STATe?
 < 0

:SOURCE:ATM:MANual:PM:FM:SEND <type>

Parameter: <type> = <CHARACTER PROGRAM DATA>
 OFF Adds no PM Forward cell.
 VP VP Forward
 VC VC Forward

Function: Sets PM Forward cell addition.

Restriction: Invalid in the following cases:
 • When :INSTrument:ATM is <OFF>.
 • When :DISPlay:TMENu[:NAME] is other than <"MANual:JON">,
 <"MANual:TCLayer">, <"MANual:TCELL1">, and <"MANual:RCELL1">.

Example use: To add PM Forward cell:
 > :SOURCE:ATM:MANual:PM:FM:SEND VP

:SOURCE:ATM:MANual:PM:FM:SEND?

Response <type> = <CHARACTER RESPONSE DATA>

Function: Queries PM Forward cell addition condition.

Example use: > :SOURCE:ATM:MANual:PM:FM:SEND?
 < VP

:SOURce:ATM:MANual:PM:FM:CBLOCK <numeric>

Parameter: <numeric> = <CHARACTER PROGRAM DATA>
128, 256, 512, 1024, 2048, 4096, 8192, 16384, 32768, 65536

Function: Sets PM forward cell interval.

Restriction: Invalid in the following cases:

- When :INSTrument:ATM is <OFF>.
- When :DISPlay:TMENu[:NAME] is other than <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, and <"MANual:RCEL1">.
- When :SOURce:ATM:MANual:PM:FM:SEND is <OFF>.
- The following restrictions apply according to the number of send cells:

Condition (unit: cps)	Restriction
3200 < Number of send cells < 6400	128 cannot be selected
6400 < Number of send cells < 12800	128 to 256 cannot be selected
12800 < Number of send cells < 25600	128 to 512 cannot be selected
25600 < Number of send cells < 51200	128 to 1024 cannot be selected
51200 < Number of send cells < 102400	128 to 2048 cannot be selected
102400 < Number of send cells < 202800	128 to 4096 cannot be selected
202800 < Number of send cells < 409600	128 to 8192 cannot be selected
409600 < Number of send cells < 819200	128 to 16384 cannot be selected

Example use: To set PM Forward cell interval to 128:
> :SOURce:ATM:MANual:PM:FM:CBLOCK 128

:SOURce:ATM:MANual:PM:FM:CBLOCK ?

Response <numeric> = <NR1 NUMERIC RESPONSE DATA>

Function: Queries PM Forward cell interval:

Example use: > :SOURce:ATM:MANual:PM:FM:CBLOCK?
< 128

:SOURce:ATM:MANual:PM:FM:ERRor:TYPE <character>

Parameter: <type> = <CHARACTER PROGRAM DATA>

OFF	Inserts no error.
LOST	Lost
MISINS	Misinserted
BIPV	BIPV
SECB	SECB

Function: Sets error type to be inserted for the send signal.

Restriction: Invalid in the following cases:

- When :INSTrument:ATM is <OFF>.
- When :DISPlay:TMENu[:NAME] is other than <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, and <"MANual:RCEL1">.
- When :SOURce:ATM:MANual:PM:FM:SEND is <OFF>.

Example use: To insert LOST:
> :SOURce:ATM:MANual:PM:FM:ERRor:TYPE LOST

:SOURce:ATM:MANual:PM:FM:ERRor:TYPE?

Response <type> = <CHARACTER RESPONSE DATA>

Function: Queries error type to be inserted for the send signal.

Example use: > :SOURce:ATM:MANual:PM:FM:ERRor:TYPE?
< LOST

SECTION 4 REMOTE CONTROL

:SOURce:ATM:MANual:PM:FM:ERRor:TIMing:MODE <character>

Parameter: <mode> = <CHARACTER PROGRAM DATA>

ONCE	Single error
R1E_3	1E-3
R1E_4	1E-4
R1E_5	1E-5
R1E_6	1E-6
R1E_7	1E-7
R1E_8	1E-8
R1E_9	1E-9
R5E_3	5E-3
R5E_4	5E-4
R5E_5	5E-5
R5E_6	5E-6
R5E_7	5E-7
R5E_8	5E-8
R5E_9	5E-9

Function: Sets error insertion rate.

Restriction: Invalid in the following cases:

- When :INSTrument:ATM is <OFF>.
- When :DISPlay:TMENu[:NAME] is other than <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, and <"MANual:RCEL1">.
- When :SOURce:ATM:MANual:PM:FM:SEND is <OFF>.
- When :SOURce:ATM:MANual:PM:FM:ERRor:TYPE is <OFF>.
- When <SEQUence> is set while:SOURce:ATM:MANual:PM:FM:ERRor:TYPE is <MCSN>.

Example use: To insert Single errors:

> :SOURce:ATM:MANual:PM:FM:ERRor:TIMing:MODE ONCE

:SOURce:ATM:MANual:PM:FM:ERRor:TIMing:MODE?

Response <mode> = <CHARACTER RESPONSE DATA>

ONCE Single

Function: Queries error insertion rate.

Example use: > :SOURce:ATM:MANual:PM:FM:ERRor:TIMing:MODE?
< ONCE

:SOURce:ATM:MANual:PM:FM:ERRor:TIMing:COUNT <numeric>

Parameter: <numeric> = <DECIMAL NUMERIC PROGRAM DATA>

1 to 64

Function: Sets successive error addition count.

Restriction: Invalid in the following cases:

- When :INSTrument:ATM is <OFF>.
- When :DISPlay:TMENu[:NAME] is other than <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, and <"MANual:RCEL1">.
- When :SOURce:ATM:MANual:PM:FM:SEND is <OFF>.
- When :SOURce:ATM:MANual:PM:FM:ERRor:TYPE is <OFF>.
- When :SOURce:ATM:MANual:PM:FM:ERRor:TIMing is <ONCE>.

Example use: To set successive error addition count to 5:

> :SOURce:ATM:MANual:PM:FM:ERRor:TIMing:COUNT 5

:SOURCE:ATM:MANual:PM:FM:ERRor:TIMing:COUNT?

Response <numeric> = <NR1 NUMERIC RESPONSE DATA>

Function: Queries successive error addition count.

Example use: > :SOURCE:ATM:MANual:PM:FM:ERRor:TIMing:COUNT?
< 5

:SOURCE:ATM:MANual:PM:BR:SEND <type>

Parameter: <type> = <CHARACTER PROGRAM DATA>

OFF Adds no PM Backward cell.

VP VP Backward

VC VC Backward

Function: Sets PM Backward cell addition.

Restriction: Invalid in the following cases:

- When :INSTRument:ATM is <OFF>.
- When :DISPlay:TMENu[:NAME] is other than <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, and <"MANual:RCEL1">.

Example use: To add PM Backward cell:

> :SOURCE:ATM:MANual:PM:BR:SEND VP

:SOURCE:ATM:MANual:PM:BR:SEND?

Response <type> = <CHARACTER RESPONSE DATA>

Function: Queries PM Backward cell addition condition.

Example use: > :SOURCE:ATM:MANual:PM:BR:SEND?
< VP

:SOURCE:ATM:MANual:PM:BR:ERRor:TYPE <character>

Parameter: <character> = <CHARACTER PROGRAM DATA>

OFF Inserts no error.

LOST Lost

MISINS Misinserted

BIPV BIPV

SECB SECB

Function: Sets error type to be inserted for the send signal.

Restriction: Invalid in the following cases:

- When :INSTRument:ATM is <OFF>.
- When :DISPlay:TMENu[:NAME] is other than <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, and <"MANual:RCEL1">.
- When :SOURCE:ATM:MANual:PM:FM:SEND is <OFF>.

Example use: To add SECB:

>:SOURCE:ATM:MANual:PM:BR:ERRor:TYPE SECB

:SOURCE:ATM:MANual:PM:BR:ERRor:TYPE?

Response <type> = <CHARACTER RESPONSE DATA>

Function: Queries error type to be inserted for the receive signal.

Example use: >:SOURCE:ATM:MANual:PM:BR:ERRor:TYPE?
<SECB

SECTION 4 REMOTE CONTROL

:SOURCE:ATM:MANual:PM:BR:ERRor:TIMing:MODE <character>

Parameter: <character> = <CHARACTER PROGRAM DATA>

ONCE	Single error
R1E_3	1E-3
R1E_4	1E-4
R1E_5	1E-5
R1E_6	1E-6
R1E_7	1E-7
R1E_8	1E-8
R1E_9	1E-9
R5E_3	5E-3
R5E_4	5E-4
R5E_5	5E-5
R5E_6	5E-6
R5E_7	5E-7
R5E_8	5E-8
R5E_9	5E-9

Function: Sets error insertion rate.

Restriction: Invalid in the following cases:

- When :INSTRument:ATM is <OFF>.
- When :DISPlay:TMENU[:NAME] is other than <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, and <"MANual:RCEL1">.
- When :SOURce:ATM:MANual:PM:BR:SEND is <OFF>.
- When :SOURce:ATM:MANual:PM:BR:ERRor:TYPE is <OFF>.

Example use: To insert Single errors:

>:SOURce:ATM:MANual:PM:BR:ERRor:TIMing:MODE ONCE

:SOURce:ATM:MANual:PM:BR:ERRor:TIMing:MODE?

Response <type> = <CHARACTER RESPONSE DATA>

Function: Queries error insertion rate.

Example use: >:SOURce:ATM:MANual:PM:BR:ERRor:TIMing:MODE?
<ONCE

:SOURce:ATM:PATtern:ATM:O191:PAYLoad <string>

Parameter: <string> = <STRING PROGRAM DATA>

"00,01,02,03, ... ,2F" Specify payload in 37 hexadecimal bytes.

Note: Specify <.....> not to change a current value.

Function: Sets payload pattern for ATM:0.191.

Restriction: Invalid in the following case:

- When :INSTRument:ATM is <OFF>.

Example use: To set payload pattern for ATM:0.191:

> :SOURce:ATM:PATtern:O191:PAYLoad "00,01,01,00, ... ,01"

:SOURce:ATM:PATtern:ATM:O191:PAYLoad?

Response <string> = <STRING RESPONSE DATA>

Function: Queries payload pattern for ATM:0.191.

Example use: > :SOURce:ATM:PATtern:ATM:O191:PAYLoad?
< "00,01,01,00, ... ,01"

:SOURce:ATM:PATtern:ATM:O191:DEFault

Parameter: None
Function: Sets initial pattern as payload pattern for ATM:0.191.
Restriction: Invalid in the following case:

- When :INSTrument:ATM is <OFF>.

Example use: To initialize payload pattern for ATM:0.191:
> :SOURce:ATM:PATtern:ATM:O191:DEFault

:SOURce:ATM:PATtern:ATM:O191:TCPT <string>

Parameter: <string> = <STRING PROGRAM DATA>
"00000000" to "11111111"
Function: Sets TCPT for ATM:0.191 (bit format).
Restriction: Invalid in the following case:
When :INSTrument:ATM is <OFF>.
Example use: To set TCPT for ATM:0.191 to "00001011":
> :SOURce:ATM:PATtern:ATM:O191:TCPT "00001011"

:SOURce:ATM:PATtern:ATM:O191:TCPT?

Response <string> = <STRING RESPONSE DATA>
Function: Queries TCPT for ATM:0.191 (bit format).
Example use: > :SOURce:ATM:PATtern:ATM:O191:TCPT?
< "00001011"

:SOURce:ATM:PATtern:ATM:USER:PAYLoad <string>

Parameter: <string> = <STRING PROGRAM DATA>
"00,01,02,03, ... ,2F" Specify payload in 48 hexadecimal bytes.
Note: Specify <...,...> not to change a current value.
Function: Sets payload pattern for ATM:User.
Restriction: Invalid in the following case:

- When :INSTrument:ATM is <OFF>.

Example use: To set payload pattern for ATM:Other:
> :SOURce:ATM:PATtern:ATM:USER:PAYLoad "00,01,01,00, ... ,01"

:SOURce:ATM:PATtern:ATM:USER:PAYLoad?

Response <string> = <STRING RESPONSE DATA>
Function: Queries payload pattern for ATM:User.
Example use: > :SOURce:ATM:PATtern:ATM:USER:PAYLoad?
< "00,01,01,00, ... ,01"

:SOURce:ATM:PATtern:ATM:USER:DEFault

Parameter: None
Function: Sets initial pattern as payload pattern for ATM:User.
Restriction: Invalid in the following case:

- When :INSTrument:ATM is <OFF>.

Example use: To initialize payload pattern for ATM:User:
> :SOURce:ATM:PATtern:ATM:USER:DEFault

SECTION 4 REMOTE CONTROL

:SOURCE:ATM:PATTERN:AAL1:POINter <string>

Parameter: <string> = <STRING PROGRAM DATA>
"00" to "FF" Specify one hexadecimal byte.

Function: Sets Pointer at AAL1.

Restriction: Invalid in the following case:
• When :INSTRument:ATM is <OFF>.

Example use: To set Pointer at AAL1 to "FF":
> :SOURCE:ATM:PATTERN:AAL1:POINter "FF"

:SOURCE:ATM:PATTERN:AAL1:POINter?

Response <string> = <STRING RESPONSE DATA>

Function: Queries Pointer at AAL1.

Example use: > :SOURCE:ATM:PATTERN:AAL1:POINter?
< "FF"

:SOURCE:ATM:PATTERN:AAL1:PAYLoad <string>

Parameter: <string> = <STRING PROGRAM DATA>
"00,01,02,03, ... ,2F" Specify payload in 47 hexadecimal bytes.
Note: Specify <...> not to change a current value.

Function: Sets payload pattern at AAL1.

Restriction: Invalid in the following case:
• When :INSTRument:ATM is <OFF>.

Example use: To set payload pattern at AAL1:
> :SOURCE:ATM:PATTERN:AAL1:PAYLoad "00,01,01,00, ... ,01"

:SOURCE:ATM:PATTERN:AAL1:PAYLoad?

Response <string> = <STRING RESPONSE DATA>

Function: Queries payload pattern at AAL1.

Example use: > :SOURCE:ATM:PATTERN:AAL1:PAYLoad?
< "00,01,01,00, ... ,01"

:SOURCE:ATM:PATTERN:AAL1:DEFault

Parameter: None

Function: Sets initial pattern as payload pattern at AAL1.

Restriction: Invalid in the following case:
• When :INSTRument:ATM is <OFF>.

Example use: To initialize payload pattern at AAL1:
> :SOURCE:ATM:PATTERN:AAL1:DEFault

:SOURCE:ATM:PATTERN:AAL1:PFORmat <boolean>
Parameter: <boolean> = <BOOLEAN PROGRAM DATA>
 OFF or 0
 ON or 1
Function: Sets P-format at AAL1.
Restriction: Invalid in the following case:
 • When :INSTRument:ATM is <OFF>.
Example use: To set P-format at AAL1 to ON:
 > :SOURCE:ATM:PATTERN:AAL1:PFORmat ON

:SOURCE:ATM:PATTERN:AAL1:PFORmat?
Response <boolean> = <NR1 NUMERIC RESPONSE DATA>
 0
 1
Function: Queries P-format at AAL1.
Example use: > :SOURCE:ATM:PATTERN:AAL1:PFORmat?
 < 1

:SOURCE:ATM:PATTERN:AAL1:RTS <string>
Parameter: <string> = <STRING PROGRAM DATA>
 "0000" to "1111"
Function: Sets RTS at AAL1 (bit format).
Restriction: Invalid in the following case:
 • When :INSTRument:ATM is <OFF>.
Example use: To set RTS at AAL1 to "0011":
 > :SOURCE:ATM:PATTERN:AAL1:RTS "0011"

:SOURCE:ATM:PATTERN:AAL1:RTS?
Response <string> = <STRING RESPONSE DATA>
Function: Queries RTS at AAL1 (bit format).
Example use: > :SOURCE:ATM:PATTERN:AAL1:RTS?
 < "0011"

:SOURCE:ATM:PATTERN:AAL2:PCID <string>
Parameter: <string> = <STRING PROGRAM DATA>
 "00" to "FF"
Function: Sets CID (Primary) at AAL2.
Restriction: Invalid in the following case:
 • When :INSTRument:ATM is <OFF>.
Example use: To set PCID at AAL2 to "11":
 > :SOURCE:ATM:PATTERN:AAL2:PCID "11"

:SOURCE:ATM:PATTERN:AAL2:PCID?
Response <string> = <STRING RESPONSE DATA>
Function: Queries CID (Primary) at AAL2.
Example use: > :SOURCE:ATM:PATTERN:AAL2:PCID?
 < "11"

SECTION 4 REMOTE CONTROL

:SOURCE:ATM:PATTERN:AAL2:LI <numeric>
Response <numeric> = <NR1 NUMERIC RESPONSE DATA>
1 to 64
Function: Sets LI at AAL2.
Restriction: Invalid in the following case:
• When :INSTRUMENT:ATM is <OFF>.
Example use: To set LI at AAL2 to "11":
>:SOURCE:ATM:PATTERN:AAL2:LI "11"

:SOURCE:ATM:PATTERN:AAL2:LI ?
Response <numeric> = <numeric RESPONSE DATA>
Function: Queries LI at AAL2.
Example use: >:SOURCE:ATM:PATTERN:AAL2:LI ?
<"11"

:SOURCE:ATM:PATTERN:AAL2:PPPT <string>
Parameter: <string> = <STRING PROGRAM DATA>
"00","01","10","11"
Function: Sets PPT (Primary) at AAL2.
Restriction: Invalid in the following case:
• When :INSTRUMENT:ATM is <OFF>.
Example use: To set PPTD at AAL2 to "11":
>:SOURCE:ATM:PATTERN:AAL2:PPPT "11"

:SOURCE:ATM:PATTERN:AAL2:PPPT ?
Response <string> = <STRING RESPONSE DATA>
Function: Queries PPT (Primary) at AAL2.
Example use: >:SOURCE:ATM:PATTERN:AAL2:PPPT ?
<"11"

:SOURCE:ATM:PATTERN:AAL2:PUUi <STRING>
Parameter: <string> = <STRING PROGRAM DATA>
"000" to "111"
Function: Sets UUI (Primary) at AAL2.
Restriction: Invalid in the following case:
• When :INSTRUMENT:ATM is <OFF>.
Example use: To set PUUI at AAL2 to "101":
>:SOURCE:ATM:PATTERN:AAL2:PUUi "101"

:SOURCE:ATM:PATTERN:AAL2:PUUi?
Response <string> = <STRING RESPONSE DATA>
Function: Queries UUi (Primary) at AAL2.
Example use: >:SOURCE:ATM:PATTERN:AAL2:PUUi?
<"101"

:SOURCE:ATM:PATTERN:AAL2:PAYLOAD <string>
Parameter: <string> = <STRING PROGRAM DATA>
"00,01,02,..." (64BYTE)
Function: Sets payload at AAL2.
Restriction: Invalid in the following case:
• When :INSTRUMENT:ATM is <OFF>.
Example use: To set payload at AAL2 to "11,11,11":
>:SOURCE:ATM:PATTERN:AAL2:PAYLOAD "11,11,11"

:SOURCE:ATM:PATTERN:AAL2:PAYLOAD?
Response <string> = <STRING RESPONSE DATA>
Function: Queries payload at AAL2.
Example use: >:SOURCE:ATM:PATTERN:AAL2:PAYLOAD?
<"11,11,11"

:SOURCE:ATM:PATTERN:AAL2:DCID <string>
Parameter: <string> = <STRING PROGRAM DATA>
"00" to "FF"
Function: Sets CID (Dummy) at AAL2.
Restriction: Invalid in the following case:
• When :INSTRUMENT:ATM is <OFF>.
Example use: To set DCID at AAL2 to "11":
>:SOURCE:ATM:PATTERN:AAL2:DCID

:SOURCE:ATM:PATTERN:AAL2:DCID ?
Response <string> = <STRING RESPONSE DATA>
Function: Queries CID (Dummy) at AAL2.
Example use: >:SOURCE:ATM:PATTERN:AAL2:DCID ?
<"11"

:SOURCE:ATM:PATTERN:AAL2:DPPT <string>
Parameter: <string> = <STRING PROGRAM DATA>
"00","01","10","11"
Function: Sets PPT (Primary) at AAL2.
Restriction: Invalid in the following case:
• When :INSTRUMENT:ATM is <OFF>.
Example use: To set PPTD at AAL2 to "11":
>:SOURCE:ATM:PATTERN:AAL2:DCID

:SOURCE:ATM:PATTERN:AAL2:DPPT?
Response <string> = <STRING RESPONSE DATA>
Function: Queries PPT (Dummy) at AAL2.
Example use: >:SOURCE:ATM:PATTERN:AAL2:DPPT
<"11"

SECTION 4 REMOTE CONTROL

:SOURCE:ATM:PATTERN:AAL2:DUUi <string>
Parameter: <string> = <STRING PROGRAM DATA>
"00","01","10","11"
Function: Sets PPT (Primary) at AAL2.
Restriction: Invalid in the following case:
• When :INSTRUMENT:ATM is <OFF>.
Example use: To set DPTD at AAL2 to "11":
>:SOURCE:ATM:PATTERN:AAL2:DUUi "11"

:SOURCE:ATM:PATTERN:AAL2:DUUi ?
Response <string> = <STRING RESPONSE DATA>
Function: Queries UUi (Dummy) at AAL2.
Example use: >:SOURCE:ATM:PATTERN:AAL2:DUUi ?
<"11"

:SOURCE:ATM:PATTERN:AAL2:DEFault
Parameter: None
Function: Initializes PAYLoad at AAL2.
Restriction: Invalid in the following case:
• When :INSTRUMENT:ATM is <OFF>.
Example use: To initialize Payload at AAL2:
>:SOURCE:ATM:PATTERN:AAL2:DEFault

:SOURCE:ATM:PATTERN:AAL34:MID <string>
Parameter: <string> = <STRING PROGRAM DATA>
"0000000000" to "1111111111"
Function: Sets MID at AAL3/4 (bit format).
Restriction: Invalid in the following case:
• When :INSTRUMENT:ATM is <OFF>.
Example use: To set MID at AAL3/4 to "0000000011":
> :SOURCE:ATM:PATTERN:AAL34:MID "0000000011"

:SOURCE:ATM:PATTERN:AAL34:MID?
Response <string> = <STRING RESPONSE DATA>
Function: Queries MID at AAL3/4 (bit format).
Example use: > :SOURCE:ATM:PATTERN:AAL34:MID?
< "0000000011"

:SOURCE:ATM:PATTERN:AAL34:CPI <string>
Parameter: <string> = <STRING PROGRAM DATA>
"00" to "FF" Specify one hexadecimal byte.
Function: Sets CPI at AAL3/4.
Restriction: Invalid in the following case:
• When :INSTRUMENT:ATM is <OFF>.
Example use: To set CPI at AAL3/4 to "FF":
> :SOURCE:ATM:PATTERN:AAL34:CPI "FF"

:SOURCE:ATM:PATTERN:AAL34:CPI?
Response <string> = <STRING RESPONSE DATA>
Function: Queries CPI at AAL3/4.
Example use: > :SOURCE:ATM:PATTERN:AAL34:CPI?
< "FF"

:SOURCE:ATM:PATTERN:AAL34:BTAG <string>
Parameter: <string> = <STRING PROGRAM DATA>
"00" to "FF" Specify one hexadecimal byte.
Function: Sets BTag and ETag at AAL3/4.
Restriction: Invalid in the following case:
• When :INSTRUMENT:ATM is <OFF>.
Example use: To set BTag and ETag at AAL3/4 to "FF":
> :SOURCE:ATM:PATTERN:AAL34:BTAG "FF"

:SOURCE:ATM:PATTERN:AAL34:BTAG?
Response <string> = <STRING RESPONSE DATA>
Function: Queries BTag and ETag at AAL3/4.
Example use: > :SOURCE:ATM:PATTERN:AAL34:BTAG?
< "FF"

:SOURCE:ATM:PATTERN:AAL34:BASize <numeric>
Parameter: <numeric> = <DECIMAL NUMERIC PROGRAM DATA>
1 to 65535
Function: Sets BASize at AAL3/4.
Restriction: Invalid in the following case:
• When :INSTRUMENT:ATM is <OFF>.
Example use: To set BASize at AAL3/4 to 5:
> :SOURCE:ATM:PATTERN:AAL34:BASize 5

:SOURCE:ATM:PATTERN:AAL34:BASize?
Response <numeric> = <NR1 NUMERIC RESPONSE DATA>
Function: Queries BASize at AAL3/4.
Example use: > :SOURCE:ATM:PATTERN:AAL34:BASize?
< 5

SECTION 4 REMOTE CONTROL

:SOURce:ATM:PATtern:AAL34:LENGth <numeric>

Parameter: <numeric> = <DECIMAL NUMERIC PROGRAM DATA>
1 to 65535

Function: Sets Length at AAL3/4.

Restriction: Invalid in the following case:
• When :INSTrument:ATM is <OFF>.

Example use: To set Length at AAL3/4 to 5:
> :SOURce:ATM:PATtern:AAL34:LENGth 5

:SOURce:ATM:PATtern:AAL34:LENGth?

Response <numeric> = <NR1 NUMERIC RESPONSE DATA>

Function: Queries Length at AAL3/4.

Example use: > :SOURce:ATM:PATtern:AAL34:LENGth?
< 5

:SOURce:ATM:PATtern:AAL5:LENGth <numeric>

Parameter: <numeric> = <DECIMAL NUMERIC PROGRAM DATA>
1 to 65535

Function: Sets Length at AAL5.

Restriction: Invalid in the following case:
• When :INSTrument:ATM is <OFF>.

Example use: To set Length at AAL5 to 5:
> :SOURce:ATM:PATtern:AAL5:LENGth 5

:SOURce:ATM:PATtern:AAL5:LENGth?

Response <numeric> = <NR1 NUMERIC RESPONSE DATA>

Function: Queries Length at AAL5.

Example use: > :SOURce:ATM:PATtern:AAL5:LENGth?
< 5

:SOURce:ATM:PATtern:AAL5:UU <string>

Parameter: <string> = <STRING PROGRAM DATA>
"00" to "FF"

Function: Sets CPCS-UU at AAL5.

Restriction: Invalid in the following case:
• When :INSTrument:ATM is <OFF>.

Example use: To set CPCS-UU at AAL5 to "11":
> :SOURce:ATM:PATtern:AAL5:UU "11"

:SOURce:ATM:PATtern:AAL5:UU?

Response <string> = <NR1 STRING RESPONSE DATA>

Function: Queries CPCS-UU at AAL5.

Example use: > :SOURce:ATM:PATtern:AAL5:UU?
< "11"

:SOURCE:ATM:PATTERN:AAL5:CPI <string>
Parameter: <string> = <STRING PROGRAM DATA>
 "00" to "FF"
Function: Sets CPI at AAL5.
Restriction: Invalid in the following case:
 • When :INSTRUMENT:ATM is <OFF>.
Example use: To set CPI at AAL5 to "11":
 >:SOURCE:ATM:PATTERN:AAL5:CPI "11"

:SOURCE:ATM:PATTERN:AAL5:CPI ?
Response <string> = <NR1 STRING RESPONSE DATA>
Function: Queries CPI at AAL5.
Example use: >:SOURCE:ATM:PATTERN:AAL5:CPI?
 <"11"

:SOURCE:ATM:PATTERN:PAYLOAD:PATTERN <numeric>,<string>
Parameter: <numeric> = <DECIMAL NUMERIC PROGRAM DATA>
 1 to 65535 Specify setting-start position (byte).
 <string> = <STRING PROGRAM DATA>
 "00,00,00, ... ,00" Specify in hexadecimal for the number of bytes to be
 set.

Note: Specify <...,...> not to change a current value.

Function: Sets the 65,535-byte payload pattern.
Restriction: Invalid in the following case:
 • When :INSTRUMENT:ATM is <OFF>.
Example use: To set four bytes (starting from third payload) to "00,01,01,00":
 > :SOURCE:ATM:PATTERN:PAYLOAD:PATTERN 3,"00,01,01,00"

:SOURCE:ATM:PATTERN:PAYLOAD:PATTERN? <numeric1>,<numeric2>
Parameter: <numeric1>,<numeric2> = <DECIMAL NUMERIC PROGRAM DATA>
 1 to 65535 Output start position (byte) and output end position (byte)
Response <string> = <STRING RESPONSE DATA>
 "00,00,00,00, ... ,00" The range set by <numeric> is output.
Function: Queries the 65,535-byte payload pattern.
Example use: > :SOURCE:ATM:PATTERN:PAYLOAD:PATTERN? 3,10
 < "00,01,02,03,04,05,06,07"

:SOURCE:ATM:PATTERN:PAYLOAD:DEFAULT <string>
Parameter: <string> = <STRING PROGRAM DATA>
 "00000000" to "11111111"
Function: Sets initial pattern as the 65,535-byte payload pattern.
Restriction: Invalid in the following case:
 • When :INSTRUMENT:ATM is <OFF>.
Example use: To initialize the 65,535-byte payload pattern to "00000000":
 > :SOURCE:ATM:PATTERN:PAYLOAD:DEFAULT "00000000"

SECTION 4 REMOTE CONTROL

:SOURCE:ATM:PATTERN:AIS:FSField <string>

Parameter: <string> = <STRING PROGRAM DATA>
"00,01,02,03, ... ,2F" Specify 45 hexadecimal bytes.

Note: Specify <...,> not to change a current value.

Function: Sets AIS cell Function specific field.

Restriction: Invalid in the following case:

- When :INSTRUMENT:ATM is <OFF>.

Example use: To set AIS cell Function specific field:
> :SOURCE:ATM:PATTERN:AIS:FSField "00,01,01,00, ... ,01"

:SOURCE:ATM:PATTERN:AIS:FSField?

Response <string> = <STRING RESPONSE DATA>

Function: Queries AIS cell Function specific field.

Example use: > :SOURCE:ATM:PATTERN:AIS:FSField?
< "00,01,01,00, ... ,01"

:SOURCE:ATM:PATTERN:AIS:DEFAULT

Parameter: None

Function: Sets initial pattern as AIS cell Function specific field.

Restriction: Invalid in the following case:

- When :INSTRUMENT:ATM is <OFF>.

Example use: To initialize AIS cell Function specific field:
> :SOURCE:ATM:PATTERN:AIS:DEFAULT

:SOURCE:ATM:PATTERN:AIS:REServe <string>

Parameter: <string> = <STRING PROGRAM DATA>
"000000" to "111111"

Function: Sets AIS cell Reserve (bit format).

Restriction: Invalid in the following case:

- When :INSTRUMENT:ATM is <OFF>.

Example use: To set AIS cell Reserve to "001011":
> :SOURCE:ATM:PATTERN:AIS:REServe "001011"

:SOURCE:ATM:PATTERN:AIS:REServe?

Response <string> = <STRING RESPONSE DATA>

Function: Queries AIS cell Reserve (bit format).

Example use: > :SOURCE:ATM:PATTERN:AIS:REServe?
< "001011"

:SOURCE:ATM:PATTERN:RDI:FSField <string>

Parameter: <string> = <STRING PROGRAM DATA>
"00,01,02,03, ... ,2F" Specify 45 hexadecimal bytes.
Note: Specify <.....> not to change a current value.

Function: Sets RDI cell Function specific field.

Restriction: Invalid in the following case:
• When :INSTRUMENT:ATM is <OFF>.

Example use: To set RDI cell Function specific field:
> :SOURCE:ATM:PATTERN:RDI:FSField "00,01,01,00, ... ,01"

:SOURCE:ATM:PATTERN:RDI:FSField?

Response <string> = <STRING RESPONSE DATA>

Function: Queries RDI cell Function specific field.

Example use: > :SOURCE:ATM:PATTERN:RDI:FSField?
< "00,01,01,00, ... ,01"

:SOURCE:ATM:PATTERN:RDI:DEFault

Parameter: None

Function: Sets initial pattern as RDI cell Function specific field.

Restriction: Invalid in the following case:
• When :INSTRUMENT:ATM is <OFF>.

Example use: To initialize RDI cell Function specific field:
> :SOURCE:ATM:PATTERN:RDI:DEFault

:SOURCE:ATM:PATTERN:RDI:REServe <string>

Parameter: <string> = <STRING PROGRAM DATA>
"000000" to "111111"

Function: Sets RDI cell Reserve (bit format).

Restriction: Invalid in the following case:
• When :INSTRUMENT:ATM is <OFF>.

Example use: To set RDI cell Reserve to "001011":
> :SOURCE:ATM:PATTERN:RDI:REServe "001011"

:SOURCE:ATM:PATTERN:RDI:REServe?

Response <string> = <STRING RESPONSE DATA>

Function: Queries RDI cell Reserve (bit format).

Example use: > :SOURCE:ATM:PATTERN:RDI:REServe?
< "001011"

SECTION 4 REMOTE CONTROL

:SOURce:ATM:PATtern:USER:OAM <string>

Parameter: <string> = <STRING PROGRAM DATA>
"0000" to "1111"

Function: Sets OAM type of User program cell. (bit format)

Restriction: Invalid in the following case:

- When :INSTrument:ATM is <OFF>.

Example use: To set OAM type of User program cell to "0001":
> :SOURce:ATM:PATtern:USER:OAM "0001"

:SOURce:ATM:PATtern:USER:OAM?

Response <string> = <STRING RESPONSE DATA>

Function: Queries OAM type of User program cell. (bit format)

Example use: > :SOURce:ATM:PATtern:USER:OAM?
< "0001"

:SOURce:ATM:PATtern:USER:FUNction <string>

Parameter: <string> = <STRING PROGRAM DATA>
"0000" to "1111"

Function: Sets Function type of User program cell (bit format).

Restriction: Invalid in the following case:

- When :INSTrument:ATM is <OFF>.

Example use: To set Function type of User program cell to "0010":
> :SOURce:ATM:PATtern:USER:FUNction "0010"

:SOURce:ATM:PATtern:USER:FUNction?

Response <string> = <STRING RESPONSE DATA>

Function: Queries the Function type of User program cell (bit format).

Example use: > :SOURce:ATM:PATtern:USER:FUNction?
< "0010"

:SOURce:ATM:PATtern:USER:FSField <string>

Parameter: <string> = <STRING PROGRAM DATA>
"00,01,02,03, ... ,2F" Specify 45 hexadecimal bytes.
Note: Specify <...,...> not to change a current value.

Function: Sets User program cell Function specific field.

Restriction: Invalid in the following case:

- When :INSTrument:ATM is <OFF>.

Example use: To set User program cell Function specific field:
> :SOURce:ATM:PATtern:USER:FSField "00,01,01,00, ... ,01"

:SOURce:ATM:PATtern:USER:FSField?

Response <string> = <STRING RESPONSE DATA>

Function: Queries User program cell Function specific field.

Example use: > :SOURce:ATM:PATtern:USER:FSField?
< "00,01,01,00, ... ,01"

:SOURce:ATM:PATtern:USER:DEFault

Parameter: None
Function: Sets initial pattern as User program cell Function specific field.
Restriction: Invalid in the following case:

- When :INSTrument:ATM is <OFF>.

Example use: To initialize User program cell Function specific field:
> :SOURce:ATM:PATtern:USER:DEFault

:SOURce:ATM:PATtern:USER:REServe <string>

Parameter: string = <STRING PROGRAM DATA>
"000000" to "111111"
Function: Sets User program cell Reserve (bit format).
Restriction: Invalid in the following case:

- When :INSTrument:ATM is <OFF>.

Example use: To set User program cell Reserve to "001011":
> :SOURce:ATM:PATtern:USER:REServe "001011"

:SOURce:ATM:PATtern:USER:REServe?

Response string = <STRING RESPONSE DATA>
Function: Queries User program cell Reserve (bit format).
Example use: > :SOURce:ATM:PATtern:USER:REServe?
< "001011"

:SOURce:ATM:PATtern:CC:FSField <string>

Parameter: string = <STRING PROGRAM DATA>
00,01,02,03, ... ,2F" Specify 45 hexadecimal bytes.
Note: Specify <...,...> not to change a current value.
Function: Sets CC cell Function specific field.
Restriction: Invalid in the following case:

- When :INSTrument:ATM is <OFF>.

Example use: To set CC cell Function specific field:
> :SOURce:ATM:PATtern:CC:FSField "00,01,01,00, ... ,01"

:SOURce:ATM:PATtern:CC:FSField?

Response <string> = <STRING RESPONSE DATA>
Function: Queries CC cell Function specific field.
Example use: > :SOURce:ATM:PATtern:CC:FSField?
< "00,01,01,00, ... ,01"

:SOURce:ATM:PATtern:CC:DEFault

Parameter: None
Function: Sets initial pattern as CC cell Function specific field.
Restriction: Invalid in the following case:

- When :INSTrument:ATM is <OFF>.

Example use: To initialize CC cell Function specific field:
> :SOURce:ATM:PATtern:CC:DEFault

SECTION 4 REMOTE CONTROL

:SOURce:ATM:PATtern:CC:REServe <string>

Parameter: <string> = <STRING PROGRAM DATA>
"000000" to "111111"

Function: Sets CC cell Reserve (bit format).

Restriction: Invalid in the following case:
• When :INSTrument:ATM is <OFF>.

Example use: To set CC cell Reserve to "001011":
> :SOURce:ATM:PATtern:CC:REServe "001011"

:SOURce:ATM:PATtern:CC:REServe?

Response <string> = <STRING RESPONSE DATA>

Function: Queries CC cell Reserve (bit format).

Example use: > :SOURce:ATM:PATtern:CC:REServe?
< "001011"

:SOURce:ATM:PATtern:LOOPback:FSField:INDication <string>

Parameter: <string> = <STRING PROGRAM DATA>
"00000000" to "11111111"

Function: Sets Indication of the Loopback cell.

Restriction: Invalid in the following case:
• When :INSTrument:ATM is <OFF>.

Example use: To set Indication of the Loopback cell to "00000001":
> :SOURce:ATM:PATtern:LOOPback:FSField:INDication "00000001"

:SOURce:ATM:PATtern:LOOPback:FSField:INDication?

Response <string> = <STRING RESPONSE DATA>

Function: Queries Indication of the Loopback cell.

Example use: > :SOURce:ATM:PATtern:LOOPback:FSField:INDication?
< "00000001"

:SOURce:ATM:PATtern:LOOPback:FSField:CTAG <string>

Parameter: <string> = <STRING PROGRAM DATA>
"00,01,02,03" Specify four hexadecimal bytes.
Note: Specify <.....> not to change a current value.

Function: Sets Correlation Tag of the Loopback cell.

Restriction: Invalid in the following case:
• When :INSTrument:ATM is <OFF>.

Example use: To set Correlation Tag of the Loopback cell to "FF,FF,FF,FF":
> :SOURce:ATM:PATtern:LOOPback:FSField:CTAG "FF,FF,FF,FF"

:SOURce:ATM:PATtern:LOOPback:FSField:CTAG?

Response <string> = <STRING RESPONSE DATA>

Function: Queries Correlation Tag of the Loopback cell.

Example use: > :SOURce:ATM:PATtern:LOOPback:FSField:CTAG?
< "FF,FF,FF,FF"

:SOURCE:ATM:PATTERN:LOOPback:FSField:LOCation <string>

Parameter: <string> = <STRING PROGRAM DATA>
"00,01,02,03, ... ,2F" Specify 16 hexadecimal bytes.
Note: Specify <...,...> not to change a current value.

Function: Sets Location ID of the Loopback cell.

Restriction: Invalid in the following case:
• When :INSTrument:ATM is <OFF>.

Example use: To set Location ID of the Loopback cell:
> :SOURCE:ATM:PATTERN:LOOPback:FSField:LOCation "00,01,01,00, ... ,01"

:SOURCE:ATM:PATTERN:LOOPback:FSField:LOCation?

Response <string> = <STRING RESPONSE DATA>

Function: Queries Location ID of the Loopback cell.

Example use: > :SOURCE:ATM:PATTERN:LOOPback:FSField:LOCation?
< "00,01,01,00, ... ,01"

:SOURCE:ATM:PATTERN:LOOPback:FSField:SOURce <string>

Parameter: <string> = <STRING PROGRAM DATA>
"00,01,02,03, ... ,2F" Specify 16 hexadecimal bytes.
Note: Specify <...,...> not to change a current value.

Function: Sets Source ID of the Loopback cell.

Restriction: Invalid in the following case:
• When :INSTrument:ATM is <OFF>.

Example use: To set Source ID of the Loopback cell:
> :SOURCE:ATM:PATTERN:LOOPback:FSField:SOURce "00,01,01,00, ... ,01"

:SOURCE:ATM:PATTERN:LOOPback:FSField:SOURce?

Response <string> = <STRING RESPONSE DATA>

Function: Queries Source ID of the Loopback cell.

Example use: > :SOURCE:ATM:PATTERN:LOOPback:FSField:SOURce?
< "00,01,01,00, ... ,01"

:SOURCE:ATM:PATTERN:LOOPback:FSField:UNUSed <string>

Parameter: <string> = <STRING PROGRAM DATA>
"00,01,02,03, ... ,2F" Specify eight hexadecimal bytes.
Note: Specify <...,...> not to change a current value.

Function: Sets Unused of the Loopback cell.

Restriction: Invalid in the following case:
• When :INSTrument:ATM is <OFF>.

Example use: To set Unused of the Loopback cell:
> :SOURCE:ATM:PATTERN:LOOPback:FSField:UNUSed "00,01,01,00, ... ,01"

:SOURCE:ATM:PATTERN:LOOPback:FSField:UNUSed?

Response <string> = <STRING RESPONSE DATA>

Function: Queries Unused of the Loopback cell.

Example use: > :SOURCE:ATM:PATTERN:LOOPback:FSField:UNUSed?
< "00,01,01,00, ... ,01"

SECTION 4 REMOTE CONTROL

:SOURCE:ATM:PATTERN:LOOPback:FSField:DEFAULT

Parameter: None

Function: Sets initial pattern as Indication, Correlation tag, Location ID, Source ID, and Unused of the Loopback cell.

Restriction: Invalid in the following case:

- When :INSTRUMENT:ATM is <OFF>.

Example use: To initialize Loopback cell:
> :SOURCE:ATM:PATTERN:LOOPback:FSField:DEFAULT

:SOURCE:ATM:PATTERN:LOOPback:REServe <string>

Parameter: <string> = <STRING PROGRAM DATA>
"000000" to "111111"

Function: Sets Loopback cell Reserve (bit format).

Restriction: Invalid in the following case:

- When :INSTRUMENT:ATM is <OFF>.

Example use: To set Loopback cell Reserve to "001011":
> :SOURCE:ATM:PATTERN:LOOPback:REServe "001011"

:SOURCE:ATM:PATTERN:LOOPback:REServe?

Response <string> = <STRING RESPONSE DATA>

Function: Queries Loopback cell Reserve (bit format)

Example use: > :SOURCE:ATM:PATTERN:LOOPback:REServe?
< "001011"

:SOURCE:ATM:PATTERN:FM:FSField:TSTP <string>

Parameter: <string> = <STRING PROGRAM DATA>
"00,01,02,03" Specify four hexadecimal bytes.
Note: Specify <.....> not to change a current value.

Function: Sets TSTP of Forward monitoring.

Restriction: Invalid in the following case:

- When :INSTRUMENT:ATM is <OFF>.

Example use: To set TSTP of Forward monitoring to "FF,FF,FF,FF":
> :SOURCE:ATM:PATTERN:FM:FSField:TSTP "FF,FF,FF,FF"

:SOURCE:ATM:PATTERN:FM:FSField:TSTP?

Response <string> = <STRING RESPONSE DATA>

Function: Queries TSTP of Forward monitoring.

Example use: > :SOURCE:ATM:PATTERN:FM:FSField:TSTP?
< "FF,FF,FF,FF"

:SOURCE:ATM:PATTERN:FM:FSField:UNUSed <string>
Parameter: <string> = <STRING PROGRAM DATA>
"00,01,02,03, ... ,2F" Specify 34 hexadecimal bytes.
Note: Specify <...> not to change a current value.
Function: Sets Unused of Forward monitoring.
Restriction: Invalid in the following case:
• When :INSTRument:ATM is <OFF>.
Example use: To set Unused of Forward monitoring:
> :SOURCE:ATM:PATTERN:FM:FSField:UNUSed "00,01,01,00, ... ,01"

:SOURCE:ATM:PATTERN:FM:FSField:UNUSed?
Response <string> = <STRING RESPONSE DATA>
Function: Queries Unused of Forward monitoring.
Example use: > :SOURCE:ATM:PATTERN:FM:FSField:UNUSed?
< "00,01,01,00, ... ,01"

:SOURCE:ATM:PATTERN:FM:FSField:DEFault
Parameter: None
Function: Sets initial pattern as TSTP and Unused of Forward monitoring.
Restriction: Invalid in the following case:
• When :INSTRument:ATM is <OFF>.
Example use: To initialize Forward monitoring:
> :SOURCE:ATM:PATTERN:FM:FSField:DEFault

:SOURCE:ATM:PATTERN:FM:REServe <string>
Parameter: <string> = <STRING PROGRAM DATA>
"000000" to "111111"
Function: Sets Forward monitoring Reserve (bit format).
Restriction: Invalid in the following case:
• When :INSTRument:ATM is <OFF>.
Example use: To set Forward monitoring Reserve to "001011":
> :SOURCE:ATM:PATTERN:FM:REServe "001011"

:SOURCE:ATM:PATTERN:FM:REServe?
Response <string> = <STRING RESPONSE DATA>
Function: Queries Forward monitoring Reserve (bit format).
Example use: > :SOURCE:ATM:PATTERN:FM:REServe?
< "001011"

SECTION 4 REMOTE CONTROL

:SOURCE:ATM:PATTERN:BR:FSField:UNUSed1 <string>
Parameter: <string> = <STRING PROGRAM DATA>
"00,00" Specify two hexadecimal bytes.
Note: Specify <...,...> not to change a current value.
Function: Sets Unused1 of Backward report.
Restriction: Invalid in the following case:
• When :INSTRUMENT:ATM is <OFF>.
Example use: To set Unused1 of Backward report:
> :SOURCE:ATM:PATTERN:BR:FSField:UNUSed1 "6A,6A"

:SOURCE:ATM:PATTERN:BR:FSField:UNUSed1?
Response <string> = <STRING RESPONSE DATA>
Function: Queries Unused1 of Backward report.
Example use: > :SOURCE:ATM:PATTERN:BR:FSField:UNUSed1?
< "6A,6A"

:SOURCE:ATM:PATTERN:BR:FSField:TUCO1 <character>
Parameter: <character> = <CHARACTER PROGRAM DATA>
128,256,512,1024
Function: Sets TUCO+1 of Backward report.
Restriction: Invalid in the following cases:
• When :INSTRUMENT:ATM is <OFF>.
• When TOCO is 0, TUCO+1 is not changed.
Example use: To set TUCO+1 of Backward report:
>:SOURCE:ATM:PATTERN:BR:FSField:TUCO1 "128"

:SOURCE:ATM:PATTERN:BR:FSField:TUCO1 ?
Response <character> = <CHARACTER RESPONSE DATA>
Function: Queries TUCO1 of Backward report.
Example use: >:SOURCE:ATM:PATTERN:BR:FSField:TUCO1 ?
<"128"

:SOURCE:ATM:PATTERN:BR:FSField:TUCO <character>
Parameter: <character> = <CHARACTER PROGRAM DATA>
0,128,256,512,1024
Function: Sets TUCO of Backward report.
Restriction: Invalid in the following cases:
• When :INSTRUMENT:ATM is <OFF>.
• When TOCO is not 0, the same value as TUCO+1 is set.
Example use: To set TUCO of Backward report:
>:SOURCE:ATM:PATTERN:BR:FSField:TUCO "128"

:SOURCE:ATM:PATTERN:BR:FSField:TUCO ?
Response <character> = <CHARACTER RESPONSE DATA>
Function: Queries TUCO of Backward report.
Example use: >:SOURCE:ATM:PATTERN:BR:FSField:TUCO ?
<"128"

:SOURce:ATM:PATtern:BR:FSField:TSTP <string>

Parameter: <string> = <STRING PROGRAM DATA>
"00,01,02,03" Specify four hexadecimal bytes.
Note: Specify <.....> not to change a current value.

Function: Sets TSTP of Backward report.

Restriction: Invalid in the following case:
• When :INSTRument:ATM is <OFF>.

Example use: To set TSTP of Backward report to "FF,FF,FF,FF":
> :SOURce:ATM:PATtern:BR:FSField:TSTP "FF,FF,FF,FF"

:SOURce:ATM:PATtern:BR:FSField:TSTP?

Response <string> = <STRING RESPONSE DATA>

Function: Queries TSTP of Backward report.

Example use: > :SOURce:ATM:PATtern:BR:FSField:TSTP?
< "FF,FF,FF,FF"

:SOURce:ATM:PATtern:BR:FSField:UNUSed2 <string>

Parameter: <string> = <STRING PROGRAM DATA>
"00,01,02,03, ... ,2F" Specify 29 hexadecimal bytes.
Note: Specify <.....> not to change a current value.

Function: Sets Unused2 of Backward report.

Restriction: Invalid in the following case:
• When :INSTRument:ATM is <OFF>.

Example use: To set Unused2 of Backward report:
> :SOURce:ATM:PATtern:BR:FSField:UNUSed2 "00,01,01,00, ... ,01"

:SOURce:ATM:PATtern:BR:FSField:UNUSed2?

Response <string> = <STRING RESPONSE DATA>

Function: Queries Unused2 of Backward report.

Example use: > :SOURce:ATM:PATtern:BR:FSField:UNUSed2?
< "00,01,01,00, ... ,01"

:SOURce:ATM:PATtern:BR:FSField:DEFault

Parameter: None

Function: Sets initial pattern as Unused1, TSTP, and Unused2 of Backward report.

Restriction: Invalid in the following case:
• When :INSTRument:ATM is <OFF>.

Example use: To initialize Backward report:
> :SOURce:ATM:PATtern:BR:FSField:DEFault

SECTION 4 REMOTE CONTROL

:SOURCE:ATM:PATTERN:BR:REServe <string>

Parameter: <string> = <STRING PROGRAM DATA>
"000000" to "111111"

Function: Sets Backward report Reserve (bit format).

Restriction: Invalid in the following case:

- When :INSTRUMENT:ATM is <OFF>.

Example use: To set Backward report Reserve to "001011":
> :SOURCE:ATM:PATTERN:BR:REServe "001011"

:SOURCE:ATM:PATTERN:BR:REServe?

Response <string> = <STRING RESPONSE DATA>

Function: Queries Backward report Reserve (bit format).

Example use: > :SOURCE:ATM:PATTERN:BR:REServe?
< "001011"

:SOURCE:ATM:PATTERN:BGRound:HEADer <numeric>,<pattern>

Parameter: <numeric> = <DECIMAL NUMERIC PROGRAM DATA>
1 to 10 No.

<pattern> = <STRING PROGRAM DATA>

"[<gfc>],[<vpi>],[<vci>],[<pt>],[<clp>]"

<gfc> = 0 to F (HEX format)

<vpi> = 0 to 255 At UNI

0 to 4095 At NNI

<vci> = 0 to 65535

<pt> = 000 to 111 (BIN format)

<clp> = 0 to 1 (BIN format)

When the part after a value is completely omitted, comma can also be omitted.

Function: Sets header pattern of Background cell.

Restriction: Invalid in the following cases:

- When all parameters are omitted.
- When :INSTRUMENT:ATM is <OFF>.

Example use: To set third header pattern of Background cell to GFC:F and VCI:255:
> :SOURCE:ATM:PATTERN:BGRound:HEADer 3, "F,,256"

:SOURCE:ATM:PATTERN:BGRound:HEADer? <numeric>

Parameter: <numeric> = <DECIMAL NUMERIC PROGRAM DATA>

Response <pattern> = <STRING PROGRAM DATA>

"[<gfc>],[<vpi>],[<vci>],[<pt>],[<clp>]"

Note: <gfc> is output as "" at NNI.

Function: Queries header pattern <numeric>.

Example use: > :SOURCE:ATM:PATTERN:BGRound:HEADer? 3
< "F,32,256,001,0"

:SOURce:ATM:PATtern:BGRound:PAYLoad <numeric>,<string>

Parameter: <numeric> = <DECIMAL NUMERIC PROGRAM DATA>
1 to 10

<string> = <STRING PROGRAM DATA>

"00,01,02,03, ... ,2F" Specify payload in 48 hexadecimal bytes.

Note: Specify <...,...> not to change a current value.

Function: Sets payload pattern of Background cell.

Restriction: Invalid in the following case:

- When :INSTrument:ATM is <OFF>.

Example use: To set third payload pattern of Background cell:

> :SOURce:ATM:PATtern:BGRound:PAYLoad 3,"00,01,01,00, ... ,01"

:SOURce:ATM:PATtern:BGRound:PAYLoad? <numeric>

Parameter: <numeric> = <DECIMAL NUMERIC PROGRAM DATA>

Response <string> = <STRING RESPONSE DATA>

Function: Queries payload pattern of Background cell.

Example use: > :SOURce:ATM:PATtern:BGRound:PAYLoad? 3

< "00,01,01,00, ... ,01"

:SOURce:ATM:PATtern:BGRound:CRc10 [<numeric>]

Parameter: <numeric> = <DECIMAL NUMERIC PROGRAM DATA>
1 to 10

Note: When <numeric> is omitted, CRC is calculated for all 1 to 10 Background cells.

Function: Requests CRc10 calculation of Background cell.

Restriction: Invalid in the following case:

- When :INSTrument:ATM is <OFF>.

Example use: To request CRc10 calculation of 10 Background cells.

> :SOURce:ATM:PATtern:BGRound:CRc10 10

:SOURce:ATM:PATtern:BGRound:DEFault <type>[,<numeric>]

Parameter: <type> = <CHARACTER PROGRAM DATA>

HEADer Header section

PAYLoad Payload section

ALL Header and payload section

<numeric> = <DECIMAL NUMERIC PROGRAM DATA>

1 to 10

Note: When <numeric> is not set, header and payload are set to the initial patterns for all 10 cells.

When <numeric> is set, header and payload are set to the initial patterns for one cell.

Function: Sets initial pattern in Background cell.

Restriction: Invalid in the following case:

- When :INSTrument:ATM is <OFF>.

Example use: To initialize third payload pattern of Background cell:

> :SOURce:ATM:PATtern:BGRound:DEFault PAYLoad,3

SECTION 4 REMOTE CONTROL

:SOURCE:ATM:PATTERN:MEMORIZED:HEADER <numeric>,<pattern>

Parameter: <numeric> = <DECIMAL NUMERIC PROGRAM DATA>
 1 to 2016 No.
 <pattern> = <STRING PROGRAM DATA>
 " [<gfc>],[<vpi>],[<vci>],[<pt>],[<clp>] "
 <gfc> = 0 to F (HEX format)
 <vpi> = 0 to 255 AT UNI
 0 to 4095 AT NNI
 <vci> = 0 to 65535
 <pt> = 000 to 111 (BIN format)
 <clp> = 0 to 1 (BIN format)

When the part after a value is completely omitted, commas can also be omitted.

Function: Sets header pattern of Memorized cell.

Restriction: Invalid in the following cases:

- When all parameters are omitted.
- When :INSTRUMENT:ATM is <OFF>.

Example use: To set 2016th header pattern of Memorized cell to GFC:F,PT:001:
 > :SOURCE:ATM:PATTERN:MEMORIZED:HEADER 2016,"F",,,,"001",

:SOURCE:ATM:PATTERN:MEMORIZED:HEADER? <numeric>

Parameter: <numeric> = <DECIMAL NUMERIC PROGRAM DATA>
Response <pattern> = <STRING PROGRAM DATA>
 " [<gfc>],[<vpi>],[<vci>],[<pt>],[<clp>] "
 Note: <gfc> is space at NNI.

Function: Queries header pattern of Memorized cell.

Example use: > :SOURCE:ATM:PATTERN:MEMORIZED:HEADER? 2016
 < "F",255,4095,"001","0"

:SOURCE:ATM:PATTERN:MEMORIZED:PAYLOAD <numeric>,<string>

Parameter: <numeric> = <DECIMAL NUMERIC PROGRAM DATA>
 1 to 2016
 <string> = <STRING PROGRAM DATA>
 "00,01,02,03, ... ,2F" Specify payload in 48 hexadecimal bytes.
 Note: Specify <...,> not to change a current value.

Function: Sets payload pattern of Memorized cell.

Restriction: Invalid in the following case:

- When :INSTRUMENT:ATM is <OFF>.

Example use: To set 2016th payload pattern of Memorized cell:
 > :SOURCE:ATM:PATTERN:MEMORIZED:PAYLOAD 2016,"00,01,01,00, ... ,01"

:SOURCE:ATM:PATTERN:MEMORIZED:PAYLOAD? <numeric>

Parameter: <numeric> = <DECIMAL NUMERIC PROGRAM DATA>
Response <string> = <STRING RESPONSE DATA>
Function: Queries payload pattern of Memorized cell.
Example use: > :SOURCE:ATM:PATTERN:MEMORIZED:PAYLOAD? 2016
 < "00,01,01,00, ... ,01"

:SOURCE:ATM:PATTERN:MEMORIZED:CRC10 [<numeric>]

Parameter: <numeric> = <DECIMAL NUMERIC PROGRAM DATA>
1 to 2016

Note: When <numeric> is omitted, CRC is calculated for all 1 to 2016
Memorized cells.

Function: Requests CRC10 calculation of Memorized cell.

Restriction: Invalid in the following case:
• When :INSTRUMENT:ATM is <OFF>.

Example use: To request CRC10 calculation of 2016 Memorized cells.
> :SOURCE:ATM:PATTERN:MEMORIZED:CRC10 2016

:SOURCE:ATM:PATTERN:MEMORIZED:DEFAULT <type>[,<numeric>]

Parameter: <type> = <CHARACTER PROGRAM DATA>
HEADER Header section
PAYLOAD Payload section
ALL Initializes headers and payloads of 1 to 2016 cells.

<numeric> = <DECIMAL NUMERIC PROGRAM DATA>
1 to 2016

Note: When <numeric> is not set, header and payload are set to the initial
patterns for all 2016 cells.

When <numeric> is set, header and payload are set to the initial patterns
for one cell.

Function: Sets initial pattern in Memorized cell.

Restriction: Invalid in the following case:
• When :INSTRUMENT:ATM is <OFF>.

Example use: To initialize the third payload pattern of Memorized cell:
> :SOURCE:ATM:PATTERN:MEMORIZED:DEFAULT PAYLOAD,3

:SOURCE:ATM:PATTERN:MEMORIZED:EDIT:PASTE <numeric>

Parameter: <numeric> = <DECIMAL NUMERIC PROGRAM DATA>
1 to 2016

Function: Edits a Memorized cell. (Paste)

Restriction: Invalid in the following case:
• When :INSTRUMENT:ATM is <OFF>.

Example use: To paste to 20th Memorized cell:
> :SOURCE:ATM:PATTERN:MEMORIZED:EDIT:PASTE 20

:SOURCE:ATM:PATTERN:MEMORIZED:EDIT:CUT <numeric>

Parameter: <numeric> = <DECIMAL NUMERIC PROGRAM DATA>
1 to 2016

Function: Edits a Memorized cell. (Cut)

Restriction: Invalid in the following case:
• When :INSTRUMENT:ATM is <OFF>.

Example use: To cut 20th Memorized cell:
> :SOURCE:ATM:PATTERN:MEMORIZED:EDIT:CUT 20

SECTION 4 REMOTE CONTROL

:SOURCE:ATM:PATTERN:MEMORIZED:EDIT:COPY <numeric>

Parameter: <numeric> = <DECIMAL NUMERIC PROGRAM DATA>
1 to 2016

Function: Edits a Memorized cell. (Copy)

Restriction: Invalid in the following case:
• When :INSTRUMENT:ATM is <OFF>.

Example use: To copy 20th Memorized cell:
> :SOURCE:ATM:PATTERN:MEMORIZED:EDIT:COPY 20

:SOURCE:ATM:PATTERN:MEMORIZED:EDIT:INSERT <numeric>

Parameter: <numeric> = <DECIMAL NUMERIC PROGRAM DATA>
1 to 2016

Function: Edits a Memorized cell. (Insertion)

Restriction: Invalid in the following case:
• When :INSTRUMENT:ATM is <OFF>.

Example use: To insert at 20th Memorized cell:
> :SOURCE:ATM:PATTERN:MEMORIZED:EDIT:INSERT 20

:SOURCE:ATM:PATTERN:MEMORIZED:CAPTURE

Parameter: None

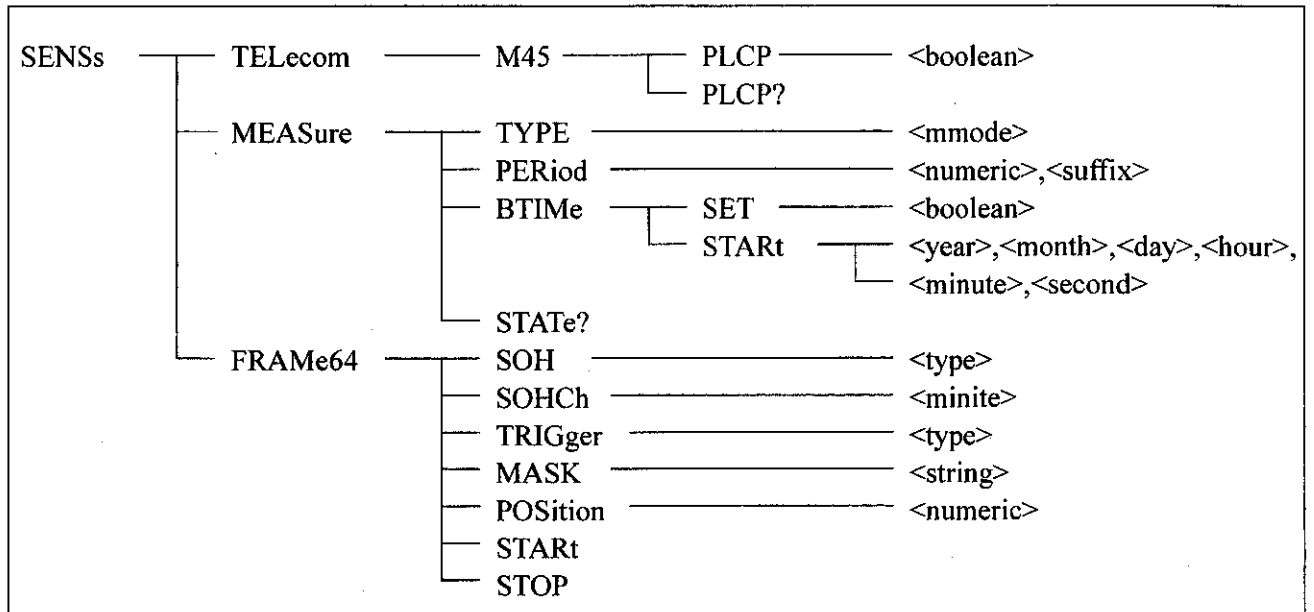
Function: Copies capture result to Memorized cell.

Restriction: Invalid in the following cases:
• When :INSTRUMENT:ATM is <OFF>.
• When no Capture data exists.

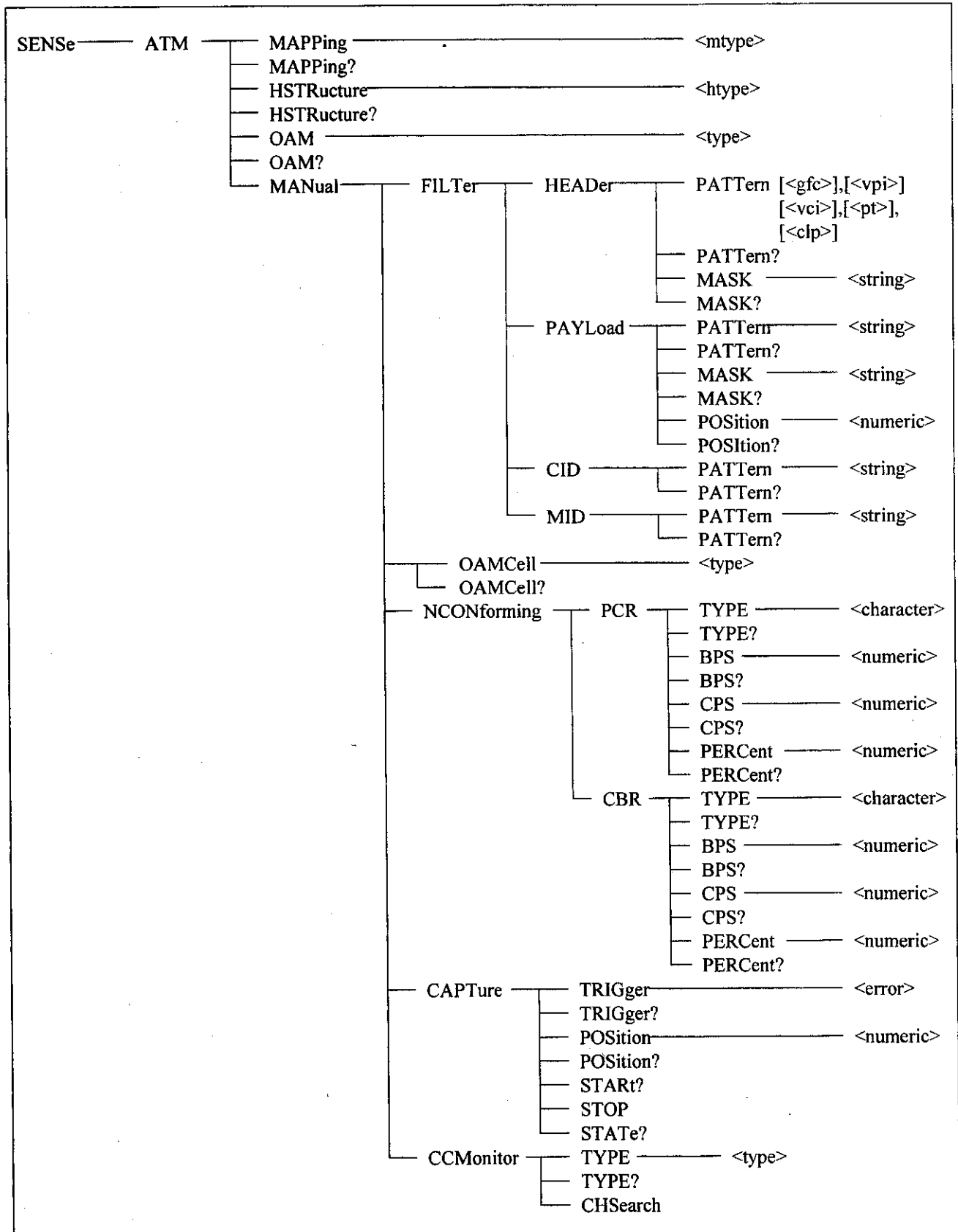
Example use: > :SOURCE:ATM:PATTERN:MEMORIZED:CAPTURE

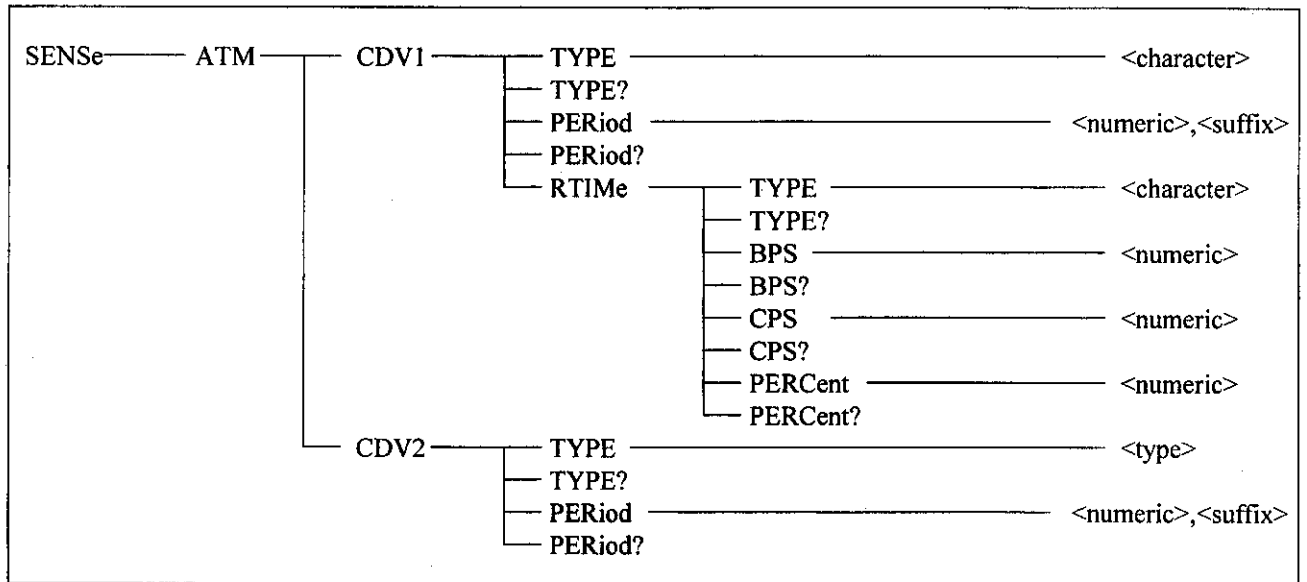
(3) SENSE subsystem

In the SENSE subsystem, set the reception side and measurement conditions.



SECTION 4 REMOTE CONTROL





SECTION 4 REMOTE CONTROL

:SENSe:TELEcom:M45:PLCP <boolean>

Parameter: <boolean> = <BOOLEAN PROGRAM DATA>
OFF or 0
ON or 1

Function: Sets the PLCP for 45M signals

Restriction: Invalid in the following cases:

- When the 1.5/45/52M unit is not installed.
- When the ATM unit is not installed.
- When :INSTrument:ATM is <OFF>.
- When :SENSe:TELEcom:BRATe is other than <M45>.

Example use: To set the 45M PLCP to OFF:
>:SENSe:TELEcom:M45:PLCP OFF

:SENSe:TELEcom:M45:PLCP ?

Response: <boolean> = <NR1 NUMERIC RESPONSE DATA>
0
1

Function: Queries the PLCP for 45M signals.

Example use: > :SENSe:TELEcom:M45:PLCP ?
< 0

:SENSe:MEASure:TYPE <mmode>

Parameter <mmode> = <CHARACTER PROGRAM DATA>
MANual Manual measurement
SINGle Single measurement
REPeat Repeated measurement

Function Sets measurement mode.

Restriction Invalid in the following case:

- When :DISPlay:TMENu[:NAME] is other than <"MANual[:JOFF]"/>, <"MANual:JON"/>, <"MANual:TCLayer"/>, <"MANual:TCEL1"/>, <"MANual:RCEL1"/>, <"PSEQUence[:JOFF]"/>, and <"PSEQUence:JON"/>.

Example use To set measurement mode to repeated measurement:
> :SENSe:MEASure:TYPE REPeat

:SENSe:MEASure:PERiod <numeric>,<suffix>

Parameter <numeric> = <DECIMAL NUMERIC PROGRAM DATA>
1 to 99
<suffix> = <CHARACTER PROGRAM DATA>
D day
H hour
M minute
S second

Function Sets measurement time.

Restriction Invalid in the following case:

- When :DISPlay:TMENu[:NAME] is other than <"MANual[:JOFF]"/>, <"MANual:JON"/>, <"MANual:TCLayer"/>, <"MANual:TCEL1"/>, <"MANual:RCEL1"/>, <"PSEQUence[:JOFF]"/>, and <"PSEQUence:JON"/>.

Example use To set measurement time to one hour:
> :SENSe:MEASure:PERiod 1,H

:SENSe:MEASure:BTIME:SET <boolean>

Parameter <boolean> = <BOOLEAN PROGRAM DATA>
OFF or 0 Turns off measurement start time setting function.
ON or 1 Turns on measurement start time setting function.

Function Turns on and off measurement start time setting function.

Restriction Invalid in the following case:

- When :DISPlay:TMENu[:NAME] is other than <"MANual[:JOFF]"/>, <"MANual:JON"/>, <"MANual:TCLayer"/>, <"MANual:TCEL1"/>, and <"MANual:RCEL1"/>.

Example use To turn on measurement start time setting function:
> :SENSe:MEASure:BTIME:SET ON

SECTION 4 REMOTE CONTROL

:SENSe:MEASure:BTIME:STARt <year>,<month>,<day>,<hour>,<minute>,<second>

Parameter <year> = <DECIMAL NUMERIC PROGRAM DATA>
1994 to 2093
<month> = <DECIMAL NUMERIC PROGRAM DATA>
1 to 12
<day> = <DECIMAL NUMERIC PROGRAM DATA>
1to31
<hour> = <DECIMAL NUMERIC PROGRAM DATA>
0 to 23
<minute>= <DECIMAL NUMERIC PROGRAM DATA>
0 to 59
<second>= <DECIMAL NUMERIC PROGRAM DATA>
0to59

Function Sets measurement start time of measurement start time setting function.

Restriction Invalid in the following case:

- When :DISPlay:TMENu[:NAME] is other than <"MANual[:JOFF]">, <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, and <"MANual:RCEL1">.

Example use To set measurement start time to 10:12:13 on April 1, 1995:
> :SENSe:MEASure:BTIME:STARt 1995,4,1,10,12,13

:SENSe:MEASure:STATe?

Response: <mestype>, <numeric>
<mestype> = <CHARACTER RESPONSE DATA >
CDV1 1-point CDV measurement
CDV2 2-point CDV measurement
<numeric> = <NR1 NUMERIC RESPONSE DATA >
0 Measurement end
1 Measuring

Function: Queries measurement state.

Example use: > :SENSe:MEASure:STATe?
< CDV1,1

:SENSe:FRAMe64:SOH <type>

Parameter <type> = <CHARACTER PROGRAM DATA>
A11, A12, A13, A21, A22, A23, J0, X18, X19,
B 1, X22, X23, B 1, X25, X26, F 1, X28, X29,
X 2 1, X 2 1, X 2 1, X 2 1, X 2 1, X 2 7, X 2 7, X 2 7, X 2 7,
D 1, X32, X33, B 1, X35, X36, D 3, X38, X39,
X 3 1, X 3 1, X 3 1, X 3 1, X 3 1, X 3 1, X 3 1, X 3 1,
H11, H12, H13 H21, H22, H23, H31, H32, H33,
B21, B22, B23 X54, X55, X56, X57, X58, X59,
D 4, X62, X63, D 5, X65, X66, D 6, X68, X69,
X 6 1, X 6 1, X 6 1, X 6 1, X 6 1, X 6 1, X 6 1, X 6 1,
D 7, X72, X73, D 8, X75, X76, D 9, X78, X79,
X 7 1, X 7 1, X 7 1, X 7 1, X 7 1, X 7 1, X 7 1, X 7 1,
D 1 0, X82, X83, D 1 1, X85, X86, D 1 2, X88, X89,
X 8 1, X 8 1, X 8 1, X 8 1, X 8 1, X 8 1, X 8 1, X 8 1,
S 1, Z12, Z13, Z21, Z22, M 1, E 2, X98, X99,
Z 1 1, Z 2 3, X 9 7, X 9 7, X 9 7, X 9 7,

Function Sets position of one SOH byte of SOH 64frame.

Restriction Invalid in the following case:

- When :DISPlay:TMENu[:NAME] is other than <"MANual[:JOFF]">, <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, <"MANual:RCEL1">, <"PSEquence[:JOFF]">, and <"PSEquence:JON">.

Example use To set one SOH byte of SOH 64frame to A11:
> :SENSe:FRAMe64:SOH A11

:SENSe:FRAMe64:SOHCh <numeric>

Parameter <numeric> = <DECIMAL NUMERIC PROGRAM DATA>
1 to 16 Step value:1

Function Selects SOH channel of SOH 64frame.

Restriction Invalid in the following case:

- When :DISPlay:TMENu[:NAME] is other than <"MANual[:JOFF]">, <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, <"MANual:RCEL1">, <"PSEQUence[:JOFF]">, and <"PSEQUence:JON">.

Example use To select channel 4:

> :SENSe:FRAMe64:SOHCh 4

:SENSe:FRAMe64:TRIGger <type>

Parameter <type> = <CHARACTER PROGRAM DATA>
OOFF OOF
MATCH K1/K2 match
MISMatch K1/K2 mismatch
MANual Manual

Function Sets trigger item of SOH 64frame.

Restriction Invalid in the following case:

- When :DISPlay:TMENu[:NAME] is other than <"MANual[:JOFF]">, <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, <"MANual:RCEL1">, <"PSEQUence[:JOFF]">, and <"PSEQUence:JON">.

Example use To set trigger item of SOH 64frame to K1/K2 mismatch:

> :SENSe:FRAMe64:TRIGger MISMatch

:SENSe:FRAMe64:PATtern <string>

Parameter <string> = <STRING PROGRAM DATA>
"0000000000000000" to "1111111111111111"

Function Sets trigger pattern of SOH 64frame.

Restriction Invalid in the following case:

- When :DISPlay:TMENu[:NAME] is other than <"MANual[:JOFF]">, <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, <"MANual:RCEL1">, <"PSEQUence[:JOFF]">, and <"PSEQUence:JON">.

Example use To set trigger pattern of SOH 64frame to "0000110100001101":

> :SENSe:FRAMe64:PATtern "0000110100001101"

:SENSe:FRAMe64:MASK <string>

Parameter <string> = <STRING PROGRAM DATA>
"0000000000000000" to "1111111111111111"

Function Sets trigger mask pattern of SOH 64frame.

Restriction Invalid in the following case:

- When :DISPlay:TMENu[:NAME] is other than <"MANual[:JOFF]">, <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, <"MANual:RCEL1">, <"PSEQUence[:JOFF]">, and <"PSEQUence:JON">.

Example use To set trigger mask pattern of SOH 64frame to "0000110100001101":

> :SENSe:FRAMe64:MASK "0000110100001101"

SECTION 4 REMOTE CONTROL

:SENSe:FRAMe64:POSition <numeric>

Parameter <numeric> = <DECIMAL NUMERIC PROGRAM DATA>
1 to 64 Step value: 1

Function Sets trigger position of SOH 64frame.

Restriction Invalid in the following case:

- When :DISPlay:TMENu[:NAME] is other than <"MANual[:JOFF]">, <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, <"MANual:RCEL1">, <"PSEquence[:JOFF]">, and <"PSEquence:JON">.

Example use To set trigger position of SOH 64frame to 60:
> :SENSe:FRAMe64:POSition 60

:SENSe:FRAMe64:STARt

Parameter None

Function Starts capture of SOH 64frame.

Restriction Invalid in the following case:

- When :DISPlay:TMENu[:NAME] is other than <"MANual[:JOFF]">, <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, <"MANual:RCEL1">, <"PSEquence[:JOFF]">, and <"PSEquence:JON">.

Example use To start capture of SOH 64frame:
> :SENSe:FRAMe64:STARt

:SENSe:FRAMe64:STOP

Parameter None

Function Stops capture of SOH 64frame.

Restriction Invalid in the following case:

- When :DISPlay:TMENu[:NAME] is other than <"MANual[:JOFF]">, <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, <"MANual:RCEL1">, <"PSEquence[:JOFF]">, and <"PSEquence:JON">.

Example use > :SENSe:FRAMe64:STOP

:SENSe:ATM:MAPPING <mtype>

Parameter <mtype> = <CHARACTER PROGRAM DATA>
AAL1 AAL1
AAL2 AAL2
AAL34 AAL3/4
AAL5 AAL5
ATM ATM

Function Sets ATM mapping of the receive signal.

Restriction Invalid in the following case:

- When :INSTrument:ATM is <OFF>.

Example use To set ATM mapping of the receive signal to AAL1:
> :SENSe:ATM:MAPPING AAL1

:SENSe:ATM:MAPPING?

Response: <mtype> = <CHARACTER RESPONSE DATA>

Function Queries ATM mapping of the receive signal.

Example use > :SENSe:ATM:MAPPING?
< AAL1

:SENSe:ATM:HSTRUcture <htype>

Parameter <htype> = <CHARACTER PROGRAM DATA>
UNI
NNI

Function Sets Header structure of the receive signal.

Restriction Invalid in the following case:

- When :INSTrument:ATM is <OFF>.

Example use To set ATM mapping of the receive signal to AAL1:
> :SENSe:ATM:HSTRUcture UNI

:SENSe:ATM:HSTRUcture?

Response <htype> = <CHARACTER RESPONSE DATA>

Function Queries Header structure of the receive signal.

Example use > :SENSe:ATM:HSTRUcture?
< UNI

:SENSe:ATM:OAM <type>

Parameter <type> = <CHARACTER PROGRAM DATA>
SEGMENT Segment
END End-to-end

Function Sets OAM type of the receive signal.

Restriction Invalid in the following case:

- When :INSTrument:ATM is <OFF>.

Example use To set OAM type of the receive signal to End-to-end:
> :SENSe:ATM:OAM END

:SENSe:ATM:OAM?

Response <trailer> = <CHARACTER RESPONSE DATA>

Function Queries OAM type of the receive signal.

Example use > :SENSe:ATM:OAM?
< END

SECTION 4 REMOTE CONTROL

:SENSe:ATM:MANual:FILTer:HEADer:PATtern <pattern>

Parameter <pattern> = <STRING PROGRAM DATA>
" [<gfc>],[<vpi>],[<vci>],[<pt>],[<clp>]"
<gfc> = 0 to F (HEX format)
<vpi> = 0 to 255 At UNI
0 to 4095 At NNI
<vci> = 0 to 65535
<pt> = 000 to 111 (BIN format)
<clp> = 0 to 1 (BIN format)

When the part after a value is completely omitted, commas can also be omitted.

Function Sets header filter pattern.

Restriction Invalid in the following cases:

- When all parameters are omitted.
- When :INSTRument:ATM is <OFF>.
- When :DISPlay:TMENu[:NAME] is other than <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, and <"MANual:RCEL1">.

Example use To set header filter pattern to GFC:F, VPI:255:
> :SENSe:ATM:MANual:FILTer:HEADer:PATtern "F,255"

:SENSe:ATM:MANual:FILTer:HEADer:PATtern?

Response <pattern> = <STRING RESPONSE DATA>
Note: <gfc> is crammed to be output at NNI.

Function Queries header filter pattern.

Example use > :SENSe:ATM:MANual:FILTer:HEADer:PATtern?
< "F,255,4095,001,1"

:SENSe:ATM:MANual:FILTer:HEADer:MASK <string>

Parameter <string> = <STRING PROGRAM DATA>
"00,00,00,00" Specify header mask pattern in four hexadecimal bytes.

Note: Specify <...,...> not to change a current value.

Function Sets header filter mask pattern.

Restriction Invalid in the following cases

- When :INSTRument:ATM is <OFF>.
- When :DISPlay:TMENu[:NAME] is other than <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, and <"MANual:RCEL1">.

Example use To set header filter mask pattern of "00,01,10,00":
> :SENSe:ATM:MANual:FILTer:HEADer:MASK "00,01,10,00"

:SENSe:ATM:MANual:FILTer:HEADer:MASK?

Response <string> = <STRING RESPONSE DATA>

Function Queries header filter mask pattern..

Example use > :SENSe:ATM:MANual:FILTer:HEADer:MASK?
< "00,01,01,00"

:SENSe:ATM:MANual:FILTer:PAYLoad:PATtern <string>
Parameter <string> = <STRING PROGRAM DATA>
"00" Specify payload pattern in one hexadecimal byte.
Function Sets payload filter pattern.
Restriction Invalid in the following cases:

- When :INSTrument:ATM is <OFF>.
- When :DISPlay:TMENu[:NAME] is other than <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, and <"MANual:RCEL1">.

Example use To set payload filter pattern of "00":
> :SENSe:ATM:MANual:FILTer:PAYLoad:PATtern "00"

:SENSe:ATM:MANual:FILTer:PAYLoad:PATtern?
Response <string> = <STRING RESPONSE DATA>
Function Queries payload filter pattern.
Example use > :SENSe:ATM:MANual:FILTer:PAYLoad:PATtern?
< "00"

:SENSe:ATM:MANual:FILTer:PAYLoad:MASK <string>
Parameter <string> = <STRING PROGRAM DATA>
"00" Specifies payload in one hexadecimal byte.
Function Specifies payload filter pattern.
Restriction Invalid in the following cases:

- When :INSTrument:ATM is <OFF>.
- When :DISPlay:TMENu[:NAME] is other than <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, and <"MANual:RCEL1">.

Example use To sets the pay load filter pattern to "00".
> :SENSe:ATM:MANual:FILTer:PAYLoad:MASK "00"

:SENSe:ATM:MANual:FILTer:PAYLoad:MASK?
Response <string> = <STRING RESPONSE DATA>
Function Queries pay load filter mask pattern.
Example use > :SENSe:ATM:MANual:FILTer:PAYLoad:MASK?
< "00"

:SENSe:ATM:MANual:FILTer:PAYLoad:POSition <numeric>
Parameter <numeric> = <DECIMAL NUMERIC PROGRAM DATA>
1 to 48 Step value: 1
Function Sets payload filter position.
Restriction Invalid in the following cases:

- When :INSTrument:ATM is <OFF>.
- When :DISPlay:TMENu[:NAME] is other than <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, and <"MANual:RCEL1">.

Example use To set payload filter position to 10:
> :SENSe:ATM:MANual:FILTer:PAYLoad:POSition 10

:SENSe:ATM:MANual:FILTer:PAYLoad:POSition?
Response <numeric> = <NR1 NUMERIC RESPONSE DATA>
Function Queries payload filter position.
Example use > :SENSe:ATM:MANual:FILTer:PAYLoad:POSition?
< 10

SECTION 4 REMOTE CONTROL

:SENSe:ATM:MANual:FILLTer:CID:PATtern <string>

Parameter <type> = <CHARACTER PROGRAM DATA>
"00"to"FF"

Function Specifies CID at AAL2.

Restriction Invalid in the following cases:

- When :INSTrument:ATM is <OFF>.
- When :DISPlay:TMENu[:NAME] is other than <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, and <"MANual:RCEL1">.
- When :SENSe:ATM:MANual:TRAFfic:PAYload:TYPE:Time is stamp.

Example use To set CID pattern to "00":

> :SENSe:ATM:MANual:FILLTer:CID:PATtern "00"

:SENSe:ATM:MANual:FILLTer:CID:PATtern ?

Response <string> = <STRING RESPONSE DATA>

Function Queries CID.

Example use >:SENSe:ATM:MANual:FILLTer:CID:PATtern ?
<"00"

:SENSe:ATM:MANual:FILLTer:MID:PATtern <string>

Parameter <type> = <CHARACTER PROGRAM DATA>
"0000000000"to"1111111111"

Function Specifies CID at AAL2.

Restriction Invalid in the following cases:

- When :INSTrument:ATM is <OFF>.
- When :DISPlay:TMENu[:NAME] is other than <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, and <"MANual:RCEL1">.
- When :SENSe:ATM:MANual:TRAFfic:PAYload:TYPE:Time is stamp.

Example use To set MID pattern to "00":

> :SENSe:ATM:MANual:FILLTer:MID:PATtern "0101010101"

:SENSe:ATM:MANual:FILLTer:MID:PATtern ?

Response <string> = <STRING RESPONSE DATA>

Function Queries MID.

Example use >:SENSe:ATM:MANual:FILLTer:MID:PATtern ?
<"0101010101"

:SENSe:ATM:MANual:OAMCell <type>

Parameter: <type> = <CHARACTER PROGRAM DATA>
VP
VC

Function: Sets VP/VC of measurement condition.

Restriction: Invalid in the following cases.

- When :INSTrument:ATM is <OFF>.

Example use: To set VP/VC of measurement condition to VP:

> :SENSe:ATM:MANual:OAMCell VP

:SENSe:ATM:MANual:OAMCell ?

Response: <type> = <CHARACTER RESUPONSE DATA>

Function: Queries VP/VC of measurement condition.

Example use: > :SENSe:ATM:MANual:OAMCell ?
< VP

:SENSe:ATM:MANual:NCONforming:CBR:TYPE <type>

Parameter: <type> = <CHARACTER PROGRAM DATA>
BPS b/s
CPS Cells/s
PERCent %

Function: Sets the CBR type of Non-conforming.

Restriction: Invalid in the following cases:
• When the ATM unit is not installed.
• When :INSTrument:ATM is <OFF>.
• When :DISPlay:TMENu[:NAME] is other than <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1"> or <"MANual:RCEL1">.

Example use: To set CBR type to b/s:
> :SOURce:ATM:MANual:NCONForming:CBR:TYPE BPS

:SENSe:ATM:MANual:NCONforming:CBR:TYPE?

Response: <type> = <CHARACTER RESPONSE DATA>
BPS b/s
CPS cells/sec
PERC %

Function: Queries CBR type of Non-conforming.

Example use > :SOURce:ATM:MANual:NCONForming:CBR:TYPE?
< BPS

:SENSe:ATM:MANual:NCONforming:CBR:BPS <numeric>

Parameter <numeric> = <DECIMAL NUMERIC PROGRAM DATA>
0 to 999999 Step value: 1 kb/s

Function Sets Non-conforming CBR (kb/s).

Restriction Invalid in the following cases:
• When :INSTrument:ATM is <OFF>.
• When :DISPlay:TMENu[:NAME] is other than <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, and <"MANual:RCEL1">.
• When :SENSe:ATM:MANual:NCONforming:CBR:TYPE is other than <BPS>.

Example use To set Non-conforming CBR to 256:
>:SENSe:ATM:MANual:NCONforming:CBR:BPS 256

:SENSe:ATM:MANual:NCONforming:CBR:BPS ?

Response <numeric> = <NR1 NUMERIC RESPONSE DATA>

Function Queries Non-conforming CBR (kb/s).

Example use > :SENSe:ATM:MANual:NCONforming:CBR:BPS ?
< 256

SECTION 4 REMOTE CONTROL

- :SENSe:ATM:MANual:NCONforming:CBR:CPS** <numeric>
Parameter <numeric> = <DECIMAL NUMERIC PROGRAM DATA>
0 to 1412830 Step value: 1 Cell/s
Function Sets Non-conforming CBR (Cell/S).
Restriction Invalid in the following cases:
• When :INSTrument:ATM is <OFF>.
• When :DISPlay:TMENu[:NAME] is other than <"MANual:JON">,
<"MANual:TCLayer">, <"MANual:TCEL1">, and <"MANual:RCEL1">.
• When :SENSe:ATM:MANual:NCONforming:CBR:TYPE is other than <CPS>.
Example use To set Non-conforming CBR to 256:
>:SENSe:ATM:MANual:NCONforming:CBR:CPS 256
- :SENSe:ATM:MANual:NCONforming:CBR:CPS ?**
Response <numeric> = <NR1 NUMERIC RESPONSE DATA>
Function Queries Non-conforming CBR (Cell/s).
Example use >:SENSe:ATM:MANual:NCONforming:CBR:CPS ?
< 256
- :SENSe:ATM:MANual:NCONforming:CBR:PERCent** <numeric>
Parameter <numeric> = <DECIMAL NUMERIC PROGRAM DATA>
0.0 to 100.0 Step value: 0.1%
Function Sets Non-conforming CBR (%).
Restriction Invalid in the following cases:
• When :INSTrument:ATM is <OFF>.
• When :DISPlay:TMENu[:NAME] is other than <"MANual:JON">,
<"MANual:TCLayer">, <"MANual:TCEL1">, and <"MANual:RCEL1">.
• When :SENSe:ATM:MANual:NCONforming:CBR:TYPE is other than <PERCent>.
Example use To set Non-conforming CBR to 10.0:
>:SENSe:ATM:MANual:NCONforming:CBR:PERCent 10.0
- :SENSe:ATM:MANual:NCONforming:CBR:PERCent ?**
Response <numeric> = <NR1 NUMERIC RESPONSE DATA>
Function Queries Non-conforming CBR (%).
Example use >:SENSe:ATM:MANual:NCONforming:CBR:PERCent ?
< 10.0
- :SENSe:ATM:MANual:NCONforming:CDVT** <numeric>
Parameter <numeric> = <DECIMAL NUMERIC PROGRAM DATA>
0 to 999 Step value: One cell
Function Sets Non-conforming CDVT.
Restriction Invalid in the following cases:
• When :INSTrument:ATM is <OFF>.
• When :DISPlay:TMENu[:NAME] is other than <"MANual:JON">,
<"MANual:TCLayer">, <"MANual:TCEL1">, and <"MANual:RCEL1">.
Example use To set Non-conforming CDVT to 256:
> :SENSe:ATM:MANual:NCONforming:CDVT 256
- :SENSe:ATM:MANual:NCONforming:CDVT?**
Response <numeric> = <NR1 NUMERIC RESPONSE DATA>
Function Queries Non-conforming CDVT.
Example use > :SENSe:ATM:MANual:NCONforming:CDVT?
< 256

:SENSe:ATM:MANual:CAPTure:TRIGger <error>

Parameter <error> = <CHARACTER PROGRAM DATA>

"MANual"	Manual
"AIS:VP"	VP-AIS
"RDI:VP"	VP-RDI
"LOC:VP"	VP-LOC
"AIS:VC"	VC-AIS
"RDI:VC"	VC-RDI
"LOC:VC"	VC-LOC
"LCD"	Lost of cell sync
"CORR"	Corrected
"DISC"	Discarded
"NONCONF"	Nonconf
"ERRORED"	Errored cell
"LOST"	Lost cell
"MISINS"	Misinserted
"SECB"	SECB
"SARPDU"	SAR-PDU
"SNP"	SNP
"UCSNP"	Uncorect SNP
"P"	P
"OSF"	OSF
"SN"	SN
"CPSHEC"	HEC error
"LI"	Length indicater
"LENGTH"	Length
"CRC10"	CRC10
"DISCPDU"	Discarded PDU
"ST"	Segment type
"ABORT"	Abort
"UDLVPDU"	Undelivered PDU
"CPI"	CPI
"BETAG"	B/ETag
"BASIZE"	BASize
"AL"	AL
"FSIZE"	Frame size
"CRC32"	CRC32
"FM:LOST"	FM Lost
"FM:MISINS"	FM Misinserted
"FM:BIPV"	FM BIPV
"FM:SECB"	FM SECB
"BR:LOST"	BR Lost
"BR:MISINS"	BR Misinserted
"BR:BIPV"	BR BIPV
"BR:SECB"	BR SECB

SECTION 4 REMOTE CONTROL

Function	Sets capture trigger item.
Restriction	Invalid in the following cases: <ul style="list-style-type: none">• When :INSTrument:ATM is <OFF>.• When :DISPlay:TMENu[:NAME] is other than <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, and <"MANual:RCEL1">.
Example use	To set capture trigger item to MANual: > :SENSe:ATM:MANual:CAPTure:TRIGger MANual
:SENSe:ATM:MANual:CAPTure:TRIGger?	
Response	<error> = <CHARACTER RESPONSE DATA>
Function	Queries capture trigger item.
Example use	> :SENSe:ATM:MANual:CAPTure:TRIGger? < MAN
:SENSe:ATM:MANual:CAPTure:POSition <numeric>	
Parameter	<numeric> = <DECIMAL NUMERIC PROGRAM DATA> 1 to 2016
Function	Sets trigger position.
Restriction	Invalid in the following cases: <ul style="list-style-type: none">• When :INSTrument:ATM is <OFF>.• When :DISPlay:TMENu[:NAME] is other than <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, and <"MANual:RCEL1">.
Example use	To set trigger position to 53: > :SENSe:ATM:MANual:CAPTure:POSition 53
:SENSe:ATM:MANual:CAPTure:POSition?	
Response	<numeric> = <NR1 NUMERIC RESPONSE DATA>
Function	Queries trigger position.
Example use	> :SENSe:ATM:MANual:CAPTure:POSition? < 53
:SENSe:ATM:MANual:CAPTure:STARt	
Parameter	None
Function	Starts capture.
Restriction	Invalid in the following cases: <ul style="list-style-type: none">• When :INSTrument:ATM is <OFF>.• When :DISPlay:TMENu[:NAME] is other than <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, and <"MANual:RCEL1">. Note: If this command is executed during capture, a restart occurs.
Example use	> :SENSe:ATM:MANual:CAPTure:STARt
:SENSe:ATM:MANual:CAPTure:STOP	
Parameter	None
Function	Stops capture.
Restriction	Invalid in the following cases: <ul style="list-style-type: none">• When :INSTrument:ATM is <OFF>.• When :DISPlay:TMENu[:NAME] is other than <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, and <"MANual:RCEL1">.
Example use	> :SENSe:ATM:MANual:CAPTure:STOP

:SENSe:ATM:MANual:CAPTure:STATe?

Response <numeric> = <NR1 NUMERIC RESPONSE DATA>
 0 Capture ended
 1 Waiting for trigger
 2 Waiting for end
Function Queries capture condition.
Example use > :SENSe:ATM:MANual:CAPTure:STATe?
 < 1

:SENSe:ATM:MANual:LMONitor:TYPE <type>

Parameter <type> = <CHARACTER PROGRAM DATA>
 INDividual Value from last intermediate data
 ACCumulate Accumulated value from measurement start
Function Sets Live monitor mode.
Restriction In valid in the following cases:
 • When :INSTrument:ATM is <OFF>.
 • When :DISPlay:TMENu[:NAME] is other than <"MANual:JON">,
 <"MANual:TCLayer">, <"MANual:TCEL1">, and <"MANual:RCEL1">.
Example use To set Live monitor mode to ACCumulate:
 > :SENSe:ATM:MANual:LMONitor:TYPE ACCumulate

:SENSe:ATM:MANual:LMONitor:TYPE?

Response <type> = <CHARACTER RESPONSE DATA>
 IND Values from last intermediate data.
 ACC Accumulated values from measurement start.
Function Queries Live monitor mode.
Example use > :SENSe:ATM:MANual:LMONitor:TYPE?
 < MAN

:SENSe:ATM:MANual:LMONitor:CHSearch

Parameter None
Function Searches for Live monitor CH.
Restriction In valid in the following cases:
 • When :INSTrument:ATM is <OFF>.
 • When :DISPlay:TMENu[:NAME] is other than <"MANual:JON">,
 <"MANual:TCLayer">, <"MANual:TCEL1">, and <"MANual:RCEL1">.
Example use To search CH:
 > :SENSe:ATM:MANual:LMONitor:CHSearch

:SENSe:ATM:MANual:LMONitor:STATe?

Response <numeric> = <NR1 NUMERIC RESPONSE DATA>
 0 Search completed
 1 Search in progress
Function Queries search condition of Live monitor.
Example use > :SENSe:ATM:MANual:LMONitor:STATe?
 < 1

:SENSe:ATM:CDV1:PERiod <numeric>,<suffix>

Parameter <numeric> = <DECIMAL NUMERIC PROGRAM DATA>
1 to 99
<suffix> = <CHARACTER PROGRAM DATA>
D day
H hour
M minute
S second

Function Sets measurement time of 1-point CDV measurement.

Restriction Invalid in the following cases:

- When :INSTrument:ATM is <OFF>.
- When :DISPlay:TMENu[:NAME] is other than <"CDV1">.
- When :SENSe:ATM:CDV1:TYPE is <MANual>.

Example use Sets measurement time of 1-point CDV measurement to one hour.
> :SENSe:ATM:CDV1:PERiod 1,H

:SENSe:ATM:CDV1:PERiod?

Response <numeric>,<suffix>
<numeric> = <NR1 NUMERIC RESPONSE DATA>
<suffix> = <CHARACTER RESPONSE DATA>

Function Queries measurement time of 1-point CDV measurement.

Example use > :SENSe:ATM:CDV1:PERiod?
< 1,H

:SENSe:ATM:CDV1:RTIME:PTYPE <character>

Parameter <charater> = <CHARACTER PROGRAM DATA>
BPS kb/s
CPS cell/s
PERCent %

Function Sets cell interval used as the reference in 1-point CDV measurement.

Restriction Invalid in the following cases:

- When :INSTrument:ATM is <OFF>.
- When :DISPlay:TMENu[:NAME] is other than <"CDV1">.

Example use To set cell interval of 1-point CDV measurement to cell/s:
> :SENSe:ATM:CDV1:RTIME:PTYPE CPS

:SENSe:ATM:CDV1:RTIME:PTYPE?

Response <type> = <CHARACTER RESPONSE DATA>

Function Queries cell interval used as the reference in 1-point CDV measurement.

Example use > :SENSe:ATM:CDV1:RTIME:PTYPE?
< CPS

SECTION 4 REMOTE CONTROL

:SENSe:ATM:CDV1:RTIME:BPS <numeric>

Parameter <numeric> = <DECIMAL NUMERIC PROGRAM DATA>
0 to 999999

Function Sets cell interval of 1-point CDV measurement (kb/s).

Restriction Invalid in the following cases:

- When :INSTRument:ATM is <OFF>.
- When :DISPlay:TMENu[:NAME] is other than <"CDV1">.
- When :SENSe:ATM:CDV1:RTIME is other than <BPS>.

Example use To set cell interval of 1-point CDV measurement to 256 (kb/s):
> :SENSe:ATM:CDV1:RTIME:BPS 256

:SENSe:ATM:CDV1:TRIME:BPS?

Response <numeric> = <NR1 NUMERIC RESPONSE DATA>

Function Queries cell interval (kb/s) of 1-point CDV measurement.

Example use > :SENSe:ATM:CDV1:RTIME:BPS?
< 256

:SENSe:ATM:CDV1:RTIME:CPS <numeric>

Parameter <numeric> = <DECIMAL NUMERIC PROGRAM DATA>
0 to 999999

Function Sets cell interval of 1-point CDV measurement (cell/s).

Restriction Invalid in the following cases:

- When :INSTRument:ATM is <OFF>.
- When :DISPlay:TMENu[:NAME] is other than <"CDV1">.
- When :SENSe:ATM:CDV1:RTIME is other than <CPS>.

Example use To set cell interval of 1-point CDV measurement to 256 (cell/s):
> :SENSe:ATM:CDV1:RTIME:CPS 256

:SENSe:ATM:CDV1:TRIME:CPS?

Response <numeric> = <NR1 NUMERIC RESPONSE DATA>

Function Queries cell interval of 1-point CDV measurement (cell/s).

Example use > :SENSe:ATM:CDV1:RTIME:CPS?
< 256

:SENSe:ATM:CDV1:RTIME:PERCent <numeric>

Parameter <numeric> = <DECIMAL NUMERIC PROGRAM DATA>
0.0 to 100.0

Function Sets cell interval of 1-point CDV measurement (%).

Restriction Invalid in the following cases:

- When :INSTRument:ATM is <OFF>.
- When :DISPlay:TMENu[:NAME] is other than <"CDV1">.
- When :SENSe:ATM:CDV1:RTIME is other than <PERCent>.

Example use To set cell interval of 1-point CDV measurement to 10.0 (%):
> :SENSe:ATM:CDV1:RTIME:BPS 10.0

:SENSe:ATM:CDV1:TRIME:PERCent?

Response <numeric> = <NR1 NUMERIC RESPONSE DATA>

Function Queries cell interval of 1-point CDV measurement (%).

Example use > :SENSe:ATM:CDV1:RTIME:PERCent?
< 10.0

:SENSe:ATM:CDV2:TYPE <type>

Parameter <type> = <CHARACTER PROGRAM DATA>
MANual Manual measurement
SINGle Single measurement

Function Sets measurement mode of 2-point CDV measurement.

Restriction Invalid in the following cases:
• When :INSTRument:ATM is <OFF>.
• When :DISPlay:TMENu[:NAME] is other than <"CDV2">.

Example use To set measurement mode of 2-point CDV measurement to manual:
> :SENSe:ATM:CDV2:TYPE MANual

:SENSe:ATM:CDV2:TYPE?

Response <type> = <CHARACTER RESPONSE DATA>
MAN Manual measurement
SING Single measurement

Function Queries measurement mode of 2-point CDV measurement.

Example use > :SENSe:ATM:CDV2:TYPE?
< MAN

:SENSe:ATM:CDV2:PERiod <numeric>,<suffix>

Parameter <numeric> = <DECIMAL NUMERIC PROGRAM DATA>
1 to 99
<suffix> = <CHARACTER PROGRAM DATA>
D day
H hour
M minute
S second

Function Sets measurement time of 2-point CDV measurement.

Restriction Invalid in the following cases:
• When :INSTRument:ATM is <OFF>.
• When :DISPlay:TMENu[:NAME] is other than <"CDV2">.
• When :SENSe:ATM:CDV2:TYPE is <MANual>.

Example use To set measurement time of 2-point CDV measurement to one hour:
> :SENSe:ATM:CDV2:PERiod 1,H

:SENSe:ATM:CDV2:PERiod?

Response <numeric>,<suffix>
<numeric> = <NR1 NUMERIC RESPONSE DATA>
<suffix> = <CHARACTER RESPONSE DATA>

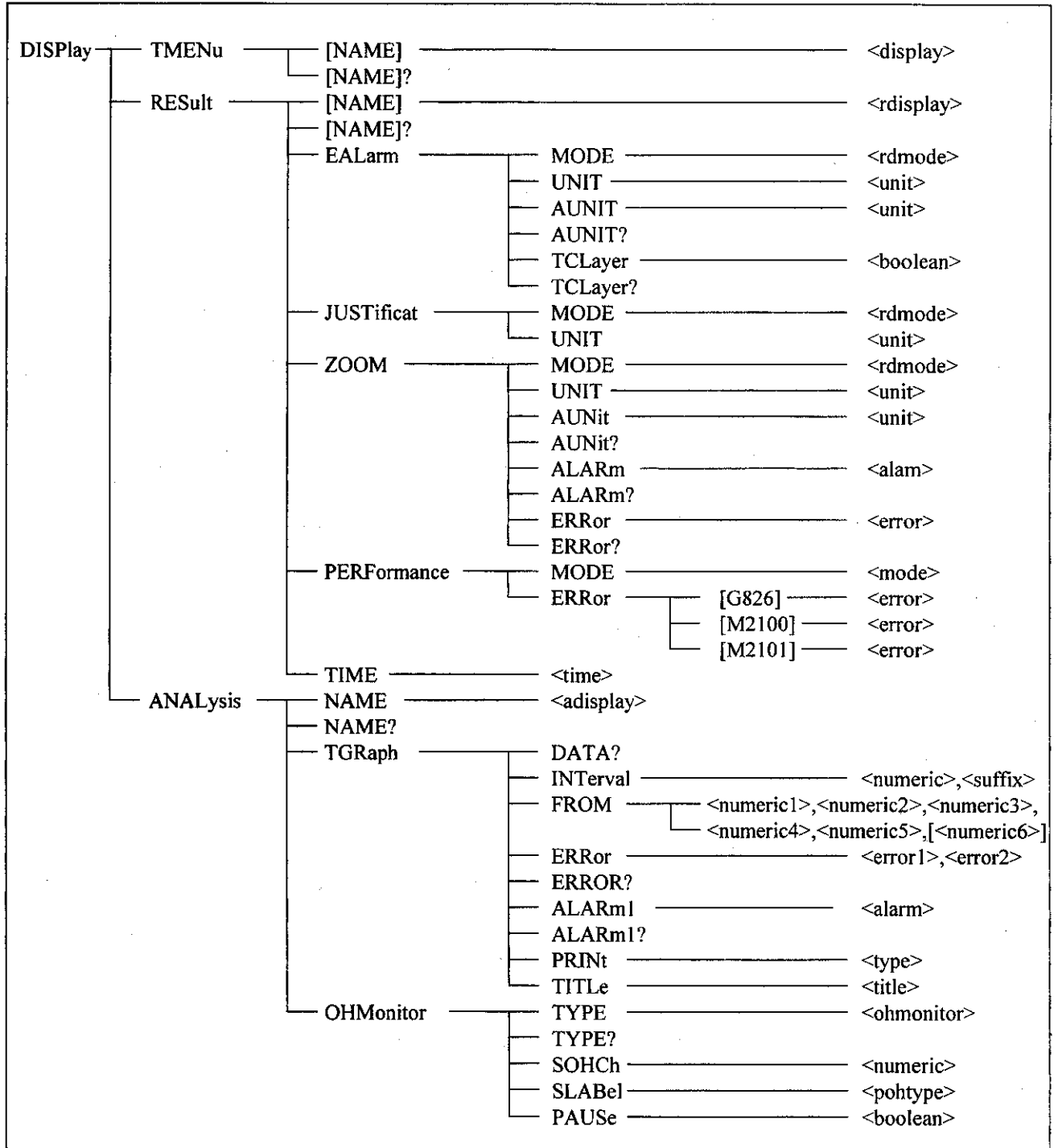
Function Queries measurement time of 2-point CDV measurement.

Example use > :SENSe:ATM:CDV2:PERiod?
< 1,H

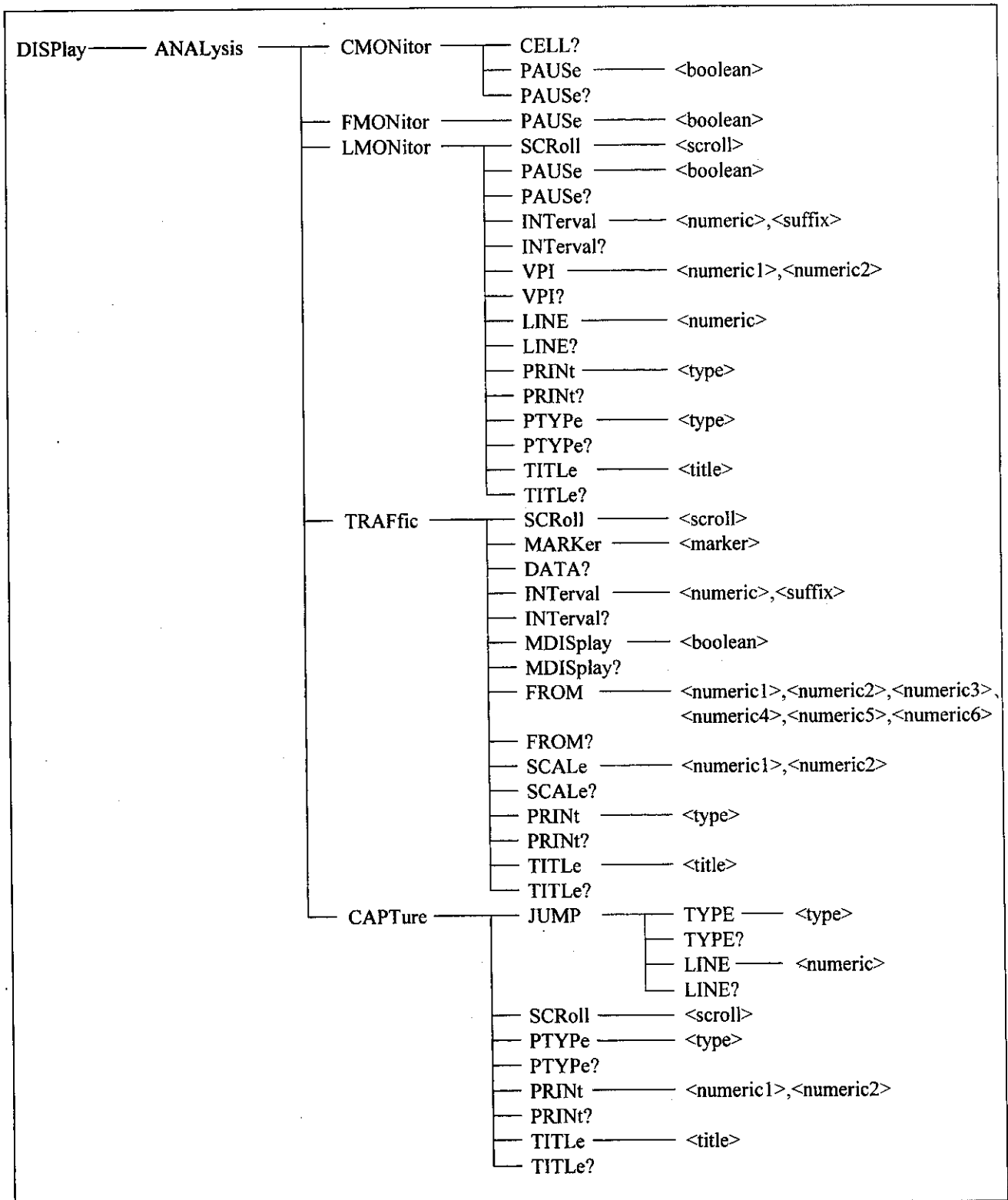
SECTION 4 REMOTE CONTROL

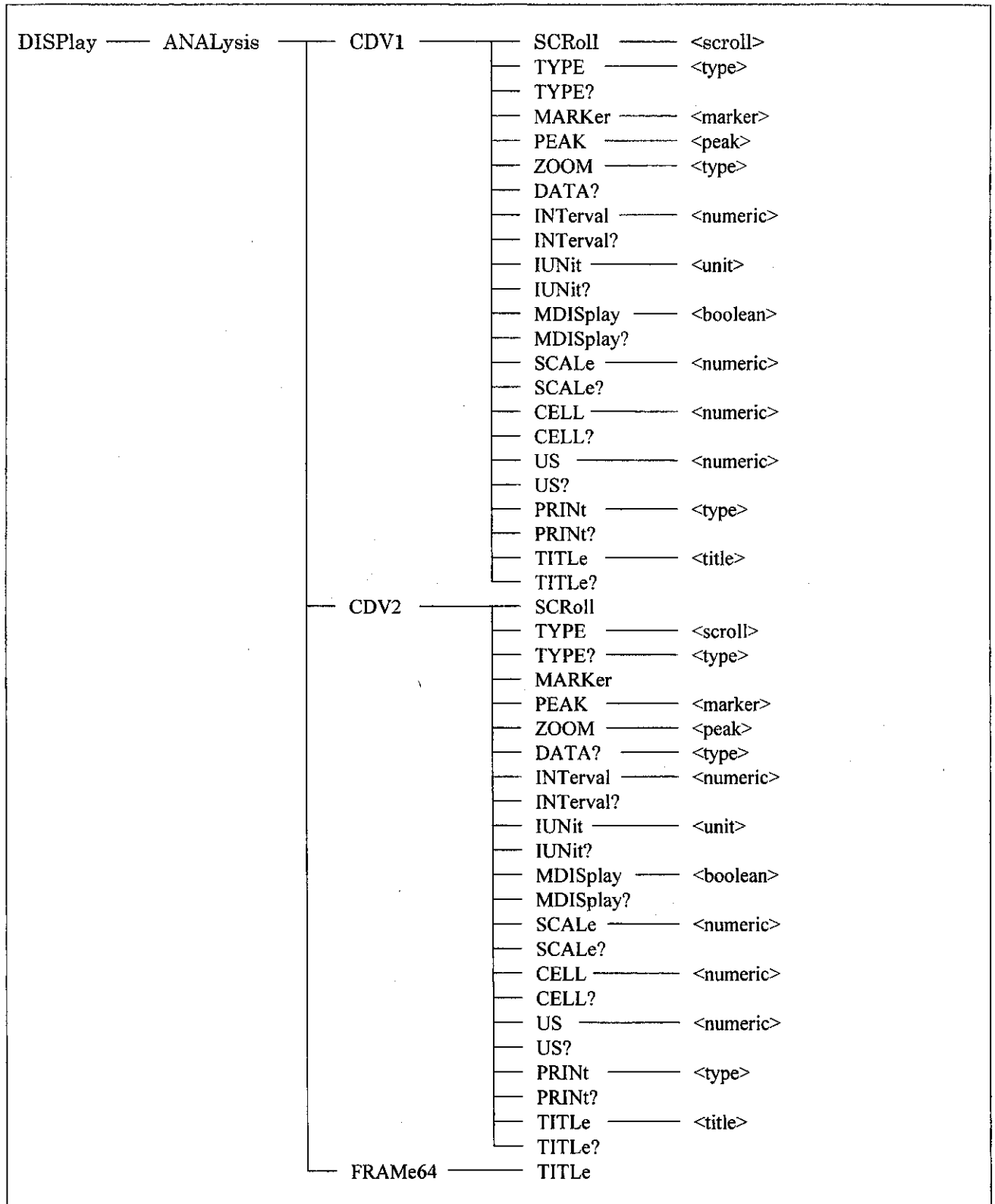
(3) DISPlay subsystem

In the DISPlay subsystem, make settings on the Result and Analyze screens.

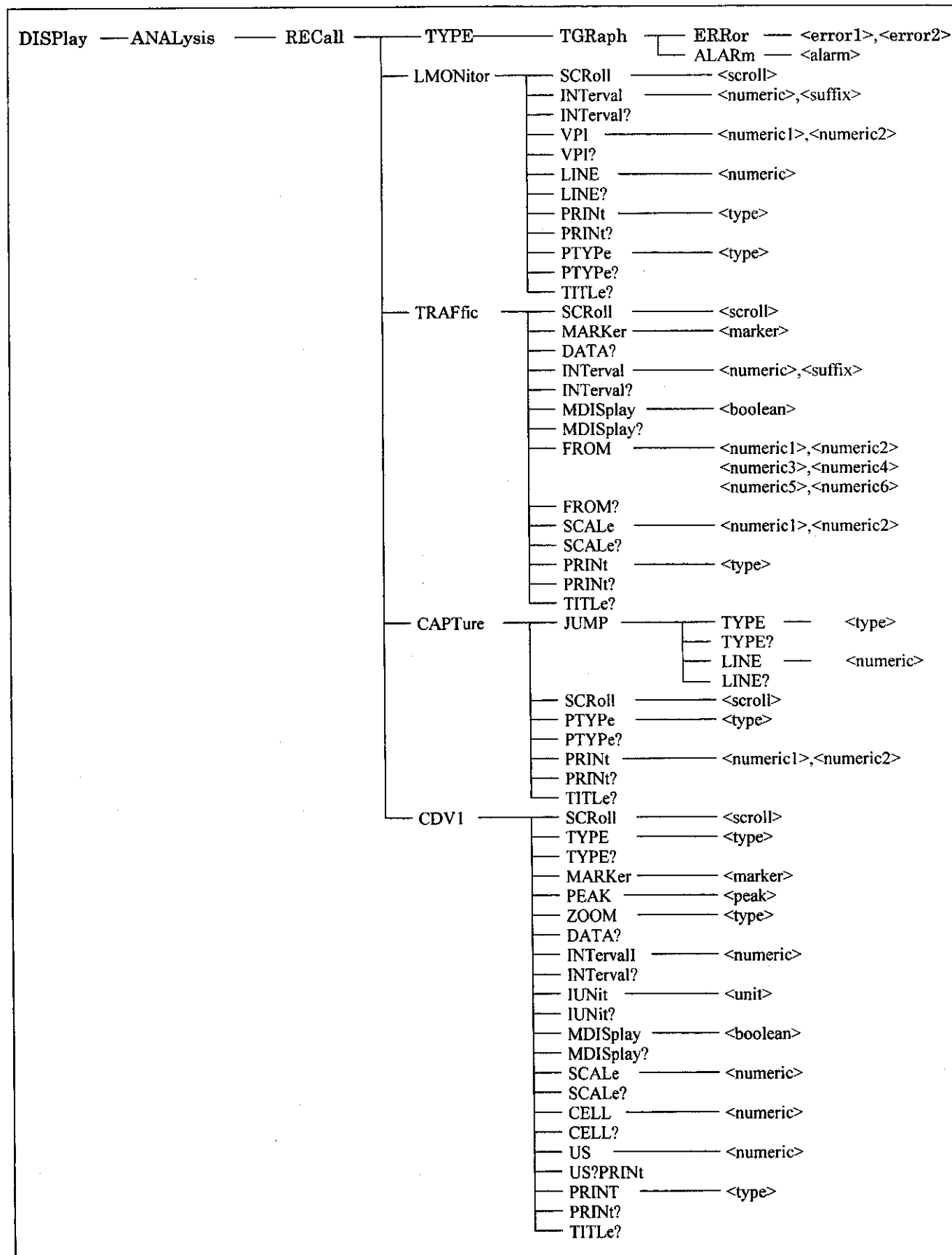


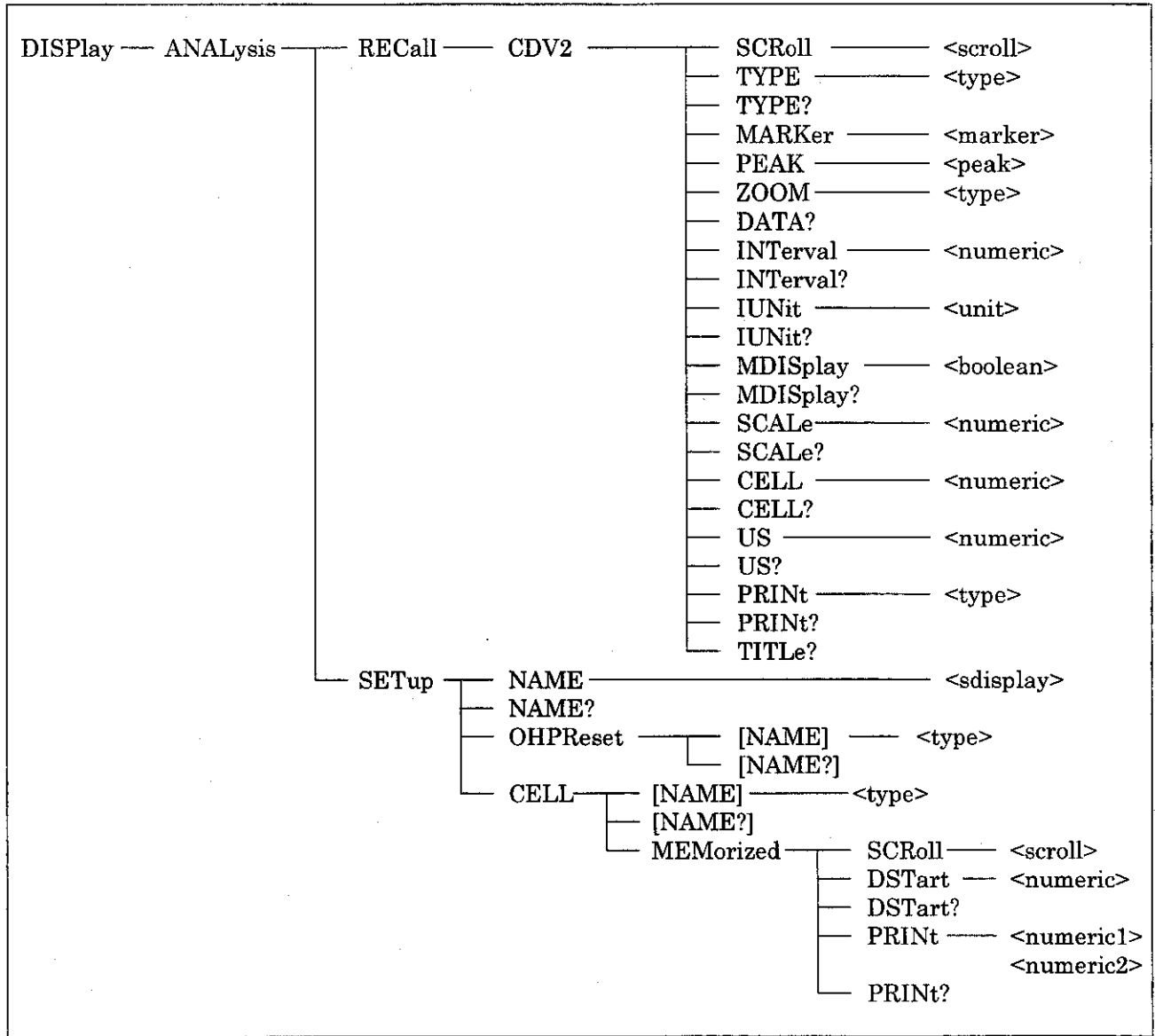
SECTION 4 REMOTE CONTROL





SECTION 4 REMOTE CONTROL





SECTION 4 REMOTE CONTROL

:DISPlay:TMENu[:NAME] <tdisplay>

Parameter <tdisplay> = <STRING PROGRAM DATA>

"TSEarch"	Trouble search subscreen
"MANual"	Manual(STM) subscreen
"MANual:JOFF"	Manual(STM) subscreen
"MANual:JON"	Manual:jitter subscreen
"MANual:TCLayer"	Manual(ATM)TCLayer subscreen
"MANual:TCELI"	Manual(ATM)Tx cell subscreen
"MANual:RCELI"	Manual(ATM)Rx cell subscreen
"PSEquence"	Pointer sequence subscreen
"PSEquence:JOFF"	Pointer sequence subscreen
"PSEquence:JON"	Pointer sequence:jitter subscreen
"DELay"	Delay subscreen
"CDV1"	1-point CDV subscreen
"CDV2"	2-point CDV subscreen

Function: Selects display item on Test menu screen.

Restriction: Invalid in the following cases:

- When <"TSEarch">, <"MANual[:JOFF]">, <"PSEquence[:JOFF]">, <"PSEquence:JON">, or <"DELay"> is set while :INSTrument:ATM is <ON>.
- When <"MANual:TCLayer">, <"MANual:TCELI">, <"MANual:RCELI">, <"CDV1">, or <"CDV2"> is set while :INSTrument:ATM is <OFF>.

Example use: To select MANual:jitter subscreen as display item on Test menu screen:

```
> :DISPlay:TMENu:NAME "MANual:JON", or
> :DISPlay:TMENu "MANual:JON"
```

:DISPlay:TMENu[:NAME]?

Response: <tdisplay> = <STRING RESPONSE DATA>

"TSE"	Trouble search subscreen
"MAN"	Manual subscreen
"MAN:JOFF"	Manual subscreen
"MAN:JON"	Manual:jitter subscreen
"MANual:TCL"	Manual(ATM)TCLayer subscreen
"MANual:TCEL"	Manual(ATM)Tx cell subscreen
"MANual:RCEL"	Manual(ATM)Rx cell subscreen
"PSEQ"	Pointer sequence subscreen
"PSEQ:JOFF"	Pointer sequence subscreen
"PSEQ:JON"	Pointer sequence:jitter subscreen
"DEL"	Delay subscreen
"JTOL"	Jitter tolerance subscreen
"JTR"	Jitter transfer subscreen
"JFR"	Jitter/Freq. subscreen
"WAND"	Wander subscreen
"CDV1"	1-point CDV subscreen
"CDV2"	2-point CDV subscreen

Function: Queries display item on Test menu screen.

Example use: > :DISPlay:TMENu:NAME?, or

```
> :DISPlay:TMENu?
< "MAN:JOFF"
```

:DISPlay:TMENu:MANual:SElect <type>

Parameter <type> = <CHARACTER PROGRAM DATA>
TRAFFic Traffic
EALarm Error/Alarm
PM PM cell

Function: Switches Tx cell screen of Test menu:Manual.

Restriction: Invalid in the following cases:

- When :INSTRument:ATM is <OFF>.
- When :DISPlay:TMENu[:NAME] is other than <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, and <"MANual:RCEL1">.

Example use: To switch Manual:Tx cell screen to Traffic:
> :DISPlay:TMENu:MANual:SElect TRAFFic

:DISPlay:TMENu:MANual:SElect?

Response: <type> = <CHARACTER RESPONSE DATA>
TRAF Traffic
EAL Error/Alarm
PM PM cell

Function: Queries Tx cell screen condition of Test menu:Manual.

Example use: > :DISPlay:TMENu:MANual:SElect?
< TRAF

:DISPlay:RESult[:NAME] <rdisplay>

Parameter <rdisplay> = <STRING PROGRAM DATA>
"TSEarch" Trouble search subscreen
"EALarm" Error/Alarm subscreen
"JUSTificat" Justification subscreen
"ZOOM" Zoom subscreen
"PERFormance" Performance subscreen
"DELaY" Delay subscreen
"CDV1" 1-point CDV subscreen
"CDV2" 2-point CDV subscreen
"B2" B2 error subscreen

Function: Selects display item on Result screen.

Restriction: Invalid in the following cases:

- When <"CDV1"> or <"CDV2"> is set while the ATM unit is not installed.
- When <"CDV1"> is set while :DISPlay:TMENu[:NAME] is other than <"CDV1">.
- When <"CDV2"> is set while :DISPlay:TMENu[:NAME] is other than <"CDV2">.
- When and <"JUSTificat"> is set while :DISPlay:TMENu[:NAME] is <"MANual[:JOFF]">, <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, <"MANual:RCEL1">, <"PSEQUence[:JOFF]">, or <"PSEQUence:JON">, and :SENSe:TELEcom:BRATe is <M139>, <M45>, <M34>, <M8>, <M2>, or <M1_5>.

Example use: To select "TSEarch" as display item on Result screen:
> :DISPlay:RESult:NAME "TSEarch", or
> :DISPlay:RESult "TSEarch"

SECTION 4 REMOTE CONTROL

:DISPlay:RESult[:NAME]?

Response: <rdisplay> = <STRING RESPONSE DATA>

"TSE"	Trouble search subscreen
"EAL"	Error/Alarm subscreen
"JUST"	Justification subscreen
"ZOOM"	Zoom subscreen
"PERF"	Performance subscreen
"DEL"	Delay subscreen
"CDV1"	1-point CDV subscreen
"CDV2"	2-point CDV subscreen
"B2"	B2 error subscreen

Function: Queries display item on Result screen.

Example use: > :DISPlay:RESult:NAME?, or
> :DISPlay:RESult?
< "TSE"

:DISPlay:RESult:EALarm:MODE <rdmode>

Parameter <rdmode> = <CHARACTER PROGRAM DATA>

CURRent	Current measurement result
LAST	Last measurement result

Function: Selects measurement result display mode.

Restriction: Invalid in the following case:

- When :DISPlay:TMENu[:NAME] is other than <"MANual[:JOFF]">, <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, <"MANual:RCEL1">, <"PSEquence[:JOFF]">, and <"PSEquence:JON">.

Example use: To select current measurement result as measurement result display mode:
> :DISPlay:RESult:EALarm:MODE CURRent

:DISPlay:RESult:EALarm:UNIT <unit>

Parameter <unit> = <CHARACTER PROGRAM DATA>

COUNT	Count value display
RATE	Rate value display

Function: Selects count value or rate value display of measurement results.

Restriction: Invalid in the following case:

- When :DISPlay:TMENu[:NAME] is other than <"MANual[:JOFF]">, <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, <"MANual:RCEL1">, <"PSEquence[:JOFF]">, and <"PSEquence:JON">.

Example use: To select count value display of measurement results:
> :DISPlay:RESult:EALarm:UNIT COUNT

:DISPlay:RESult:EALarm:AUNit <unit>

Parameter <unit> = <CHARACTER PROGRAM DATA>
COUNT Count value display
SECOnd Second value display

Function: Selects count value or second value display of measurement results (Alarm).

Restriction: Invalid in the following cases:

- When :INSTrument:ATM is <OFF>.
- When :DISPlay:TMENu[:NAME] is other than <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, and <"MANual:RCEL1">

Example use: To select count value display of measurement results:
> :DISPlay:RESult:EALarm:AUNit COUNT

:DISPlay:RESult:EALarm:AUNit?

Response: <unit> = <CHARACTER RESPONSE DATA>
COUN Count value display
SEC Second value display

Function: Queries measurement result (Alarm) display condition (count value or second value).

Example use: > :DISPlay:RESult:EALarm:AUNit?
< COUN

:DISPlay:RESult:EALarm:TCLayer <boolean>

Parameter <boolean> = <BOOLEAN PROGRAM DATA>
OFF or 0 Cell
ON or 1 TCLayer

Function: Switches between TCLayer and Cell on Result screen (Error/Alarm).

Restriction: Invalid in the following cases:

- When :INSTrument:ATM is <OFF>.
- When :DISPlay:TMENu[:NAME] is other than <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, and <"MANual:RCEL1">.

Example use: To switch to TCLayer screen:
> :DISPlay:RESult:EALarm:TCLayer ON

:DISPlay:RESult:EALarm:TCLayer?

Response <boolean> = <NR1 NUMERIC RESPONSE DATA>
0 Cell
1 TCLayer

Function: Queries TCLayer/Cell condition of Result screen (Error/Alarm).

Example use: > :DISPlay:RESult:EALarm:TCLayer?
< 1

SECTION 4 REMOTE CONTROL

:DISPlay:RESult:JUSTificat:MODE <rdmode>

Parameter <rdmode> = <CHARACTER PROGRAM DATA>
 CURRENT Current measurement result
 LAST Last measurement result

Function: Selects measurement result display mode.

Restriction: Invalid in the following cases:

- When :DISPlay:TMENu[:NAME] is other than <"MANual[:JOFF]">, <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, <"MANual:RCEL1">, <"PSEquence[:JOFF]">, and <"PSEquence:JON">.
- When :SENSe:TELEcom:BRATe is <M139>, <M45>, <M34>, <M8>, <M2>, or <M1_5>.

Example use: To select current measurement result as measurement result display mode:
> :DISPlay:RESult:JUSTificat:MODE CURRENT

:DISPlay:RESult:JUSTificat:UNIT <unit>

Parameter <unit> = <CHARACTER PROGRAM DATA>
 COUNT Count value display
 RATE Rate value display

Function: Selects count value or rate value display of measurement results.

Restriction: Invalid in the following case:

- When :DISPlay:TMENu[:NAME] is other than <"MANual[:JOFF]">, <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, <"MANual:RCEL1">, <"PSEquence[:JOFF]">, and <"PSEquence:JON">.
- When :SENSe:TELEcom:BRATe is <M139>, <M45>, <M34>, <M8>, <M2>, or <M1_5>.

Example use: To select count value display of measurement results:
> :DISPlay:RESult:JUSTificat:UNIT COUNT

:DISPlay:RESult:ZOOM:MODE <rdmode>

Parameter <rdmode> = <CHARACTER PROGRAM DATA>
 CURRENT Current measurement result
 LAST Last measurement result

Function: Selects measurement result display mode.

Restriction: Invalid in the following case:

- When :DISPlay:TMENu[:NAME] is other than <"MANual[:JOFF]">, <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, <"MANual:RCEL1">, <"PSEquence[:JOFF]">, and <"PSEquence:JON">.

Example use: To select current measurement result as measurement result display mode:
> :DISPlay:RESult:ZOOM:MODE CURRENT

:DISPlay:RESult:ZOOM:UNIT <unit>

Parameter <unit> = <CHARACTER PROGRAM DATA>
 COUNT Count value display
 RATE Rate value display

Function: Selects count value or rate value display of measurement results.

Restriction: Invalid in the following case:

- When :DISPlay:TMENu[:NAME] is other than <"MANual[:JOFF]">, <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, <"MANual:RCEL1">, <"PSEquence[:JOFF]">, and <"PSEquence:JON">.

Example use: To select count value display of measurement results:
> :DISPlay:RESult:ZOOM:UNIT COUNT

:DISPlay:RESult:ZOOM:AUNit <unit>

Parameter <unit> = <CHARACTER PROGRAM DATA>
 COUNT Count value display
 SECOnd Second value display

Function: Selects count value or second value display of measurement results (Alarm).

Restriction: Invalid in the following cases:

- When :INSTrument:ATM is <OFF>.
- When :DISPlay:TMENu[:NAME] is other than <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, and <"MANual:RCEL1">.

Example use: To select count value display of measurement results:

> :DISPlay:RESult:ZOOM:AUNit COUNT

:DISPlay:RESult:ZOOM:AUNit?

Response: <unit> = <CHARACTER RESPONSE DATA>
 COUN Count value display
 SEC Second value display

Function: Queries measurement result (Alarm) display condition (count value or second value).

Example use: > :DISPlay:RESult:ZOOM:AUNit?

< COUN

SECTION 4 REMOTE CONTROL

:DISPlay:RESult:ZOOM:ALARm <alarm>

Parameter	<alarm> = <STRING PROGRAM DATA>
"POWer"	Power fail
"LOS"	LOS
"LOF"	LOF
"AIS:MS"	MS-AIS
"RDI:MS"	MS-RDI
"AIS:AU"	AU-AIS
"LOP:AU"	AU-LOP
"RDI:HP"	HP-RDI
"SLM:HP"	HP-SLM
"AIS:TU"	TU-AIS
"LOP:TU"	TU-LOP
"RDI:LP"	LP-RDI
"SLM:LP"	LP-SLM
"RFI:LP"	LP-RFI
"LOM:TU"	TU-LOM
"AIS:M139"	139M AIS
"AIS:M45"	45M AIS
"AIS:M34"	34M AIS
"AIS:M2"	2M AIS
"AIS:M1_5"	1.5M AIS
"LOF:M139"	139M LOF
"LOF:M45"	45M LOF
"LOF:M34"	34M LOF
"LOF:M2"	2M LOF
"LOF:M1_5"	1.5M LOF
"LOF:PLCP"	PLCP LOF
"RDI:M139"	139M RDI
"RDI:M45"	45M RDI
"RDI:M34"	34M RDI
"RDI:M2"	2M RDI
"RDI:M1_5"	1.5M RDI
"RDI:PLCP"	PLCP RDI
"AIS:VP"	VP-AIS
"RDI:VP"	VP-RDI
"LOC:VP"	VP-LOC
"AIS:VC"	VC-AIS
"RDI:VC"	VC-RDI
"LOC:VC"	VC-LOC
"LCD"	Lost of cell sync
"PATtern"	Sync. loss
"OOF:PLCP"	OOF PLCP

Function: Selects alarm display of measurement results (ZOOM).

Restriction: Invalid in the following case:

- When :DISPlay:TMENu[:NAME] is other than <"MANual[:JOFF]">, <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, <"MANual:RCEL1">, <"PSEquence[:JOFF]">, and <"PSEquence:JON">.

Example use: To select MS-RDI display of measurement results (ZOOM):
> :DISPlay:RESult:ZOOM:ALARm "RDI:MS"

:DISPlay:RESult:ZOOM:ALARm?

Response: <alarm> = <STRING RESPONSE DATA>

Function: Queries the alarm display of measurement results (ZOOM).

Example use: > :DISPlay:RESult:ZOOM:ALARm?
< "RDI:MS"

:DISPlay:RESult:ZOOM:ERRor <error>

Parameter	<error> = <STRING PROGRAM DATA>
"B1"	B1 error
"B2"	B2 error
"B3:HP"	HP-B3 error
"B3:LP"	LP-B3 error
"BIP2"	BIP-2 error
"REI:MS"	MS-REI error
"REI:HP"	HP-REI error
"REI:LP"	LP-REI error
"CODE"	Code error
"FRAMe:M139"	139M FAS
"FRAMe:M45"	45M FAS
"FRAMe:M34"	34M FAS
"FRAMe:M8"	8M FAS
"FRAMe:M2"	2M FAS
"FRAMe:M1_5"	1.5M FAS
"REI:M139"	139M REI error
"REI:M45"	45M REI error
"REI:M34"	34M REI error
"PLCP:REI"	PLCP REI error
"CRC4"	CRC-4 error
"EBIT"	E-Bit
"BIP8"	BIP-8 error
"PARITY"	Parity
"CBIT"	C-Bit
"CRC6"	CRC-6 error
"CELL"	Cell
"CORR"	Corrected
"DISC"	Discarded
"NONCONF"	Nonconf
"ERRORED"	Errored cell
"LOST"	Lost cell
"MISINS"	Misinserted
"SECB"	SECB
"SARPDU"	SAR-PDU
"SNP"	SNP
"UCSNP"	Uncorect SNP
"P"	P
"OSF"	OSF
"SN"	SN
"CPSPKT"	CPS-Packet
"CPSHEC"	HEC error
"LI"	Length indicator
"LENGTH"	Length
"CPCS"	CPCS-PDU
"MID"	MID
"CRC10"	CRC10
"DISCPDU"	Discarded PDU
"ST"	Segment type
"ABORT"	Abort
"UDLVPDU"	Undelivered PDU
"CPI"	CPI
"BETAG"	B/ETag
"BASIZE"	BASize
"AL"	AL
"FSIZE"	Frame size
"CRC32"	CRC32
"FM:LOST"	FM Lost
"FM:MISINS"	FM Misinserted
"FM:BIPV"	FM BIPV
"FM:SECB"	FM SECB
"BR:LOST"	BR Lost
"BR:MISINS"	BR Misinserted
"BR:BIPV"	BR BIPV
"BR:SECB"	BR SECB
"BIT"	Bit error
"CIDPKT"	CID PKT

SECTION 4 REMOTE CONTROL

Function: Selects error display of measurement results (ZOOM).
Restriction: Invalid in the following case:

- When :DISPlay:TMENu[:NAME] is other than <"MANual[:JOFF]">, <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, <"MANual:RCEL1">, <"PSEquence[:JOFF]">, and <"PSEquence:JON">.

Example use: To select E-Bit display of measurement results (ZOOM):
> :DISPlay:RESult:ZOOM:ERRor "EBIT"

:DISPlay:RESult:ZOOM:ERRor?

Response: <error> = <STRING RESPONSE DATA>
Function: Queries error display of measurement results (ZOOM).
Example use: > :DISPlay:RESult:ZOOM:ERRor?
< "EBIT"

:DISPlay:RESult:PERFormance:MODE <rdmode>

Parameter <rdmode> = <CHARACTER PROGRAM DATA>
CURRENT Current measurement result
LAST Last measurement result

Function: Selects measurement result display mode.
Restriction: Invalid in the following cases:

- When :DISPlay:TMENu[:NAME] is other than <"MANual[:JOFF]">, <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, <"MANual:RCEL1">, <"PSEquence[:JOFF]">, and <"PSEquence:JON">.
- When :CALCulate:TELEcom:PERFormance:TYPE is <OFF>.

Example use: To select current measurement result as measurement result display mode:
> :DISPlay:RESult:PERFormance:MODE CURRENT

:DISPlay:RESult:PERFormance:ERRor[:G826] <error>

Parameter <error> = <STRING PROGRAM DATA>
"BIP" BIP
"REI" REI
"FCRC" FAS/CRC
"PARITY" Parity
"BIT" Bit
"CELL" Cell

Function: Selects error of measurement results (performance G.826).
Restriction: Invalid in the following cases:

- When the 1.5/45/52M (B3ZS) unit is not installed and <"PARITY"> is set.
- When the ATM unit is not installed and <"CELL"> is set.
- When :DISPlay:TMENu[:NAME] is other than <"MANual[:JOFF]">, <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, <"MANual:RCEL1">, <"PSEquence[:JOFF]">, and <"PSEquence:JON">.
- When :CALCulate:TELEcom:PERFormance:TYPE is <OFF>, <G821>, or <M2100>.
- When <"BIP"> or <"REI"> is set while :SENSe:TELEcom:BRATe is <M139>, <M45>, <M34>, <M8>, <M2>, or <M1_5>.
- When <"FCRC"> is set while :SENSe:TELEcom:MMODE is <OSERvice>.
- When <"BIT"> is set while :SENSe:TELEcom:MMODE is <ISERvice>.
- When <"FCRC"> is set while :SENSe:TELEcom:MMODE is <ISERvice>, :SENSe:TELEcom:DEMux:MRATe is <OFF>, and :SENSe:TELEcom:FRAMing is <OFF>.
- When <"FCRC"> is set while :INSTrument:ATM is <ON>, :SENSe:TELEcom:BRATe is <M622>, <M156>, <M156CMI>, or <M52B3ZS>.
- When <"CELL"> is set while :INSTrument:ATM is <OFF>.
- When <"BIT"> is set while :INSTrument:ATM is <ON>.
- When <"PARITY"> is set while :SENSe:TELEcom:BRATe is other than <M45>.

Example use: To set error of measurement results (performance G.826) to BIP:
> :DISPlay:RESult:PERFormance:ERRor "BIP", or
> :DISPlay:RESult:PERFormance:ERRor:G826 "BIP" ("G826" statement is omissible.)

:DISPlay:RESult:PERFormance:ERRor[:G826]?

Response: <error> = <STRING RESPONSE DATA>

Function: Queries error of measurement results (performance G.826).

Example use: > :DISPlay:RESult:PERFormance:ERRor?, or
> :DISPlay:RESult:PERFormance:ERRor:G826? ("G826" statement is omissible.)
< "BIP"

:DISPlay:RESult:PERFormance:ERRor:M2100 <error>

Parameter <error> = <STRING PROGRAM DATA>

"FCRC"	FAS/CRC
"PARITY"	Parity
"BIT"	Bit
"ERRORED"	Errored cell
"LOST"	Lost cell
"MISINS"	Misinserted cell

Function: Selects error of measurement results (performance M2100).

Restriction: Invalid in the following cases:

- When the 1.5/45/52M (B3ZS) unit is not installed and <"PARITY"> is set.
- When the ATM unit is not installed and <"ERRORED">, <"LOST">, or <"MISINS"> is set.
- When :DISPlay:TMENu[:NAME] is other than <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, and <"MANual:RCEL1">.
- When :CALCulate:TELEcom:PERFormance:TYPE is <OFF>, <G821>, or <G826>.
- When <"FCRC"> is set while :INSTrument:ATM is <ON>, :SENSe:TELEcom:BRATe is <M622>, <M156>, <M156CMI>, or <M52B3ZS>.
- When <"FCRC"> is set while :SENSe:TELEcom:MMODE is <OSERvice>.
- When <"BIT"> is set while :SENSe:TELEcom:MMODE is <ISERvice>.
- When <"BIT"> is set while :INSTrument:ATM is <ON>.
- When <"ERRORED">, <"LOST">, or <"MISINS"> is set while :INSTrument:ATM is <OFF>.
- When <"PARITY"> is set while :SENSe:TELEcom:BRATe is other than <M45>.

Example use: To set error of measurement results (performance M2100) to FAS/CRC:

> :DISPlay:RESult:PERFormance:ERRor:M2100 "FCRC"

:DISPlay:RESult:PERFormance:ERRor:M2100?

Response: <error> = <STRING RESPONSE DATA>

Function: Queries error of measurement results (performance M2100).

Example use: > :DISPlay:RESult:PERFormance:ERRor:M2100?
< "FCRC"

:DISPlay:RESult:TIME <time>

Parameter <time> = <CHARACTER PROGRAM DATA>

ELAPsed	Elapsed time
STARt	Start time

Function: Selects measurement time display of Result screen.

Restriction: Invalid in the following case:

- When <ELAPsed> is set while :DISPlay:TMENu[:NAME] is <"TSEArch"> or <"DELay">.

Example use: To display elapsed time:

> :DISPlay:RESult:TIME ELAPsed

SECTION 4 REMOTE CONTROL

:DISPlay:ANALysis[:NAME] <adisplay>

Parameter	<adisplay> = <STRING PROGRAM DATA>
"TSEarch"	Trouble search subscreen
"EALarm"	Error/Alarm subscreen
"OHMonitor"	OH monitor subscreen
"CMONitor"	Cell monitor subscreen
"LMONitor"	Live monitor subscreen
"TRAFfic"	Traffic monitor subscreen
"CAPTure"	Cell capture subscreen
"CDV1"	1-point CDV subscreen
"CDV2"	2-point CDV subscreen
"FRAMe64"	SOH 64frame subscreen
"RECall"	Recall subscreen

Function: Selects display item on Analyze screen.

Restriction: Invalid in the following cases:

- When the ATM unit is not installed and <"CMONitor">, <"LMONitor">, <"TRAFfic">, or <"CAPTure"> is set.
- When <"EALarm">, <"OHMonitor">, <"CMONitor">, <"FMONitor">, <"LMONitor">, <"TRAFfic">, <"CAPTure">, or <"SOH64"> is set while :DISPlay:TMENu[:NAME] is other than <"MANual[:JOFF]">, <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, <"MANual:RCEL1">, <"PSEQuence[:JOFF]">, and <"PSEQuence:JON">.
- When other than <"CDV1"> and <"RECall"> is set while :DISPlay:TMENu[:NAME] is <"CDV1">.
- When other than <"CDV2"> and <"RECall"> is set while :DISPlay:TMENu[:NAME] is <"CDV2">.
- When <"CMONitor">, <"LMONitor">, <"TRAFfic"> or <"CAPTure"> is set while :INSTrument:ATM is <OFF>.
- When <"OHMonitor"> is set while :INSTrument:ATM is <OFF>, :SENSe:TELEcom:BRATe is <M139>, <M34>, <M8>, or <M2>, :SENSe:TELEcom:DEMUX:MRATe is <OFF>, and :SENSe:TELEcom:FRAMing is <OFF>.
- When <"OHMonitor"> is set while :INSTrument:ATM is <ON>, and :SENSe:TELEcom:BRATe is <M2>.

Example use: To select "EALarm" as display item on Analyze screen:

```
> :DISPlay:ANALysis:NAME "EALarm", or  
> :DISPlay:ANALysis "EALarm"
```

:DISPlay:ANALysis[:NAME]?

Response: <adisplay> = <STRING RESPONSE DATA>

"TSE"	Trouble search subscreen
"EAL"	Error/Alarm subscreen
"OHM"	OH monitor subscreen
"CMON"	Cell monitor subscreen
"CCM"	Live monitor subscreen
"TRAF"	Traffic monitor subscreen
"CAPT"	Cell capture subscreen
"CDV1"	1-point CDV subscreen
"CDV2"	2-point CDV subscreen
"FRAME64"	SOH 64frame subscreen
"REC"	Recall subscreen

Function: Queries display item on Analyze screen.

Example use: > :DISPlay:ANALysis:NAME?, or
> :DISPlay:ANALysis?
< "EAL"

SECTION 4 REMOTE CONTROL

:DISPlay:ANALysis:TGRaph:DATA?

Response: <time>,<alarm1s>,<alarm1c>,<alarm2s>,<alarm2c>,<alarm3s>,<alarm3c>,<alarm4s>,<alarm4c>,<alarm5s>,<alarm5c>,<error1>,<error2>
 <time> = <year>,<month>,<day>,<hour>,<minute>,<second>
 Time indicated by marker
 <year> = <NR1 NUMERIC RESPONSE DATA>
 0, 1994 ~ 2093 Year
 <month> = <NR1 NUMERIC RESPONSE DATA>
 0, 1 ~ 12 Month
 <day> = <NR1 NUMERIC RESPONSE DATA>
 0, 1 ~ 31 Day
 <hour> = <NR1 NUMERIC RESPONSE DATA>
 0 ~ 23 Hour
 <minute> = <NR1 NUMERIC RESPONSE DATA>
 0 ~ 5 Minute
 <second> = <NR1 NUMERIC RESPONSE DATA>
 0 ~ 5 Second
 <alarm1s> = <STRING RESPONSE DATA>
 Alarm 1 occurrence time (sec) of data indicated by marker
 Form1
 <alarm1c> = <STRING RESPONSE DATA>
 Alarm 1 occurrence count of data indicated by marker
 Form1
 <alarm2s> = <STRING RESPONSE DATA>
 Alarm 2 occurrence time (sec) of data indicated by marker
 Form1
 <alarm2c> = <STRING RESPONSE DATA>
 Alarm 2 occurrence count of data indicated by marker
 Form1
 <alarm3s> = <STRING RESPONSE DATA>
 Alarm 3 occurrence time (sec) of data indicated by marker
 Form1
 <alarm3c> = <STRING RESPONSE DATA>
 Alarm 3 occurrence count of the data indicated by marker
 Form1
 <alarm4s> = <STRING RESPONSE DATA>
 Alarm 4 occurrence time (sec) of data indicated by marker
 Form1
 <alarm4c> = <STRING RESPONSE DATA>
 Alarm 4 occurrence count of data indicated by marker
 Form1
 <alarm5s> = <STRING RESPONSE DATA>
 Alarm 5 occurrence time (sec) of data indicated by marker
 Form1
 <alarm5c> = <STRING RESPONSE DATA>
 Alarm 5 occurrence count of data indicated by marker
 Form1
 <error1> = <STRING RESPONSE DATA>
 Error count value of data indicated by marker
 Form1
 <error2> = <STRING RESPONSE DATA>
 Error rate value of data indicated by marker
 Form2

Function: Queries data indicated by marker on Analyze:Error:Alarm screen.
 Example use: > :DISPlay:ANALysis:TGRaph:DATA?
 < 1994,12,25,12,54,30," 1"," 1"," 0"," 0",
 " 104"," 10"," 1"," 1"," 1",
 " 189"," 3.3E-04"

:DISPlay:ANALysis:TGRaph:INTerval <numeric>,<suffix>

Parameter <numeric> = <CHARACTER PROGRAM DATA>
1, 15, 60
<suffix> = <CHARACTER PROGRAM DATA>
M minute
S sec

Function: Sets graduation width of time axis on Analyze:Error/Alarm screen.

Restriction: Invalid in the following case:

- When :DISPlay:TMENU[:NAME] is other than <"MANual[:JOFF]"/>, <"MANual:JON"/>, <"MANual:TCLayer"/>, <"MANual:TCEL1"/>, <"MANual:RCEL1"/>, <"PSEquence[:JOFF]"/>, and <"PSEquence:JON"/>.

Example use: To set graduation width to one minute:

> :DISPlay:ANALysis:TGRaph:INTerval 1,M

:DISPlay:ANALysis:TGRaph:FROM <numeric1>,<numeric2>,<numeric3>,<numeric4>,<numeric5>
[,<numeric6>]

Parameter <DECIMAL NUMERIC PROGRAM DATA>
<numeric1> = 1994 ~ 2093 (year)
<numeric2> = 1 ~ 12 (month)
<numeric3> = 1 ~ 31 (day)
<numeric4> = 0 ~ 23 (hour)
<numeric5> = 0 ~ 59 (minute)
<numeric6> = 0 ~ 59 (second)

Note: If time specified by the parameter does not exist, the earliest time after the specified time is set.

If time before the measurement start time is specified, the measurement start time is set.

If time after the log end time is specified, the log end time is set.

Function: Sets display start position of Error/Alarm graph.

Restriction: Invalid in the following case:

- When :DISPlay:TMENU[:NAME] is other than <"MANual[:JOFF]"/>, <"MANual:JON"/>, <"MANual:TCLayer"/>, <"MANual:TCEL1"/>, <"MANual:RCEL1"/>, <"PSEquence[:JOFF]"/>, and <"PSEquence:JON"/>.

Example use: To display from 11:30:40 on July 28, 1996:

> :DISPlay:ANALysis:TGRaph:FROM 1996,7,28,11,30,40

SECTION 4 REMOTE CONTROL

:DISPlay:ANALysis:TGRaph:ERRor <error1>,<error2>

Parameter	<error1> = <STRING PROGRAM DATA>	
	"REI:PLCP"	PLCP REI error
	"CRC4"	CRC-4 error
	"CRC6"	CRC-6 error
	"CELL"	Cell count
	"CORR"	Corrected cell
	"DISC"	Discarded cell
	"NONCONF"	Non-conforming cell
	"ERRORED"	Errored cell
	"LOST"	Lost cell
	"MISINS"	Misinserted cell
	"SECB"	SECB
	"SARPDU"	SAR-PDU count
	"SNP"	SNP error
	"UCSNP"	Uncorrectable SNP error
	"P"	P error
	"OSF"	OSF error
	"SN"	SN error
	"CPSPKT"	CPS-Packet count
	"CPSHEC"	HEC error
	"LI"	Length indicator
	"LENGTH"	Length error
	"CPCS"	CPCS-PDU count
	"MID"	MID count
	"CRC10"	CRC10 error
	"DISCPDU"	Discarded PDU error
	"ST"	Segment type
	"ABORT"	Abort
	"UDLVPDU"	Undelivered PDU
	"CPI"	CPI error
	"BETAG"	B/ETag mismatch
	"BASIZE"	BAsize error
	"AL"	AL error
	"FSIZE"	Frame size error
	"CRC32"	CRC32 error
	"FM:LOST"	PM FM Lost cell
	"FM:MISINS"	PM FM Misinserted cell
	"FM:BIPV"	PM FM BIPV
	"FM:SECB"	PM FM SECB
	"BR:LOST"	PM BR Lost cell
	"BR:MISINS"	PM BR Misinserted cell
	"BR:BIPV"	PM BR BIPV
	"BR:SECB"	PM BR SECB
	"BIT"	Bit error
	"HIT"	Hit
	"0191"	0.191
	"FM"	FM
	"BR"	BR
	<error2> = <CHARACTER PROGRAM DATA>	
	EC	Count
	ER	Rate

* For other error items, refer to Vol. 2 of the SDH/PDH/ATM Analyzer Operation Manual.

Function: Sets error item for Error/Alarm graph display.

Restriction: Invalid in the following cases:

- When :DISPlay:TMENu[:NAME] is other than <"MANual[:JOFF]">, <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, <"MANual:RCEL1">, <"PSEquence[:JOFF]">, and <"PSEquence:JON">.
- When <ER> is set while <"HIT">, <"SAR_PDU">, <"SECB">, <"CPCS">, <"PMCount">, <"TUCO1">, <"TUCO">, <"TRCCO">, or <"TRCCO1"> is set.

Example use: To display error rate of bit errors:

```
> :DISPlay:ANALysis:TGRaph:ERRor "BIT",ER
```

:DISPlay:ANALysis:TGRaph:ERRor?

Response: <error1>,<error2>

<error1> = <STRING RESPONSE DATA>

<error2> = <CHARACTER RESPONSE DATA>

Function: Queries error item for Error/Alarm graph display.

Example use: > :DISPlay:ANALysis:TGRaph:ERRor?

```
< "BIT",ER
```

SECTION 4 REMOTE CONTROL

:DISPlay:ANALysis:TGRaph:ALARm1 <alarm>

Parameter	<alarm> = <STRING PROGRAM DATA>
"ALL"	ALL
"POWer"	Power fail
"LOS"	LOS
"LOF"	LOF
"OOF"	OOF
"AIS:MS"	MS-AIS
"RDI:MS"	MS-RDI
"AIS:AU"	AU-AIS
"LOP:AU"	AU-LOP
"RDI:HP"	HP-RDI
"SLM:HP"	HP-SLM
"AIS:TU"	TU-AIS
"LOP:TU"	TU-LOP
"RDI:LP"	LP-RDI
"SLM:LP"	LP-SLM
"RFI:LP"	LP-RFI
"LOM:TU"	TU-LOM
"AIS:M139"	139M AIS
"AIS:M45"	45M AIS
"AIS:M34"	34M AIS
"AIS:M8"	8M AIS
"AIS:M2"	2M AIS
"AIS:M1_5"	1.5M AIS
"LOF:M139"	139M LOF
"LOF:M45"	45M LOF
"LOF:M34"	34M LOF
"LOF:M8"	8M LOF
"LOF:M2"	2M LOF
"LOF:M1_5"	1.5M LOF
"LOF:MF"	MF LOF
"LOF:PLCP"	PLCP LOF
"RDI:M139"	139M RDI
"RDI:M45"	45M RDI
"RDI:M34"	34M RDI
"RDI:M8"	8M RDI
"RDI:M2"	2M RDI
"RDI:M1_5"	1.5M RDI
"RDI:MF"	MF RDI
"RDI:PLCP"	PLCP RDI
"AIS:VP"	VP-AIS
"RDI:VP"	VP-RDI
"LOC:VP"	VP-LOC
"AIS:VC"	VC-AIS
"RDI:VC"	VC-RDI
"LOC:VC"	VC-LOC
"LCD"	Lost of cell sync
"PATTerM"	Sync. loss
"OOF:PLCP"	OOF PLCP

Function: Sets alarm item to be displayed as alarm 1.

Restriction: Invalid in the following case:

- When :DISPlay:TMENu[:NAME] is other than <"MANual[:JOFF]">, <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, <"MANual:RCEL1">, <"PSEquence[:JOFF]">, and <"PSEquence:JON">.

Example use: To display Power fail as alarm 1:

```
> :DISPlay:ANALysis:TGRaph:ALARm1 "POWer"
```

:DISPlay:ANALysis:TGRaph:ALARm1?

Response <alarm> = <STRING RESPONSE DATA>
Function: Queries alarm item to be displayed as alarm 1.
Example use: > :DISPlay:ANALysis:TGRaph:ALARm1?
< "POW"

:DISPlay:ANALysis:TGRaph:ALARm2 <alarm>

Parameter <alarm> = <STRING PROGRAM DATA>
Function: Sets alarm item to be displayed as alarm 2.
Restriction: Same as :DISPlay:ANALysis:TGRaph:ALARm1.

:DISPlay:ANALysis:TGRaph:ALARm2?

Response: <alarm> = <STRING RESPONSE DATA>
Same as :DISPlay:ANALysis:TGRaph:ALARm1.
Function: Queries alarm item to be displayed as alarm 2.

:DISPlay:ANALysis:TGRaph:ALARm3 <alarm>

Parameter <alarm> = <STRING PROGRAM DATA>
Function: Sets alarm item to be displayed as alarm 3.
Restriction: Same as :DISPlay:ANALysis:TGRaph:ALARm1.

:DISPlay:ANALysis:TGRaph:ALARm3?

Response: <alarm> = <STRING RESPONSE DATA>
Same as :DISPlay:ANALysis:TGRaph:ALARm1.
Function: Queries alarm item to be displayed as alarm 3

:DISPlay:ANALysis:TGRaph:ALARm4 <alarm>

Parameter <alarm> = <STRING PROGRAM DATA>
Same as :DISPlay:ANALysis:TGRaph:ALARm1.
Function: Sets alarm item to be displayed as alarm 4.
Restriction: Same as :DISPlay:ANALysis:TGRaph:ALARm1.

:DISPlay:ANALysis:TGRaph:ALARm4?

Response: <alarm> = <STRING RESPONSE DATA>
Same as :DISPlay:ANALysis:TGRaph:ALARm1.
Function: Queries alarm item to be displayed as alarm 4

:DISPlay:ANALysis:TGRaph:ALARm5 <alarm>

Parameter <alarm> = <STRING PROGRAM DATA>
Same as :DISPlay:ANALysis:TGRaph:ALARm1.
Function: Sets alarm item to be displayed as alarm 5.
Restriction: Same as :DISPlay:ANALysis:TGRaph:ALARm1.

:DISPlay:ANALysis:TGRaph:ALARm5?

Response: <alarm> = <STRING RESPONSE DATA>
Same as :DISPlay:ANALysis:TGRaph:ALARm1.
Function: Queries alarm item to be displayed as alarm 5

SECTION 4 REMOTE CONTROL

:DISPlay:ANALysis:TGRaph:PRINt <type>

Parameter <type> = <CHARACTER PROGRAM DATA>

DISPlay	Display
ALL	All
AFTer	After
BEFore	Before

Function: Specifies printing range of Analyze:Error/Alarm screen.

Restriction: Invalid in the following case:

- When :DISPlay:TMENu[:NAME] is other than <"MANual[:JOFF]">, <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, <"MANual:RCEL1">, <"PSEquence[:JOFF]">, and <"PSEquence:JON">.

Example use: To print screen range currently on display:

> :DISPlay:ANALysis:TGRaph:PRINt DISPlay

:DISPlay:ANALysis:TGRaph:TITLe <title>

Parameter <title> = <STRING PROGRAM DATA>

"Title character string" Title character string (up to 15 characters)

"" is also allowed.

Function: Sets trace graph title.

Restriction: Invalid in the following case:

- When :DISPlay:TMENu[:NAME] is other than <"MANual[:JOFF]">, <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, <"MANual:RCEL1">, <"PSEquence[:JOFF]">, and <"PSEquence:JON">.

Example use: To display "TITLE-DISP" as trace graph title:

> :DISPlay:ANALysis:TGRaph:TITLe "TITLE-DISP"

:DISPlay:ANALysis:OHMonitor:TYPE <ohmonitor>

Parameter <ohmonitor> = <CHARACTER PROGRAM DATA>

OHead	OH
PMSP	PTR,K1/K2
PTRace	Path trace
PFRame	PDH frame
TTRace	Trail trace
PAYLoad	Payload

Function: Selects display item on OH monitor.

Restriction: Invalid in the following cases:

- When the ATM unit is not installed and <TTRace> is set.
- When :DISPlay:TMENu[:NAME] is other than <"MANual[:JOFF]">, <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, <"MANual:RCEL1">, <"PSEquence[:JOFF]">, and <"PSEquence:JON">.
- When <OHead>, <PMSP>, or <PTRace> is set while :SENSe:TELEcom:BRATe is <M139>, <M45>, <M34>, <M8>, <M2>, or <M1_5>.
- When <PFRame> is set while :SENSe:TELEcom:DEMUX:MRATe is <OFF> and, :SENSe:TELEcom:FRAMing is <OFF>.
- When <PFRame> is set while :INSTrument:ATM is <ON>.
- When <TTRace> is set while :INSTrument:ATM is <OFF>.
- When <TTRace> is set while :SENSe:TELEcom:BRATe is other than <M139> and <M34>.

Example use: To select Path trace:

> :DISPlay:ANALysis:OHMonitor:TYPE PTRace

:DISPlay:ANALysis:OHMonitor:TYPE?

Response: <ohmonitor> = <CHARACTER RESPONSE DATA>

OH	OH
PMSP	PTR,K1/K2
PTR	Path trace
PFR	PDH frame
TTR	Trail trace
PAYL	Payload

Function: Queries display item on OH monitor.

Example use: > :DISPlay:ANALysis:OHMonitor:TYPE?
< PTR

:DISPlay:ANALysis:OHMonitor:SOHCh <numeric>

Parameter <numeric> = <DECIMAL NUMERIC PROGRAM DATA>
1 ~ 16 Step value: 1

Function: Selects SOH channel for OH monitor.

Restriction: Invalid in the following cases:

- When :DISPlay:TMENu[:NAME] is other than <"MANual[:JOFF]">, <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, <"MANual:RCEL1">, <"PSEQUence[:JOFF]">, and <"PSEQUence:JON">.
- When :DISPlay:ANALysis:OHMonitor:TYPE is other than <OH>.
- When :SENSe:TELEcom:BRAtE is <M156>, <M156CMI>, <M52B3ZS>, <M139>, <M45>, <M34>, <M8>, <M2>, or <M1_5>.
- When not the value set to <AUG> in :SENSe:TELEcom:MAPPing:ROUte.

Example use: To select channel 4:

> :DISPlay:ANALysis:OHMonitor:SOHCh 4

:DISPlay:ANALysis:OHMonitor:SLABel?

Response: <pohvc4>,<bitvc4>,<pohvc3>,<bitvc3>

<pohvc4> = <STRING RESPONSE DATA>	<pohvc3> = <STRING RESPONSE DATA>
C2 of monitor data of POH-VC4 (plain-language display)	C2 of monitor data of POH-VC3 (plain-language display)
"Unequipped" (0000 0000)	"Unequipped" (0000 0000)
"Equipped-non-specific" (0000 0001)	"Equipped-non-specific" (0000 0001)
"TUG structure" (0000 0010)	"TUG structure" (0000 0010)
"Locked TU" (0000 0011)	"Locked TU" (0000 0011)
"Async. 34M or 45M(C-3)" (0000 0100)	"Async. 34M or 45M(C-3)" (0000 0100)
"Async. 139M(C-4)" (0001 0010)	"Async. 139M(C-4)" (0001 0010)
"ATM mapping" (0001 0011)	"ATM mapping" (0001 0011)
"MAN(DQDB)mapping" (0001 0100)	"MAN(DQDB)mapping" (0001 0100)
"FDDI mapping" (0001 0101)	"FDDI mapping" (0001 0101)
"O.181 mapping" (1111 1110)	"O.181 mapping" (1111 1110)
"VC-AIS" (1111 1111)	"VC-AIS" (1111 1111)
<bitvc4> = <STRING RESPONSE DATA>	<bitvc3> = <STRING RESPONSE DATA>
C2 of monitor data of POH-VC4 (bit display)	C2 of monitor data of POH-VC3 (bit display)
"00000000" ~ "11111111"	"00000000" ~ "11111111"

Function: Queries C2 (bits 1 to 8) monitor data of OH monitor.

Example use: > :DISPlay:ANALysis:OHMonitor:SLABel?
< "Unequipped","00000000","VC-AIS","11111111"

SECTION 4 REMOTE CONTROL

:DISPlay:ANALysis:OHMonitor:PAUSE <boolean>

Parameter <boolean> = <BOOLEAN PROGRAM DATA>
 OFF or 0 Pause OFF
 ON or 1 Pause ON

Function: Sets Pause in OH monitor.

Restriction: Invalid in the following cases:

- When :DISPlay:TMENu[:NAME] is other than <"MANual[:JOFF]">, <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, <"MANual:RCEL1">, <"PSEquence[:JOFF]">, and <"PSEquence:JON">.
- When :INSTrument:ATM is <OFF>, :SENSe:TELEcom:BRATe is <M139>, <M34>, <M8>, or <M2>, :SENSe:TELEcom:DEMUX:MRATe is <OFF>, and :SENSe:TELEcom:FRAMing is <OFF>.
- When :INSTrument:ATM is <ON> and :SENSe:TELEcom:BRATe is <M2>.

Example use: To set Pause in OH monitor to ON:
 > :DISPlay:ANALysis:OHMonitor:PAUSE ON

:DISPlay:ANALysis:CMONitor:CELL?

Response: <header>,<payload>
 <header> = <STRING RESPONSE DATA>
 "F,256,65535,7,1,FF" (At UNI)
 "4096,65535,7,1,FF" (At NNI)
 <payload> = <STRING RESPONSE DATA>
 "FF,FF,FF,FF,FF, ,FF,FF,FF" (Fixed to 48 bytes)

Function: Queries Cell monitor data.

Example use: > :DISPlay:ANALysis:CMONitor:CELL?
 < "F,256,65535,7,1,FF", "FF,FF,FF,FF,FF, ,FF,FF,FF"

:DISPlay:ANALysis:CMONitor:PAUSE <boolean>

Parameter <boolean> = <BOOLEAN PROGRAM DATA>
 OFF or 0 Pause OFF
 ON or 1 Pause ON

Function: Sets Pause in Cell monitor.

Restriction: Invalid in the following cases:

- When :DISPlay:TMENu[:NAME] is other than <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, <"MANual:RCEL1">, <"PSEquence[:JOFF]">, and <"PSEquence:JON">.
- When :INSTrument:ATM is <OFF>.

Example use: To set Pause in Cell monitor to ON:
 > :DISPlay:ANALysis:CMONitor:PAUSE ON

:DISPlay:ANALysis:CMONitor:PAUSE?

Response: <boolean> = <NR1 NUMERIC RESPONSE DATA>
 0 Pause OFF
 1 Pause ON

Function: Queries Pause condition in Cell monitor.

Example use: > :DISPlay:ANALysis:CMONitor:PAUSE?
 < 1

:DISPlay:ANALysis:LMONitor:SCRoll <scroll>

Parameter	<scroll> = <CHARACTER PROGRAM DATA>
	UP Scrolls up
	DOWN Scrolls down
	TOP Displays the top
	BOTTom Displayes the bottom

Function: Requests scroll on Analyze:Live monitor screen.

Restriction: Invalid in the following case:

- When no Live monitor data exists.

Example use: To scroll screen up:
> :DISPlay:ANALysis:LMONitor:SCRoll UP

:DISPlay:ANALysis:LMONitor:GRAFH <character>

Parameter	<character> = <CHARACTER PROGRAM DATA>
	TRAFic Traffic
	NCONforming Non-conforming
	FMMisins FM Misinserted cell
	FMLost FM Lost cell
	FM FM Mis/Lost cell
	FMSecb FM SECB

Function: Selects type of Analyze:Live monitor screen.

Example use: To select Traffic:
> :DISPlay:ANALysis:LMONitor:GRFH TRAFFic

:DISPlay:ANALysis:LMONitor:GRAFH ?

Parameter	<character> = <CHARACTER PROGRAM DATA>
	TRAF Traffic
	NCON Non-conforming
	FMM FM Misinserted cell
	FML FM Lost cell
	FM FM Mis/Lost cell
	FMS FM SECB

Function: Queries type of Analyze:Live monitor screen.

Example use: > :DISPlay:ANALysis:LMONitor:GRFH ?
<TRAF

:DISPlay:ANALysis:LMONitor:THReshold <boolean>

Parameter	<boolean> = <BOOLEAN PROGRAM DATA>
	OFF or 0 No display
	ON or 1 Display

Function: Sets whether to display the condition setting screen.

Example use: To set the condition setting screen to display
>:DISPlay:ANALysis:LMONitor:THReshold

SECTION 4 REMOTE CONTROL

:DISPlay:ANALysis:LMONitor:THReshold ?

Response: <boolean> = <NR1 NUMERIC RESPONSE DATA>

Function: Queries the display of condition setting screen.

Example use >:DISPlay:ANALysis:LMONitor:THReshold ?
<1

:DISPlay:ANALysis:LMONitor:NCONforming <character>

Parameter <character> = <CHARACTER PROGRAM DATA>

BPS kb/s

CPS Cell/s

PERCent %

Function: Sets Non-conforming setting display unit of Analyze:Live monitor screen.

Example use: To set Cell/S:
>:DISPlay:ANALysis:LMONitor:NCONforming CPS

:DISPlay:ANALysis:LMONitor:NCONforming ?

Response <character> = <CHARACTER RESPONSE DATA>

Function: Queries Non-conforming setting display unit.

Example use: >:DISPlay:ANALysis:LMONitor:NCONforming ?
<:CPS

:DISPlay:ANALysis:LMONitor:PAUSE <boolean>

Parameter <boolean> = <BOOLEAN PROGRAM DATA>

OFF or 0 Pause OFF

ON or 1 Pause ON

Function: Sets Pause on Analyze:Live monitor screen.

Restriction: Invalid in the following cases:

- When :INSTrument:ATM is <OFF>.
- When :DISPlay:TMENu[:NAME] is other than <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, and <"MANual:RCEL1">

Example use: To set Pause in Live monitor to ON:
> :DISPlay:ANALysis:LMONitor:PAUSE ON

:DISPlay:ANALysis:LMONitor:PAUSE?

Response: <boolean> = <NR1 NUMERIC RESPONSE DATA>

0 Pause OFF

1 Pause ON

Function: Queries Pause condition on Analyze screen (Live monitor).

Example use: > :DISPlay:ANALysis:LMONitor:PAUSE?
< 1

:DISPlay:ANALysis:LMONitor:INTerval <numeric>,<suffix>
Parameter <numeric> = <CHARACTER PROGRAM DATA>
1000, 5000, 10000, 50000, 100000, 500000, 1000000
<suffix> = <CHARACTER PROGRAM DATA>
CPS Cell/s
Function: Sets horizontal axis width of Analyze:Live monitor screen.
Restriction: Invalid in the following cases:
• When :INSTrument:ATM is <OFF>.
• When :DISPlay:TMENu[:NAME] is other than <"MANual:JON">,
<"MANual:TCLayer">, <"MANual:TCEL1">, and <"MANual:RCEL1">
Example use: To set horizontal axis width to 1000:
> :DISPlay:ANALysis:LMONitor:INTerval 1000,CPS

:DISPlay:ANALysis:LMONitor:INTerval?
Response: <numeric> = <NR1 NUMERIC RESPONSE DATA>
<suffix> = <CHARACTER RESPONSE DATA>
Function: Queries horizontal axis width of Analyze:Live monitor screen.
Example use: > :DISPlay:ANALysis:LMONitor:INTerval?
< 1000,CPS

:DISPlay:ANALysis:LMONitor:VPI <numeric1>[,<numeric2>]
Parameter <numeric1> = <DECIMAL NUMERIC PROGRAM DATA>
0 ~ 255 VPI value
<numeric2> = <DECIMAL NUMERIC PROGRAM DATA>
0 ~ 65535 VCI value
Function: Centers data specified by VPI and VCI on Analyze:Live monitor screen.
Restriction: Invalid in the following cases:
• When no Live monitor data exists.
• When :INSTrument:ATM is <OFF>.
• When :DISPlay:TMENu[:NAME] is other than <"MANual:JON">,
<"MANual:TCLayer">, <"MANual:TCEL1">, and <"MANual:RCEL1">
Example use: To set VPI value of horizontal axis center to 1000:
> :DISPlay:ANALysis:LMONitor:VPI 1000

:DISPlay:ANALysis:LMONitor:VPI?
Response: <numeric1> = <NR1 NUMERIC RESPONSE DATA>
<numeric2> = <NR1 NUMERIC RESPONSE DATA>
Function: Queries VPI and VCI of center of Analyze:Live monitor screen.
Example use: > :DISPlay:ANALysis:LMONitor:VPI?
< 100,20

SECTION 4 REMOTE CONTROL

:DISPlay:ANALysis:LMONitor:NUMBER <numeric>

Parameter <numeric1> = <DECIMAL NUMERIC PROGRAM DATA>
1 ~ 1000 No.

Function: Centers the specified number on Analyze:Live monitor screen.

Restriction: Invalid in the following cases:

- When no LIVE monitor data exists.
- When :INSTrument:ATM is <OFF>.
- When :DISPlay:TMENu[:NAME] is other than <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, and <"MANual:RCEL1">

Example use: To jump to 23rd:

> :DISPlay:ANALysis:LMONitor:NUMBER 23

:DISPlay:ANALysis:LMONitor:NUMBER?

Response: <numeric> = <NR1 NUMERIC RESPONSE DATA>

Function: Queries screen display center position of Analyze:Live monitor screen.

Example use: > :DISPlay:ANALysis:LMONitor:NUMBER?
< 23

:DISPlay:ANALysis:LMONitor:PRINt <type>

Parameter <type> = <CHARACTER PROGRAM DATA>

DISPlay	Display
ALL	All
AFTer	After
BEFore	Before

Function: Specifies printing range of Analyze:Live monitor screen.

Restriction: Invalid in the following cases:

- When :INSTrument:ATM is <OFF>.
- When :DISPlay:TMENu[:NAME] is other than <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, and <"MANual:RCEL1">

Example use: To set printing range of Live monitor subscreen:

> :DISPlay:ANALysis:LMONitor:PRINt DISPlay

:DISPlay:ANALysis:LMONitor:PRINt?

Response: <type> = <CHARACTER RESPONSE DATA>

DISP	Display
ALL	All
AFT	After
BEF	Before

Function: Queries printing range of Analyze:Live monitor screen.

Example use: > :DISPlay:ANALysis:LMONitor:PRINt?
< DISP

:DISPlay:ANALysis:LMONitor:PTYPe <type>

Parameter <type> = <CHARACTER PROGRAM DATA>
 NUMeric Numeric
 GRAPh Graph

Function: Specifies print data of Analyze:Live monitor screen.

Restriction: Invalid in the following cases:

- When :INSTrument:ATM is <OFF>.
- When :DISPlay:TMENu[:NAME] is other than <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, and <"MANual:RCEL1">

Example use: To set print data of Live monitor subscreen:
 > :DISPlay:ANALysis:LMONitor:PTYPe GRAPh

:DISPlay:ANALysis:LMONitor:PTYPe?

Response: <type> = <CHARACTER RESPONSE DATA>
 NUM Numeric
 GRAP Graph

Function: Queries print data of Analyze:Live monitor screen.

Example use: > :DISPlay:ANALysis:LMONitor:PTYPe?
 < GRAP

:DISPlay:ANALysis:LMONitor:TITLe <title>

Parameter <title> = <STRING PROGRAM DATA>
 "Title character string" Title character string (up to 15 characters)
 "" is also allowed.

Function: Sets title of Analyze:Live monitor screen.

Restriction: Invalid in the following cases:

- When :INSTrument:ATM is <OFF>.
- When :DISPlay:TMENu[:NAME] is other than <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, and <"MANual:RCEL1">

Example use: To display "TITLE-DISP" as title of Live monitor subscreen:
 > :DISPlay:ANALysis:LMONitor:TITLe "TITLE-DISP"

:DISPlay:ANALysis:LMONitor:TITLe?

Response: <title> = <STRING RESPONSE DATA>

Function: Queries title of Analyze:Live monitor screen.

Example use: > :DISPlay:ANALysis:LMONitor:TITLe?
 < "TITLE-DISP" "

:DISPlay:ANALysis:TRAFfic:SCRoll <scroll>

Parameter <scroll> = <CHARACTER PROGRAM DATA>
 LEFT Scrolls left
 RIGHT Scrolls right
 TOP Displays the top
 BOTTom Displays the bottom

Function: Requests scroll on Analyze:Traffic monitor screen.

Restriction: Invalid in the following case:

- When no Traffic monitor data exists.

Example use: To scroll screen left:
 > :DISPlay:ANALysis:TRAFfic:SCRoll LEFT

SECTION 4 REMOTE CONTROL

:DISPlay:ANALysis:TRAFfic:MARKer <marker>

Parameter <marker> = <CHARACTER PROGRAM DATA>

LEFT Moves marker 1 Div to the left.

RIGHT Moves marker 1 Div to the left.

Function: Requests marker movement on Analyze:Traffic monitor screen.

Restriction: Invalid in the following cases:

- When :INSTRument:ATM is <OFF>.
- When :DISPlay:ANALysis:TRAFfic:MDISplay is <OFF>.

Note: In multiple screen mode, the marker moves normally when set on.

Example use: To move marker to the right:

> :DISPlay:ANALysis:TRAFfic:MARKer RIGHT

:DISPlay:ANALysis:TRAFfic:DATA?

<time>,<mean-bps>,<mean-cps>,<mean-%>,<max-bps>,<max-cps>,<max-%>,<min-bps>,<min-cps>,<min-%>

<time> = <year>,<month>,<day>,<hour>,<minute>,<second>

<min-bps>,<min-cps>,<min-%>

<time> = <year>,<month>,<day>,<hour>,<minute>,<second>

Time indicated by marker

<year> = <NR1 NUMERIC RESPONSE DATA>

0, 1994 ~ 2093 Year

<month> = <NR1 NUMERIC RESPONSE DATA>

0, 1 ~ 12 Month

<day> = <NR1 NUMERIC RESPONSE DATA>

0, 1 ~ 31 Day

<hour> = <NR1 NUMERIC RESPONSE DATA>

0 ~ 23 Hour

<minute> = <NR1 NUMERIC RESPONSE DATA>

0 ~ 59 Minute

<second> = <NR1 NUMERIC RESPONSE DATA>

0 ~ 59 Second

<mean-bps>,<max-bps>,<min-bps>=<STRING RESPONSE DATA>

Average, maximum, and minimum values (b/s) of data indicated by marker

<mean-cps>,<max-cps>,<min-cps>=<SRING RESPONCE DATA>

Average, maximum, and minimum values (cell/s) of data indicated by marker

<mean-%>,<max-%>,<min-%>=<STRING RESPONSE DATA>

Average, maximum, and minimum values (%) of data indicated by marker

Function: Queries data indicated by marker on Analyze:Traffic monitor screen.

Example use: > :DISPlay:ANALysis:TRAFfic:DATA?

< 1994,12,25,12,54,30," 10"," 104"," 0"

:DISPlay:ANALysis:TRAFfic:INTerval <numeric>,<suffix>

Parameter <numeric> = <CHARACTER PROGRAM DATA>
1, 15, 60
<suffix> = <CHARACTER PROGRAM DATA>
M minute
S second

Function: Sets graduation width of time axis on Analyze:Traffic monitor screen.

Restriction: Invalid in the following cases:

- When :INSTrument:ATM is <OFF>.
- When :DISPlay:TMENu[:NAME] is other than <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, and <"MANual:RCEL1">.
- When other than the following is set according to :SENSe:MEASure:GREsolution:
1sec: 1sec, 1min, 15min, 60min
1min: 1min, 15min, 60min
15min: 15min, 60min
60min: 60min

Example use: To set graduation width to one minute:
> :DISPlay:ANALysis:TRAFfic:INTerval 1,M

:DISPlay:ANALysis:TRAFfic:INTerval?

Response: <numeric> = <NR1 NUMERIC RESPONSE DATA>
<suffix> = <CHARACTER RESPONSE DATA>

Function: Queries graduation width of time axis of Analyze:Traffic monitor screen.

Example use: > :DISPlay:ANALysis:TRAFfic:INTerval?
< 1,M

:DISPlay:ANALysis:TRAFfic:MDISplay <boolean>

Parameter <boolean> = <BOOLEAN PROGRAM DATA>
OFF or 0 Turns off marker.
ON or 1 Turns on marker.

Function: Sets whether to display marker on Analyze:Traffic monitor screen.

Restriction: Invalid in the following case:

- When no Traffic monitor data exists.

Example use: To set marker display in Traffic monitor to ON:
> :DISPlay:ANALysis:TRAFfic:MDISplay 1

:DISPlay:ANALysis:TRAFfic:MDISplay?

Response: <boolean> = <NR1 NUMERIC RESPONSE DATA>
0 Turns off marker
1 Turns on marker

Function: Queries marker display setting on Analyze:Traffic monitor screen.

Example use: > :DISPlay:ANALysis:TRAFfic:MDISplay?
< 1

SECTION 4 REMOTE CONTROL

:DISPlay:ANALysis:TRAFfic:FROM <numeric1>,<numeric2>,<numeric3>,<numeric4>,<numeric5>,<numeric6>

Parameter <DECIMAL NUMERIC PROGRAM DATA>

<numeric1> =	1994 ~ 2093 (year)
<numeric2> =	1 ~ 12 (month)
<numeric3> =	1 ~ 31 (day)
<numeric4> =	0 ~ 23 (hour)
<numeric5> =	0 ~ 59 (minute)
<numeric6> =	0 ~ 59 (second)

Note: If time specified by the parameter does not exist, the earliest time after the specified time is set.

If time before the first data time is specified, the first data time is set.

If time after the last data time is specified, the last data time is set.

Function: Sets display start position of Traffic monitor graph.

Restriction: Invalid in the following cases:

- When :INSTrument:ATM is <OFF>.
- When :DISPlay:TMENu[:NAME] is other than <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, and <"MANual:RCEL1">.

Example use: To display from 11:30:40 on July 28, 1996:

> :DISPlay:ANALysis:TRAFfic:FROM 1996,7,28,11,30,40

:DISPlay:ANALysis:TRAFfic:FROM?

Response: <numeric1>,<numeric2>,<numeric3>,<numeric4>,<numeric5>,<numeric6>
= <NR1 NUMERIC RESPONSE DATA>

Function: Queries display start position of Traffic monitor graph.

Example use: > :DISPlay:ANALysis:TRAFfic:FROM?

< 1996,7,28,11,30,40

:DISPlay:ANALysis:TRAFfic:SCALE <character>

Parameter <character> = <CHARACTER PROGRAM DATA>

BPS	b/s
CPS	cell/s
PERCent	%

Function: Sets graph vertical axis scale of Analyze:Traffic monitor screen.

Restriction: Invalid in the following cases:

- When :INSTrument:ATM is <OFF>.
- When :DISPlay:TMENu[:NAME] is other than <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, and <"MANual:RCEL1">.
- When <numeric1> ≥ <numeric2>.

Example use: To set graph vertical axis scale of Traffic monitor to b/s:

> :DISPlay:ANALysis:TRAFfic:SCALE BPS

:DISPlay:ANALysis:TRAFfic:SCALE?

Response: <numeric1>,<numeric2> = <NR2 NUMERIC RESPONSE DATA>

Function: Queries graph vertical axis scale of Analyze:Traffic monitor screen.

Example use: > :DISPlay:ANALysis:TRAFfic:SCALE?

< BPS

:DISPlay:ANALysis:TRAFfic:PRINt <type>

Parameter <type> = <CHARACTER PROGRAM DATA>
DISPlay Display
ALL All
AFTer After
BEFore Before

Function: Specifies printing range of Analyze:Traffic monitor screen.

Restriction: Invalid in the following cases:

- When :INSTrument:ATM is <OFF>.
- When :DISPlay:TMENu[:NAME] is other than <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, and <"MANual:RCEL1">.

Example use: To set Traffic monitor screen range:
> :DISPlay:ANALysis:TRAFfic:PRINt DISPlay

:DISPlay:ANALysis:TRAFfic:PRINt?

Response: <type> = <CHARACTER RESPONSE DATA>
DISP Display
ALL All
AFT After
BEF Before

Function: Queries printing range of Analyze:Traffic monitor screen.

Example use: > :DISPlay:ANALysis:TRAFfic:PRINt?
< DISP

:DISPlay:ANALysis:TRAFfic:TITLe <title>

Parameter <title> = <STRING PROGRAM DATA>
"Title character string" Title character string (up to 15 characters)
"" is also allowed.

Function: Sets title of Analyze:Traffic monitor screen.

Restriction: Invalid in the following cases:

- When :INSTrument:ATM is <OFF>.
- When :DISPlay:TMENu[:NAME] is other than <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, and <"MANual:RCEL1">.

Example use: To display "TITLE-DISP" as title of Analyze:Traffic monitor screen:
> :DISPlay:ANALysis:TRAFfic:TITLe "TITLE-DISP"

:DISPlay:ANALysis:TRAFfic:TITLe?

Response: <title> = <STRING RESPONSE DATA>
Function: Queries title of Analyze:Traffic monitor screen.
Example use: > :DISPlay:ANALysis:TRAFfic:TITLe?
< "TITLE-DISP"

SECTION 4 REMOTE CONTROL

:DISPlay:ANALysis:CAPTure:JUMP:TYPE <type>

Parameter <type> = <CHARACTER PROGRAM DATA>
 TRIGger Displays trigger positions.
 JUMP Displays Number positions.

Function: Selects display position on Analyze:Cell capture screen.

Restriction: Invalid in the following cases:

- When :INSTrument:ATM is <OFF>.
- When :DISPlay:TMENu[:NAME] is other than <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, and <"MANual:RCEL1">.
- When no Capture data exists.
- When no Trigger exists and <TRIGger> is set.

Example use: To move to trigger display position:
 > :DISPlay:ANALysis:CAPTure:JUMP:TYPE TRIGger

:DISPlay:ANALysis:CAPTure:JUMP:TYPE?

Response: <type> = <CHARACTER RESPONSE DATA>
 TRIG Displays trigger positions
 JUMP Displays Number positions

Function: Queries display position on Analyze:Cell capture screen.

Example use: > :DISPlay:ANALysis:CAPTure:JUMP:TYPE?
 < TRIG

:DISPlay:ANALysis:CAPTure:JUMP:LINE <numeric>

Parameter <numeric> = <DECIMAL NUMERIC PROGRAM DATA>
 1 ~ 2016

Function: Sets display position (Number) on Analyze:Cell capture screen.

Restriction: Invalid in the following cases:

- When :INSTrument:ATM is <OFF>.
- When :DISPlay:TMENu[:NAME] is other than <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, and <"MANual:RCEL1">.
- When no Capture data exists.
- When :DISPlay:ANALysis:CAPTure:JUMP:TYPE is <TRIGger>.

Example use: To set display position to 10:
 > :DISPlay:ANALysis:CAPTure:JUMP:LINE 10

:DISPlay:ANALysis:CAPTure:JUMP:LINE?

Response: <numeric> = <NR1 NUMERIC RESPONSE DATA>

Function: Queries display position (Number) on Analyze:Cell capture screen.

Example use: > :DISPlay:ANALysis:CAPTure:JUMP:LINE?
 < 10

:DISPlay:ANALysis:CAPTure:SCRoll <scroll>

Parameter	<scroll> = <CHARACTER PROGRAM DATA>
	LEFT Scrolls left
	RIGHT Scrolls right
	UP Scrolls up
	DOWN Scrolls down
	HTOP Displays the left edge
	HBOTtom Displays the right edge
	VTOP Displays the top
	VBOTtom Displays the bottom

Function: Requests scroll on Analyze:Cell capture screen.

Restriction: Invalid in the following cases:

- When no Capture data exists.
- When <LEFT>, <RIGHT>, <HTOP>, or <HBOTtom> is set while :DISPlay:ANALysis:CAPTure:PTYPE is <AScii> or <TRANslate>.

Example use: To display the top:
> :DISPlay:ANALysis:CAPTure:SCRoll VTOP

:DISPlay:ANALysis:CAPTure:PTYPE <type>

Parameter	<type> = <CHARACTER PROGRAM DATA>
	HEX HEX
	AScii Ascii
	TRANslate Translate

Function: Sets Payload display type of Analyze:Cell capture screen.

Restriction: Invalid in the following cases:

- When :INSTrument:ATM is <OFF>.
- When :DISPlay:TMENu[:NAME] is other than <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, and <"MANual:RCEL1">.

Example use: To set Payload display type of Cell capture subscreen to HEX:
> :DISPlay:ANALysis:CAPTure:PTYPE HEX

:DISPlay:ANALysis:CAPTure:PTYPE?

Response:	<type> = <CHARACTER RESPONSE DATA>
	HEX HEX
	ASC Ascii
	TRAN Translate

Function: Queries Payload display type of Analyze:Cell capture screen.

Example use: > :DISPlay:ANALysis:CAPTure:PTYPE?
< HEX

SECTION 4 REMOTE CONTROL

:DISPlay:ANALysis:CAPTure:PRINt <numeric1>,<numeric2>

Parameter <numeric1>,<numeric2> = <DECIMAL NUMERIC PROGRAM DATA>
1 ~ 2016

Function: Specifies printing range of Analyze:Cell capture screen.

Restriction: Invalid in the following cases:

- When :INSTRument:ATM is <OFF>.
- When :DISPlay:TMENu[:NAME] is other than <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, and <"MANual:RCEL1">
- When <numeric1> > <numeric2>

Example use: To set printing range of Cell capture subscreen:
> :DISPlay:ANALysis:CAPTure:PRINt 1,20

:DISPlay:ANALysis:CAPTure:PRINt?

Response: <numeric1>,<numeric2> = <NR1 NUMERIC RESPONSE DATA>

Function: Queries printing range of Analyze:Cell capture screen.

Example use: > :DISPlay:ANALysis:CAPTure:PRINt?
< 1,20

:DISPlay:ANALysis:CAPTure:TITLe <title>

Parameter <title> = <STRING PROGRAM DATA>
"Title character string" Title character string (up to 15 characters)
"" is also allowed.

Function: Sets title of Analyze:Cell capture screen.

Restriction: Invalid in the following cases:

- When :INSTRument:ATM is <OFF>.
- When :DISPlay:TMENu[:NAME] is other than <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCEL1">, and <"MANual:RCEL1">.

Example use: To set "Cell capture":
> :DISPlay:ANALysis:CAPTure:TITLe "Cell capture"

:DISPlay:ANALysis:CAPTure:TITLe?

Response: <title> = <STRING RESPONSE DATA>

Function: Queries title of Analyze:Cell capture screen.

Example use: > :DISPlay:ANALysis:CAPTure:TITLe?
< "Cell capture "

:DISPlay:ANALysis:CDV1:SCRoll <scroll>

Parameter <scroll> = <CHARACTER PROGRAM DATA>
LEFT Scrolls left
RIGHT Scrolls right
TOP Displays the top
BOTTOm Displays the bottom

Function: Requests scroll on Analyze:1-point CDV screen.

Restriction: Invalid in the following case:

- When no 1-point CDV data exists.

Example use: To display the top:
> :DISPlay:ANALysis:CDV1:SCRoll TOP

:DISPlay:ANALysis:CDV1:TYPE <type>

Parameter <type> = <CHARACTER PROGRAM DATA>
INDividual Individual data
ACCumulative Accumulated data

Function: Sets display data type of Analyze:1-point CDV screen.

Restriction: Invalid in the following case:

- When :DISPlay:TMENu[:NAME] is other than <"CDV1">.

Example use: To set display data type of 1-point CDV subscreen to Individual:
> :DISPlay:ANALysis:CDV1:TYPE INDividual

:DISPlay:ANALysis:CDV1:TYPE?

Response: <type> = <CHARACTER RESPONSE DATA>
IND Individual data
ACC Accumulated data

Function: Queries display data type of Analyze:1-point CDV screen.

Example use: > :DISPlay:ANALysis:CDV1:TYPE?
< IND

:DISPlay:ANALysis:CDV1:MARKer <marker>

Parameter <marker> = <CHARACTER PROGRAM DATA>
LEFT Moves marker 1 Div to the left
RIGHT Moves marker 1 Div to the right

Function: Requests marker movement on Analyze:1-point CDV screen.

Restriction: Invalid in the following case:

- When :DISPlay:ANALysis:CDV1:MDISplay is <OFF>.

Note: In multiple screen mode, the marker moves normally when set on.

Example use: To move marker to the right:
> :DISPlay:ANALysis:CDV1:MARKer RIGHT

:DISPlay:ANALysis:CDV1:PEAK <peak>

Parameter <peak> = <CHARACTER PROGRAM DATA>
BEFore Before search
NEXT Next search

Function: Requests peak search on Analyze:1-point CDV screen.

Restriction: Invalid in the following cases:

- When :DISPlay:ANALysis:CDV1:MDISplay is <OFF>.
- When there are no peaks left of the marker and <BEFore> is set.
- When there are no peaks right of the marker and <NEXT> is set.

Note: In multiple screen mode, normal operation is performed when the marker is set on.

Example use: To request Before search:
> :DISPlay:ANALysis:CDV1:PEAK BEFore

SECTION 4 REMOTE CONTROL

:DISPlay:ANALysis:CDV1:ZOOM <type>

Parameter <type> = <CHARACTER PROGRAM DATA>
IN Zoom-in function:
OUT Zoom-out function:

Function: Executes zoom function on Analyze:1-point CDV screen.

Restriction: Invalid in the following cases:

- When :DISPlay:ANALysis:CDV1:MDISPlay is <OFF>.
- When :DISPlay:ANALysis:CDV1:INTerval is <1> and <IN> is set.
- When :DISPlay:ANALysis:CDV1:INTerval is <300> and <OUT> is set.

Note: In multiple screen mode, normal operation is performed when the marker is set on.

Example use: To execute zoom-in function:

> :DISPlay:ANALysis:CDV1:ZOOM IN

:DISPlay:ANALysis:CDV1:DATA?

Response: <time>,<cell>,<count>,<rate>
<time> = <STRING RESPONSE DATA>
Interval of cell indicated by marker (!!XX!!s)
Form12
<cell> = <STRING RESPONSE DATA>
Number of intervals of cell indicated by marker (cell)
Form12
<count> = <STRING RESPONSE DATA>
Number of cells indicated by marker
Form1
<rate> = <STRING RESPONSE DATA>
Cell rate of cell indicated by marker (%)
Form3

Function: Queries data indicated by marker on Analyze:1-point CDV screen.

Example use: > :DISPlay:ANALysis:CDV1:DATA?

< " 7"," 10"," 100"," 50.0000"

:DISPlay:ANALysis:CDV1:INTerval <character>

Parameter <character> = <CHARACTER PROGRAM DATA>
1, 10, 100, 500 cell

Function: Sets graduation width of Interval axis of Analyze:1-point CDV screen.

Restriction: Invalid in the following case:

- When :DISPlay:TMENu[:NAME] is other than <"CDV1">.

Example use: To set graduation width to one step:

> :DISPlay:ANALysis:CDV1:INTerval 1

:DISPlay:ANALysis:CDV1:INTerval?

Response: <numeric1> = <NR1 NUMERIC RESPONSE DATA>
<numeric2> = <NR2 NUMERIC RESPONSE DATA>
0.7 ~ 276041.7 (μs)

Note: The Interval μs range varies depending on Rx Bit rate.

Function: Queries graduation width of Interval axis of Analyze:1-point CDV screen.

Example use: > :DISPlay:ANALysis:CDV1:INTerval?

< 1,100

:DISPlay:ANALysis:CDV1:IUNit <unit>

Parameter	<unit> = <CHARACTER PROGRAM DATA>	
	CELL	Cell
	US	µs

Function: Sets horizontal axis display interval of Analyze:1-point CDV screen.

Restriction: Invalid in the following case:

- When :DISPlay:TMENu[:NAME] is other than <"CDV1">.

Example use: To set horizontal axis display interval of 1-point CDV subscreen to Cell:
> :DISPlay:ANALysis:CDV1:IUNit CELL

:DISPlay:ANALysis:CDV1:IUNit?

Response:	<unit> = <CHARACTER RESPONSE DATA>	
	CELL	Cell
	US	µs

Function: Queries horizontal axis display interval of Analyze:1-point CDV screen.

Example use: > :DISPlay:ANALysis:CDV1:IUNit?
< CELL

:DISPlay:ANALysis:CDV1:MDISplay <boolean>

Parameter	<boolean> = <BOOLEAN PROGRAM DATA>	
	OFF or 0	Turns off marker.
	ON or 1	Turns on marker.

Function: Sets whether to display marker on Analyze:1-point CDV screen.

Restriction: Invalid in the following case:

- When no 1-point CDV data exists.

Example use: To set marker display ON:
> :DISPlay:ANALysis:CDV1:MDISplay ON

:DISPlay:ANALysis:CDV1:MDISplay?

Response:	<boolean> = <NR1 NUMERIC RESPONSE DATA>	
	0	Turns off marker.
	1	Turns on marker.

Function: Queries marker display on Analyze:1-point CDV screen.

Example use: > :DISPlay:ANALysis:CDV1:MDISplay?
< 1

:DISPlay:ANALysis:CDV1:SCALE <numeric>

Parameter	<numeric> = <CHARACTER PROGRAM DATA>	
	100	100%
	10	10%
	1	1%

Function: Sets graph vertical axis scale of Analyze:1-point CDV screen.

Restriction: Invalid in the following case:

- When :DISPlay:TMENu[:NAME] is other than <"CDV1">.

Example use: To set graph vertical axis scale to 10:
> :DISPlay:ANALysis:CDV1:SCALE 10

:DISPlay:ANALysis:CDV1:SCALE?

Response:	<numeric> = <NR1 NUMERIC RESPONSE DATA>	
-----------	---	--

Function: Queries graph vertical axis scale of Analyze:1-point CDV screen.

Example use: > :DISPlay:ANALysis:CDV1:SCALE?
< 10

SECTION 4 REMOTE CONTROL

:DISPlay:ANALysis:CDV1:CELL <numeric>

Parameter <numeric> = <DECIMAL NUMERIC PROGRAM DATA>
-8970 ~ 8970 (cell)

Function: Sets graph horizontal axis center value (cell) of Analyze:1-point CDV screen.

Restriction: Invalid in the following cases:

- When :DISPlay:TMENu[:NAME] is other than <"CDV1">.
- When :DISPlay:ANALysis:CDV1:IUNit is <US>.
- The setting range varies depending on Interval.

Example use: To set graph horizontal axis center value to 10 cell:
> :DISPlay:ANALysis:CDV1:CELL 10

:DISPlay:ANALysis:CDV1:CELL?

Response: <numeric> = <NR1 NUMERIC RESPONSE DATA>

Function: Queries graph horizontal axis center value (cell) of Analyze:1-point CDV screen.

Example use: > :DISPlay:ANALysis:CDV1:CELL?
< 10

:DISPlay:ANALysis:CDV1:US <numeric>

Parameter <numeric> = <NON-DECIMAL NUMERIC PROGRAM DATA>
-2476093.7 ~ 2476093.7 (μ s)

Function: Sets graph horizontal axis center value (μ s) of Analyze:1-point CDV screen.

Restriction: Invalid in the following cases:

- When :DISPlay:TMENu[:NAME] is other than <"CDV1">.
- When :DISPlay:ANALysis:CDV1:IUNit is <CELL>.
- The setting range varies depending on Interval.

Example use: To set graph horizontal axis center value to 10 μ s:
> :DISPlay:ANALysis:CDV1:US 10

:DISPlay:ANALysis:CDV1:US?

Response: <numeric> = <NR2 NUMERIC RESPONSE DATA>

Function: Queries the graph horizontal axis center value (μ s) of the Analyze:1-point CDV screen.

Example use: > :DISPlay:ANALysis:CDV1:US?
< 10

:DISPlay:ANALysis:CDV1:PRINt <type>

Parameter <type> = <CHARACTER PROGRAM DATA>
DISPlay Display

Function: Specifies the printing range of the Analyze:1-point CDV screen.

Restriction: Invalid in the following case:

- When :DISPlay:TMENu[:NAME] is other than <"CDV1">.

Example use: To print the screen range currently on display:
> :DISPlay:ANALysis:CDV1:PRINt DISPlay

:DISPlay: ANALysis:CDV1:PRINt?

Response: <type> = <CHARACTER RESPONSE DATA>
DISP Display

Function: Queries the printing range of the Analyze:1-point CDV screen.

Example use: > :DISPlay:ANALysis:CDV1:PRINt?
< DISP

:DISPlay:ANALysis:CDV1:TITLe <title>

Parameter <title> = <STRING PROGRAM DATA>
 "Title character string" Title character string (up to 15 characters)
 "" is also allowed.

Function: Sets the title of the Analyze:1-point CDV screen.

Restriction: Invalid in the following case:
 • When :DISPlay:TMENu[:NAME] is other than <"CDV1">

Example use: To set "1-point CDV":
 > :DISPlay:ANALysis:CDV1:TITLe "1-point CDV"

:DISPlay:ANALysis:CDV1:TITLe?

Response: <title> = <STRING RESPONSE DATA>

Function: Queries the title of the Analyze:1-point CDV screen.

Example use: > :DISPlay:ANALysis:CDV1:TITLe?
 < "1-point CDV" "

:DISPlay:ANALysis:CDV2:SCRoll <scroll>

Parameter <scroll> = <CHARACTER PROGRAM DATA>
 LEFT Scrolls left.
 RIGHT Scrolls right.
 TOP Displays the top.
 BOTTOm Displays the bottom.

Function: Requests a scroll on the Analyze:2-point CDV screen.

Restriction: Invalid in the following case:
 • When no 2-point CDV data exists.

Example use: To display the top:
 > :DISPlay:ANALysis:CDV2:SCRoll TOP

:DISPlay:ANALysis:CDV2:TYPE <type>

Parameter <type> = <CHARACTER PROGRAM DATA>
 INDividual Individual data
 ACCumulative Accumulated data

Function: Sets display data type of Analyze:2-point CDV screen.

Restriction: Invalid in the following case:
 • When :DISPlay:TMENu[:NAME] is other than <"CDV2">.

Example use: To set display data type of 2-point CDV subscreen to Individual:
 > :DISPlay:ANALysis:CDV2:TYPE INDividual

:DISPlay:ANALysis:CDV2:TYPE?

Response: <type> = <CHARACTER RESPONSE DATA>
 IND Individual data
 ACC Accumulated data

Function: Queries display data type of Analyze:2-point CDV screen.

Example use: > :DISPlay:ANALysis:CDV2:TYPE?
 < IND

SECTION 4 REMOTE CONTROL

:DISPlay:ANALysis:CDV2:MARKer <marker>

Parameter <marker> = <CHARACTER PROGRAM DATA>
 LEFT Moves marker 1 Div to the left.
 RIGHT Moves marker 1 Div to the right.

Function: Requests marker movement on Analyze:2-point CDV screen.

Restriction: Invalid in the following case:

- When :DISPlay:ANALysis:CDV2:MDISplay is <OFF>.

Note: In multiple screen mode, the marker moves normally when set on.

Example use: To move marker to the right:

> :DISPlay:ANALysis:CDV2:MARKer RIGHT

:DISPlay:ANALysis:CDV2:PEAK <peak>

Parameter <peak> = <CHARACTER PROGRAM DATA>
 BEFore Before search
 NEXT Next search

Function: Requests peak search on Analyze:2-point CDV screen.

Restriction: Invalid in the following cases:

- When :DISPlay:ANALysis:CDV2:MDISplay is <OFF>.
- When there are no peaks left of the marker and <BEFore> is set.
- When there are no peaks right of the marker and <NEXT> is set.

Note: In multiple screen mode, normal operation is performed when the marker is set on.

Example use: To request Before search:

> :DISPlay:ANALysis:CDV2:PEAK BEFore

:DISPlay:ANALysis:CDV2:ZOOM <type>

Parameter <type> = <CHARACTER PROGRAM DATA>
 IN Zoom-in function
 OUT Zoom-out function

Function: Executes zoom function on Analyze:2-point CDV screen.

Restriction: Invalid in the following cases:

- When :DISPlay:ANALysis:CDV2:MDISplay is <OFF>.
- When :DISPlay:ANALysis:CDV2:INTerval is <1>, and <IN> is set.
- When :DISPlay:ANALysis:CDV2:INTerval is <300>, and <OUT> is set.

Note: In multiple screen mode, normal operation is performed when the marker is set on.

Example use: To execute zoom-in function:

> :DISPlay:ANALysis:CDV2:ZOOM IN

:DISPlay:ANALysis:CDV2:DATA?

Response: <time>,<cell>,<count>,<rate>

<time> = <STRING RESPONSE DATA>
Interval of cell indicated by marker (μs)
Form12

<cell> = <STRING RESPONSE DATA>
Number of intervals of cell indicated by marker (cell)
Form12

<count> = <STRING RESPONSE DATA>
Number of cells indicated by marker
Form1

<rate> = <STRING RESPONSE DATA>
Rate of cell indicated by marker (%)
Form1

Note: The following is output when no analysis data exists:

< "-----","-----","-----","-----">

Function: Queries the data indicated by the marker on the Analyze:2-point CDV screen.

Example use: > :DISPlay:ANALysis:CDV2:DATA?
< " 7"," 10"," 100"," 50.0000"

:DISPlay:ANALysis:CDV2:INTERval <character>

Parameter: <character> = <CHARACTER PROGRAM DATA>
1, 10, 100, 500

Function: Sets the graduation width of the Interval axis of the Analyze:2-point CDV screen.

Restriction: Invalid in the following case:

- When :DISPlay:TMENu[:NAME] is other than <"CDV2">.

Example use: To set the graduation width to one step:
> :DISPlay:ANALysis:CDV2:INTERval 1

:DISPlay:ANALysis:CDV2:INTERval?

Response: <numeric1> = <NR1 NUMERIC RESPONSE DATA>
<numeric2> = <NR2 NUMERIC RESPONSE DATA>
0.7 ~ 276041.7 (μs)

Note: The Interval μs range varies depending on the Rx Bit rate.

Function: Queries the graduation width of the Interval axis of the Analyze:2-point CDV screen.

Example use: > :DISPlay:ANALysis:CDV2:INTERval?
< 1,100

SECTION 4 REMOTE CONTROL

DISPlay:ANALysis:CDV2:IUNit <unit>

Parameter: <unit> = <CHARACTER PROGRAM DATA>
CELL Cell
US μ s

Function: Sets the horizontal axis display interval of the Analyze:2-point CDV screen.

Restriction: Invalid in the following case:

- When :DISPlay:TMENu[:NAME] is other than <"CDV2">.

Example use: To set the horizontal axis display interval of the 2-point CDVsubscreen to Cell:
> :DISPlay:ANALysis:CDV2:IUNit CELL

:DISPlay:ANALysis:CDV2:IUNit?

Response: <unit> = <CHARACTER RESPONSE DATA>
CELL Cell
US μ s

Function: Queries the horizontal axis display interval of the Analyze:2-point CDV screen.

Example use: > :DISPlay:ANALysis:CDV2:IUNit?
< CELL

:DISPlay:ANALysis:CDV2:MDISplay <boolean>

Parameter: <boolean> = <BOOLEAN PROGRAM DATA>
OFF or 0 Turns marker off.
ON or 1 Turns marker on.

Function: Sets whether to display the marker on the Analyze:2-point CDV screen.

Restriction: Invalid in the following case:

- When no 2-point CDV data exists.

Example use: To set marker display to ON:
> :DISPlay:ANALysis:CDV2:MDISplay ON

:DISPlay:ANALysis:CDV2:MDISplay?

Response: <boolean> = <NR1 NUMERIC RESPONSE DATA>
0 Marker OFF
1 Marker ON

Function: Queries the setting on whether to display the marker on the Analyze:2-point CDV screen.

Example use: > :DISPlay:ANALysis:CDV2:MDISplay?
< 1

:DISPlay:ANALysis:CDV2:SCALe <numeric>

Parameter: <numeric> = <CHARACTER PROGRAM DATA>
100 100%
10 10%
1 1%

Function: Sets the graph vertical axis scale of the Analyze:2-point CDV screen.

Restriction: Invalid in the following case:

- When :DISPlay:TMENu[:NAME] is other than <"CDV2">.

Example use: To set the graph vertical axis scale to 10%:
> :DISPlay:ANALysis:CDV2:SCALe 10

:DISPlay:ANALysis:CDV2:SCALE?

Response: <numeric> = <NR1 NUMERIC RESPONSE DATA>

Function: Queries the graph vertical axis scale of the Analyze:2-point CDV screen.

Example use: > :DISPlay:ANALysis:CDV2:SCALE?
< 10

:DISPlay:ANALysis:CDV2:CELL <numeric>

Parameter: <numeric> = <DECIMAL NUMERIC PROGRAM DATA>
-8970 ~ 8970 (cell)

Function: Sets the graph horizontal axis center value (cell) of the Analyze:2-point CDV screen.

Restriction: Invalid in the following cases:

- When :DISPlay:TMENU[:NAME] is other than <"CDV2">.
- When :DISPlay:ANALysis:CDV2:IUNit is <US>.
- The setting range varies depending on Interval.

Example use: To set the graph horizontal axis center value to 10 cell:
> :DISPlay:ANALysis:CDV2:CELL 10

:DISPlay:ANALysis:CDV2:CELL?

Response: <numeric> = <NR1 NUMERIC RESPONSE DATA>

Function: Queries the graph horizontal axis center value (cell) of the Analyze:2-point CDV screen.

Example use: > :DISPlay:ANALysis:CDV2:CELL?
< 10

:DISPlay:ANALysis:CDV2:US <numeric>

Parameter: <numeric> = <DECIMAL NUMERIC PROGRAM DATA>
-2476093.7 ~ 2476093.7 (μ s)

Function: Sets the graph horizontal axis center value (μ s) of the Analyze:2-point CDV screen.

Restriction: Invalid in the following cases:

- When :DISPlay:TMENU[:NAME] is other than <"CDV2">.
- When :DISPlay:ANALysis:CDV2:IUNit is <CELL>.
- The setting range varies depending on Interval.

Example use: To set the graph horizontal axis center value to 10 μ s:
> :DISPlay:ANALysis:CDV2:US 10

:DISPlay:ANALysis:CDV2:US?

Response: <numeric> = <NR1 NUMERIC RESPONSE DATA>

Function: Queries the graph horizontal axis center value (μ s) of the Analyze:2-point CDV screen.

Example use: > :DISPlay:ANALysis:CDV2:US?
< 10

:DISPlay:ANALysis:CDV2:PRINt <type>

Parameter: <type> = <CHARACTER PROGRAM DATA>
DISPlay Display

Function: Specifies the printing range of the Analyze:2-point CDV screen.

Restriction: Invalid in the following case:

- When :DISPlay:TMENU[:NAME] is other than <"CDV2">.

Example use: To print the screen range currently on display:
> :DISPlay:ANALysis:CDV2:PRINt DISPlay

SECTION 4 REMOTE CONTROL

:DISPlay:ANALysis:CDV2:PRINt?

Response: <type> = <CHARACTER RESPONSE DATA>
DISP Display

Function: Queries the printing range of the Analyze:2-point CDV screen.

Example use: > :DISPlay:ANALysis:CDV2:PRINt?
< DISP

:DISPlay:ANALysis:CDV2:TITLe <title>

Parameter: <title> = <STRING PROGRAM DATA>
"Title character string" Title character string (up to 15 characters)
"" is also allowed.

Function: Sets the title of the Analyze:2-point CDV screen.

Restriction: Invalid in the following case:
• When :DISPlay:TMENu[:NAME] is other than <"CDV2">.

Example use: To set "2-point CDV":
> :DISPlay:ANALysis:CDV2:TITLe "2-point CDV"

:DISPlay:ANALysis:CDV2:TITLe?

Response: <title> = <STRING RESPONSE DATA>

Function: Queries the title of the Analyze:2-point CDV screen.

Example use: > :DISPlay:ANALysis:CDV2:TITLe?
< "2-point CDV "

:DISPlay:ANALysis:FRAMe64:TITLe <title>

Parameter: <title> = <STRING PROGRAM DATA>
"Title character string" Title character string (up to 15 characters)
"" is also allowed.

Function: Sets the title of the Analyze:SOH frame64 screen.

Restriction: Invalid in the following cases:
• When :SENSe:TELEcom:BRATe is <M139>, <M45>, <M34>, <M8>, <M2>, or <M1_5>.
• When :DISPlay:TMENu[:NAME] is other than <"MANual[:JOFF]">, <"MANual:JON">, <"MANual:TCLayer">, <"MANual:TCELI">, <"MANual:RCELI">, <"PSEQuence[:JOFF]">, and <"PSEQuence:JON">.

Example use: To set the title of SOH frame64 to "TITLE-DISP":
> :DISPlay:ANALysis:FRAMe64:TITLe "TITLE-DISP"

:DISPlay:ANALysis:RECall:TGRaph:ERRor <error1>, <error2>

Parameter: <error1> = <STRING PROGRAM DATA>
Same as :DISPlay:ANALysis:TGRaph:ERRor.
<error2> = <CHARACTER PROGRAM DATA>
Same as :DISPlay:ANALysis:TGRaph:ERRor.

Function: Sets the error item for Error/Alarm graph display on the Analyze:Recall screen.

Restriction: Invalid in the following cases:

- When :DISPlay:ANALysis:RECall:TYPE? is other than <"EAL">.
- When the specified measurement result is not found.
- When <ER> is set while <"HIT">, <"SAR_PDU">, <"SECB">, <"CPCS">, <"PMCount">, <"TUC01">, <"TUC0">, <"TRCC0">, or <"TRCC01"> is set.

Example use: To display the error rate of bit errors:
> :DISPlay:ANALysis:RECall:TGRaph:ERRor "BIT",ER

:DISPlay:ANALysis:RECall:TGRaph:ERRor?

Response: <error1>,<error2>
<error1> = <STRING RESPONSE DATA>
<error2> = <CHARACTER RESPONSE DATA>

Function: Queries the error item for Error/Alarm graph display on the Analyze:Recall screen.

Example use: > :DISPlay:ANALysis:RECall:TGRaph:ERRor?
< "BIT",ER

:DISPlay:ANALysis:RECall:TGRaph:ALARm1 <alarm>

Parameter: <alarm> = <STRING PROGRAM DATA>
Same as :DISPlay:ANALysis:TGRaph:ALARm1.

Function: Sets the alarm item to be displayed as alarm 1 on the Analyze:Recall screen.

Restriction: Invalid in the following case:

- When :DISPlay:ANALysis:RECall:TYPE? is other than <"EAL">.

Example use: To display Power fail as alarm 1:
> :DISPlay:ANALysis:RECall:TGRaph:ALARm1 "POWER"

:DISPlay:ANALysis:RECall:TGRaph:ALARm1?

Response: <alarm> = <STRING RESPONSE DATA>
Function: Queries the alarm item to be displayed as alarm 1 on the Analyze:Recall screen.
Example use: > :DISPlay:ANALysis:RECall:TGRaph:ALARm1?
< "POW"

:DISPlay:ANALysis:RECall:TGRaph:ALARm2 <alarm>

Parameter: <alarm> = <STRING PROGRAM DATA>
Same as :DISPlay:ANALysis:RECall:TGRaph:ALARm1.

Function: Sets the alarm item to be displayed as alarm 2 on the Analyze:Recall screen.

Restriction: Same as :DISPlay:ANALysis:RECall:TGRaph:ALARm1.

:DISPlay:ANALysis:RECall:TGRaph:ALARm2?

Response: <alarm> = <STRING RESPONSE DATA>
Same as :DISPlay:ANALysis:RECall:TGRaph:ALARm1?.
Function: Queries the alarm item to be displayed as alarm 2 on the Analyze:Recall screen.

SECTION 4 REMOTE CONTROL

:DISPlay:ANALysis:RECall:TGRaph:ALARm3 <alarm>

Parameter: <alarm> = <STRING PROGRAM DATA>

Same as :DISPlay:ANALysis:RECall:TGRaph:ALARm1.

Function: Sets the alarm item to be displayed as alarm 3 on the Analyze:Recall screen.

Restriction: Same as :DISPlay:ANALysis:RECall:TGRaph:ALARm1.

:DISPlay:ANALysis:RECall:TGRaph:ALARm3?

Response: <alarm> = <STRING RESPONSE DATA>

Same as :DISPlay:ANALysis:RECall:TGRaph:ALARm1?.

Function: Queries the alarm item to be displayed as alarm 3 on the Analyze:Recall screen.

:DISPlay:ANALysis:RECall:TGRaph:ALARm4 <alarm>

Parameter: <alarm> = <STRING PROGRAM DATA>

Same as :DISPlay:ANALysis:RECall:TGRaph:ALARm1.

Function: Sets the alarm item to be displayed as alarm 4 on the Analyze:Recall screen.

Restriction: Same as :DISPlay:ANALysis:RECall:TGRaph:ALARm1

:DISPlay:ANALysis:RECall:TGRaph:ALARm4?

Response: <alarm> = <STRING RESPONSE DATA>

Same as :DISPlay:ANALysis:RECall:TGRaph:ALARm1?.

Function: Queries the alarm item to be displayed as alarm 4 on the Analyze:Recall screen.

:DISPlay:ANALysis:RECall:TGRaph:ALARm5 <alarm>

Parameter: <alarm> = <STRING PROGRAM DATA>

Same as :DISPlay:ANALysis:RECall:TGRaph:ALARm1.

Function: Sets the alarm item to be displayed as alarm 5 on the Analyze:Recall screen.

Restriction: Same as :DISPlay:ANALysis:RECall:TGRaph:ALARm1.

:DISPlay:ANALysis:RECall:TGRaph:ALARm5?

Response: <alarm> = <STRING RESPONSE DATA>

Same as :DISPlay:ANALysis:RECall:TGRaph:ALARm1?.

Function: Queries the alarm item to be displayed as alarm 5 on the Analyze:Recall screen.

:DISPlay:ANALysis:RECall:LMONitor:SCRoll <scroll>

Parameter: <scroll> = <CHARACTER PROGRAM DATA>

UP Scrolls upward.

DOWN Scrolls down.

TOP Displays the top.

BOTTOM Displays the bottom.

Function: Specifies a scroll on the Analyze:Recall screen (Live monitor).

Restriction: Invalid in the following case:

- When :DISPlay:ANALysis:RECall:TYPE? is other than <"CCM">.

Example use: To scroll up:

> :DISPlay:ANALysis:RECall:LMONitor:SCRoll UP

:DISPlay:ANALysis:RECall:LMONitor:INTerval <numeric>,<suffix>
Parameter: <numeric> = <CHARACTER PROGRAM DATA>
1000, 5000, 10000, 50000, 100000, 500000, 1000000
<suffix> = <CHARACTER PROGRAM DATA>
CPS Cell/s
Function: Sets the horizontal axis width of the Analyze:Recall screen (Live monitor).
Restriction: Invalid in the following case:
• When :DISPlay:ANALysis:RECall:TYPE? is other than <"CCM">.
Example use: To set the horizontal axis width to 1000:
> :DISPlay:ANALysis:RECall:LMONitor:INTerval 1000,CPS

:DISPlay:ANALysis:RECall:LMONitor:INTerval?
Response: <numeric> = <NR1 NUMERIC RESPONSE DATA>
<suffix> = <CHARACTER RESPONSE DATA>
Function: Queries the horizontal axis width of the Analyze:Recall screen (Live monitor).
Example use: > :DISPlay:ANALysis:RECall:LMONitor:INTerval?
< 1000,CPS

:DISPlay:ANALysis:RECall:LMONitor:VPI <numeric1>[,<numeric2>]
Parameter: <numeric1> = <DECIMAL NUMERIC PROGRAM DATA>
0 ~ 4095 VPI value
<numeric2> = <DECIMAL NUMERIC PROGRAM DATA>
0 ~ 65535 VCI value
Function: Centers the data specified by VPI and VCI on the Analyze:Recall screen (Live monitor).
Restriction: Invalid in the following case:
• When :DISPlay:ANALysis:RECall:TYPE? is other than <"CCM">.
Example use: To set the VPI of the horizontal axis center value to 1000:
> :DISPlay:ANALysis:RECall:LMONitor:VPI 1000

:DISPlay:ANALysis:RECall:LMONitor:VPI?
Response: <numeric1> = <NR1 NUMERIC RESPONSE DATA>
<numeric2> = <NR1 NUMERIC RESPONSE DATA>
Function: Queries the VPI and VCI of the center value on the Analyze:Recall screen (Live monitor).
Example use: > :DISPlay:ANALysis:RECall:LMONitor:VPI?
< 100,20

:DISPlay:ANALysis:RECall:LMONitor:NUMBer <numeric>
Parameter: <numeric1> = <DECIMAL NUMERIC PROGRAM DATA>
1 ~ 1000 No.
Function: Centers the specified number on the Analyze:Recall screen (Live monitor).
Restriction: Invalid in the following case:
• When :DISPlay:ANALysis:RECall:TYPE? is other than <"CCM">.
Example use: To jump to 23:
> :DISPlay:ANALysis:RECall:LMONitor:NUMBer 23

:DISPlay:ANALysis:RECall:LMONitor:NUMBer?
Response: <numeric> = <NR1 NUMERIC RESPONSE DATA>
Function: Queries the screen display center position of the Analyze:Recal screen (Live monitor).
Example use: > :DISPlay:ANALysis:RECall:LMONitor:NUMBer?
< 23

SECTION 4 REMOTE CONTROL

:DISPlay:ANALysis:RECall:LMONitor:PRINt <type>

Parameter: <type> = <CHARACTER PROGRAM DATA>

DISPlay	Display
ALL	All
AFTer	After
BEFore	Before

Function: Specifies the printing range of the Analyze:Recall screen (Live monitor).

Restriction: Invalid in the following case:

- When :DISPlay:ANALysis:RECall:TYPE? is other than <"CCM">.

Example use: To set the printing range of the Live monitor screen:

> :DISPlay:ANALysis:RECall:LMONitor:PRINt DISPlay

:DISPlay:ANALysis:RECall:LMONitor:PRINt?

Response: <type> = <CHARACTER RESPONSE DATA>

DISP	Display
ALL	All
AFT	After
BEF	Before

Function: Queries the printing range of the Analyze:Recall screen (Live monitor).

Example use: > :DISPlay:ANALysis:RECall:LMONitor:PRINt?

< DISP

:DISPlay:ANALysis:RECall:LMONitor:PTYPE <type>

Parameter: <type> = <CHARACTER PROGRAM DATA>

NUMeric	Numeric data printing
GRAPh	Graph data printing

Function: Specifies the print data of the Analyze:Recall screen (Live monitor).

Restriction: Invalid in the following case:

- When :DISPlay:ANALysis:RECall:TYPE? is other than <"CCM">.

Example use: To set the print data of the Live monitor screen:

> :DISPlay:ANALysis:RECall:LMONitor:PTYPE GRAPH

:DISPlay:ANALysis:RECall:LMONitor:PTYPE?

Response: <type> = <CHARACTER RESPONSE DATA>

NUM	Numeric data
GRAP	Graph data

Function: Queries the print data of the Analyze:Recall screen (Live monitor).

Example use: > :DISPlay:ANALysis:RECall:LMONitor:PTYPE?

< GRAP

:DISPlay:ANALysis:RECall:LMONitor:TITLe?

Response: <title> = <STRING RESPONSE DATA>

Function: Queries the title of the Analyze:Recall screen (Live monitor).

Example use: > :DISPlay:ANALysis:RECall:LMONitor:TITLe?

< "TITLE-DISP "

:DISPlay:ANALysis:RECall:TRAFfic:SCRoll <scroll>

Parameter: <scroll> = <CHARACTER PROGRAM DATA>
LEFT Scrolls leftward.
RIGHT Scrolls right.
TOP Displays the top.
BOTTom Displays the bottom.

Function: Requests the scroll on the Analyze:Recall screen (Traffic monitor).

Restriction: Invalid in the following case:

- When :DISPlay:ANALysis:RECall:TYPE? is other than <"TRAF">.

Example use: To scroll leftward:

> :DISPlay:ANALysis:RECall:TRAFfic:SCRoll LEFT

:DISPlay:ANALysis:RECall:TRAFfic:MARKer <marker>

Parameter: <marker> = <CHARACTER PROGRAM DATA>
LEFT Moves the marker 1 Div to the left.
RIGHT Moves the marker 1 Div to the right.

Function: Requests marker movement on the Analyze:Recall screen (Traffic monitor).

Restriction: Invalid in the following cases:

- When :DISPlay:ANALysis:RECall:TYPE? is other than <"TRAF">.
- When :DISPlay:ANALysis:RECall:TRAFfic:MDISplay is <OFF>.

Note: In multiple screen mode, the marker moves normally as if on.

Example use: To move the marker to the right:

> :DISPlay:ANALysis:RECall:TRAFfic:MARKer RIGHT

:DISPlay:ANALysis:RECall:TRAFfic:DATA?

Response: <time>,<mean>,<max>,<min>

Function: Queries the data indicated by the marker on the Analyze:Recall screen (Traffic monitor).

Example use: > :DISPlay:ANALysis:RECall:TRAFfic:DATA?

< 1994,12,25,12,54,30," 1"," 0"," 104"

:DISPlay:ANALysis:RECall:TRAFfic:INTerval <numeric>,<suffix>

Parameter: <numeric> = <CHARACTER PROGRAM DATA>
1, 15, 60

<suffix> = <CHARACTER PROGRAM DATA>

M minute

S second

Function: Sets the graduation width of the time axis of the Analyze:Recall screen (Traffic monitor).

Restriction: Invalid in the following cases:

- When :DISPlay:ANALysis:RECall:TYPE? is other than <"TRAF">.
- When other than one of the following values is set according to the graph resolution at saving:

1sec: 1sec, 1min, 15min, 60min

1min: 1min, 15min, 60min

15min: 15min, 60min

60min: 60min

Example use: To set the graduation width to one minute:

> :DISPlay:ANALysis:RECall:TRAFfic:INTerval 1,M

SECTION 4 REMOTE CONTROL

:DISPlay:ANALysis:RECall:TRAFfic:INTerval?

Response: <numeric> = <NR1 NUMERIC RESPONSE DATA>
<suffix> = <CHARACTER RESPONSE DATA>

Function: Queries the graduation width of the time axis of the Analyze:Recall screen (Traffic monitor).

Example use: > :DISPlay:ANALysis:RECall:TRAFfic:INTerval?
< 1,M

:DISPlay:ANALysis:RECall:TRAFfic:MDISplay <boolean>

Parameter: <boolean> = <BOOLEAN PROGRAM DATA>
OFF or 0 Turns marker off.
ON or 1 Turns marker on.

Function: Sets whether to display the marker on the Analyze:Recall screen (Traffic monitor).

Restriction: Invalid in the following case:
• When :DISPlay:ANALysis:RECall:TYPE? is other than <"TRAF">.

Example use: To set the marker display on Traffic monitor to ON:
> :DISPlay:ANALysis:RECall:TRAFfic:MDISplay 1

:DISPlay:ANALysis:RECall:TRAFfic:MDISplay?

Response: <boolean> = <NR1 NUMERIC RESPONSE DATA>
0 Marker OFF
1 Marker ON

Function: Queries the setting on whether to display the marker on the Analyze:Recall screen (Traffic monitor).

Example use: > :DISPlay:ANALysis:RECall:TRAFfic:MDISplay?
< 1

:DISPlay:ANALysis:RECall:TRAFfic:FROM <numeric1>,<numeric2>,<numeric3>,<numeric4>,<numeric5>,<numeric6>

Parameter: <DECIMAL NUMERIC PROGRAM DATA>
<numeric1> = 1994 ~ 2093 (year)
<numeric2> = 1 ~ 12 (month)
<numeric3> = 1 ~ 31 (day)
<numeric4> = 0 ~ 23 (hour)
<numeric5> = 0 ~ 59 (minute)
<numeric6> = 0 ~ 59 (second)

Note: If the time specified by the parameter does not exist, the earliest time after the specified time is set.

If time before the first data time is specified, the first data time is set.

If time after the last data time is specified, the last data time is set.

Function: Sets the display start position of the Traffic monitor graph on the Analyze:Recall screen.

Restriction: Invalid in the following case:
• When :DISPlay:ANALysis:RECall:TYPE? is other than <"TRAF">.

Example use: To display from 11:30:40 on July 28, 1996:
> :DISPlay:ANALysis:RECall:TRAFfic:FROM 1996,7,28,11,30,40

:DISPlay:ANALysis:RECall:TRAFfic:FROM?

Response: <numeric1>,<numeric2>,<numeric3>,<numeric4>,<numeric5>,<numeric6>
= <NR1 NUMERIC RESPONSE DATA>

Function: Queries the display start position of the Traffic monitor graph on the Analyze:Recall screen.

Example use: > :DISPlay:ANALysis:RECall:TRAFfic:FROM?
< 1996,7,28,11,30,40

:DISPlay:ANALysis:RECall:TRAFfic:SCALe <numeric1>,<numeric2>

Parameter: <numeric1> = <NON-DECIMAL NUMERIC PROGRAM DATA>
1.0E0, 1.0E1, 1.0E2, 1.0E3, 1.0E4, 1.0E5, 1.0E6

<numeric2> = <NON-DECIMAL NUMERIC PROGRAM DATA>
1.0E1, 1.0E2, 1.0E3, 1.0E4, 1.0E5, 1.0E6, 1.0E7

Function: Sets the graph vertical axis scale of the Analyze:Recall screen (Traffic monitor).

Restriction: Invalid in the following cases:
• When :DISPlay:ANALysis:RECall:TYPE? is other than <"TRAF">.
• When <numeric1> \geq <numeric2>.

Example use: To set the graph vertical axis scale of Traffic monitor from 1.0E1 to 1.0E6:
> :DISPlay:ANALysis:RECall:TRAFfic:SCALe 1.0E1,1.0E6

:DISPlay:ANALysis:RECall:TRAFfic:SCALe?

Response: <numeric1>,<numeric2> = <NR2 NUMERIC RESPONSE DATA>

Function: Queries the graph vertical axis scale of the Analyze:Recall screen (Traffic monitor).

Example use: > :DISPlay:ANALysis:RECall:TRAFfic:SCALe?
< 1.0E1,1.0E6

:DISPlay:ANALysis:RECall:TRAFfic:PRINt <type>

Parameter: <type> = <CHARACTER PROGRAM DATA>

DISPlay	Display
ALL	All
AFTer	After
BEFore	Before

Function: Specifies the printing range of the Analyze:Recall screen (Traffic monitor).

Restriction: Invalid in the following case:
• When :DISPlay:ANALysis:RECall:TYPE? is other than <"TRAF">.

Example use: To set the Traffic monitor screen range:
> :DISPlay:ANALysis:RECall:TRAFfic:PRINt DISPlay

:DISPlay:ANALysis:RECall:TRAFfic:PRINt?

Response: <type> = <CHARACTER RESPONSE DATA>

DISP	Display
ALL	All
AFT	After
BEF	Before

Function: Queries the printing range of the Analyze:Recall screen (Traffic monitor).

Example use: > :DISPlay:ANALysis:RECall:TRAFfic:PRINt?
< DISP

SECTION 4 REMOTE CONTROL

:DISPlay:ANALysis:RECall:TRAFfic:TITLe?

Response: <title> = <STRING RESPONSE DATA>

Function: Queries the title of the Analyze:Recall screen (Traffic monitor).

Example use: > :DISPlay:ANALysis:RECall:TRAFfic:TITLe?
< "TITLE-DISP "

:DISPlay:ANALysis:RECall:CAPTure:JUMP:TYPE <type>

Parameter: <type> = <CHARACTER PROGRAM DATA>

TRIGger Displays trigger positions.

JUMP Displays number positions.

Function: Sets the display position on the Analyze:Recall screen (Cell capture).

Restriction: Invalid in the following cases:

- When :DISPlay:ANALysis:RECall:TYPE? is other than <"CAPT">.
- When no Trigger exists and <TRIGger> is set.

Example use: To move the trigger display position:

> :DISPlay:ANALysis:RECall:CAPTure:JUMP:TYPE TRIGger

:DISPlay:ANALysis:RECall:CAPTure:JUMP:TYPE?

Response: <type> = <CHARACTER RESPONSE DATA>

TRIG Displays trigger positions.

JUMP Displays number positions.

Function: Queries the display position on the Analyze:Recall screen (Cell capture).

Example use: > :DISPlay:ANALysis:RECall:CAPTure:JUMP:TYPE?
< TRIG

:DISPlay:ANALysis:RECall:CAPTure:JUMP:LINE <numeric>

Parameter: <numeric> = <DECIMAL NUMERIC PROGRAM DATA>

1 ~ 2016

Function: Sets the display position (Number) on the Analyze:Recall screen (Cell capture).

Restriction: Invalid in the following cases:

- When :DISPlay:ANALysis:RECall:TYPE? is other than <"CAPT">.
- When :DISPlay:ANALysis:RECall:CAPTure:JUMP:TYPE is <TRIGger>.
- When the setting exceeds the total number of Capture data items.

Example use: To set the display position to 10:

> :DISPlay:ANALysis:RECall:CAPTure:JUMP:LINE 10

:DISPlay:ANALysis:RECall:CAPTure:JUMP:LINE?

Response: <numeric> = <NR1 NUMERIC RESPONSE DATA>

Function: Queries the display position (Number) on the Analyze:Recall screen (Cell capture).

Example use: > :DISPlay:ANALysis:RECall:CAPTure:JUMP:LINE?
< 10

:DISPlay:ANALysis:RECall:CAPTure:SCRoll <scroll>

Parameter: <scroll> = <CHARACTER PROGRAM DATA>

LEFT	Scrolls left.
RIGHT	Scrolls right.
UP	Scrolls up.
DOWN	Scrolls down.
HTOP	Displays the left edge.
HBOTtom	Displays the right edge.
VTOP	Displays the top.
VBOTtom	Displays the bottom.

Function: Requests a scroll on the Analyze:Recall screen (Cell capture).

Restriction: Invalid in the following cases:

- When :DISPlay:ANALysis:RECall:TYPE? is other than <"CAPT">.
- When <LEFT>, <RIGHT>, <HTOP>, or <HBOTtom> is set while :DISPlay:ANALysis:RECall:CAPTure:PTYPE is <ASCii> or <TRANslate>.

Example use: To display the top:

> :DISPlay:ANALysis:RECall:CAPTure:SCRoll VTOP

:DISPlay:ANALysis:RECall:CAPTure:PTYPE <type>

Parameter: <type> = <CHARACTER PROGRAM DATA>

HEX	HEX
ASCii	Ascii
TRANslate	Translate

Function: Sets the Payload display type of the Analyze:Recall screen (Cell capture).

Restriction: Invalid in the following case:

- When :DISPlay:ANALysis:RECall:TYPE? is other than <"CAPT">.

Example use: To set the Payload display type of the Cell capture subscreen to HEX:

> :DISPlay:ANALysis:RECall:CAPTure:PTYPE HEX

:DISPlay:ANALysis:RECall:CAPTure:PTYPE?

Response: <type> = <CHARACTER RESPONSE DATA>

HEX	HEX
ASC	Ascii
TRAN	Translate

Function: Queries the Payload display type of the Analyze:Recall screen (Cell capture).

Example use: > :DISPlay:ANALysis:RECall:CAPTure:PTYPE?

< HEX

:DISPlay:ANALysis:RECall:CAPTure:PRINt <numeric1>,<numeric2>

Parameter: <numeric1>,<numeric2> = <DECIMAL NUMERIC PROGRAM DATA>

1 ~ 2016

Function: Specifies the printing range of the Analyze:Recall screen (Cell capture).

Restriction: Invalid in the following cases:

- When :DISPlay:ANALysis:RECall:TYPE? is other than <"CAPT">.
- When <numeric1> > <numeric2>.

Example use: To set the Cell capture screen range:

> :DISPlay:ANALysis:RECall:CAPTure:PRINt 1,20

SECTION 4 REMOTE CONTROL

:DISPlay:ANALysis:RECall:CAPTure:PRINt?

Response: <numeric1>,<numeric2> = <NR1 NUMERIC RESPONSE DATA>
Function: Queries the printing range of the Analyze:Recall screen (Cell capture).
Example use: > :DISPlay:ANALysis:RECall:CAPTure:PRINt?
< 1,20

:DISPlay:ANALysis:RECall:CAPTure:TITLe?

Response: <title> = <STRING RESPONSE DATA>
Function: Queries the title of the Analyze:Recall screen (Cell capture).
Example use: > :DISPlay:ANALysis:RECall:CAPTure:TITLe?
< "Cell capture "

:DISPlay:ANALysis:RECall:CDV1:SCRoll <scroll>

Parameter: <scroll> = <CHARACTER PROGRAM DATA>
LEFT Scrolls left.
RIGHT Scrolls right.
TOP Displays the top.
BOTTOM Displays the bottom.
Function: Requests a scroll on the Analyze:Recall screen (1-point CDV).
Restriction: Invalid in the following case:
• When :DISPlay:ANALysis:RECall:TYPE? is other than <"CDV1">.
Example use: To display the top:
> :DISPlay:ANALysis:RECall:CDV1:SCRoll TOP

:DISPlay:ANALysis:RECall:CDV1:TYPE <type>

Parameter: <type> = <CHARACTER PROGRAM DATA>
INDividual
ACCumulative
Function: Sets the display data type of the Analyze:Recall screen (1-point CDV).
Restriction: Invalid in the following case:
• When :DISPlay:ANALysis:RECall:TYPE? is other than <"CDV1">.
Example use: To set the display data type of the 1-point CDV subscreen to Individual:
> :DISPlay:ANALysis:RECall:CDV1:TYPE INDividual

:DISPlay:ANALysis:RECall:CDV1:TYPE?

Response: <type> = <CHARACTER RESPONSE DATA>
IND
ACC
Function: Queries the display data type of the Analyze:Recall screen (1-point CDV).
Example use: > :DISPlay:ANALysis:RECall:CDV1:TYPE?
< IND

:DISPlay:ANALysis:RECall:CDV1:MARKer <marker>

Parameter: <marker> = <CHARACTER PROGRAM DATA>

LEFT Moves the marker 1 Div to the left.

RIGHT Moves the marker 1 Div to the right.

Function: Requests a marker movement on the Analyze:Recall screen (1-point CDV).

Restriction: Invalid in the following cases:

- When :DISPlay:ANALysis:RECall:TYPE? is other than <"CDV1">.
- When :DISPlay:ANALysis:RECall:CDV1:MDISplay is <OFF>.

Note: In multiple screen mode, the marker moves normally as if on.

Example use: To move the marker to the right:

> :DISPlay:ANALysis:RECall:CDV1:MARKer RIGHT

:DISPlay:ANALysis:RECall:CDV1:PEAK <peak>

Parameter: <peak> = <CHARACTER PROGRAM DATA>

BEFore Before search

NEXT Next search

Function: Requests a peak search on the Analyze:Recall screen (1-point CDV).

Restriction: Invalid in the following cases:

- When :DISPlay:ANALysis:RECall:TYPE? is other than <"CDV1">.
- When :DISPlay:ANALysis:RECall:CDV1:MDISplay is <OFF>.
- When there are no peaks on the left of the marker and <BEFore> is set.
- When there are no peaks right of the marker and <NEXT> is set.

Note: In multiple screen mode, normal operation is performed as if the marker is on.

Example use: To request a Before search:

> :DISPlay:ANALysis:RECall:CDV1:PEAK BEFore

:DISPlay:ANALysis:RECall:CDV1:ZOOM <type>

Parameter: <type> = <CHARACTER PROGRAM DATA>

IN Zoom in function

OUT Zoom out function

Function: Executes zoom function on the Analyze:Recall screen (1-point CDV).

Restriction: Invalid in the following cases:

- When :DISPlay:ANALysis:RECall:TYPE? is other than <"CDV1">.
- When :DISPlay:ANALysis:RECall:CDV1:MDISplay is <OFF>.
- When :DISPlay:ANALysis:RECall:CDV1:INTerval is <1>, and <IN> is set.
- When :DISPlay:ANALysis:RECall:CDV1:INTerval is <300>, and <OUT> is set.

Note: In multiple screen mode, normal operation is performed as if the marker is on.

Example use: To execute zoom-in function:

> :DISPlay:ANALysis:RECall:CDV1:ZOOM IN

SECTION 4 REMOTE CONTROL

:DISPlay:ANALysis:RECall:CDV1:DATA?

Response: <time>,<cell>,<count>,<rate>
<time> = <STRING RESPONSE DATA>
Interval of cell indicated by marker (μ s)
Form12
<cell> = <STRING RESPONSE DATA>
Number of intervals (cell) of cell indicated by marker
Form12
<count> = <STRING RESPONSE DATA>
Number of cells indicated by marker
Form1
<rate> = <STRING RESPONSE DATA>
Rate of the cell indicated by marker (%)
Form3

Function: Queries the data indicated by the marker on the Analyze:Recall screen (1-point CDV).

Example use: > :DISPlay:ANALysis:RECall:CDV1:DATA?
< " 10"," 101"," 0"," 100"

:DISPlay:ANALysis:RECall:CDV1:INterval <numeric>

Parameter: <numeric> = <CHARACTER PROGRAM DATA>
1, 10, 100, 500

Function: Sets the graduation width of the Interval axis of the Analyze:Recall screen (1-point CDV).

Restriction: Invalid in the following case:

- When :DISPlay:ANALysis:RECall:TYPE? is other than <"CDV1">.

Example use: To set the graduation width to one step:
> :DISPlay:ANALysis:RECall:CDV1:INterval 1

:DISPlay:ANALysis:RECall:CDV1:INterval?

Response: <numeric> = <NR1 NUMERIC RESPONSE DATA>

Function: Queries the graduation width of the Interval axis of the Analyze:Recall screen (1-point CDV).

Example use: > :DISPlay:ANALysis:RECall:CDV1:INterval?
< 1

:DISPlay:ANALysis:RECall:CDV1:IUNit <unit>

Parameter: <unit> = <CHARACTER PROGRAM DATA>
CELL Cell
US μ s

Function: Sets the horizontal axis display interval of the Analyze:Recall screen (1-point CDV).

Restriction: Invalid in the following case:

- When :DISPlay:ANALysis:RECall:TYPE? is other than <"CDV1">.

Example use: To set the horizontal axis display interval of the 1-point CDV subscreen to Cell:
> :DISPlay:ANALysis:RECall:CDV1:IUNit CELL

:DISPlay:ANALysis:RECall:CDV1:IUNit?

Response: <type> = <CHARACTER RESPONSE DATA>
CELL Cell
US μ s

Function: Queries the horizontal axis display interval of the Analyze:Recall screen (1-point CDV).

Example use: > :DISPlay:ANALysis:RECall:CDV1:IUNit?
< CELL

:DISPlay:ANALysis:RECall:CDV1:MDISplay <boolean>

Parameter: <boolean> = <BOOLEAN PROGRAM DATA>
OFF or 0 Turns marker off.
ON or 1 Turns marker on.

Function: Sets whether to display the marker on the Analyze:Recall screen (1-point CDV).

Restriction: Invalid in the following case:
• When :DISPlay:ANALysis:RECall:TYPE? is other than <"CDV1">.

Example use: To set marker display to ON:
> :DISPlay:ANALysis:RECall:CDV1:MDISplay ON

:DISPlay:ANALysis:RECall:CDV1:MDISplay?

Response: <numeric> = <NR1 NUMERIC RESPONSE DATA>
0 Marker OFF
1 Marker ON

Function: Queries the setting on whether to display the marker on the Analyze:Recall screen (1-point CDV).

Example use: > :DISPlay:ANALysis:RECall:CDV1:MDISplay?
< 1

:DISPlay:ANALysis:RECall:CDV1:SCALE <numeric>

Parameter: <numeric1> = <CHARACTER PROGRAM DATA>
100 100%
10 10%
1 1%

Function: Sets the graph vertical axis scale of the Analyze:Recall screen (1-point CDV).

Restriction: Invalid in the following case:
• When :DISPlay:ANALysis:RECall:TYPE? is other than <"CDV1">.

Example use: To set the graph vertical axis scale to 10:
> :DISPlay:ANALysis:RECall:CDV1:SCALE 10

:DISPlay:ANALysis:RECall:CDV1:SCALE?

Response: <numeric> = <NR1 NUMERIC RESPONSE DATA>

Function: Queries the graph vertical axis scale of the Analyze:Recall screen (1-point CDV).

Example use: > :DISPlay:ANALysis:RECall:CDV1:SCALE?
< 10

SECTION 4 REMOTE CONTROL

:DISPlay:ANALysis:RECall:CDV1:CELL <numeric>

Parameter: <numeric> = <DECIMAL NUMERIC PROGRAM DATA>
-8970 ~ 8970 (cell)

Function: Sets the graph horizontal axis center value (cell) of the Analyze:Recall screen (1-point CDV).

Restriction: Invalid in the following cases:

- When :DISPlay:ANALysis:RECall:TYPE? is other than <"CDV1">.
- When :DISPlay:ANALysis:RECall:CDV1:IUNit is <US>.
- The setting range varies depending on Interval.

Example use: To set the graph horizontal axis center value to 10 cells:
> :DISPlay:ANALysis:RECall:CDV1:CELL 10

:DISPlay:ANALysis:RECall:CDV1:CELL?

Response: <numeric> = <NR1 NUMERIC RESPONSE DATA>

Function: Queries the graph horizontal axis center value (cell) of the Analyze:Recall screen (1-point CDV).

Example use: > :DISPlay:ANALysis:RECall:CDV1:CELL?
< 10

:DISPlay:ANALysis:RECall:CDV1:US <numeric>

Parameter: <numeric> = <NON-DECIMAL NUMERIC PROGRAM DATA>
-2476093.7 ~ 2476093.7 (μ s)

Function: Sets the graph horizontal axis center value (μ s) of the Analyze:Recall screen (1-point CDV).

Restriction: Invalid in the following cases:

- When :DISPlay:ANALysis:RECall:TYPE? is other than <"CDV1">.
- When :DISPlay:ANALysis:RECall:CDV1:IUNit is <CELL>.
- The setting range varies depending on Interval.

Example use: To set the graph horizontal axis center value to 10 μ s:
> :DISPlay:ANALysis:RECall:CDV1:US 10

:DISPlay:ANALysis:RECall:CDV1:US?

Response: <numeric> = <NR2 NUMERIC RESPONSE DATA>

Function: Queries the graph horizontal axis center value (μ s) of the Analyze:Recall screen (1-point CDV).

Example use: > :DISPlay:ANALysis:RECall:CDV1:US?
< 10

:DISPlay:ANALysis:RECall:CDV1:PRINt <type>

Parameter: <type> = <CHARACTER PROGRAM DATA>
DISPlay Display

Function: Specifies the printing range of the Analyze:Recall screen (1-point CDV).

Restriction: Invalid in the following case:

- When :DISPlay:ANALysis:RECall:TYPE? is other than <"CDV1">.

Example use: To print the screen range currently on display:
> :DISPlay:ANALysis:RECall:CDV1:PRINt DISPlay

:DISPlay:ANALysis:RECall:CDV1:PRINt?

Response: <type> = <CHARACTER RESPONSE DATA>
DISP Display

Function: Queries the printing range of the Analyze:Recall screen (1-point CDV).

Example use: > :DISPlay:ANALysis:RECall:CDV1:PRINt?
< DISP

:DISPlay:ANALysis:RECall:CDV1:TITLe?

Response: <title> = <STRING RESPONSE DATA>

Function: Queries the title of the Analyze:Recall screen (1-point CDV).

Example use: > :DISPlay:ANALysis:RECall:CDV1:TITLe?
< "1-point CDV "

:DISPlay:ANALysis:RECall:CDV2:SCRoll <scroll>

Parameter: <scroll> = <CHARACTER PROGRAM DATA>
LEFT Scrolls left.
RIGHt Scrolls right.
TOP Displays the top.
BOTTom Displays the bottom.

Function: Requests a scroll on the Analyze:Recall screen (2-point CDV).

Restriction: Invalid in the following case:

- When :DISPlay:ANALysis:RECall:TYPE? is other than <"CDV2">.

Example use: To display the top:
> :DISPlay:ANALysis:RECall:CDV2:SCRoll TOP

:DISPlay:ANALysis:RECall:CDV2:TYPE <type>

Parameter: <type> = <CHARACTER PROGRAM DATA>
INDividual
ACCumulative

Function: Sets the display data type of the Analyze:Recall screen (2-point CDV).

Restriction: Invalid in the following case:

- When :DISPlay:ANALysis:RECall:TYPE? is other than <"CDV2">.

Example use: To set the display data type of the 2-point CDV subscreen to Individual:
> :DISPlay:ANALysis:RECall:CDV2:TYPE INDividual

:DISPlay:ANALysis:RECall:CDV2:TYPE?

Response: <type> = <CHARACTER RESPONSE DATA>
IND
ACC

Function: Queries the display data type of the Analyze:Recall screen (2-point CDV).

Example use: > :DISPlay:ANALysis:RECall:CDV2:TYPE?
< IND

SECTION 4 REMOTE CONTROL

:DISPlay:ANALysis:RECall:CDV2:MARKer <marker>

Parameter: <marker> = <CHARACTER PROGRAM DATA>
LEFT Moves the marker 1 Div to the left.
RIGHT Moves the marker 1 Div to the right.

Function: Requests a marker movement on the Analyze:Recall screen (2-point CDV).

Restriction: Invalid in the following cases:

- When :DISPlay:ANALysis:RECall:TYPE? is other than <"CDV2">.
- When :DISPlay:ANALysis:RECall:CDV2:MDISplay is <OFF>.

Note: In multiple screen mode, the marker moves normally when on.

Example use: To move the marker to the right:
> :DISPlay:ANALysis:RECall:CDV2:MARKer RIGHT

:DISPlay:ANALysis:RECall:CDV2:PEAK <peak>

Parameter: <peak> = <CHARACTER PROGRAM DATA>
BEFore Before search
NEXT Next search

Function: Requests a peak search on the Analyze:Recall screen (2-point CDV).

Restriction: Invalid in the following cases:

- When :DISPlay:ANALysis:RECall:TYPE? is other than <"CDV2">.
- When :DISPlay:ANALysis:RECall:CDV2:MDISplay is <OFF>.
- When there are no peaks left of the marker, and <BEFore> is set.
- When there are no peaks right of the marker, and <NEXT> is set.

Note: In multiple screen mode, the marker moves normally when on.

Example use: To request a Before search:
> :DISPlay:ANALysis:RECall:CDV2:PEAK BEFore

:DISPlay:ANALysis:RECall:CDV2:ZOOM <type>

Parameter: <type> = <CHARACTER PROGRAM DATA>
IN Zoom in function
OUT Zoom out function

Function: Executes zoom function on the Analyze:Recall screen (2-point CDV).

Restriction: Invalid in the following cases:

- When :DISPlay:ANALysis:RECall:TYPE? is other than <"CDV2">.
- When :DISPlay:ANALysis:RECall:CDV2:MDISplay is <OFF>.
- When :DISPlay:ANALysis:RECall:CDV2:INTerval is <1>, and <IN> is set.
- When :DISPlay:ANALysis:RECall:CDV2:INTerval is <300>, and <OUT> is set.

Note: In multiple screen mode, the marker moves normally when on.

Example use: To execute zoom-in function:
> :DISPlay:ANALysis:RECall:CDV2:ZOOM IN

:DISPlay:ANALysis:RECall:CDV2:DATA?

Response: <time>,<cell>,<count>,<rate>
<time> = <STRING RESPONSE DATA>
Interval of cell indicated by marker (μ s)
Form12
<cell> = <STRING RESPONSE DATA>
Number of intervals (cell) of cell indicated by marker
Form12
<count> = <STRING RESPONSE DATA>
Number of cells indicated by the marker
Form1
<rate> = <STRING RESPONSE DATA>
Rate of cell indicated by marker (%)
Form3

Function: Queries the data indicated by the marker on the Analyze:Recall screen (2-point CDV).

Example use: > :DISPlay:ANALysis:RECall:CDV2:DATA?
< " 10"," 101"," 0"," 100"

:DISPlay:ANALysis:RECall:CDV2:INterval <numeric>

Parameter: <numeric> = <CHARACTER PROGRAM DATA>
1, 10, 100, 500

Function: Sets the graduation width of the Interval axis of the Analyze:Recall screen (2-point CDV).

Restriction: Invalid in the following case:
• When :DISPlay:ANALysis:RECall:TYPE? is other than <"CDV2">.

Example use: To set the graduation width to one step:
> :DISPlay:ANALysis:RECall:CDV2:INterval 1

:DISPlay:ANALysis:RECall:CDV2:INterval?

Response: <numeric> = <NR1 NUMERIC RESPONSE DATA>
Function: Queries the graduation width of the Interval axis of the Analyze:Recall screen (2-point CDV).
Example use: > :DISPlay:ANALysis:RECall:CDV2:INterval?
< 1

:DISPlay:ANALysis:RECall:CDV2:IUNit <unit>

Parameter: <unit> = <CHARACTER PROGRAM DATA>
CELL Cell
US μ s

Function: Sets the horizontal axis display interval of the Analyze:Recall screen (2-point CDV).

Restriction: Invalid in the following case:
• When :DISPlay:ANALysis:RECall:TYPE? is other than <"CDV2">.

Example use: To set the horizontal axis display interval of the 2-point CDV subscreen to Cell:
> :DISPlay:ANALysis:RECall:CDV2:IUNit CELL

SECTION 4 REMOTE CONTROL

:DISPlay:ANALysis:RECall:CDV2:IUNit?

Response: <type> = <CHARACTER RESPONSE DATA>
CELL Cell
US μ s

Function: Queries the horizontal axis display interval of the Analyze:Recall screen (2-point CDV).

Example use: > :DISPlay:ANALysis:RECall:CDV2:IUNit?
< CELL

:DISPlay:ANALysis:RECall:CDV2:MDISplay <boolean>

Parameter: <boolean> = <BOOLEAN PROGRAM DATA>
OFF or 0 Turns marker off.
ON or 1 Turns marker on.

Function: Sets whether to display the marker on the Analyze:Recall screen (2-point CDV).

Restriction: Invalid in the following case:

- When :DISPlay:ANALysis:RECall:TYPE? is other than <"CDV2">.

Example use: To set marker display to ON:
> :DISPlay:ANALysis:RECall:CDV2:MDISplay ON

:DISPlay:ANALysis:RECall:CDV2:MDISplay?

Response: <numeric> = <NR1 NUMERIC RESPONSE DATA>
0 Marker OFF
1 Marker ON

Function: Queries the setting on whether to display the marker on the Analyze:Recall screen (2-point CDV).

Example use: > :DISPlay:ANALysis:RECall:CDV2:MDISplay?
< 1

:DISPlay:ANALysis:RECall:CDV2:SCALE <numeric>

Parameter: <numeric1> = <CHARACTER PROGRAM DATA>
100 100%
10 10%
1 1%

Function: Sets the graph vertical axis scale of the Analyze:Recall screen (2-point CDV).

Restriction: Invalid in the following case:

- When :DISPlay:ANALysis:RECall:TYPE? is other than <"CDV2">.

Example use: To set the graph vertical axis scale to 10%:
> :DISPlay:ANALysis:RECall:CDV2:SCALE 10

:DISPlay:ANALysis:RECall:CDV2:SCALE?

Response: <numeric> = <NR1 NUMERIC RESPONSE DATA>

Function: Queries the graph vertical axis scale of the Analyze:Recall screen (2-point CDV).

Example use: > :DISPlay:ANALysis:RECall:CDV2:SCALE?
< 10

:DISPlay:ANALysis:RECall:CDV2:CELL <numeric>

Parameter: <numeric> = <DECIMAL NUMERIC PROGRAM DATA>
-8970 ~ 8970 (cell)

Function: Sets the graph horizontal axis center value (cell) of the Analyze:Recall screen (2-point CDV).

Restriction: Invalid in the following cases:

- When :DISPlay:ANALysis:RECall:TYPE? is other than <"CDV2">.
- When :DISPlay:ANALysis:RECall:CDV2:IUNit is <US>.
- The setting range varies depending on Interval.

Example use: To set the graph horizontal axis center value to 10 cells:
> :DISPlay:ANALysis:RECall:CDV2:CELL 10

:DISPlay:ANALysis:RECall:CDV2:CELL?

Response: <numeric> = <NR1 NUMERIC RESPONSE DATA>

Function: Queries the graph horizontal axis center value (cell) of the Analyze:Recall screen (2-point CDV).

Example use: > :DISPlay:ANALysis:RECall:CDV2:CELL?
< 10

:DISPlay:ANALysis:RECall:CDV2:US <numeric>

Parameter: <numeric> = <NON-DECIMAL NUMERIC PROGRAM DATA>
-2476093.7 ~ 2476093.7 (μ s)

Function: Sets the graph horizontal axis center value (μ s) of the Analyze:Recall screen (2-point CDV).

Restriction: Invalid in the following cases:

- When :DISPlay:ANALysis:RECall:TYPE? is other than <"CDV2">.
- When :DISPlay:ANALysis:RECall:CDV2:IUNit is <CELL>.
- The setting range varies depending on Interval.

Example use: To set the graph horizontal axis center value to 10 μ s:
> :DISPlay:ANALysis:RECall:CDV2:US 10

:DISPlay:ANALysis:RECall:CDV2:US?

Response: <numeric> = <NR2 NUMERIC RESPONSE DATA>

Function: Queries the graph horizontal axis center value (μ s) of the Analyze:Recall screen (2-point CDV).

Example use: > :DISPlay:ANALysis:RECall:CDV2:US?
< 10

:DISPlay:ANALysis:RECall:CDV2:PRINt <type>

Parameter: <type> = <CHARACTER PROGRAM DATA>
DISPlay Display

Function: Sets the printing range of the Analyze:Recall screen (2-point CDV).

Restriction: Invalid in the following case:

- When :DISPlay:ANALysis:RECall:TYPE? is other than <"CDV2">.

Example use: To print the screen range currently on display:
> :DISPlay:ANALysis:RECall:CDV2:PRINt DISPlay

SECTION 4 REMOTE CONTROL

:DISPlay:ANALysis:RECall:CDV2:PRINt?

Response: <type> = <CHARACTER RESPONSE DATA>
DISP Display

Function: Queries the printing range of the Analyze:Recall screen (2-point CDV).

Example use: > :DISPlay:ANALysis:RECall:CDV2:PRINt?
< DISP

:DISPlay:ANALysis:RECall:CDV2:TITLe?

Response: <title> = <STRING RESPONSE DATA>

Function: Queries the title of the Analyze:Recall screen (2-point CDV).

Example use: > :DISPlay:ANALysis:RECall:CDV2:TITLe?
< "2-point CDV "

:DISPlay:SETup[:NAME]

Parameter: <sdisplay> = <STRING PROGRAM DATA>

"MAPPing"	Mapping subscreen
"MEMory"	Memory subscreen
"PRINt"	Print subscreen
"SPPData"	OH preset data subscreen
"CELL"	Cell edit subscreen
"SYSTem"	System subscreen
"FDISK"	Floppy disk subscreen
"STEST"	Self test subscreen
"CUSTomer"	Customer subscreen

Function: Selects the display item on the Setup screen.

Restriction: Invalid in the following cases:

- When the ATM unit is not installed, and <"CELL"> is set.
- When :INSTrument:ATM is <OFF>, and <"CELL"> is set.
- When the measurement (set on the Test menu main screen) is being measured, and <"STEST"> is set.

Example use: To select "PRINt" as the display item on the Setup screen:
> :DISPlay:SETup:NAME "PRINt", or
> :DISPlay:SETup "PRINt"

:DISPlay:SETup[:NAME]?

Response: <sdisplay> = <STRING RESPONSE DATA>

"MAPP"	Mapping subscreen
"MEM"	Memory subscreen
"PRIN"	Print subscreen
"SPPD"	OH preset data subscreen
"CELL"	Cell edit subscreen
"SYST"	System subscreen
"FDIS"	Floppy disk subscreen
"STES"	Self test subscreen
"CUST"	Customer subscreen

Function: Queries the display item on the Setup screen.

Example use: > :DISPlay:SETup:NAME?, or
> :DISPlay:SETup?
< "PRIN"

:DISPlay:SETup:OHPReset[:NAME] <type>

Parameter: <type> = <CHARACTER PROGRAM DATA>
STM STM
E3 E3
E4 E4
DS3Plcp DS3 PLCP

Function: Sets OH preset data display switching on the Setup screen.

Restriction: Invalid in the following cases:

- When the ATM unit is not installed, and <E3>, <E4>, or <DS3Plcp> is set.
- When the 2/8/34/139/156M(CMI) unit is not installed, and <E3> or <E4> is set.
- When the 1.5/45/52M(B3ZS) unit is not installed, and <DS3Plcp> is set.
- When :INSTrument:ATM is <OFF>, and <E3>, <E4>, or <DS3Plcp> is set.

Example use: To display the STM screen:

> :DISPlay:SETup:OHPReset:NAME STM, or
> :DISPlay:SETup:OHPReset STM

:DISPlay:SETup:OHPReset[:NAME]?

Response: <type> = <CHARACTER RESPONSE DATA>
STM STM
E3 E3
E4 E4
DS3P DS3 PLCP

Function: Queries the OH preset data display switching on the Setup screen.

Example use: > :DISPlay:SETup:OHPReset:NAME?, or
> :DISPlay:SETup:OHPReset?
< STM

:DISPlay:SETup:CELL[:NAME] <type>

Parameter: <type> = <CHARACTER PROGRAM DATA>
FORGround Foreground cell
OAM OAM cell
BACKground Background cell
MEMorized Memorized cell

Function: Sets Cell edit display switching on the Setup screen.

Restriction: Invalid in the following case:

- When :INSTrument:ATM is <OFF>.

Example use: To set Cell edit display to Foreground:

> :DISPlay:SETup:CELL:NAME FORGround, or
> :DISPlay:SETup:CELL FORGround

:DISPlay:SETup:CELL[:NAME]?

Response: <type> = <CHARACTER RESPONSE DATA>
FORG Foreground cell
OAM OAM cell
BACK Background cell
MEM Memorized cell

Function: Queries the Cell edit display switching on the Setup screen.

Example use: > :DISPlay:SETup:CELL:NAME?, or
> :DISPlay:SETup:CELL?
< FORG

SECTION 4 REMOTE CONTROL

:DISPlay:SETup:CELL:MEMorized:SCRoll <scroll>

Parameter: <scroll> = <CHARACTER PROGRAM DATA>

UP	Scrolls up.
DOWN	Scrolls down.
TOP	Displays the top.
BOTTOM	Displays the bottom.

Function: Requests a scroll on Memorized of Setup screen.

Restriction: Invalid in the following case:

- When :INSTrument:ATM is <OFF>.

Example use: To scroll up:

> :DISPlay:SETup:CELL:MEMorized:SCRoll UP

:DISPlay:SETup:CELL:MEMorized:DStArt <numeric>

Parameter: <numeric> = <DECIMAL NUMERIC PROGRAM DATA>

1 ~ 2018 Step value:1

Function: Sets Display start on Memorized cell of Setup screen.

Restriction: Invalid in the following case:

- When :INSTrument:ATM is <OFF>.

Example use: To set the display start position of MEMorized cell to 1000:

> :DISPlay:SETup:CELL:MEMorized:DStArt 1000

:DISPlay:SETup:CELL:MEMorized:DStArt?

Response: <numeric> = <NR1 NUMERIC RESPONSE DATA>

Function: Queries Display start on Memorized of Setup screen.

Example use: > :DISPlay:SETup:CELL:MEMorized:DStArt?

< 1000

:DISPlay:SETup:CELL:MEMorized:PRINt <numeric1>,<numeric2>

Parameter: <numeric1>,<numeric2> = <DECIMAL NUMERIC PROGRAM DATA>

1 ~ 2016

Function: Specifies the printing range of Memorized of Setup screen.

Restriction: Invalid in the following cases:

- When :INSTrument:ATM is <OFF>.
- When <numeric1> > <numeric2>.

Example use: To set the printing range of Memorized cell to 1 ~ 20:

> :DISPlay:SETup:CELL:MEMorized:PRINt 1,20

:DISPlay:SETup:CELL:MEMorized:PRINt?

Response: <numeric1>,<numeric2> = <NR1 NUMERIC RESPONSE DATA>

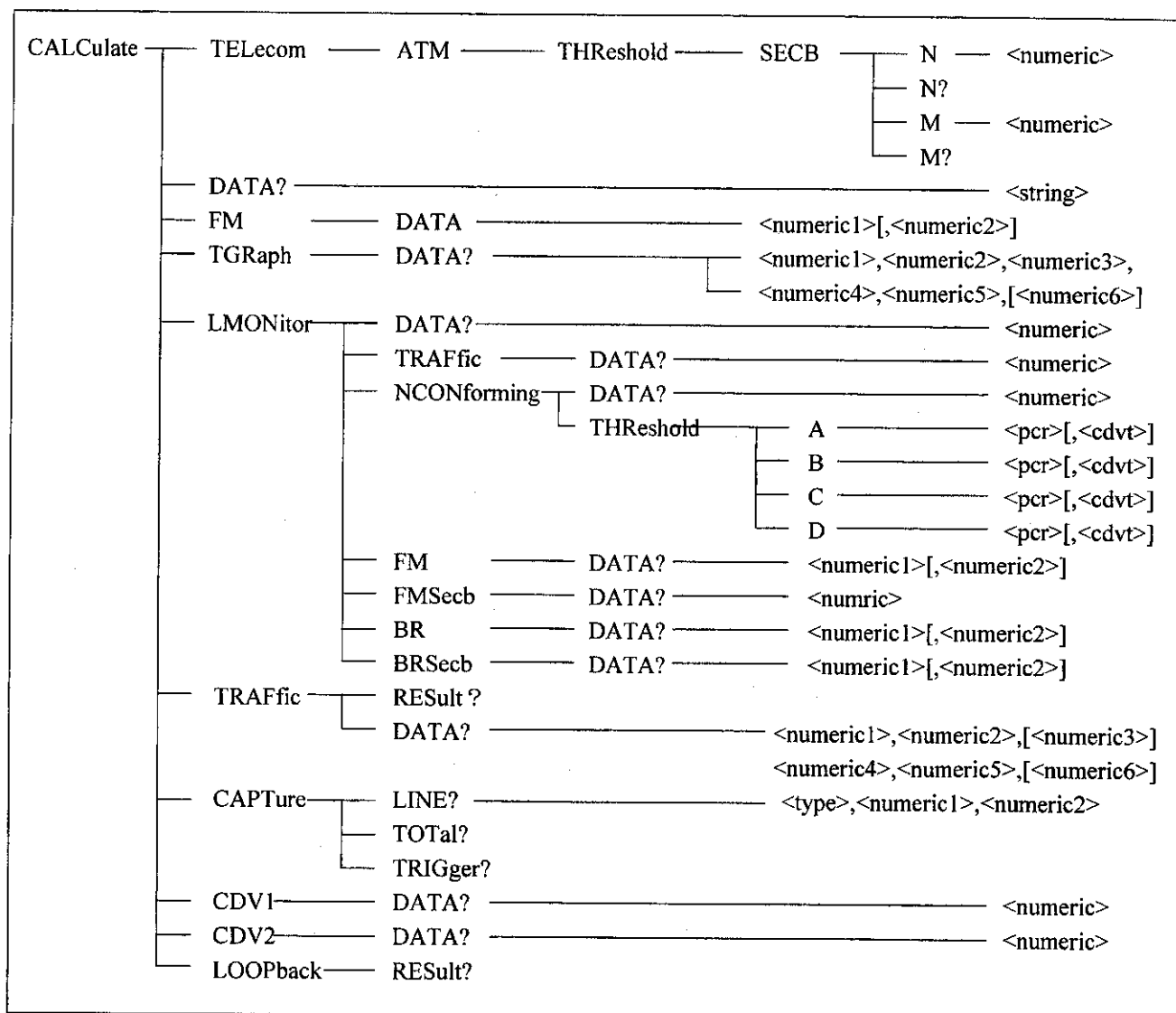
Function: Queries the printing range of Memorized cell of Setup screen.

Example use: > :DISPlay:SETup:CELL:MEMorized:PRINt?

< 1,20

(4) CALCulate subsystem

In the CALCulate subsystem, set performance measurement and display the measurement results.



SECTION 4 REMOTE CONTROL

:CALCulate:TELEcom:ATM:THReshold:SECB:N <numeric>

Parameter: <numeric> = <CHARACTER PROGRAM DATA>
128, 256, 512, 1024, 2048, 4096, 8192

Function: Sets Cell block size N.

Restriction: Invalid in the following case:
• When :INSTRument:ATM is <OFF>.

Example use: To set Cell block size N to 128:
> :CALCulate:TELEcom:ATM:THReshold:SECB:N 128

:CALCulate:TELEcom:ATM:THReshold:SECB:N?

Response: <numeric> = <NR1 NUMERIC RESPONSE DATA>

Function: Queries Cell block size N.

Example use: > :CALCulate:TELEcom:ATM:THReshold:SECB:N?
< 128

:CALCulate:TELEcom:ATM:THReshold:SECB:M <numeric>

Parameter: <numeric> = <CHARACTER PROGRAM DATA>
8, 16, 32, 64, 128, 256, 512

Function: Sets SECB threshold M.

Restriction: Invalid in the following case:
• When :INSTRument:ATM is <OFF>.

Example use: To set SECB threshold M to 8:
> :CALCulate:TELEcom:ATM:THReshold:SECB:M 8

:CALCulate:TELEcom:ATM:THReshold:SECB:M?

Response: <numeric> = <NR1 NUMERIC RESPONSE DATA>

Function: Queries SECB threshold M.

Example use: > :CALCulate:TELEcom:ATM:THReshold:SECB:M?
< 8

:CALCulate:DATA? <string>

Parameter: <string> = <STRING PROGRAM DATA>
"[CURRent:]<result>" Current measurement results
"LAST:<result>" Last measurement results
See the table below for the <result> contents.

Response: <string> = <STRING RESPONSE DATA>
See the table.

Function: Queries the measurement results corresponding to the parameter.

Example use: To query the EC current value of bit errors:
> :CALCulate:DATA? "CURRent:EC:BIT", or
> :CALCulate:DATA? "EC:BIT"
< " 892"

Table Error/Alarm Measurement

	Item	<result>	Response format
EC	PLCP REI	"EC:REI:PLCP"	Form1
	CRC-4	"EC:CRC4"	Form1
	Cell Count	"EC:CELL"	Form1
	Corrected cell	"EC:CORR"	Form1
	Discarded cell	"EC:DISC"	Form1
	Nonconf	"EC:NONCONF"	Form1
	Errored cell	"EC:ERRORED"	Form1
	Lost cell	"EC:LOST"	Form1
	Misinserted	"EC:MISINS"	Form1
	SECB	"EC:SECB"	Form1
	SAR-PDU	"EC:SARPDU"	Form1
	SNP error	"EC:SNP"	Form1
	Uncorrectable SNP error	"EC:UCSNP"	Form1
	P error	"EC:P"	Form1
	OSF error	"EC:OSF"	Form1
	SN error	"EC:SN"	Form1
	CPS-Packet Count	"EC:CPSPKT"	Form1
	HEC error	"EC:CPSHC"	Form1
	Length Indicator error	"EC:LI"	Form1
	Segment type	"EC:ST"	Form1
	Length indicator error	"EC:LI"	Form1
	Length	"EC:LENGTH"	Form1
	CPCS-PDU count	"EC:CPCS"	Form1
	MID count	"EC:MID"	Form1
	CRC10 error	"EC:CRC10"	Form1
	Discarded type PDU	"EC:DISPDU"	Form1
	Segment type error	"EC : ST"	Form1
	Abort	"EC:ABORT"	Form1
	Undelivered PDU	"EC:UDLVPDU"	Form1
	CPI error	"EC:CPI"	Form1
	Btag/ETag mismatch	"EC:BETAG"	Form1
	BASize error	"EC:BASize"	Form1
	AL error	"EC:AL"	Form1
	Frame size error	"EC:FSize"	Form1
	CRC32 error	"EC:CRC32"	Form1
	PRBS/word bit error	"EC:BIT"	Form1
	PM FM Lost Cell	"EC:FM:LOST"	Form1
	PM FM Misinserted Cell	"EC:FM:MISINS"	Form1
	PM FM BIPV	"EC:FM:BIPV"	Form1
	PM BR Lost Cell	"EC:BR:LOST"	Form1
PM BR Misinserted Cell	"EC:BR:MISINS"	Form1	
PM BR BIPV	"EC:BR:BIPV"	Form1	
PM BR SECB	"EC:BR:SECB"	Form1	

SECTION 4 REMOTE CONTROL

	Item	<result>	Response format
ER	PLCP REI	"ER:REI:PLCP"	Form2
	CRC-4	"ER:CRC4"	Form2
	Cell	"ER:CELL"	Form2
	Corrected cell	"ER:CORR"	Form2
	Discarded cell	"ER:DISC"	Form2
	Nonconf	"ER:NONCONF"	Form2
	Errored cell	"ER:ERRORED"	Form2
	Lost cell	"ER:LOST"	Form2
	Misinserted	"ER:MISINS"	Form2
	SECB	"ER:SECB"	Form2
	SAR-PDU	"ER:SARPDU"	Form2
	SNP	"ER:SNP"	Form2
	Uncorrectable SNP	"ER:UCSNP"	Form2
	P	"ER:P"	Form2
	OSF	"ER:OSF"	Form2
	SN	"ER:SN"	Form2
	HEC error	"ER:CPSHC"	Form2
	Length Indicator	"ER:LI"	Form2
	Segment type	"ER:ST"	Form2
	Length indicator	"ER:LI"	Form2
	Length	"ER:LENGTH"	Form2
	CRC10 error	"ER:CRC10"	Form2
	Discarded type PDU	"ER:DISPDU"	Form2
	Segment type	"ER : ST"	Form2
	Abort	"ER:ABORT"	Form2
	Undelivered PDU	"ER:UDLVPDU"	Form2
	CPI error	"ER:CPI"	Form2
	B/E mismatch	"ER:BETAG"	Form2
	BASize error	"ER:BA SIZE"	Form2
	AL	"ER:AL"	Form2
	Frame size	"ER:F SIZE"	Form2
	CRC32	"ER:CRC32"	Form2
	PRBS/word bit error	"ER:BIT"	Form2
	FM Lost	"ER:FM:LOST"	Form2
	FM Misinserted	"ER:FM:MISINS"	Form2
	FM BIPV	"ER:FM:BIPV"	Form2
	BR Lost	"ER:BR:LOST"	Form2
	BR Misinserted	"ER:BR:MISINS"	Form2
	BR BIPV	"ER:BR:BIPV"	Form2
	BR SECB	"ER:BR:SECB"	Form2
CID PKT	"ER:CIDPKT"	Form1	

Table Error/Alarm Measurement (Second)

Item		<result>	Response format
OOF	PLCP	"ASEConds:OOF:PLCP"	Form 1
RAI	PLCP	"ASEConds:RAI:PLCP"	Form 1
VP	AIS	"ASEConds:VP:AIS"	Form 1
	RDI	"ASEConds:VP:RDI"	Form 1
	LOC	"ASEConds:VP:LOC"	Form 1
VC	AIS	"ASEConds:VC:AIS"	Form 1
	RDI	"ASEConds:VC:RDI"	Form 1
	LOC	"ASEConds:VC:LOC"	Form 1
LCD		"ASEConds:LCD"	Form 1

Table Error/Alarm Measurement (Count)

Item		<result>	Response format
VP	AIS	"ACounts:VP:AIS"	Form 1
	RDI	"ACounts:VP:RDI"	Form 1
	LOC	"ACounts:VP:LOC"	Form 1
VC	AIS	"ACounts:VC:AIS"	Form 1 *
	RDI	"ACounts:VC:RDI"	Form 1
	LOC	"ACounts:VC:LOC"	Form 1

SECTION 4 REMOTE CONTROL

Table Performance Measurement

Item			<result>	Response format
M.2100	Bit or FAS/CRC	RxES	"M2100:ES"	Form1
		TxES	"M2100:ES2"	Form1
		RxSES	"M2100:SES"	Form1
		TxSES	"M2100:SES2"	Form1
		RxUS	"M2100:US"	Form1
		RxTEST	"M2100:TEST"	Form4
		TxTEST	"M2100:TEST2"	Form4
	Parity	RxES	"M2100:PARITY:ES"	Form1
		RxSES	"M2100:PARITY:SES"	Form1
		RxUS	"M2100:PARITY:US"	Form1
		RxTEST	"M2100:PARITY:TEST"	Form4
	Errored cell	RxES	"M2100:ES:ERRored"	Form1
		RxSES	"M2100:SES:ERRored"	Form1
		RxUS	"M2100:US:ERRored"	Form1
		RxTEST	"M2100:TEST:ERRored"	Form4
	Lost cell	RxES	"M2100:ES:LOST"	Form1
		RxSES	"M2100:SES:LOST"	Form1
		RxUS	"M2100:US:LOST"	Form1
		RxTEST	"M2100:TEST:LOST"	Form4
	MisINS cell	RxES	"M2100:ES:MISINS"	Form1
RxSES		"M2100:SES:MISINS"	Form1	
RxUS		"M2100:US:MISINS"	Form1	
RxTEST		"M2100:TEST:MISINS"	Form4	

Table Performance Measurement

	Item		<result>	Response format
G.826	MS-REI	ES	"G826:ES:REI:MS"	Form1
		SES	"G826:SES:REI:MS"	Form1
		BBE	"G826:BBE:REI:MS"	Form1
		ESR	"G826:ESR:REI:MS"	Form2
		SESR	"G826:SESR:REI:MS"	Form2
		BBER	"G826:BBER:REI:MS"	Form2
		SDP	"G826:SDP:REI:MS"	Form1
		US	"G826:US:REI:MS"	Form1
		HP-REI	ES	"G826:ES:REI:HP"
		SES	"G826:SES:REI:HP"	Form1
		BBE	"G826:BBE:REI:HP"	Form1
		ESR	"G826:ESR:REI:HP"	Form2
		SESR	"G826:SESR:REI:HP"	Form2
		BBER	"G826:BBER:REI:HP"	Form2
		SDP	"G826:SDP:REI:HP"	Form1
		US	"G826:US:REI:HP"	Form1
	LP-REI	ES	"G826:ES:REI:LP"	Form1
		SES	"G826:SES:REI:LP"	Form1
		BBE	"G826:BBE:REI:LP"	Form1
		ESR	"G826:ESR:REI:LP"	Form2
		SESR	"G826:SESR:REI:LP"	Form2
		BBER	"G826:BBER:REI:LP"	Form2
		SDP	"G826:SDP:REI:LP"	Form1
		US	"G826:US:REI:LP"	Form1
	Parity	ES	"G826:ES:PARITY"	Form1
		SES	"G826:SES:PARITY"	Form1
		BBE	"G826:BBE:PARITY"	Form1
		ESR	"G826:ESR:PARITY"	Form2
		SESR	"G826:SESR:PARITY"	Form2
		BBER	"G826:BBER:PARITY"	Form2
		SDP	"G826:SDP:PARITY"	Form1
		US	"G826:US:PARITY"	Form1
	Errored cell	ES	"G826:ES:ERRORED"	Form1
		SES	"G826:SES:ERRORED"	Form1
		BBE	"G826:BBE:ERRORED"	Form1
		ESR	"G826:ESR:ERRORED"	Form2
		SESR	"G826:SESR:ERRORED"	Form2
		BBER	"G826:BBER:ERRORED"	Form2
		SDP	"G826:SDP:ERRORED"	Form1
		US	"G826:US:ERRORED"	Form1
	Lost cell	ES	"G826:ES:LOST"	Form1
		SES	"G826:SES:LOST"	Form1
		BBE	"G826:BBE:LOST"	Form1
		ESR	"G826:ESR:LOST"	Form2
		SESR	"G826:SESR:LOST"	Form2
		BBER	"G826:BBER:LOST"	Form2
		SDP	"G826:SDP:LOST"	Form1
		US	"G826:US:LOST"	Form1
	MisINS cell	ES	"G826:ES:MISINS"	Form1
		SES	"G826:SES:MISINS"	Form1
		BBE	"G826:BBE:MISINS"	Form1
		ESR	"G826:ESR:MISINS"	Form2
		SESR	"G826:SESR:MISINS"	Form2
		BBER	"G826:BBER:MISINS"	Form2
		SDP	"G826:SDP:MISINS"	Form1
		US	"G826:US:MISINS"	Form1

SECTION 4 REMOTE CONTROL

Table 1-point CDV Measurement

Item	<result>	Response format
Average	"CDV1:AVERAge"	Form12
Maximum	"CDV1:MAXimum"	Form12
Minimum	"CDV1:MINimum"	Form12

Table 2-point CDV Measurement

Item	<result>	Response format
Average	"CDV2:AVERAge"	Form12
Maximum	"CDV2:MAXimum"	Form12
Minimum	"CDV2:MINimum"	Form12
Offset	"CDV2:OFFSet"	Form12

:CALCulate:TGRaph:DATA? <numeric1>,<numeric2>,<numeric3>,<numeric4>,<numeric5>
 [,<numeric6>]

Parameter: <DECIMAL NUMERIC PROGRAM DATA>

Date and time of the read data

<numeric1> = 1994 ~ 2093 (year)

<numeric2> = 1 ~ 12 (month)

<numeric3> = 1 ~ 31 (day)

<numeric4> = 0 ~ 23 (hour)

<numeric5> = 0 ~ 59 (minute)

<numeric6> = 0 ~ 59 (second)

Response: <time>,<alarm1s>,<alarm1c>,<alarm2s>,<alarm2c>,<alarm3s>,<alarm3c>,
 <alarm4s>,<alarm4c>,<alarm5s>,<alarm5c>,<error1>,<error2>

<time> = <year>,<month>,<day>,<hour>,<minute>

Date and time of the read data

<year> = <NR1 NUMERIC RESPONSE DATA>

<month> = <NR1 NUMERIC RESPONSE DATA>

<day> = <NR1 NUMERIC RESPONSE DATA>

<hour> = <NR1 NUMERIC RESPONSE DATA>

<minute> = <NR1 NUMERIC RESPONSE DATA>

<Second> = <NR1 NUMERIC RESPONSE DATA>

<alarm1s> = <STRING RESPONSE DATA>

Alarm 1 occurrence time (sec)

(Form1)

<alarm2s> = <STRING RESPONSE DATA>

Alarm 2 occurrence time (sec)

(Form1)

<alarm3s> = <STRING RESPONSE DATA>

Alarm 3 occurrence time (sec)

(Form1)

<alarm4s> = <STRING RESPONSE DATA>

Alarm 4 occurrence time (sec)

(Form1)

<alarm5s> = <STRING RESPONSE DATA>

Alarm 5 occurrence time (sec)

(Form1)

<alarm1c> = <STRING RESPONSE DATA>

Alarm 1 occurrence count

(Form1)

<alarm2c> = <STRING RESPONSE DATA>

Alarm 2 occurrence count

(Form1)

<alarm3c> = <STRING RESPONSE DATA>

Alarm 3 occurrence count

(Form1)

<alarm4c> = <STRING RESPONSE DATA>

Alarm 4 occurrence count

(Form1)

<alarm5c> = <STRING RESPONSE DATA>

Alarm 5 occurrence count

(Form1)

<error1> = <STRING RESPONSE DATA>

Error count value

(Form1)

<error2> = <STRING RESPONSE DATA>

Error rate value

(Form2)

Function: Queries the Error/Alarm analysis results.

Example use: To read analysis data at 01:20:30 on October 23, 1994:

> :CALCulate:TGRaph:DATA? 1994,10,23,1,20,30

< 1994,10,23,1,30," 0"," 0"," 14"," 4",

" 4"," 4"," 1.2E+06"," 100"," 0"," 0",

" 111"," 1.3E-06"

SECTION 4 REMOTE CONTROL

:CALCulate:LMONitor:TRAFfic:DATA? <numeric>

Parameter: <numeric> = <DECIMAL NUMERIC PROGRAM DATA>
1 ~ 1023 No.

Response: <vpi>,<vci>,<cps>,<bps>,<percent>,<type>,<alarm>
 <vpi> = <STRING RESPONSE DATA>
 VPI value
 (Form1)
 <vci> = <STRING RESPONSE DATA>
 VCI value
 (Form1)
 <cps> = <STRING RESPONSE DATA>
 Cell/s value
 (Form1)
 <bps> = <STRING RESPONSE DATA>
 kb/s value
 (Form1)
 <percent> = <STRING RESPONSE DATA>
 % value
 (Form3)
 <type> = <STRING RESPONSE DATA>
 Cell types
 "ATM"
 "AAL1"
 "AAL2"
 "AAL3/4"
 "AAL5"
 <alarm> = <STRING RESPONSE DATA>
 Alarms
 "VP_AIS"
 "VP_RDI"
 "VP_LOC"
 "VC_AIS"
 "VC_RDI"
 "VC_LOC"

Note: When no data exists or when :DISPlay:ANALysis:CDV1:TYPE is <INDividual>, the following is output for data out of the range currently displayed on a full screen:

< "-----","-----","-----","-----","-----","-----","-----"

Function: Queries the Live monitor results.

Example use: To read the No.100 data:

```
> :CALCulate:LMONitor:TRAFfic:DATA? 100
< " 300"," 100"," 10"," 10," 000.0","AAL1","VC_AIS"
```

:CALCulate:LMONitor:NCONforming:DATA? <numeric>

Parameter: <numeric> = <DECIMAL NUMERIC PROGRAM DATA>
1 ~ 1023 No.

Response: <vpi>,<vci>,<count>,<cps>,<alarm>
<vpi> = <STRING RESPONSE DATA>
VPI value
(Form1)
<vci> = <STRING RESPONSE DATA>
VCI value
(Form1)
<count> = <STRING RESPONSE DATA>
count value
(Form1)
<cps> = <STRING RESPONSE DATA>
Cell/s value
(Form1)
<type> = <STRING RESPONSE DATA>
Cell types
"ATM"
"AAL1"
"AAL2"
"AAL3/4"
"AAL5"
<alarm> = <STRING RESPONSE DATA>
Alarms
"VP_AIS"
"VP_RDI"
"VP_LOC"
"VC_AIS"
"VC_RDI"
"VC_LOC"

Note: When no data exists or when :DISPlay:ANALysis:CDV1:TYPE is <INDividual>, the following is output for data out of the range currently displayed on a full screen:
< "-----", "-----", "-----", "-----", "-----", "-----"

Function: Queries the Live monitor results.

Example use: To read the No.100 data:

> :CALCulate:LMONitor:NCONforming:DATA? 100

< " 300", " 100", " 1000", " 3000", "AAL1", "VC_AIS"

SECTION 4 REMOTE CONTROL

:CALCulate:LMONitor:NCONforming:THReshold <numeric>,<character>
Parameter: <numeric> = <DECIMAL NUMERIC PROGRAM DATA>
 1 ~ 1023
 <character> = <CHARACTER RESPONSE DATA>
 A,B,C,D
Function: Sets the threshold value position.
Example use: CALCulate:LMONitor:NCONforming:THReshold 100,A

:CALCulate:LMONitor:NCONforming:THReshold ?
Response: <numeric> = <STRING RESPONSE DATA>
 <character>= <STRING RESPONSE DATA>
Function: Queries the threshold value position.
Example use: >:CALCulate:LMONitor:NCONforming:THReshold ?
 <100,A

:CALCulate:LMONitor:NCONforming:THReshold:A <numeric>,<character>
Parameter: <pcr> = <DECIMAL NUMERIC PROGRAM DATA>
 0 ~ 999999 (kp/s)
 <cdvt>= <DECIMAL NUMERIC PROGRAM DATA>
 0 ~ 999 (cell)
Function: Sets the threshold value of A.
Example use: To set the threshold value of A:
 >:CALCulate:LMONitor:NCONforming:THReshold:A 100,200

:CALCulate:LMONitor:NCONforming:THReshold:A ?
Response: <pcr> = <DECIMAL NUMERIC RESPONSE DATA>
 <cdvp> = <DECIMAL NUMERIC RESPONSE DATA>
Function: Queries the threshold value of A.
Example use: >:CALCulate:LMONitor:NCONforming:THReshold:A ?
 <:100,200

:CALCulate:LMONitor:NCONforming:THReshold:B <numeric>,<character>
Parameter: <pcr> = <DECIMAL NUMERIC PROGRAM DATA>
 0 ~ 999999 (kp/s)
 <cdvt>= <DECIMAL NUMERIC PROGRAM DATA>
 0 ~ 999 (cell)
Function: Sets the threshold value of B.
Example use: To set the threshold value of B:
 >:CALCulate:LMONitor:NCONforming:THReshold:B 100,200

:CALCulate:LMONitor:NCONforming:THReshold:B ?
Response: <pcr> = <DECIMAL NUMERIC RESPONSE DATA>
 <cdvp> = <DECIMAL NUMERIC RESPONSE DATA>
Function: Queries the threshold value of B.
Example use: >:CALCulate:LMONitor:NCONforming:THReshold:B ?
 <:100,200

:CALCulate:LMONitor:NCONforming:THReshold:C <numeric>,<character>
Parameter: <pcr> =<DECIMAL NUMERIC PROGRAM DATA>
 0 ~ 999999 (kp/s)
 <cdvt>=<DECIMAL NUMERIC PROGRAM DATA>
 0 ~ 999 (cell)
Function: Sets the threshold value of C.
Example use: To set the threshold value of C:
 >:CALCulate:LMONitor:NCONforming:THReshold:C 100,200

:CALCulate:LMONitor:NCONforming:THReshold:C ?
Response: <pcr> = <DECIMAL NUMERIC RESPONSE DATA>
 <cdvp> = <DECIMAL NUMERIC RESPONSE DATA>
Function: Queries the threshold value of C.
Example use: >:CALCulate:LMONitor:NCONforming:THReshold:C ?
 <:100,200

:CALCulate:LMONitor:NCONforming:THReshold:D <numeric>,<character>
Parameter: <pcr> =<DECIMAL NUMERIC PROGRAM DATA>
 0 ~ 999999 (kp/s)
 <cdvt>=<DECIMAL NUMERIC PROGRAM DATA>
 0 ~ 999 (cell)
Function: Sets the threshold value of D.
Example use: To set the threshold value of D:
 >:CALCulate:LMONitor:NCONforming:THReshold:D 100,200

:CALCulate:LMONitor:NCONforming:THReshold:D ?
Response: <pcr> = <DECIMAL NUMERIC RESPONSE DATA>
 <cdvp> = <DECIMAL NUMERIC RESPONSE DATA>
Function: Queries the threshold value of D.
Example use: >:CALCulate:LMONitor:NCONforming:THReshold:D ?
 <:100,200

SECTION 4 REMOTE CONTROL

:CALCulate:LMONitor:NCONforming:FM:DATA? <numeric1>[,<numeric2>]

Parameter: <numeric1> = <DECIMAL NUMERIC PROGRAM DATA>
1 to 1023 No.

<numeric2> = <DECIMAL NUMERIC PROGRAM DATA>
1 to ? (Number of successive output data)

Response: <vpi>,<vci>,<count>,<mis>,<los>,<cps>,<alarm>
 <vpi> = <STRING RESPONSE DATA>
 VPI value
 (Form1)
 <vci> = <STRING RESPONSE DATA>
 VCI value
 (Form1)
 <count> = <STRING RESPONSE DATA>
 FM (Misinserted + Lost) cell count value
 (Form1)
 <mis> = <STRING RESPONSE DATA>
 FM Misinserted cell count value
 (Form1)
 <los> = <STRING RESPONSE DATA>
 FM Lost cell count value
 (Form1)
 <cps> = <STRING RESPONSE DATA>
 cell/s value
 (Form1)
 <alarm> = <STRING RESPONSE DATA>
 Alarm
 "VP_AIS"
 "VP_RDI"
 "VP_LOC"
 "VC_AIS"
 "VC_RDI"
 "VC_LOC"

Note: When no data exists or when:DISPlay:ANALysis:CDV1:TYPE is <INDividual>, the following is output for data out of the range currently displayed on a full screen:

< "-----", "-----", "-----", "-----", "-----", "-----", "-----"

Function: Queries the Live monitor(Traffic) result s .

Example use: To Read the No. 100 data :

> :CALCulate:LMONitor:TRAFfic:FM:DATA? 100

< " 300", " 100", " 10000", " 183", " 111", " 121", "VC_AIS"

:CALCulate:LMONitor:FMSeCb:DATA? <numeric>

Parameter: <numeric> = <DECIMAL NUMERIC PROGRAM DATA>
1 to 1023 No.

Response: <vpi>,<vci>,<count>,<mis-count>,<los-count>,<cps>,<alarm>

<vpi> = <STRING RESPONSE DATA>

VPI value

(Form1)

<vci> = <STRING RESPONSE DATA>

VCI value

(Form1)

<count> = <STRING RESPONSE DATA>

Count(Mis+Los) value

(Form1)

<mis-count> = <STRING RESPONSE DATA>

Count(Misinserted) value

(Form1)

<los-count> = <STRING RESPONSE DATA>

Count (Lost) value

(Form1)

<cps> = <STRING RESPONSE DATA>

Cell/s value

(Form1)

<alarm> = <STRING RESPONSE DATA>

Alarms

"VP_AIS"

"VP_RDI"

"VP_LOC"

"VC_AIS"

"VC_RDI"

"VC_LOC"

Note: When no data exists or when :DISPlay:ANALysis:CDV1:TYPE is <INDividual>, the following is output for data out of the range currently displayed on a full screen:

< "-----","-----","-----","-----","-----","-----">

Function: Queries the Live monitor results.

Example use: To read the No.100 data:

> :CALCulate:LMONitor:FMSeCb:DATA? 100

< " 300"," 100"," 1000"," 3000","AAL1","VC_AIS"

SECTION 4 REMOTE CONTROL

:CALCulate:TRAFfic:RESult?

Response: <count>,<cps>,<Maximum>,<Minimum>
<count> = <STRING RESPONSE DATA>
Number of captured cells (Total)
(Form1)
<cps> = <STRING RESPONSE DATA>
Average number of captured cells (Total)
(Form1)
<Maximum> = <STRING RESPONSE DATA>
Maximum number of captured cells
(Form1)
<Minimum> = <STRING RESPONSE DATA>
Minimum number of captured cells
(Form1)

Function: Queries the measurement results.

Example use: To query the Traffic monitor results:

```
> :CALCulate:TRAFfic:RESult?  
< " 15892"," 1200"," 10000"," 1"
```

:CALCulate:LMONitor:NCONforming:BR:DATA? <numeric1>[,<numeric2>]

Parameter: <numeric1> = <DECIMAL NUMERIC PROGRAM DATA>
1 to 1023 No.

<numeric2> = <DECIMAL NUMERIC PROGRAM DATA>
1 to ? (Number of successive output data)

Response: <vpi>,<vci>,<count>,<mis>,<los>,<cps>,<alarm>
<vpi> = <STRING RESPONSE DATA>
VPI value
(Form1)
<vci> = <STRING RESPONSE DATA>
VCI value
(Form1)
<count> = <STRING RESPONSE DATA>
BR (Misinserted + Lost) cell count value
(Form1)
<mis> = <STRING RESPONSE DATA>
BR Misinserted cell count value
(Form1)
<los> = <STRING RESPONSE DATA>
BR Lost cell count value
(Form1)
<cps> = <STRING RESPONSE DATA>
cell/s value
(Form1)
<alarm> = <STRING RESPONSE DATA>
Alarm
"VP_AIS"
"VP_RDI"
"VP_LOC"
"VC_AIS"
"VC_RDI"
"VC_LOC"

Note: When no data exists or when:DISPlay:ANALysis:CDV1:TYPE is <INDividual>, the following is output for data out of the range currently displayed on a full screen:

< "-----","-----","-----","-----","-----","-----","-----"

Function: To read the Live monitor(Traffic) results.

Example use: To read the No.100 data:

> :CALCulate:LMONitor:TRAFfic:BR:DATA? 100

< " 300"," 100"," 10000"," 183"," 111"," 551","VC_AIS"

SECTION 4 REMOTE CONTROL

:CALCulate:LMONitor:BRSecb:DATA? <numeric1>[,<numeric2>]

Parameter: <numeric1> = <DECIMAL NUMERIC PROGRAM DATA>
1 to 1023 No.
<numeric2> = <DECIMAL NUMERIC PROGRAM DATA>
1 to ? (Number of successive output data)

Response: <vpi>,<vci>,<count>,<cps>,<alarm>
<vpi> = <STRING RESPONSE DATA>
VPI value
(Form1)
<vci> = <STRING RESPONSE DATA>
VCI value
(Form1)
<count>= <STRING RESPONSE DATA>
BR SECB count value
(Form1)
<cps> = <STRING RESPONSE DATA>
cell/s value
(Form1)
<alarm>= <STRING RESPONSE DATA>
Ararm
"VP_AIS"
"VP_RDI"
"VP_LOC"
"VC_AIS"
"VC_RDI"
"VC_LOC"

Note: when no data exists or when :DISPlay:ANALysis:CDV1:TYPE is <INDividual>, the following is output for data out of the range currently displayed in full screen:

<"-----","-----","-----","-----","-----">

Function: Querues the Live monitor(Traffic) results.

Example use: To read the No.100 data:

> :CALCulate:LMONitor:BRSecb:DATA? 100

<" 300"," 100"," 10000"," 183","VC_AIS"

:CALCulate:TRAFfic:DATA? <numeric1>,<numeric2>,<numeric3>,<numeric4>,<numeric5>,<numeric6>

Parameter: <DECIMAL NUMERIC PROGRAM DATA>

Date and time of the read data

<numeric1> = 1994 ~ 2093 (year)

<numeric2> = 1 ~ 12 (month)

<numeric3> = 1 ~ 31 (day)

<numeric4> = 0 ~ 23 (hour)

<numeric5> = 0 ~ 59 (minute)

<numeric6> = 0 ~ 59 (second)

Response: <time>,<meas>,<max>,<min>

<time> = <year>,<month>,<day>,<hour>,<minute>,<second>

<year> = <NR1 NUMERIC RESPONSE DATA>

0,1994 ~ 2093 Year

<month> = <NR1 NUMERIC RESPONSE DATA>

0,1 ~ 12 Month

<day> = <NR1 NUMERIC RESPONSE DATA>

0,1 ~ 31 Day

<hour> = <NR1 NUMERIC RESPONSE DATA>

0 ~ 23 Hour

<minute> = <NR1 NUMERIC RESPONSE DATA>

0 ~ 59 Minute

<second> = <NR1 NUMERIC RESPONSE DATA>

0 ~ 59 Second

<meas> = <STRING RESPONSE DATA>

Average number of captured cells
(Form1)

<max> = <STRING RESPONSE DATA>

Maximum number of captured cells
(Form1)

<min> = <STRING RESPONSE DATA>

Minimum number of captured cells
(Form1)

Function: Queries the Traffic monitor analysis results.

Example use: To read the analysis data at 01:20:30 on October 23rd, 1995:

> :CALCulate:TRAFfic:DATA? 1995,10,23,1,20,30

< 1995,10,23,1,20,30," 80"," 100"," 0"

SECTION 4 REMOTE CONTROL

:CALCulate:CAPTure:LINE? <type>,<numeric1>,<numeric2>

Parameter: <type> = <CHARACTER PROGRAM DATA>

HEX HEX

AScii Ascii

TRANslate Translate

<numeric1>,<numeric2> = <DECIMAL NUMERIC PROGRAM DATA>

1 ~ 2016

Response: <string> = <STRING RESPONSE DATA>

Hexadecimal character strings delimited on byte basis are returned for the specified number as the capture results.

Function: Queries the Capture results.

Example use: To query the Capture results:

> :CALCulate:CAPTure:LINE? HEX,1,2

< "F,256,65535,0,0,00,00,00,00,00,00,00,00,00, ... ,00","F,256,65535,0,0,,11,11,11,11,11,11,11,11, ... ,11"

:CALCulate:CAPTure:TOTal?

Response: <numeric> = <NR1 NUMERIC RESPONSE DATA>

0 ~ 2016

Note: If no capture has occurred, 0 is output.

Function: Queries the number of captured lines.

Example use: > :CALCulate:CAPTure:TOTal?

< 2016

:CALCulate:CAPTure:TRIGger?

Response: <numeric> = <NR1 NUMERIC RESPONSE DATA>

0 ~ 2016

Note: If no capture has occurred or no trigger exists, 0 is output.

Function: Queries the number of captured trigger lines.

Example use: > :CALCulate:CAPTure:TRIGger?

< 2016

:CALCulate:CDV1:DATA? <numeric>

Parameter: <numeric> = <DECIMAL NUMERIC PROGRAM DATA>
-9000 ~ 9000

Response: <time>,<cell>,<count>,<rate>
<time> = <STRING RESPONSE DATA>
Cell interval (μ s)
(Form12)
<cell> = <STRING RESPONSE DATA>
Number of cell intervals (cell)
(Form12)
<count> = <STRING RESPONSE DATA>
Number of cells
(Form1)
<rate> = <STRING RESPONSE DATA>
Cell rate (%)
(Form3)

Function: Queries the 1-point CDV analysis results.

Example use: To read the 10th cell analysis data by 1-point CDV:
> :CALCulate:CDV1:DATA? 10
< " 7"," 10"," 100"," 50.0000"

:CALCulate:CDV2:DATA? <numeric>

Parameter: <numeric> = <DECIMAL NUMERIC PROGRAM DATA>
-9000 ~ 9000

Response: <time>,<cell>,<count>,<rate>
<time> = <STRING RESPONSE DATA>
Cell interval (μ s)
(Form12)
<cell> = <STRING RESPONSE DATA>
Number of cell intervals (cell)
(Form12)
<count> = <STRING RESPONSE DATA>
Number of cells
(Form1)
<rate> = <STRING RESPONSE DATA>
Cell rate (%)
(Form3)

Function: Queries the 2-point CDV analysis results.

Example use: To read the 10th cell analysis data by 2-point CDV:
> :CALCulate:CDV2:DATA? 10
< " 7"," 10"," 100"," 50.0000"

:CALCulate:LOOPback:RESult?

Response: <loopback> = <STRING RESPONSE DATA>
Form4

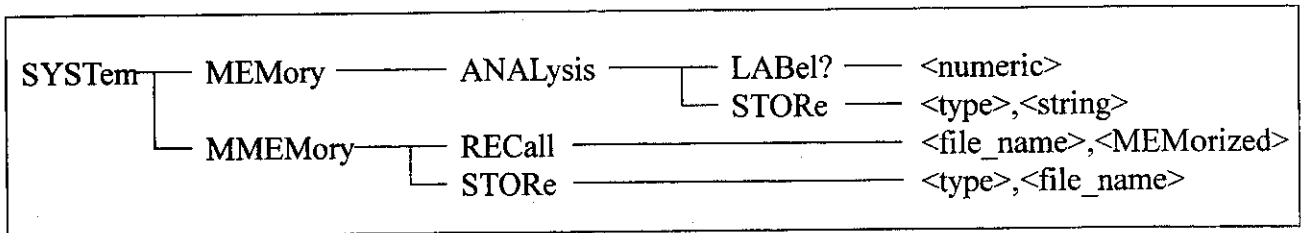
Function: Queries the Loopback measurement results.

Example use: > :CALCulate:LOOPback:RESult?
< " Acceptable"

SECTION 4 REMOTE CONTROL

(5) SYSTem subsystem

In the SYSTem subsystem, set the printer, memory, buzzer, etc.



:SYSTem:MEMory:ANALysis:LABel? <numeric>

Parameter: <numeric> = <DECIMAL PROGRAM DATA>
1~15 Memory No.1~No.15

Response: <title>,<gtype>,<stime>,<use>
<title> = <STRING RESPONSE DATA>
Memory name (fixed to eight characters)
<gtype> = <CHARACTER RESPONSE DATA>
Graph type
<stime> = <STRING RESPONSE DATA>
Measurement start time (fixed to 19 characters)
<use> = <STRING RESPONSE DATA>
Memory amount used (percent)
Form3

Function: Queries the Analyze memory registration condition.

Example use: To query the registration condition of memory No.1:
> :SYSTem:MEMory:ANALysis:LABel? 1
< "JITTER ",JTOL,,"1994.12.25 18:40:30", " 30.0000"

:SYSTem:MEMory:ANALysis:STORe <type>,<title>

Parameter: <type> = <CHARACTER PROGRAM DATA>
<title> = <STRING PROGRAM DATA>
Memory name (up to eight characters)

Function: Writes data in the analyze memory.

Restriction: Invalid in the following case:
• When no analysis data exists.

Example use: To write analysis data (Error/Alarm) under the name of "DEMO1":
< :SYSTem:MEMory:ANALysis:STORe EALarm,"DEMO1"

:SYSTem:MMEMory:RECall <file_name>[,<memorized>]

Parameter: <file_name> = <STRING PROGRAM DATA>
"File name" (Case-independence, including the extension)
The character string must consist of 1 to 12 characters. "" is not allowed.
<memorized> = <CHARACTER PROGRAM DATA>
CAPTure Recalls the file to the
Analyze:Recall screen.
MEMorized Recalls the file to Cell edit screen
(Memorized cell).

Note: <memorized> is valid only when the file recalled is Cell capture data.

Function: Reads a file from the current directory of the floppy disk.

Restriction: Invalid in the following cases:
• When the file is not Cell capture data, and the <memorized> parameter is specified.
• When the file is Cell capture data, and the <memorized> parameter is not specified.

Example use: To read data into the file setting condition called "DEMO1.CND":
> :SYSTem:MMEMory:RECall "DEMO1.CND"

SECTION 4 REMOTE CONTROL

:SYSTEM:MMEMory:STORe <type>,<file_name>

Parameter: <type> = <STRING PROGRAM DATA>

"CONDition"	Setting condition data
"MEMorized:MEMorized"	Memorized cell data
"MEMorized:MTEXT"	Memorized cell data (text format)
"PAYLoad:PAYLoad"	Payload(65535byte) data
"PAYLoad:PTEXT"	Payload(65535byte) data (text format)
"TSEarch:RTEXT"	Trouble search measurement results on the Result screen (text format)
"EALarm:RTEXT"	Error/Alarm measurement results on the Result screen (text format)
"DELay:RTEXT"	DELay measurement results on the Result screen (text format)
"EALarm:EALarm"	Analysis data on the Error/Alarm screen
"EALarm:EAText"	Analysis data on the Error/Alarm screen (text format)
"LMONitor:LMONitor"	Analysis data on the Live monitor screen
"LMONitor:CTEXT"	Analysis data on the Live monitor screen (text format)
"CAPTure:CAPTure"	Analysis data on the Cell capture screen
"CAPTure:CTEXT"	Analysis data on the Cell capture screen (text format)
"CDV1:CDV1"	Analysis data on the 1-point CDV screen
"CDV1:CTEXT"	Analysis data on the 1-point CDV screen (text format)
"CDV2:CDV2"	Analysis data on the 2-point CDV screen
"CDV2:CTEXT"	Analysis data on the 2-point CDV screen (text format)
"FRAMe64:FRAMe64"	Analysis data on the SOH 64frame screen
"FRAMe64:FTEXT"	Analysis data on the SOH 64frame screen (text format)
"RECall:RECall"	Analysis data on the Recall screen
"RECall:RTEXT"	Analysis data on the Recall screen (text format)
<file_name> = <STRING PROGRAM DATA>	
"File name" (Case-independence, including the extension)	
The character string must consist of up to 12 characters. "" is not allowed.	

Function: Writes a file in the current directory of the floppy disk.

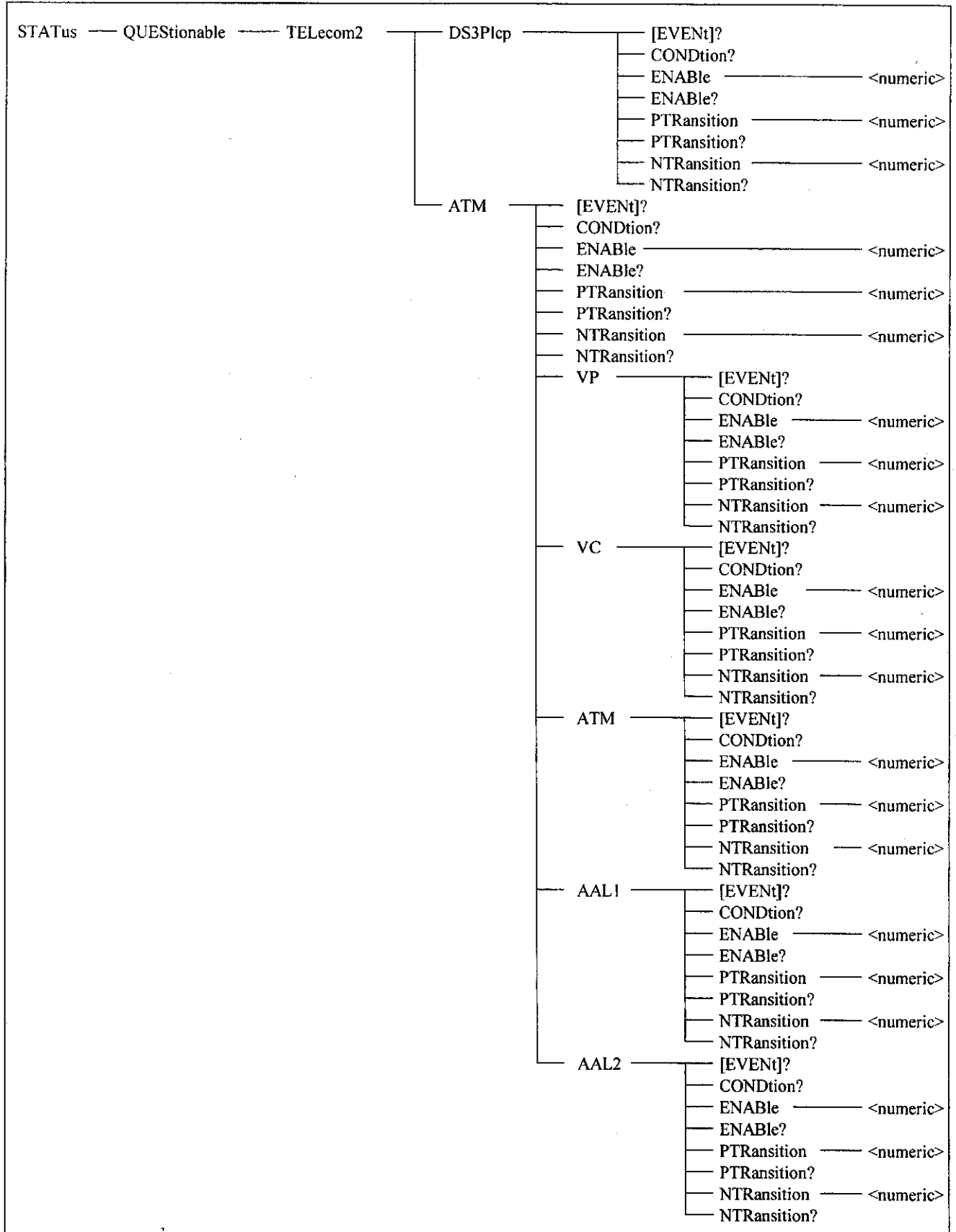
Restriction: Invalid in the following cases:

- When there is no data to be stored, and other than <"CONDition">,<"MEMorized:MEMorized">,<"MEMorized:MTEXT">,<"PAYLoad:PAYLoad">, and <"PAYLoad:PTEXT"> is set.
- When :SENSe:ATM:MANual:LMONitor:TYPE is <INDividual>, and <"LMONiter:LMONitor"> or <"LMONitor:CTEXT"> is set.

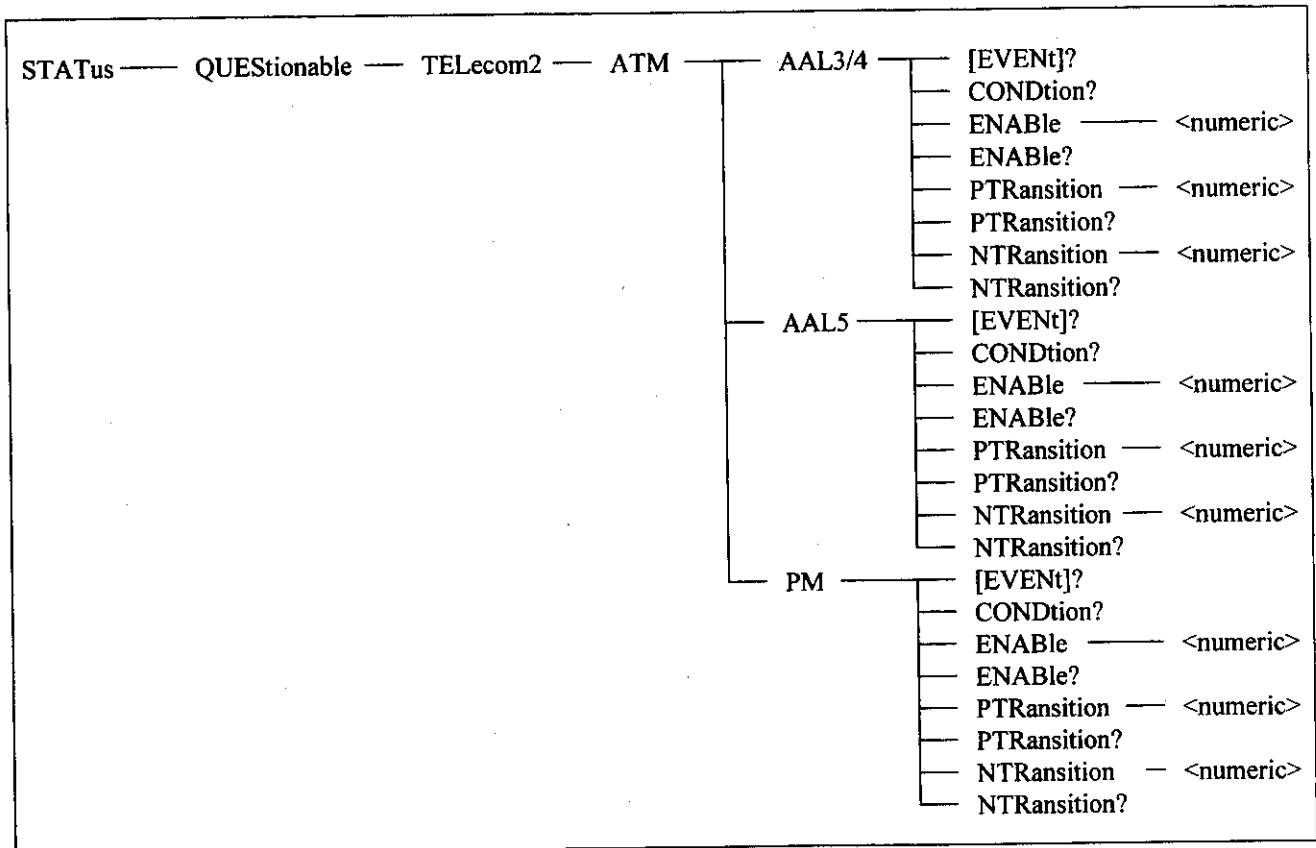
Example use: To write the current setting condition in the file named as "DEMO1.CND":
> :SYSTEM:MMEMory:STORe "CONDition","DEMO1.CND"

(6) STATUS subsystem

In the STATUS subsystem, status registers are controlled.(set and displayed)



SECTION 4 REMOTE CONTROL



< TELecom2 Status Register >

:STATus:QUEStionable:TELEcom2:DS3Plcp[:EVENT]?

Response: <numeric> = <NR1 NUMERIC RESPONSE DATA>
0 ~ 32767 Sum of event register bits (decimal)

Function: Queries the contents of the event register of the DS3 PLCP status register.

Example use: To query the event register of the DS3 PLCP status register:
> :STATus:QUEStionable:TELEcom2:DS3Plcp[:EVENT]?
< 32767

:STATus:QUEStionable:TELEcom2:DS3Plcp:CONDition?

Response: <numeric> = <NR1 NUMERIC RESPONSE DATA>
0 ~ 32767 Sum of condition register bits (decimal)

Function: Queries the contents of the condition register of the DS3 PLCP status register.

Example use: To query the condition register of the DS3 PLCP status register:
> :STATus:QUEStionable:TELEcom2:DS3Plcp:CONDition?
< 32767

:STATus:QUEStionable:TELEcom2:DS3Plcp:ENABLE <numeric>

Parameter: <numeric> = <DECIMAL NUMERIC PROGRAM DATA>
0 ~ 32767 Sum of event enable register bits (decimal)

Function: Sets the mask value of the event enable register of the DS3 PLCP status register.

Example use: To set 32767 in the event enable register of the DS3 PLCP status register:
> :STATus:QUEStionable:TELEcom2:DS3Plcp:ENABLE 32767

:STATus:QUEStionable:TELEcom2:DS3Plcp:ENABLE?

Response: <numeric> = <NR1 NUMERIC RESPONSE DATA>
0 ~ 32767 Sum of event enable register bits (decimal)

Function: Queries the contents of the event enable register of the DS3 PLCP status register.

Example use: To query the event enable register of the DS3 PLCP status register:
> :STATus:QUEStionable:TELEcom2:DS3Plcp:ENABLE?
< 32767

:STATus:QUEStionable:TELEcom2:DS3Plcp:PTRansition <numeric>

Parameter: <numeric> = <DECIMAL NUMERIC PROGRAM DATA>
0 ~ 32767 Sum of transition filter bits (decimal)

Function: Sets the transition filter (positive-direction transition) of the DS3 PLCP status register.

Example use: To set 32767 in the transition filter (positive-direction transition) of the DS3 PLCP status register:
> :STATus:QUEStionable:TELEcom2:DS3Plcp:PTRansition 32767

:STATus:QUEStionable:TELEcom2:DS3Plcp:PTRansition?

Response: <numeric> = <NR1 NUMERIC RESPONSE DATA>
0 ~ 32767 Sum of transition filter bits (decimal)

Function: Queries the contents of the transition filter (positive-direction transition) of the DS3 PLCP status register.

Example use: To query the transition filter (positive-direction transition) of the DS3 PLCP status register:
> :STATus:QUEStionable:TELEcom2:DS3Plcp:PTRansition?
< 32767

SECTION 4 REMOTE CONTROL

:STATus:QUESTionable:TELEcom2:DS3Plcp:NTRansition <numeric>

Parameter: <numeric> = <DECIMAL NUMERIC PROGRAM DATA>
0 ~ 32767 Sum of transition filter bits (decimal)

Function: Sets the transition filter (negative-direction transition) of the DS3 PLCP status register.

Example use: To set 32767 in the transition filter (negative-direction transition) of the DS3 PLCP status register:
> :STATus:QUESTionable:TELEcom2:DS3Plcp:NTRansition 32767

:STATus:QUESTionable:TELEcom2:DS3Plcp:NTRansition?

Response: <numeric> = <NR1 NUMERIC RESPONSE DATA>
0 ~ 32767 Sum of transition filter bits (decimal)

Function: Queries the contents of the transition filter (negative-direction transition) of the DS3 PLCP status register.

Example use: To query the transition filter (negative-direction transition) of the DS3 PLCP status register:
> :STATus:QUESTionable:TELEcom2:DS3Plcp:NTRansition?
< 32767

:STATus:QUESTionable:TELEcom2:ATM[:EVENT]?

Response: <numeric> = <NR1 NUMERIC RESPONSE DATA>
0 ~ 32767 Sum of event register bits (decimal)

Function: Queries the contents of the event register of the ATM status register.

Example use: To query the event register of the ATM status register:
> :STATus:QUESTionable:TELEcom2:ATM[:EVENT]?
< 32767

:STATus:QUESTionable:TELEcom2:ATM:CONDition?

Response: <numeric> = <NR1 NUMERIC RESPONSE DATA>
0 ~ 32767 Sum of condition register bits (decimal)

Function: Queries the contents of the condition register of the ATM status register.

Example use: To query the condition register of the ATM status register:
> :STATus:QUESTionable:TELEcom2:ATM:CONDition?
< 32767

:STATus:QUESTionable:TELEcom2:ATM:ENABle <numeric>

Parameter: <numeric> = <DECIMAL NUMERIC PROGRAM DATA>
0 ~ 32767 Sum of event enable register bits (decimal)

Function: Sets the mask value of the event enable register of the ATM status register.

Example use: To set 32767 in the event enable register of the ATM status register:
> :STATus:QUESTionable:TELEcom2:ATM:ENABle 32767

:STATus:QUESTionable:TELEcom2:ATM:ENABle?

Response: <numeric> = <NR1 NUMERIC RESPONSE DATA>
0 ~ 32767 Sum of event enable register bits (decimal)

Function: Queries the contents of the event enable register of the ATM status register.

Example use: To query the event enable register of the ATM status register:
> :STATus:QUESTionable:TELEcom2:ATM:ENABle?
< 32767

:STATus:QUEStionable:TELEcom2:ATM:PTRansition <numeric>
Parameter: <numeric> = <DECIMAL NUMERIC PROGRAM DATA>
0 ~ 32767 Sum of transition filter bits (decimal)
Function: Sets the transition filter (positive-direction transition) of the ATM status register.
Example use: To set 32767 in the transition filter (positive-direction transition) of the ATM status register:
> :STATus:QUEStionable:TELEcom2:ATM:PTRansition 32767

:STATus:QUEStionable:TELEcom2:ATM:PTRansition <numeric>
Response: <numeric> = <NR1 NUMERIC RESPONSE DATA>
0 ~ 32767 Sum of transition filter bits (decimal)
Function: Queries the contents of the transition filter (positive-direction transition) of the ATM status register.
Example use: To query the transition filter (positive-direction transition) of the ATM status register:
> :STATus:QUEStionable:TELEcom2:ATM:PTRansition?
< 32767

:STATus:QUEStionable:TELEcom2:ATM:NTRansition <numeric>
Parameter: <numeric> = <DECIMAL NUMERIC PROGRAM DATA>
0 ~ 32767 Sum of transition filter bits (decimal)
Function: Sets the transition filter (negative-direction transition) of the ATM status register.
Example use: To set 32767 in the transition filter (negative-direction transition) of the ATM status register:
> :STATus:QUEStionable:TELEcom2:ATM:NTRansition 32767

:STATus:QUEStionable:TELEcom2:ATM:NTRansition?
Response: <numeric> = <NR1 NUMERIC RESPONSE DATA>
0 ~ 32767 Sum of transition filter bits (decimal)
Function: Queries the contents of the transition filter (negative-direction transition) of the ATM status register.
Example use: To query the transition filter (negative-direction transition) of the ATM status register:
> :STATus:QUEStionable:TELEcom2:ATM:NTRansition?
< 32767

:STATus:QUEStionable:TELEcom2:ATM:VP[:EVENT]?
Response: <numeric> = <NR1 NUMERIC RESPONSE DATA>
0 ~ 32767 Sum of event register bits (decimal)
Function: Queries the contents of the event register of the ATM VP status register.
Example use: To query the event register of the ATM VP status register:
> :STATus:QUEStionable:TELEcom2:ATM:VP[:EVENT]?
< 32767

:STATus:QUEStionable:TELEcom2:ATM:VP:CONDition?
Response: <numeric> = <NR1 NUMERIC RESPONSE DATA>
0 ~ 32767 Sum of condition register bits (decimal)
Function: Queries the contents of the condition register of the ATM VP status register.
Example use: To query the condition register of the ATM VP status register:
> :STATus:QUEStionable:TELEcom2:ATM:VP:CONDition?
< 32767

SECTION 4 REMOTE CONTROL

:STATus:QUEStionable:TELEcom2:ATM:VP:ENABle <numeric>

Parameter: <numeric> = <DECIMAL NUMERIC PROGRAM DATA>
0 ~ 32767 Sum of event enable register bits (decimal)

Function: Sets the mask value of the event enable register of the ATM VP status register.

Example use: To set 32767 in the event enable register of the ATM VP status register:

> :STATus:QUEStionable:TELEcom2:ATM:VP:ENABle 32767

:STATus:QUEStionable:TELEcom2:ATM:VP:ENABle?

Response: <numeric> = <NR1 NUMERIC RESPONSE DATA>
0 ~ 32767 Sum of event enable register bits (decimal)

Function: Queries the contents of the event enable register of the ATM VP status register.

Example use: To query the event enable register of the ATM VP status register:

> :STATus:QUEStionable:TELEcom2:ATM:VP:ENABle?
< 32767

:STATus:QUEStionable:TELEcom2:ATM:VP:PTRansition <numeric>

Parameter: <numeric> = <DECIMAL NUMERIC PROGRAM DATA>
0 ~ 32767 Sum of transition filter bits (decimal)

Function: Sets the transition filter (positive-direction transition) of the ATM VP status register.

Example use: To set 32767 in the transition filter (positive-direction transition) of the ATM VP status register:

> :STATus:QUEStionable:TELEcom2:ATM:VP:PTRansition 32767

:STATus:QUEStionable:TELEcom2:ATM:VP:PTRansition?

Response: <numeric> = <NR1 NUMERIC RESPONSE DATA>
0 ~ 32767 Sum of transition filter bits (decimal)

Function: Queries the contents of the transition filter (positive-direction transition) of the ATM VP status register.

Example use: To query the transition filter (positive-direction transition) of the ATM VP status register:

> :STATus:QUEStionable:TELEcom2:ATM:VP:PTRansition?
< 32767

:STATus:QUEStionable:TELEcom2:ATM:VP:NTRansition <numeric>

Parameter: <numeric> = <DECIMAL NUMERIC PROGRAM DATA>
0 ~ 32767 Sum of transition filter bits (decimal)

Function: Sets the transition filter (negative-direction transition) of the ATM VP status register.

Example use: To set 32767 in the transition filter (negative-direction transition) of the ATM VP status register:

> :STATus:QUEStionable:TELEcom2:ATM:VP:NTRansition 32767

:STATus:QUEStionable:TELEcom2:ATM:VP:NTRansition?

Response: <numeric> = <NR1 NUMERIC RESPONSE DATA>
0 ~ 32767 Sum of transition filter bits (decimal)

Function: Queries the contents of the transition filter (negative-direction transition) of the ATM VP status register.

Example use: To query the transition filter (negative-direction transition) of the ATM VP status register:

> :STATus:QUEStionable:TELEcom2:ATM:VP:NTRansition?
< 32767

:STATus:QUESTionable:TELEcom2:ATM:VC[:EVENT]?

Response: <numeric> = <NR1 NUMERIC RESPONSE DATA>
0 ~ 32767 Sum of event register bits (decimal)

Function: Queries the contents of the event register of the ATM VC status register.

Example use: To query the event register of the ATM VC status register:
> :STATus:QUESTionable:TELEcom2:ATM:VC[:EVENT]?
< 32767

:STATus:QUESTionable:TELEcom2:ATM:VC:CONDition?

Response: <numeric> = <NR1 NUMERIC RESPONSE DATA>
0 ~32767 Sum of condition register bits (decimal)

Function: Queries the contents of the condition register of ATM VC status register.

Example use: To query the contents of the condition register of ATM VC status register.
> :STATus:QUESTionable:TELEcom2:ATM:VC:CONDition?
< 32767

:STATus:QUESTionable:TELEcom2:ATM:VC:ENABLE <numeric>

Parameter: <numeric>=<DECIMAL NUMERIC PROGRAM DATA>
0 ~32767 Sum of event enable register bits (decimal)

Function: Sets the mask value of the event enable register of ATM VC status register.

Example use: To set the event enable register of ATM VC status register to 32767.
> :STATus:QUESTionable:TELEcom2:ATM:VC:ENABLE 32767

:STATus:QUESTionable:TELEcom2:ATM:VC:ENABLE ?

Parameter: <numeric>=<DECIMAL NUMERIC PROGRAM DATA>
0 ~32767 Sum of event enable register bits (decimal)

Function: Queries the contents of the event enable register of ATM VC status register.

Example use: To query the event enable register of ATM VC status register.
> :STATus:QUESTionable:TELEcom2:ATM:VC:ENABLE ?
< 32767

:STATus:QUESTionable:TELEcom2:ATM:VC:PTRansition <numeric>

Parameter: <numeric> = <DECIMAL NUMERIC PROGRAM DATA>
0 ~ 32767 Sum of transition filter bits (decimal)

Function: Sets the transition filter (positive-direction transition) of the ATM VC status register.

Example use: To set 32767 in the transition filter (positive-direction transition) of the ATM VC status register:
> :STATus:QUESTionable:TELEcom2:ATM:VC:PTRansition 32767

:STATus:QUESTionable:TELEcom2:ATM:VC:PTRansition?

Response: <numeric> = <NR1 NUMERIC RESPONSE DATA>
0 ~ 32767 Sum of transition filter bits (decimal)

Function: Queries the contents of the transition filter (positive-direction transition) of the ATM VC status register.

Example use: To query the transition filter (positive-direction transition) of the ATM VC status register:
> :STATus:QUESTionable:TELEcom2:ATM:VC:PTRansition?
< 32767

SECTION 4 REMOTE CONTROL

:STATus:QUESTionable:TELEcom2:ATM:VC:NTRansition <numeric>

Parameter: <numeric> = <DECIMAL NUMERIC PROGRAM DATA>
0 ~ 32767 Sum of transition filter bits (decimal)

Function: Sets the transition filter (negative-direction transition) of the ATM VC status register.

Example use: To set 32767 in the transition filter (negative-direction transition) of the ATM VC status register:
> :STATus:QUESTionable:TELEcom2:ATM:VC:NTRansition 32767

:STATus:QUESTionable:TELEcom2:ATM:VC:NTRansition?

Response: <numeric> = <NR1 NUMERIC RESPONSE DATA>
0 ~ 32767 Sum of transition filter bits (decimal)

Function: Queries the contents of the transition filter (negative-direction transition) of the ATM VC status register.

Example use: To query the transition filter (negative-direction transition) of the ATM VC status register:
> :STATus:QUESTionable:TELEcom2:ATM:VC:NTRansition?
< 32767

:STATus:QUESTionable:TELEcom2:ATM:O191[:EVENT]?

Response: <numeric> = <NR1 NUMERIC RESPONSE DATA>
0 ~ 32767 Sum of event register bits (decimal)

Function: Queries the contents of the event register of the ATM O191 status register.

Example use: To query the event register of the ATM O191 status register:
> :STATus:QUESTionable:TELEcom2:ATM:O191[:EVENT]?
< 32767

:STATus:QUESTionable:TELEcom2:ATM:O191:CONDition?

Response: <numeric> = <NR1 NUMERIC RESPONSE DATA>
0 ~ 32767 Sum of condition register bits (decimal)

Function: Queries the contents of the condition register of the ATM O191 status register.

Example use: To query the condition register of the ATM O191 status register:
> :STATus:QUESTionable:TELEcom2:ATM:O191:CONDition?
< 32767

:STATus:QUESTionable:TELEcom2:ATM:O191:ENABle <numeric>

Parameter: <numeric> = <DECIMAL NUMERIC PROGRAM DATA>
0 ~ 32767 Sum of event enable register bits (decimal)

Function: Sets the mask value of the event enable register of the ATM O191 status register.

Example use: To set 32767 in the event enable register of the ATM O191 status register:
> :STATus:QUESTionable:TELEcom2:ATM:O191:ENABle 32767

:STATus:QUESTionable:TELEcom2:ATM:O191:ENABle?

Response: <numeric> = <NR1 NUMERIC RESPONSE DATA>
0 ~ 32767 Sum of event enable register bits (decimal)

Function: Queries the contents of the event enable register of the ATM O191 status register.

Example use: To query the event enable register of the ATM O191 status register:
> :STATus:QUESTionable:TELEcom2:ATM:O191:ENABle?
< 32767

:STATUS:QUESTIONable:TELEcom2:ATM:O191:PTRansition <numeric>
 Parameter: <numeric> = <DECIMAL NUMERIC PROGRAM DATA>
 0 ~ 32767 Sum of transition filter bits (decimal)
 Function: Sets the transition filter (positive-direction transition) of the ATM O191 status register.
 Example use: To set 32767 in the transition filter (positive-direction transition) of the ATM O191 status register:
 > :STATUS:QUESTIONable:TELEcom2:ATM:O191:PTRansition 32767

:STATUS:QUESTIONable:TELEcom2:ATM:O191:PTRansition?
 Response: <numeric> = <NR1 NUMERIC RESPONSE DATA>
 0 ~ 32767 Sum of transition filter bits (decimal)
 Function: Queries the contents of the transition filter (positive-direction transition) of the ATM O191 status register.
 Example use: To query the transition filter (positive-direction transition) of the ATM O191 status register:
 > :STATUS:QUESTIONable:TELEcom2:ATM:O191:PTRansition?
 < 32767

:STATUS:QUESTIONable:TELEcom2:ATM:O191:NTRansition <numeric>
 Parameter: <numeric> = <DECIMAL NUMERIC PROGRAM DATA>
 0 ~ 32767 Sum of transition filter bits (decimal)
 Function: Sets the transition filter (negative-direction transition) of the ATM O191 status register.
 Example use: To set 32767 in the transition filter (negative-direction transition) of the ATM O191 status register:
 > :STATUS:QUESTIONable:TELEcom2:ATM:O191:NTRansition 32767

:STATUS:QUESTIONable:TELEcom2:ATM:O191:NTRansition?
 Response: <numeric> = <NR1 NUMERIC RESPONSE DATA>
 0 ~ 32767 Sum of transition filter bits (decimal)
 Function: Queries the contents of the transition filter (negative-direction transition) of the ATM O191 status register.
 Example use: To query the transition filter (negative-direction transition) of the ATM O191 status register:
 > :STATUS:QUESTIONable:TELEcom2:ATM:O191:NTRansition?
 < 32767

:STATUS:QUESTIONable:TELEcom2:ATM:AAL1[:EVENT]?
 Response: <numeric> = <NR1 NUMERIC RESPONSE DATA>
 0 ~ 32767 Sum of event register bits (decimal)
 Function: Queries the contents of the event register of the ATM AAL1 status register.
 Example use: To query the event register of the ATM AAL1 status register:
 > :STATUS:QUESTIONable:TELEcom2:ATM:AAL1[:EVENT]?
 < 32767

:STATUS:QUESTIONable:TELEcom2:ATM:AAL1:CONDition?
 Response: <numeric> = <NR1 NUMERIC RESPONSE DATA>
 0 ~ 32767 Sum of condition register bits (decimal)
 Function: Queries the contents of the condition register of the ATM AAL1 status register.
 Example use: To query the condition register of the ATM AAL1 status register:
 > :STATUS:QUESTIONable:TELEcom2:ATM:AAL1:CONDition?
 < 32767

SECTION 4 REMOTE CONTROL

:STATus:QUESTionable:TELEcom2:ATM:AAL1:ENABLE <numeric>

Parameter: <numeric> = <DECIMAL NUMERIC PROGRAM DATA>
0 ~ 32767 Sum of event enable register bits (decimal)

Function: Sets the mask value of the event enable register of the ATM AAL1 status register.

Example use: To set 32767 in the event enable register of the ATM AAL1 status register:

> :STATus:QUESTionable:TELEcom2:ATM:AAL1:ENABLE 32767

:STATus:QUESTionable:TELEcom2:ATM:AAL1:ENABLE?

Response: <numeric> = <NR1 NUMERIC RESPONSE DATA>
0 ~ 32767 Sum of event enable register bits (decimal)

Function: Queries the contents of the event enable register of the ATM AAL1 status register.

Example use: To query the event enable register of the ATM AAL1 status register:

> :STATus:QUESTionable:TELEcom2:ATM:AAL1:ENABLE?
< 32767

:STATus:QUESTionable:TELEcom2:ATM:AAL1:PTRansition <numeric>

Parameter: <numeric> = <DECIMAL NUMERIC PROGRAM DATA>
0 ~ 32767 Sum of transition filter bits (decimal)

Function: Sets the transition filter (positive-direction transition) of the ATM AAL1 status register.

Example use: To set 32767 in the transition filter (positive-direction transition) of the ATM AAL1 status

register:

> :STATus:QUESTionable:TELEcom2:ATM:AAL1:PTRansition 32767

:STATus:QUESTionable:TELEcom2:ATM:AAL1:PTRansition?

Response: <numeric> = <NR1 NUMERIC RESPONSE DATA>
0 ~ 32767 Sum of transition filter bits (decimal)

Function: Queries the contents of the transition filter (positive-direction transition) of the ATM AAL1 status register.

Example use: To query the transition filter (positive-direction transition) of the ATM AAL1 status register:

> :STATus:QUESTionable:TELEcom2:ATM:AAL1:PTRansition?
< 32767

:STATus:QUESTionable:TELEcom2:ATM:AAL1:NTRansition <numeric>

Parameter: <numeric> = <DECIMAL NUMERIC PROGRAM DATA>
0 ~ 32767 Sum of transition filter bits (decimal)

Function: Sets the transition filter (negative-direction transition) of the ATM AAL1 status register.

Example use: To set 32767 in the transition filter (negative-direction transition) of the ATM AAL1 status register:

> :STATus:QUESTionable:TELEcom2:ATM:AAL1:NTRansition 32767

:STATus:QUESTionable:TELEcom2:ATM:AAL1:NTRansition?

Response: <numeric> = <NR1 NUMERIC RESPONSE DATA>
0 ~ 32767 Sum of transition filter bits (decimal)

Function: Queries the contents of the transition filter (negative-direction transition) of the ATM AAL1 status register.

Example use: To query the transition filter (negative-direction transition) of the ATM AAL1 status register:

> :STATus:QUESTionable:TELEcom2:ATM:AAL1:NTRansition?
< 32767

:STATus:QUEStionable:TELEcom2:ATM:AAL2[:EVENT]?

Response: <numeric> = <NR1 NUMERIC RESPONSE DATA>
0 ~ 32767 Sum of event register bits (decimal)

Function: Queries the contents of the event register of the ATM AAL2 status register.

Example use: To query the event register of the ATM AAL2 status register:
> :STATus:QUEStionable:TELEcom2:ATM:AAL2[:EVENT]?
< 32767

:STATus:QUEStionable:TELEcom2:ATM:AAL2:CONDition?

Response: <numeric> = <NR1 NUMERIC RESPONSE DATA>
0 ~ 32767 Sum of condition register bits (decimal)

Function: Queries the contents of the condition register of the ATM AAL2 status register.

Example use: To query the condition register of the ATM AAL2 status register:
> :STATus:QUEStionable:TELEcom2:ATM:AAL2:CONDition?
< 32767

:STATus:QUEStionable:TELEcom2:ATM:AAL2:ENABle <numeric>

Parameter: <numeric> = <DECIMAL NUMERIC PROGRAM DATA>
0 ~ 32767 Sum of event enable register bits (decimal)

Function: Sets the mask value of the event enable register of the ATM AAL2 status register.

Example use: To set 32767 in the event enable register of the ATM AAL2 status register:
> :STATus:QUEStionable:TELEcom2:ATM:AAL2:ENABle 32767

:STATus:QUEStionable:TELEcom2:ATM:AAL2:ENABle?

Response: <numeric> = <NR1 NUMERIC RESPONSE DATA>
0 ~ 32767 Sum of event enable register bits (decimal)

Function: Queries the contents of the event enable register of the ATM AAL2 status register.

Example use: To query the event enable register of the ATM AAL2 status register:
> :STATus:QUEStionable:TELEcom2:ATM:AAL2:ENABle?
< 32767

:STATus:QUEStionable:TELEcom2:ATM:AAL2:PTRansition <numeric>

Parameter: <numeric> = <DECIMAL NUMERIC PROGRAM DATA>
0 ~ 32767 Sum of transition filter bits (decimal)

Function: Sets the transition filter (positive-direction transition) of the ATM AAL2 status register.

Example use: To set 32767 in the transition filter (positive-direction transition) of the ATM AAL2
status

register:

> :STATus:QUEStionable:TELEcom2:ATM:AAL2:PTRansition 32767

:STATus:QUEStionable:TELEcom2:ATM:AAL2:PTRansition?

Response: <numeric> = <NR1 NUMERIC RESPONSE DATA>
0 ~ 32767 Sum of transition filter bits (decimal)

Function: Queries the contents of the transition filter (positive-direction transition) of the ATM
AAL2 status register.

Example use: To query the transition filter (positive-direction transition) of the ATM AAL2 status
register:
> :STATus:QUEStionable:TELEcom2:ATM:AAL2:PTRansition?
< 32767

SECTION 4 REMOTE CONTROL

:STATUS:QUESTIONable:TELEcom2:ATM:AAL2:NTRansition <numeric>

Parameter: <numeric> = <DECIMAL NUMERIC PROGRAM DATA>
0 ~ 32767 Sum of transition filter bits (decimal)

Function: Sets the transition filter (negative-direction transition) of the ATM AAL2 status register.

Example use: To set 32767 in the transition filter (negative-direction transition) of the ATM AAL2 status register:

> :STATUS:QUESTIONable:TELEcom2:ATM:AAL2:NTRansition 32767

:STATUS:QUESTIONable:TELEcom2:ATM:AAL2:NTRansition?

Response: <numeric> = <NR1 NUMERIC RESPONSE DATA>
0 ~ 32767 Sum of transition filter bits (decimal)

Function: Queries the contents of the transition filter (negative-direction transition) of the ATM AAL2 status register.

Example use: To query the transition filter (negative-direction transition) of the ATM AAL2 status register:

> :STATUS:QUESTIONable:TELEcom2:ATM:AAL2:NTRansition?
< 32767

:STATUS:QUESTIONable:TELEcom2:ATM:AAL34[:EVENT]?

Response: <numeric> = <NR1 NUMERIC RESPONSE DATA>
0 ~ 32767 Sum of event register bits (decimal)

Function: Queries the contents of the event register of the ATM AAL3/4 status register.

Example use: To query the event register of the ATM AAL3/4 status register:

> :STATUS:QUESTIONable:TELEcom2:ATM:AAL34[:EVENT]?
< 32767

:STATUS:QUESTIONable:TELEcom2:ATM:AAL34:CONDition?

Response: <numeric> = <NR1 NUMERIC RESPONSE DATA>
0 ~ 32767 Sum of condition register bits (decimal)

Function: Queries the contents of the condition register of the ATM AAL3/4 status register.

Example use: To query the condition register of the ATM AAL3/4 status register:

> :STATUS:QUESTIONable:TELEcom2:ATM:AAL34:CONDition?
< 32767

:STATUS:QUESTIONable:TELEcom2:ATM:AAL34:ENABLE <numeric>

Parameter: <numeric> = <DECIMAL NUMERIC PROGRAM DATA>
0 ~ 32767 Sum of event enable register bits (decimal)

Function: Sets the mask value of the event enable register of the ATM AAL3/4 status register.

Example use: To set 32767 in the event enable register of the ATM AAL3/4 status register:

> :STATUS:QUESTIONable:TELEcom2:ATM:AAL34:ENABLE 32767

:STATUS:QUESTIONable:TELEcom2:ATM:AAL34:ENABLE?

Response: <numeric> = <NR1 NUMERIC RESPONSE DATA>
0 ~ 32767 Sum of event enable register bits (decimal)

Function: Queries the contents of the event enable register of the ATM AAL3/4 status register.

Example use: To query the event enable register of the ATM AAL3/4 status register:

> :STATUS:QUESTIONable:TELEcom2:ATM:AAL34:ENABLE?
< 32767

:STATus:QUEStionable:TELEcom2:ATM:AAL34:PTRansition <numeric>
 Parameter: <numeric> = <DECIMAL NUMERIC PROGRAM DATA>
 0 ~ 32767 Sum of transition filter bits (decimal)
 Function: Sets the transition filter (positive-direction transition) of the ATM AAL3/4 status register.
 Example use: To set 32767 in the transition filter (positive-direction transition) of the ATM AAL3/4 status register:
 > :STATus:QUEStionable:TELEcom2:ATM:AAL34:PTRansition 32767

:STATus:QUEStionable:TELEcom2:ATM:AAL34:PTRansition?
 Response: <numeric> = <NR1 NUMERIC RESPONSE DATA>
 0 ~ 32767 Sum of transition filter bits (decimal)
 Function: Queries the contents of the transition filter (positive-direction transition) of the ATM AAL3/4 status register.
 Example use: To query the transition filter (positive-direction transition) of the ATM AAL3/4 status register:
 > :STATus:QUEStionable:TELEcom2:ATM:AAL34:PTRansition?
 < 32767

:STATus:QUEStionable:TELEcom2:ATM:AAL34:NTRansition <numeric>
 Parameter: <numeric> = <DECIMAL NUMERIC PROGRAM DATA>
 0 ~ 32767 Sum of transition filter bits (decimal)
 Function: Sets the transition filter (negative-direction transition) of the ATM AAL3/4 status register.
 Example use: To set 32767 in the transition filter (negative-direction transition) of the ATM AAL3/4 status register:
 > :STATus:QUEStionable:TELEcom2:ATM:AAL34:NTRansition 32767

:STATus:QUEStionable:TELEcom2:ATM:AAL34:NTRansition?
 Response: <numeric> = <NR1 NUMERIC RESPONSE DATA>
 0 ~ 32767 Sum of transition filter bits (decimal)
 Function: Queries the contents of the transition filter (negative-direction transition) of the ATM AAL3/4 status register.
 Example use: To query the transition filter (negative-direction transition) of the ATM AAL3/4 status register:
 > :STATus:QUEStionable:TELEcom2:ATM:AAL34:NTRansition?
 < 32767

:STATus:QUEStionable:TELEcom2:ATM:AAL5[:EVENT]?
 Response: <numeric> = <NR1 NUMERIC RESPONSE DATA>
 0 ~ 32767 Sum of event register bits (decimal)
 Function: Queries the contents of the event register of the ATM AAL5 status register.
 Example use: To query the event register of the ATM AAL5 status register:
 > :STATus:QUEStionable:TELEcom2:ATM:AAL5[:EVENT]?
 < 32767

:STATus:QUEStionable:TELEcom2:ATM:AAL5:CONDition?
 Response: <numeric> = <NR1 NUMERIC RESPONSE DATA>
 0 ~ 32767 Sum of condition register bits (decimal)
 Function: Queries the contents of the condition register of the ATM AAL5 status register.
 Example use: To query the condition register of the ATM AAL5 status register:
 > :STATus:QUEStionable:TELEcom2:ATM:AAL5:CONDition?
 < 32767

SECTION 4 REMOTE CONTROL

:STATUS:QUESTIONable:TELEcom2:ATM:AAL5:ENABLE <numeric>

Parameter: <numeric> = <DECIMAL NUMERIC PROGRAM DATA>

0 ~ 32767 Sum of event enable register bits (decimal)

Function: Sets the mask value of the event enable register of the ATM AAL5 status register.

Example use: To set 32767 in the event enable register of the ATM AAL5 status register:

> :STATUS:QUESTIONable:TELEcom2:ATM:AAL5:ENABLE 32767

:STATUS:QUESTIONable:TELEcom2:ATM:AAL5:ENABLE?

Response: <numeric> = <NR1 NUMERIC RESPONSE DATA>

0 ~ 32767 Sum of event enable register bits (decimal)

Function: Queries the contents of the event enable register of the ATM AAL5 status register.

Example use: To query the event enable register of the ATM AAL5 status register:

> :STATUS:QUESTIONable:TELEcom2:ATM:AAL5:ENABLE?
< 32767

:STATUS:QUESTIONable:TELEcom2:ATM:AAL5:PTRansition <numeric>

Parameter: <numeric> = <DECIMAL NUMERIC PROGRAM DATA>

0 ~ 32767 Sum of transition filter bits (decimal)

Function: Sets the transition filter (positive-direction transition) of the ATM AAL5 status register.

Example use: To set 32767 in the transition filter (positive-direction transition) of the ATM AAL5 status register:

> :STATUS:QUESTIONable:TELEcom2:ATM:AAL5:PTRansition 32767

:STATUS:QUESTIONable:TELEcom2:ATM:AAL5:PTRansition?

Response: <numeric> = <NR1 NUMERIC RESPONSE DATA>

0 ~ 32767 Sum of transition filter bits (decimal)

Function: Queries the contents of the transition filter (positive-direction transition) of the ATM AAL5 status register.

Example use: To query the transition filter (positive-direction transition) of the ATM AAL5 status register:

> :STATUS:QUESTIONable:TELEcom2:ATM:AAL5:PTRansition?
< 32767

:STATUS:QUESTIONable:TELEcom2:ATM:AAL5:NTRansition <numeric>

Parameter: <numeric> = <DECIMAL NUMERIC PROGRAM DATA>

0 ~ 32767 Sum of transition filter bits (decimal)

Function: Sets the transition filter (negative-direction transition) of the ATM AAL5 status register.

Example use: To set 32767 in the transition filter (negative-direction transition) of the ATM AAL5 status register:

> :STATUS:QUESTIONable:TELEcom2:ATM:AAL5:NTRansition 32767

:STATUS:QUESTIONable:TELEcom2:ATM:AAL5:NTRansition?

Response: <numeric> = <NR1 NUMERIC RESPONSE DATA>

0 ~ 32767 Sum of transition filter bits (decimal)

Function: Queries the contents of the transition filter (negative-direction transition) of the ATM AAL5 status register.

Example use: To query the transition filter (negative-direction transition) of the ATM AAL5 status register:

> :STATUS:QUESTIONable:TELEcom2:ATM:AAL5:NTRansition?
< 32767

:STATus:QUEStionable:TELEcom2:ATM:PM[:EVENT]?

Response: <numeric> = <NR1 NUMERIC RESPONSE DATA>
0 ~ 32767 Sum of event register bits (decimal)

Function: Queries the contents of the event register of the ATM PM status register.

Example use: To query the event register of the ATM PM status register:
> :STATus:QUEStionable:TELEcom2:ATM:PM[:EVENT]?
< 32767

:STATus:QUEStionable:TELEcom2:ATM:PM:CONDition?

Response: <numeric> = <NR1 NUMERIC RESPONSE DATA>
0 ~ 32767 Sum of condition register bits (decimal)

Function: Queries the contents of the condition register of the ATM PM status register.

Example use: To query the condition register of the ATM PM status register:
> :STATus:QUEStionable:TELEcom2:ATM:PM:CONDition?
< 32767

:STATus:QUEStionable:TELEcom2:ATM:PM:ENABle <numeric>

Parameter: <numeric> = <DECIMAL NUMERIC PROGRAM DATA>
0 ~ 32767 Sum of event enable register bits (decimal)

Function: Sets the mask value of the event enable register of the ATM PM status register. Masked with 0.

Example use: To set 32767 in the event enable register of the ATM PM status register:
> :STATus:QUEStionable:TELEcom2:ATM:PM:ENABle 32767

:STATus:QUEStionable:TELEcom2:ATM:PM:ENABle?

Response: <numeric> = <NR1 NUMERIC RESPONSE DATA>
0 ~ 32767 Sum of event enable register bits (decimal)

Function: Queries the contents of the event enable register of the ATM PM status register.

Example use: To query the event enable register of the ATM PM status register:
> :STATus:QUEStionable:TELEcom2:ATM:PM:ENABle?
< 32767

:STATus:QUEStionable:TELEcom2:ATM:PM:PTRansition <numeric>

Parameter: <numeric> = <DECIMAL NUMERIC PROGRAM DATA>
0 ~ 32767 Sum of transition filter bits (decimal)

Function: Sets the transition filter (positive-direction transition) of the ATM PM status register.

Example use: To set 32767 in the transition filter (positive-direction transition) of the ATM PM status register:
> :STATus:QUEStionable:TELEcom2:ATM:PM:PTRansition 32767

:STATus:QUEStionable:TELEcom2:ATM:PM:PTRansition?

Response: <numeric> = <NR1 NUMERIC RESPONSE DATA>
0 ~ 32767 Sum of transition filter bits (decimal)

Function: Queries the contents of the transition filter (positive-direction transition) of the ATM PM status register.

Example use: To query the transition filter (positive-direction transition) of the ATM PM status register:

> :STATus:QUEStionable:TELEcom2:ATM:PM:PTRansition?
< 32767

SECTION 4 REMOTE CONTROL

:STATus:QUEStionable:TELEcom2:ATM:PM:NTRansition <numeric>

Parameter: <numeric> = <DECIMAL NUMERIC PROGRAM DATA>
0 ~ 32767 Sum of transition filter bits (decimal)

Function: Sets the transition filter (negative-direction transition) of the ATM PM status register.

Example use: To set 32767 in the transition filter (negative-direction transition) of the ATM PM status register:

> :STATus:QUEStionable:TELEcom2:ATM:PM:NTRansition 32767

:STATus:QUEStionable:TELEcom2:ATM:PM:NTRansition?

Response: <numeric> = <NR1 NUMERIC RESPONSE DATA>
0 ~ 32767 Sum of transition filter bits (decimal)

Function: Queries the contents of the transition filter (negative-direction transition) of the ATM PM status register.

Example use: To query the transition filter (negative-direction transition) of the ATM PM status register:

> :STATus:QUEStionable:TELEcom2:ATM:PM:NTRansition?
< 32767

Appendix A

SELF-TEST ERROR CODE LIST

Table of Contents

A.1 Self-test Error Codes.....	A-3
--------------------------------	-----

Appendix A SELF-TEST ERROR CODE LIST

A.1 Self-test Error Codes

For the self-test error codes, refer to the MP1552B SDH/PDH/ATM Analyzer Operation Manual Vol.1.

Appendix A SELF-TEST ERROR CODE LIST

APPENDIX B

TEXT FILE FORMAT

Table of Contents

B.1	Test File Format	B-3
B.1.1	Live monitor analysis data	B-4
B.1.2	Traffic monitor analysis data	B-8
B.1.3	Cell capture analysis data	B-9
B.1.4	1-point CDV measurement analysis data	B-10
B.1.5	2-point CDV measurement analysis data	B-11
B.1.6	Memorized analysis data	B-12
B.1.7	AAL3/4 and AAL5 payload set data	B-13

APPENDIX B TEXT FILE FORMAT

B.1 Test File Format

The MP1552B can store analysis graph data in a floppy disk in text format.

Data can be edited using spreadsheet software (e.g., Excel).

This appendix explains the format of text files related to the ATM unit.

Notes:

-
-
1. For non-ATM items, refer to Vol.1 Of the MP1552B SDH/PDH/ATM Analyzer Operation Manual.
 2. For floppy disk operation, refer to Vol.1 the MP1552B SDH/PDH/ATM Analyzer Operation Manual.
 3. A data file stored in text format cannot be recalled to the Analyze:Recall screen.
Store a file in binary format to recall it to the Analyze:Recall screen.
-
-

(2) Non-conforming

```
[1] "ANRITSU;MP1552B;01.99;AA_LMOONCON","Live monitor",,,,,,""↓
[2] "KB/S","S;599000;256","B;5990;256","C;599000;256","D;599000;256",,""↓
[3] "VPI","VCP","DATA(Count)","DATA(Cell/s)","Alarm","Threshold",,""↓
[4] ( 0,1,80000,1500,"sVP-AIS""A"↓
      0,5,120000,45000,"eVP-AIS,B"↓
      0,10,4000,64,,,,,"C"↓
      :
      :
      4095,65535,80000,1500,,,,,"D"↓
```

- All items are delimited by a comma.
- (↓) indicates a line feed.

[1]:Management information

First item: Management information

Second item: Title characters (fixed to 15 characters)

[2]:First item: Threshold (PCR) unit "kb/s", "cell/s", "%"

Second to fifth items: AD threshold "threshold symbol;PCR;CDVT"

Sixth item: ""

[3]:Indicates VPI, VCI, data count, average number of received cells, alarm, and threshold symbol.

[4]:Displays analysis data in the item order shown in [2] for the number of channel searches performed. (Maximum 1,023 units)

Note: Data cannot be stored when no measurement result exists and when the measurement mode is Individual.

APPENDIX B TEXT FILE FORMAT

B.1.4 1-point CDV measurement analysis data

This data is the analysis graph data (including Title) displayed on the 1-point CDV subscreen or Recall subscreen (when 1-point CDV data is displayed) of the Analyze screen.

```
[1] "ANRITSU;MP1552B;01.00;A;A_1CDV","1-point CDV ", "4905;FFF;  
65535F0000", "100;Cell;100.0000;570;-345"↓  
[2] "Time","Cell","Count","Rate"↓  
[3] -400000,-6000,-1.4E06,100.0000↓  
      :  
      Repetition of [3]  
      :
```

- All items are delimited by a comma.
- (↓) indicates a line feed.

[1]:First item: Management information
: Second item: Title characters (fixed to 15 characters)
: Third item: VPI filter value, VPI filter mask value, VCI filter value, VCI filter mask value
: Fourth item: H-Interval, H-Interval unit, measurement target cell reception rate, maximum delay data position, minimum delay data position
[2]:Indicates delay time, cell interval count, occurrence count, and occurrence count rate.
[3]:Displays data in the item order shown in [2].

Note: Data cannot be stored when no measurement result exists.

B.1.5 2-point CDV measurement analysis data

This data is the analysis graph data (including Title) displayed on the 2-point CDV subscreen or Recall subscreen (when 2-point CDV data is displayed) of the Analyze screen.

```
[1] "ANRITSU;MP1552B;01.00;A;A_1CDV","2-point CDV ","4095;FFF;
65535;0000",
"100;Cell;100.000,256,570,-345"↓
[2] "Time","Cell","Count","Rate"↓
[3] -400000,-6000,1.4E06,100.0000↓
:
Repetition of [3]
:
```

- All items are delimited by a comma.
- (↓) indicates a line feed.

[1]:First item: Management information
: Second item: Title characters (fixed to 15 characters)
: Third item: VPI filter value, VPI filter mask value, VCI filter value, VCI filter mask value
: Fourth item: H-Interval, H-Interval unit, measurement target cell reception rate, offset value, maximum delay data position, minimum delay data position
[2]:Indicates total four items of delay time, cell interval count, occurrence count, and occurrence count rate.
[3]:Displays data in the item order shown in [2].

Note: Data cannot be stored when no measurement result exists.

B.1.7 AAL3/4 and AAL5 payload set data

This data is the AAL3/4 and AAL5 payload set data which is set on the Cell edit subscreen of the Setup screen.

```
[1] "ANRITSU;MP1552B;01.00;A;PAYLOAD" ↓
[2] "Data" ↓
[3] "00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00" ↓
      :
      Repetition of [3]
      :
```

- All items are delimited by a comma.
- (↓) indicates a line feed.

[1]:First item: Management information
[2]:Indicates the first item of the cell data.
[3]:Displays data in the item order shown in [2].
(The data count is fixed to 4096.)

APPENDIX B TEXT FILE FORMAT

APPENDIX C

LIST OF INITIAL VALUES

Table of Contents

C.1	Initial value of OH Preset Data	C-3
-----	---------------------------------------	-----

APPENDIX C LIST OF INITIAL VALUES

C.1 Initial value of OH Preset Data

Select the default in the Setup:OH Preset Data screen, then the OH Preset data can be initialized as shown in the following table.

(1) E3

FAI [F6]					FA2 [28]
EM --					
TR --					
RDI [0]	REI [0]	Payload type [010]	Payload dependent [00]	Timing marker [0]	
NR [00]					
GC [00]					

(2) Ea4

FAI [F6]					FA2 [28]
EM --					P1 [00]
TR --					P2 [00]
RDI [0]	REI [0]	Payload type [010]	Payload dependent [00]	Timing marker [0]	
NR [00]					
GC [00]					

APPENDIX C LIST OF INITIAL VALUES

(3) DS3 PLCP

PLCP	Fram	POI	POH	PLCP Payload	
A1 [F6]	A2 [28]	P11 [2C]	Z6 [00]	First ATM cell -- - - - - ...	
A1 [F6]	A2 [28]	P10 [29]	Z5 [00]	ATM cell -- - - - - ...	
A1 [F6]	A2 [28]	P09 [25]	Z4 [00]	ATM cell -- - - - - ...	
A1 [F6]	A2 [28]	P08 [20]	Z3 [00]	ATM cell -- - - - - ...	
A1 [F6]	A2 [28]	P07 [1C]	Z2 [00]	ATM cell -- - - - - ...	
A1 [F6]	A2 [28]	P06 [19]	Z1 [00]	ATM cell -- - - - - ...	
A1 [F6]	A2 [28]	P05 [15]	X [00]	ATM cell -- - - - - ...	
A1 [F6]	A2 [28]	P04 [10]	B1 --	ATM cell -- - - - - ...	
A1 [F6]	A2 [28]	P03 [0D]	G1 [00]	ATM cell -- - - - - ...	
A1 [F6]	A2 [28]	P02 [08]	X [00]	ATM cell -- - - - - ...	
A1 [F6]	A2 [28]	P01 [04]	X [00]	ATM cell -- - - - - ...	
A1 [F6]	A2 [28]	P00 [01]	C1 --	Twelfth ATM cell -- - - - - ...	Trailer 1100

APPENDIX D

CORRESPONDENCE BETWEEN COMMANDS AND SCREEN

Table of Contents

D.1	Command Correspondence of the Test Menu Main Screen	D-3
D.1.1	Manual subscreen	D-3
D.1.2	1-point CDV subscreen	D-6
D.1.3	2-point CDV subscreen	D-6
D.2	Command Correspondence of the Result Main Screen	D-7
D.2.1	Error/alarm subscreen	D-7
D.2.2	Zoom subscreen	D-8
D.2.3	Performance subscreen	D-8
D.2.4	1-point CDV subscreen	D-9
D.2.5	2-point CDV subscreen	D-9
D.3	Command Correspondence of the Analyze Main Screen	D-10
D.3.1	Error/Alarm subscreen	D-10
D.3.2	OH monitor subscreen	D-11
D.3.3	Cell monitor subscreen	D-11
D.3.4	Live monitor subscreen	D-12
D.3.5	Traffic monitor subscreen	D-13
D.3.6	Cell capture subscreen	D-14
D.3.7	1-point CDV subscreen	D-15
D.3.8	2-point CDV subscreen	D-16
D.3.9	Recall subscreen	D-17
D.4	Command Correspondence of the Setup Main screen	D-19
D.4.1	Mapping subscreen	D-19
D.4.2	OH Preset data subscreen	D-20
D.4.3	Cell edit subscreen	D-21
D.5	Command Correspondence of the Front Panel and Other Commands	D-23

APPENDIX D CORRESPONDENCE BETWEEN COMMANDS AND SCREEN

(25):SOURce:ATM:MANual:TRAFfic:BURSt
 (26):SOURce:ATM:MANual:TRAFfic:BURSt:TYPE
 (27):SOURce:ATM:MANual:TRAFfic:BURSt:RMAX:TYPE
 (28):SOURce:ATM:MANual:TRAFfic:BURSt:RMIN:BPS
 (29):SOURce:ATM:MANual:TRAFfic:BURSt:RMIN:BPD
 (30):SOURce:ATM:MANual:TRAFfic:BURSt:CPS
 (31):SOURce:ATM:MANual:TRAFfic:BURSt:RMAX:PERCent
 (32):SOURce:ATM:MANual:TRAFfic:BURSt:RMIN:PERCent
 (33):SOURce:ATM:MANual:TRAFfic:BURSt:T1
 (34):SOURce:ATM:MANual:TRAFfic:BURSt:T2
 (35):SOURce:ATM:MANual:TRAFfic:CWCDv:TYPE
 (36):SOURce:ATM:MANual:TRAFfic:CWCDv:BPS
 (37):SOURce:ATM:MANual:TRAFfic:CWCDv:CPS
 (38):SOURce:ATM:MANual:TRAFfic:CWCDv:PERCent
 (39):SOURce:ATM:MANual:TRAFfic:CWCDv:POISson
 (40):SOURce:ATM:MANual:TRAFfic:SAWTooth:TYPE
 (41):SOURce:ATM:MANual:TRAFfic:SAWTooth:RMAX:BPS
 (42):SOURce:ATM:MANual:TRAFfic:SAWTooth:RMIN:BPS
 (43):SOURce:ATM:MANual:TRAFfic:SAWTooth:CPS
 (44):SOURce:ATM:MANual:TRAFfic:SAWTooth:RMAX:PERCent
 (45):SOURce:ATM:MANual:TRAFfic:SAWTooth:RMIN:PRECent
 (46):SOURce:ATM:MANual:TRAFfic:SAWTooth:T1
 (47):SOURce:ATM:MANual:TRAFfic:SAWTooth:T2
 (48):SOURce:ATM:MANual:TRAFfic:TIMing:MODE
 (49):SOURce:ATM:MANual:TRAFfic:TIMing:STARt
 (50):SOURce:ATM:MANual:TRAFfic:TIMing:STOP
 (51):SOURce:ATM:MANual:TRAFfic:TIMing:STATe
 (52):SOURce:ATM:MANual:TRAFfic:BACKgrount:PERCent
 (53):SOURce:ATM:MANual:TRAFfic:BACKgrount:CPS
 (54):SOURce:ATM:MANual:TRAFfic:BACKgrount:TYPE
 (55):SOURce:ATM:MANual:TRAFfic:FCELI
 (56):SOURce:ATM:MANual:EALarm:TYPE
 (57):SOURce:ATM:MANual:EALarm:TIMing
 (58):SOURce:ATM:MANual:EALarm:ERRor:TYPE
 (59):SOURce:ATM:MANual:EALarm:ERRor:BYTE
 (60):SOURce:ATM:MANual:EALarm:ERRor:PATtern
 (61):SOURce:ATM:MANual:EALarm:ERRor:CRC3
 (62):SOURce:ATM:MANual:EALarm:TIMing:MODE
 (63):SOURce:ATM:MANual:EALarm:TIMing:COUNt
 (64):SOURce:ATM:MANual:EALarm:CC:SEND
 (65):SOURce:ATM:MANual:EALarm:LOOPback:TYPE
 (66):SOURce:ATM:MANual:EALarm:LOOPback:STARt
 (67):SOURce:ATM:MANual:EALarm:LOOPback:STATe?
 (68):SOURce:ATM:MANual:PM:FM:SEND
 (69):SOURce:ATM:MANual:PM:FM:CBLock
 (70):SOURce:ATM:MANual:PM:FM:ERRor:TYPE
 (71):SOURce:ATM:MANual:PM:FM:ERRor:TIMing:MODE

(72):SOURce:ATM:MANual:PM:FM:ERRor:TIMing:COUNT
(73):SOURce:ATM:MANual:PM:BR:SEND
(74):SOURce:ATM:MANual:PM:BR:ERRor:TYPE
(75):SOURce:ATM:MANual:PM:BR:ERRor:MODE
(76):SENSe:MEASure:TYPE
(77):SENSe:MEASure:PERiod
(78):SENSe:MEASure:BTIME:SET
(79):SENSe:MEASure:BTIME:STARt
(80):SENSe:ATM:MANual:FILTer:HEADer:PATtern
(81):SENSe:ATM:MANual:FILTer:HEADer:MASK
(82):SENSe:ATM:MANual:FILTer:PAYLoad:PATtern
(83):SENSe:ATM:MANual:FILTer:PAYLoad:MASK
(84):SENSe:ATM:MANual:FILTer:PAYLoad:POSition
(85):SENSe:ATM:MANual:FILTer:CID:PATtern
(86):SENSe:ATM:MANual:FILTer:MID:PATtern
(87):SENSe:ATM:MANual:NCONforming:PCR:TYPE
(88):SENSe:ATM:MANual:NCONforming:PCR:BPS
(89):SENSe:ATM:MANual:NCONforming:PCR:CPS
(90):SENSe:ATM:MANual:NCONforming:PCR:PERCent
(91):SENSe:ATM:MANual:NCONforming:CDVT
(92):DISPlay:TMENu[:NAME]
(93):DISPlay:TMENu:MANual:SElect
(94):SOURce:TELEcom:ERRor:TYPE
(95):SOURce:TELEcom:ERRor:ERATE
(96):SOURce:TELEcom:ERRor:PATtern
(97):SENSe:ATM:MANual:NCONforming:CBR:TYPE
(98):SENSe:ATM:MANual:NCONforming:CBR:BPS
(99):SENSe:ATM:MANual:NCONforming:CBR:CPS
(100):SENSe:ATM:MANual:NCONforming:CBR:PERCent
(101):Result display
 :CALCulate:LOOPback:RESult?

D.1.2 1-point CDV subsection

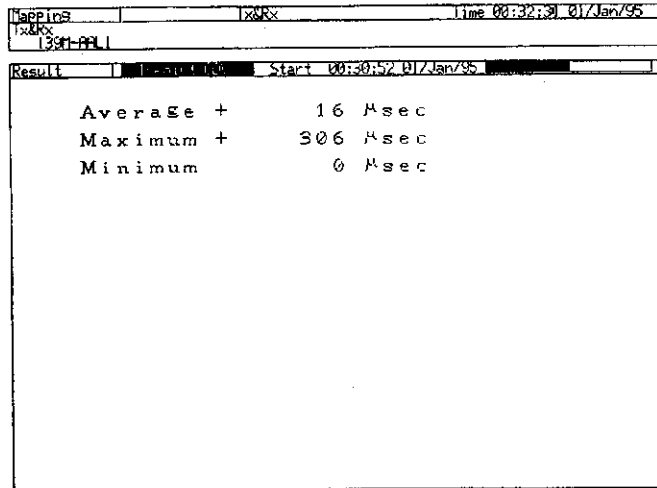


Fig. D-2 Test Menu Main Screen (1-point CDV Subscreen)

- (1):DISPlay:TMENu[:NAME]
- (2):SENSe:ATM:CDV1:TYPE
- (3):SENSe:ATM:CDV1:PERiod
- (4):SENSe:ATM:CDV1:RTIME:TYPe
- (5):SENSe:ATM:CDV1:RTIME:BPS
- (6):SENSe:ATM:CDV1:RTIME:CPS
- (7):SENSe:ATM:CDV1:RTIME:PERCent

D.1.3 2-point CDV subsection

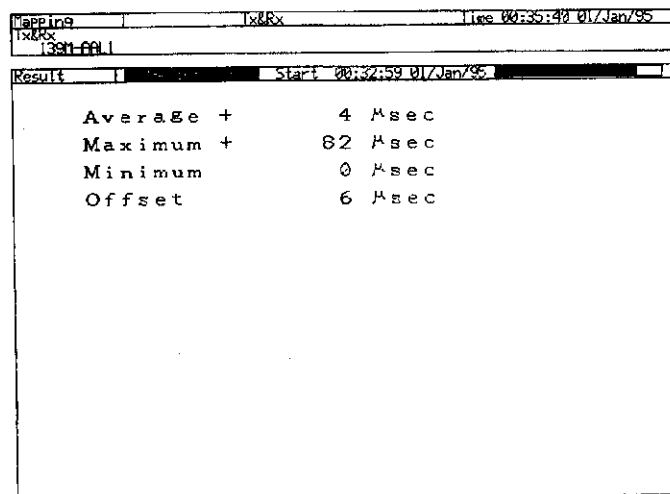


Fig. D-3 Test Menu Main Screen (2-point CDV Subscreen)

- (1):DISPlay:TMENu[:NAME]
- (2):SENSe:ATM:CDV2:TYPE
- (3):SENSe:ATM:CDV2:PERiod

D.2 Command Correspondence of the Result Main Screen

D.2.1 Error/alarm subscreen

Mapping		Tx&Rx		Time 03:59:18 01/Jan/95	
Tx&Rx		STH1 -FAL2			
Result		Error/Alarm		Start 03:58:57 01/Jan/95	
Alarm [Second]	Error [Rate]	Display data [Current]			
Section	HP(HU)	Information			
P-fail	0eAIS	0d			
LOS	0eLOP	0d			
LOF	0eRDI	0d			
DOF	0eSLM	0d			
AIS	0d				
RDI	0d				
B1	0.1E-03B3	0.4E-03c			
B2	0.2E-03d				
REI	0.3E-03REI	0.5E-03c			
Alarm		Error			
eVP-AIS	0eVC-AIS	0d	0eCorrect	2.9E-03c	0eR-PUJ3.7E-03
eVP-RDI	0eVC-RDI	0d	0eDiscard	5.0E-03c	0ePS-HEC4.4E-03c
eVP-LOC	0eVC-LOC	0d	0eNonconf	3.1E-03c	0eSF 4.0E-03d
eVP-AIS	0eVC-AIS	0d	0eFM Lost	5.0E-03c	0eSN 4.1E-03c
eVP-RDI	0eVC-RDI	0d	0eFlt	6.1E-03c	
eVP-LOC	0eVC-LOC	0d	0eFlt	6.2E-03c	
			0eBR	0eBIPV6.2E-03c	
			0eTI	0eSEC6.3E-03c	
			0eBR	0eLoc15.4E-03c	Bit 3.6E-03c
			0eBR	0eFlt	6.5E-03c
LCD	0eSync.	0d	0eBR	0eBIPV6.6E-03c	
			0eRS	0eSEC6.7E-03c	

Fig. D-4 Result Main Screen (Error/Alarm Subscreen)

- (1):DISPlay:RESult[:NAME]
- (2):DISPlay:RESult:EALarm:MODE
- (3):DISPlay:RESult:EALarm:UNIT
- (4):DISPlay:RESult:EALarm:AUNit
- (5):DISPlay:RESult:EALarm:TCLayer
- (6):Time display
:DISPlay:RESult:TIME

D.2.2 Zoom subsection

Mapping	ix&Rx	Time 07:20:50 01/Jan/95
ix&Rx	STM -AFL	
Result	Zoom	Start 07:20:46 01/Jan/95
Alarm [Count] Error [Count] Display data [Last]		
Alarm item [sVP-AIS]		
sVP-AIS		1
Error item [B1]		
B1		2

Fig. D-5 Result Main Screen (Zoom Subscreen)

- (1):DISPlay:RESult[:NAME]
- (2):DISPlay:RESult:ZOOM:MODE
- (3):DISPlay:RESult:ZOOM:UNIT
- (4):DISPlay:RESult:ZOOM:AUNit
- (5):DISPlay:RESult:ZOOM:ALARm
- (6):DISPlay:RESult:ZOOM:ERRor
- (7):Time display
- :DISPlay:RESult:TIME

D.2.3 Performance subsection

Mapping	ix&Rx	Time 07:22:17 01/Jan/95	
ix&Rx	STM -AFL		
Result	Performance	Start 07:22:13 01/Jan/95	
G. 826 Display data [Current]			
Error [BIP]			
	B1	B2	HP-B3
ES	0	0	0
SES	0	0	0
BEE	0	0	0
ESR	0.0E-00	0.0E-00	0.0E-00
SESR	0.0E-00	0.0E-00	0.0E-00
BBER	0.0E-00	0.0E-00	0.0E-00
SDP	0	0	0
US	0	0	0

Fig. D-6 Result Main Screen (Performance Subscreen)

- (1):DISPlay:RESult[:NAME]
- (2):DISPlay:RESult:PERFormance:MODE
- (3):DISPlay:RESult:PERFormance:ERRor
- (4):DISPlay:RESult:PERFormance:ERRor:M2100
- (5)Time display
- :DISPlay:RESult:TIME

D.2.4 1-point CDV subscreen

Mapping		Time 03:55:28 01/Jan/95	
1391-09.1			
Result		Start 03:52:32 01/Jan/95	
Average	-	7	µsec
Maximum	+	196	µsec
Minimum		0	µsec

Fig. D-7 Result Main Screen (1-point CDV Subscreen)

- (1):DISPlay:RESult[:NAME]
- (2)Time display
:DISPlay:RESult:TIME
- (3)Result display
:CALCulate:DATA?

D.2.5 2-point CDV subscreen

Mapping		Time 00:35:40 01/Jan/95	
1391-09.1			
Result		Start 00:32:59 01/Jan/95	
Average	+	4	µsec
Maximum	+	82	µsec
Minimum		0	µsec
Offset		6	µsec

Fig. D-8 Result Main Screen (2-point CDV Subscreen)

- (1):DISPlay:RESult[:NAME]
- (2)Time display
:DISPlay:RESult:TIME
- (3)Result display
:CALCulate:DATA?

D.3 Command Correspondence of the Analyze Main Screen

D.3.1 Error/Alarm subsection

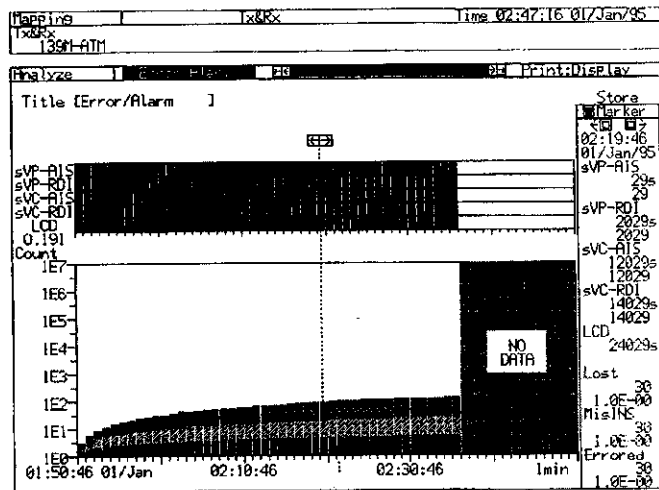


Fig. D-9 Analyze Main Screen (Error/Alarm Subscreen)

- (1):DISPlay:ANALysis[:NAME]
- (2):DISPlay:ANALysis:TGRaph:INTerval
- (3):DISPlay:ANALysis:TGRaph:ERRor
- (4):DISPlay:ANALysis:TGRaph:ALARm1
- (5):DISPlay:ANALysis:TGRaph:ALARm2
- (6):DISPlay:ANALysis:TGRaph:ALARm3
- (7):DISPlay:ANALysis:TGRaph:ALARm4
- (8):DISPlay:ANALysis:TGRaph:ALARm5
- (9):DISPlay:ANALysis:TGRaph:PRINt
- (10):DISPlay:ANALysis:TGRaph:TITLe
- (11):DISPlay:ANALysis:TGRaph:MDISplay
- (12):SYSTem:MEMory:ANALysis:LAVel?
- (13):SYSTem:MEMory:ANALysis:STORe
- (14)Result display
 - :DISPlay:ANALysis:TGRaph:DATA?
 - :CALCulate:DATA?
 - :CALCulate:TGRaph:DATA?

D.3.2 OH monitor subscreen

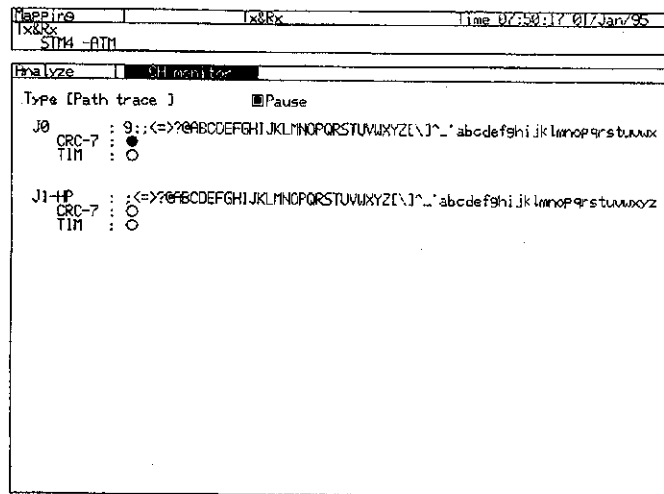


Fig. D-10 Analyze Main Screen (OH Monitor Subscreen)

- (1):DISPlay:ANALysis[:NAME]
- (2):DISPlay:ANALysis:OHMonitor:TYPE
- (3):DISPlay:ANALysis:OHMonitor:SOHCh
- (4):DISPlay:ANALysis:OHMonitor:SLABe
- (5):DISPlay:ANALysis:OHMonitor:PAUSE
- (6):DISPlay:ANALysis:OHMonitor:
- (7)Result display
 - :DISPlay:ANALysis:TGRaph:DATA?
 - :CALCulate:DATA?

D.3.3 Cell monitor subscreen

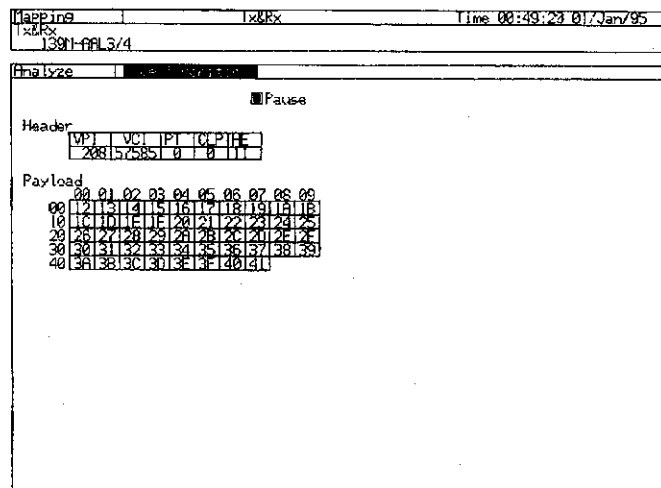


Fig. D-11 Analyze Main Screen (Cell Monitor Subscreen)

- (1):DISPlay:ANALysis[:NAME]
- (2):DISPlay:ANALysis:CMONitor:CELL?
- (3):DISPlay:ANALysis:CMONitor:PAUSE

D.3.4 Live monitor subscreen

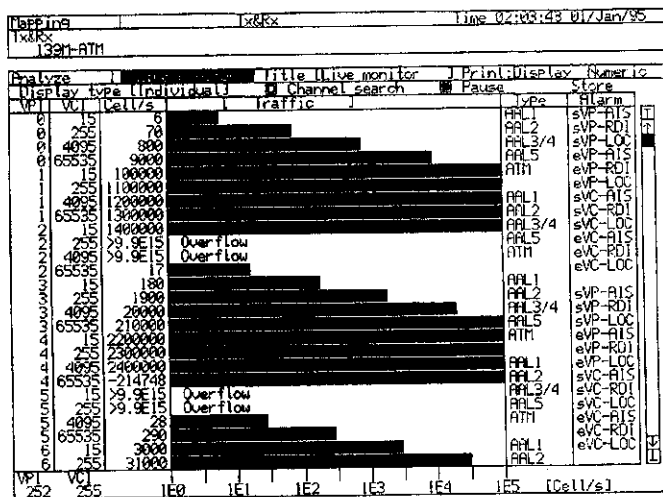


Fig. D-12 Analyze Main Screen (Live Monitor Subscreen)

- (1):SENSE:ATM:MANUal:LMONitor:TYPE
- (2):SENSE:ATM:MANUal:LMONitor:CHSearch
- (3):SENSE:ATM:MANUal:LMONitor:STATE?
- (4):DISPlay:ANALySis[:NAME]:
- (5):DISPlay:ANALySis:LMONitor:SCROLL
- (6):DISPlay:ANALySis:LMONitor:GRAPH
- (7):DISPlay:ANALySis:LMONitor:THRESHold
- (8):DISPlay:ANALySis:LMONitor:NCONforming
- (9):DISPlay:ANALySis:LMONitor:PAUSE
- (10):DISPlay:ANALySis:LMONitor:INTerval
- (11):DISPlay:ANALySis:LMONitor:VPI
- (12):DISPlay:ANALySis:LMONitor:NUMBER
- (13):DISPlay:ANALySis:LMONitor:PRINT
- (14):DISPlay:ANALySis:LMONitor:PTYPE
- (15):DISPlay:ANALySis:LMONitor:TITLe
- (16):CALCulate:LMONitor:NCONforming:THRESHold
- (17):CALCulate:LMONitor:NCONforming:THRESHold:A
- (18):CALCulate:LMONitor:NCONforming:THRESHold:B
- (19):CALCulate:LMONitor:NCONforming:THRESHold:C
- (20):CALCulate:LMONitor:NCONforming:THRESHold:D
- (21):CALCulate:LMONitor:FMSeCb:THRESHold
- (22):CALCulate:LMONitor:BRSeCb:THRESHold
- (23)Result display
 - :CALCulate:LMONitor:TRAFfic:DATA?
 - :CALCulate:LMONitor:FMSeCb:DATA?
 - :CALCulate:LMONitor:DATA?
 - :CALCulate:LMONitor:FM:DATA?
 - :CALCulate:LMONitor:BR:DATA?
 - :CALCulate:LMONitor:BRSeCb:DATA?

D.3.5 Traffic monitor subscreen

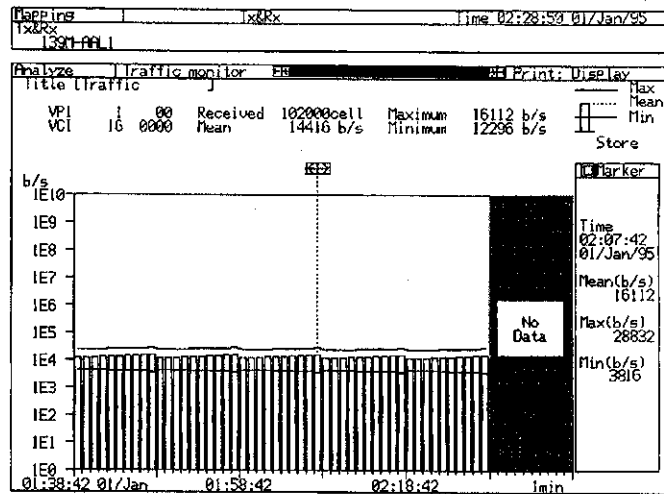


Fig. D-13 Analyze Main Screen (Traffic Monitor Subscreen)

- (1):DISPlay:ANALySis[:NAME]
- (2):DISPlay:ANALySis:TRAFfic:SCRoll
- (3):DISPlay:ANALySis:TRAFfic:MARKer
- (4):DISPlay:ANALySis:TRAFfic:DATA?
- (5):DISPlay:ANALySis:TRAFfic:INTerval
- (6):DISPlay:ANALySis:TRAFfic:MDISplay
- (7):DISPlay:ANALySis:TRAFfic:FROM
- (8):DISPlay:ANALySis:TRAFfic:SCALe
- (9):DISPlay:ANALySis:TRAFfic:PRINt
- (10):DISPlay:ANALySis:TRAFfic:TITLe
- (11)Result display
 - :CALCulate:TRAFfic:RESult?
 - :CALCulate:TRAFfic:DATA?

D.3.6 Cell capture subscreen

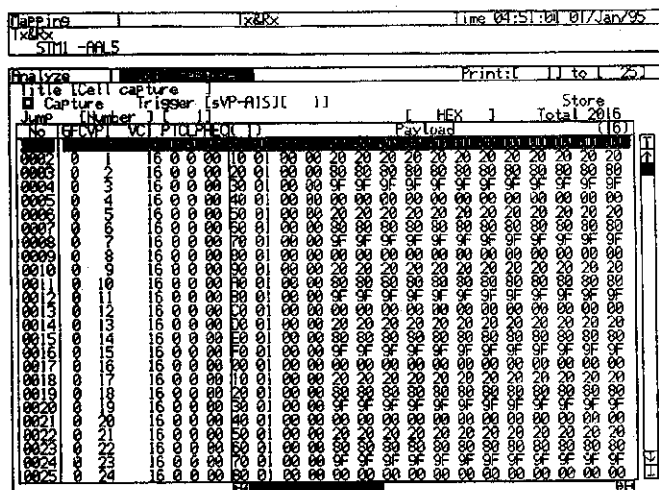


Fig. D-14 Analyze Main Screen (Cell Capture Subscreen)

- (1):SENSe:ATM:MANual:CAPTure:TRIGger
- (2):SENSe:ATM:MANual:CAPTure:POSition
- (3):SENSe:ATM:MANual:CAPTure:STARt
- (4):SENSe:ATM:MANual:CAPTure:STOP
- (5):SENSe:ATM:MANual:CAPTure:STATe?
- (6):DISPlay:ANALYsis[:NAME]:
- (7):DISPlay:ANALYsis:CAPTure:JUMP:TYPE
- (8):DISPlay:ANALYsis:CAPTure:JUMP:LINE
- (9):DISPlay:ANALYsis:CAPTure:SCRoll
- (10):DISPlay:ANALYsis:CAPTure:PTYPE
- (11):DISPlay:ANALYsis:CAPTure:PRINt
- (12):DISPlay:ANALYsis:CAPTure:TITLe
- (13)Result display
 - :CALCulate:CAPTure:LINE?
 - :CALCulate:CAPTure:TOTAl?
 - :CALCulate:CAPTure:TRIGger?

D.3.7 1-point CDV subscreen

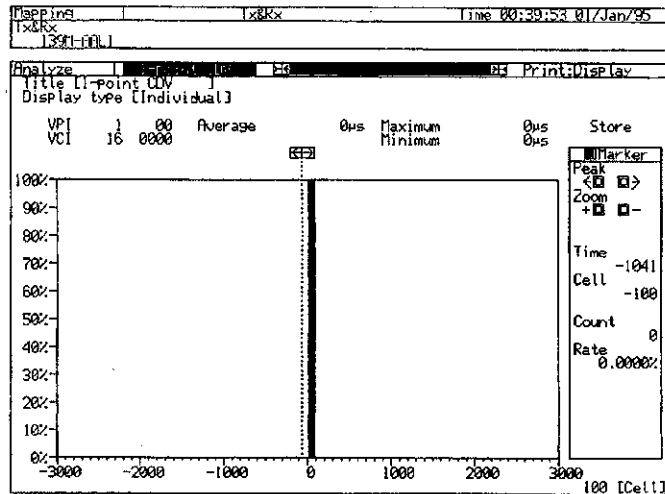


Fig. D-15 Analyze Main Screen (1-point CDV Subscreen)

- (1):SENSe:ATM:MANual:1CDV:PCR
- (2):SENSe:ATM:MANual:1CDV:TYPE
- (3):SENSe:ATM:MANual:1CDV:PERiod
- (4):DISPlay:ANALysis[:NAME]
- (5):DISPlay:ANALysis:CDV1:SCRoll
- (6):DISPlay:ANALysis:CDV1:TYPE
- (7):DISPlay:ANALysis:CDV1:MARKer
- (8):DISPlay:ANALysis:CDV1:PEAK
- (9):DISPlay:ANALysis:CDV1:ZOOM
- (10):DISPlay:ANALysis:CDV1:DATA?
- (11):DISPlay:ANALysis:CDV1:INTerval
- (12):DISPlay:ANALysis:CDV1:IUNit
- (13):DISPlay:ANALysis:CDV1:MDISplay
- (14):DISPlay:ANALysis:CDV1:SCALE
- (15):DISPlay:ANALysis:CDV1:CELL
- (16):DISPlay:ANALysis:CDV1:US
- (17):DISPlay:ANALysis:CDV1:PRINt
- (18):DISPlay:ANALysis:CDV1:TITLe
- (19)Result display
:CALCulate:CDV1:DATA?

D.3.8 2-point CDV subscreen

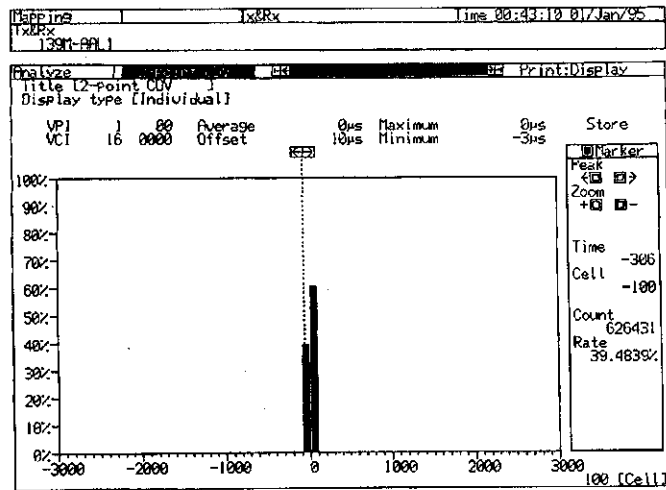


Fig. D-16 Analyze Main Screen (2-point CDV Subscreen)

- (1):SENSe:ATM:MANual:2CDV:TYPE
- (2):SENSe:ATM:MANual:2CDV:PERiod
- (3):DISPlay:ANALysis[:NAME]
- (4):DISPlay:ANALysis:CDV2:SCRoll
- (5):DISPlay:ANALysis:CDV2:TYPE
- (6):DISPlay:ANALysis:CDV2:MARKer
- (7):DISPlay:ANALysis:CDV2:PEAK
- (8):DISPlay:ANALysis:CDV2:ZOOM
- (9):DISPlay:ANALysis:CDV2:DATA?
- (10):DISPlay:ANALysis:CDV2:INTerval
- (11):DISPlay:ANALysis:CDV2:IUNit
- (12):DISPlay:ANALysis:CDV2:MDISplay
- (13):DISPlay:ANALysis:CDV2:SCALE
- (14):DISPlay:ANALysis:CDV2:CELL
- (15):DISPlay:ANALysis:CDV2:US
- (16):DISPlay:ANALysis:CDV2:PRINT
- (17):DISPlay:ANALysis:CDV2:TITLe
- (18)Result display
- :CALCulate:CDV2:DATA?

D.3.9 Recall subscreen

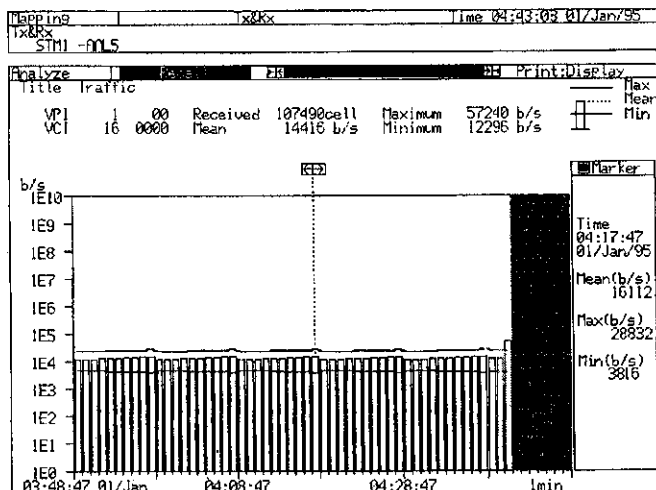


Fig. D-17 Analyze Main Screen (Recall Subscreen)

- (1):DISPlay:ANALysis[:NAME]
- (2):DISPlay:ANALysis:RECall:TGRaph:ERRor
- (3):DISPlay:ANALysis:RECall:TGRaph:ALARm1
- (4):DISPlay:ANALysis:RECall:TGRaph:ALARm2
- (5):DISPlay:ANALysis:RECall:TGRaph:ALARm3
- (6):DISPlay:ANALysis:RECall:TGRaph:ALARm4
- (7):DISPlay:ANALysis:RECall:TGRaph:ALARm5
- (8):DISPlay:ANALysis:RECall:TGRaph:PRINt
- (9):DISPlay:ANALysis:RECall:LMOonitor:SCRoll
- (10):DISPlay:ANALysis:RECall:LMOonitor:INTerval
- (11):DISPlay:ANALysis:RECall:LMOonitor:VPI
- (12):DISPlay:ANALysis:RECall:LMOonitor:NUMBer
- (13):DISPlay:ANALysis:RECall:LMOonitor:PRINt
- (14):DISPlay:ANALysis:RECall:LMOonitor:PTYPE
- (15):DISPlay:ANALysis:RECall:LMOonitor:TITLe
- (16):DISPlay:ANALysis:RECall:TRAFfic:SCRoll
- (17):DISPlay:ANALysis:RECall:TRAFfic:MARKer
- (18):DISPlay:ANALysis:RECall:TRAFfic:DATA?
- (19):DISPlay:ANALysis:RECall:TRAFfic:INTerval
- (20):DISPlay:ANALysis:RECall:TRAFfic:MDISplay
- (21):DISPlay:ANALysis:RECall:TRAFfic:FROM
- (22):DISPlay:ANALysis:RECall:TRAFfic:SCALE
- (23):DISPlay:ANALysis:RECall:TRAFfic:PRINt
- (24):DISPlay:ANALysis:RECall:TRAFfic:TITLe
- (25):DISPlay:ANALysis:RECall:CAPTure:JUMP:TYPE
- (26):DISPlay:ANALysis:RECall:CAPTure:JUMP:LINE
- (27):DISPlay:ANALysis:RECall:CAPTure:SCRoll
- (28):DISPlay:ANALysis:RECall:CAPTure:PTYPE
- (29):DISPlay:ANALysis:RECall:CAPTure:PRINt
- (30):DISPlay:ANALysis:RECall:CAPTure:TITLe

APPENDIX D CORRESPONDENCE BETWEEN COMMANDS AND SCREEN

- (31):DISPlay:ANALysis:RECall:CDV1:SCRoll
- (32):DISPlay:ANALysis:RECall:CDV1:TYPE
- (33):DISPlay:ANALysis:RECall:CDV1:MARKer
- (34):DISPlay:ANALysis:RECall:CDV1:PEAK
- (35):DISPlay:ANALysis:RECall:CDV1:ZOOM
- (36):DISPlay:ANALysis:RECall:CDV1:DATA?
- (37):DISPlay:ANALysis:RECall:CDV1:INTerval
- (38):DISPlay:ANALysis:RECall:CDV1:IUNit
- (39):DISPlay:ANALysis:RECall:CDV1:MDISplay
- (40):DISPlay:ANALysis:RECall:CDV1:SCALe
- (42):DISPlay:ANALysis:RECall:CDV1:CELL
- (43):DISPlay:ANALysis:RECall:CDV1:US
- (44):DISPlay:ANALysis:RECall:CDV1:PRINt
- (45):DISPlay:ANALysis:RECall:CDV1:TITLe
- (46):DISPlay:ANALysis:RECall:CDV2:SCRoll
- (47):DISPlay:ANALysis:RECall:CDV2:TYPE
- (48):DISPlay:ANALysis:RECall:CDV2:MARKer
- (49):DISPlay:ANALysis:RECall:CDV2:PEAK
- (50):DISPlay:ANALysis:RECall:CDV2:ZOOM
- (51):DISPlay:ANALysis:RECall:CDV2:DATA?
- (52):DISPlay:ANALysis:RECall:CDV2:INTerval
- (53):DISPlay:ANALysis:RECall:CDV2:IUNit
- (54):DISPlay:ANALysis:RECall:CDV2:MDISplay
- (55):DISPlay:ANALysis:RECall:CDV2:SCALe
- (56):DISPlay:ANALysis:RECall:CDV2:CELL
- (57):DISPlay:ANALysis:RECall:CDV2:US
- (58):DISPlay:ANALysis:RECall:CDV2:PRINt
- (59):DISPlay:ANALysis:RECall:CDV2:TITLe
- (59)Result display
 - :DISPlay:ANALysis:RECall:TGRaph:DATA?

D.4 Command Correspondence of the Setup Main Screen

D.4.1 Mapping subscreen

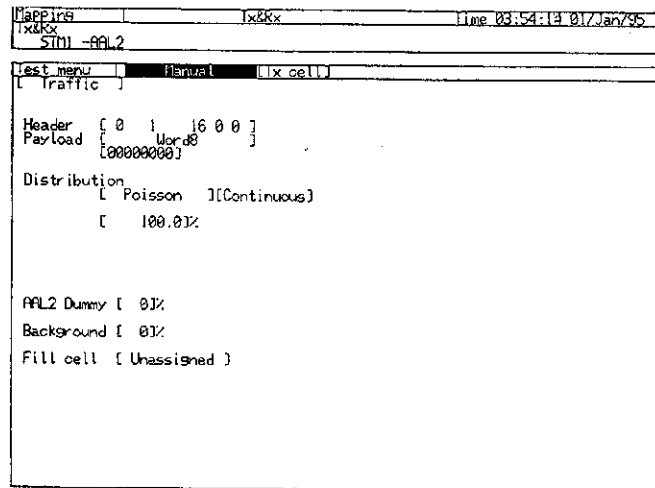


Fig. D-18 Setup Main Screen (Mapping Subscreen)

- (1):SOURCE:ATM:MAPPING
- (2):SOURCE:ATM:HSTRUCTURE
- (3):SENSE:ATM:MAPPING
- (4):SENSE:ATM:HSTRUCTURE
- (5):SENSE:ATM:OAM
- (6):DISPLAY:SETUP[:NAME]
- (7):CALCULATE:TELECOM:ATM:THRESHOLD:SECB:N
- (8):CALCULATE:TELECOM:ATM:THRESHOLD:SECB:M
- (9):SOURCE:TELECOM:OAM
- (10):SOURCE:TELECOM:M45:PLCP
- (11):SENSE:TELECOM:M45:PLCP

D.4.2 OH Preset data subscreen

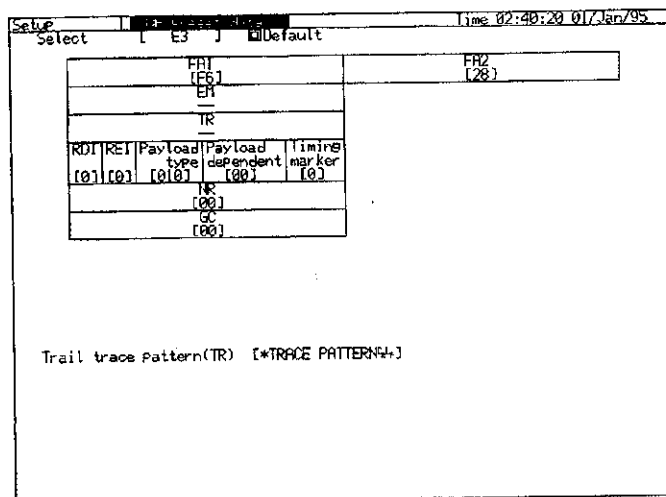


Fig. D-19 Setup Main Screen (OH Preset Data Subscreen)

- (1):SOURCE:ATM:OHPReset:E3:PATtern
- (2):SOURCE:ATM:OHPReset:E3:PTYPE
- (3):SOURCE:ATM:OHPReset:E3:TRACe
- (4):SOURCE:ATM:OHPReset:E3:DEFault
- (5):SOURCE:ATM:OHPReset:E4:PATtern
- (6):SOURCE:ATM:OHPReset:E4:PTYPE
- (7):SOURCE:ATM:OHPReset:E4:TRACe
- (8):SOURCE:ATM:OHPReset:E4:DEFault
- (9):SOURCE:ATM:OHPReset:DS3Plcp:PLCP
- (10):SOURCE:ATM:OHPReset:DS3Plcp:FRAME
- (11):SOURCE:ATM:OHPReset:DS3Plcp:POI
- (12):SOURCE:ATM:OHPReset:DS3Plcp:POH
- (13):SOURCE:ATM:OHPReset:DS3Plcp:TSEQUence
- (14):SOURCE:ATM:OHPReset:DS3Plcp:DEFault
- (15):SOURCE:ATM:OHPReset:DS3Plcp:
- (16):SOURCE:ATM:OHPReset:DS3Plcp:
- (17):SOURCE:ATM:OHPReset:DS3Plcp:
- (18):DISPlay:SETup[:NAME]
- (19):DISPlay:SETup:OHPRset[:NAME]

D.4.3 Cell edit subscreen

Setup		Time 00:09:02 01/Jan/95	
Cell type (Foreground)			
ATM	0.191	SN	TS
[Payload]		TCP	CRC16
[00000000]		---	
User Program [Payload]			
AAL1			
CSI	SN	SNP	Pointer
P-format	RTS	[Payload]	
[OFF]	[0000]	[00]	
AAL2			
OSF	SNP	PHD	

Primary packet			
CID	LI	PPT	UUI
[01]	[64]	[00]	[000]
HEC		[Payload]	

Dummy packet			
CID	LI	PPT	UUI
[02]	[64]	[00]	[000]
HEC		Pay load	

AAL3/4			
SR-PDU	SI	SN	MID
[0000000000]		LI	CRC16
---		---	
CPCS-PDU			
CPI	BTAG	BSIZE	PHD
[00]	[00]	[124]	[00]
[Payload]		LI	Length
---		[00]	[124]
AAL5			
[Payload]		PHD	CRC32
---		[00]	[00]
---		Length	---
---		[00]	[88]

Fig. D-20 Setup Main Screen (Cell Edit Subscreen)

- (1):SOURCE:ATM:PATtern:ATM:0191:PAYLoad
- (2):SOURCE:ATM:PATtern:ATM:0191:DEFault
- (3):SOURCE:ATM:PATtern:ATM:0191:TCPT
- (4):SOURCE:ATM:PATtern:ATM:USER:PAYload
- (5):SOURCE:ATM:PATtern:ATM:USER:DEFault
- (6):SOURCE:ATM:PATtern:AAL1:POINter
- (7):SOURCE:ATM:PATtern:AAL1:PAYload
- (8):SOURCE:ATM:PATtern:AAL1:DEFault
- (9):SOURCE:ATM:PATtern:AAL1:PFORmat
- (10):SOURCE:ATM:PATtern:AAL1:RTS
- (11):SOURCE:ATM:PATtern:AAL2:PCID
- (12):SOURCE:ATM:PATtern:AAL2:LI
- (13):SOURCE:ATM:PATtern:AAL2:PPPT
- (14):SOURCE:ATM:PATtern:AAL2:PUUi
- (15):SOURCE:ATM:PATtern:AAL2:PAYload
- (16):SOURCE:ATM:PATtern:AAL2:DCID
- (17):SOURCE:ATM:PATtern:AAL2:PPT
- (18):SOURCE:ATM:PATtern:AAL2:DUUi
- (19):SOURCE:ATM:PATtern:AAL2:DEFault
- (20):SOURCE:ATM:PATtern:AAL34:MID
- (21):SOURCE:ATM:PATtern:AAL34:CPI
- (22):SOURCE:ATM:PATtern:AAL34:BTAG
- (23):SOURCE:ATM:PATtern:AAL34:BASize
- (24):SOURCE:ATM:PATtern:AAL34:LENGth
- (25):SOURCE:ATM:PATtern:AAL5:LENGth
- (26):SOURCE:ATM:PATtern:AAL5:UU
- (27):SOURCE:ATM:PATtern:AAL5:CPI
- (28):SOURCE:ATM:PATtern:PAYload:PATtern
- (29):SOURCE:ATM:PATtern:PAYload:DEFault
- (30):SOURCE:ATM:PATtern:AIS:FSField
- (31):SOURCE:ATM:PATtern:AIS:DEFault
- (32):SOURCE:ATM:PATtern:AIS:REServe

- (33):SOURce:ATM:PATtern:RDI:FSField
- (34):SOURce:ATM:PATtern:RDI:DEFault
- (35):SOURce:ATM:PATtern:RDI:REServe
- (36):SOURce:ATM:PATtern:USER:OAM
- (37):SOURce:ATM:PATtern:USER:FUNcTion
- (38):SOURce:ATM:PATtern:USER:FSField
- (39):SOURce:ATM:PATtern:USER:DEFault
- (40):SOURce:ATM:PATtern:USER:REServe
- (41):SOURce:ATM:PATtern:CC:FSField
- (42):SOURce:ATM:PATtern:CC:REServe
- (43):SOURce:ATM:PATtern:CC:DEFault
- (44):SOURce:ATM:PATtern:LOOPback:FSField:INDication
- (45):SOURce:ATM:PATtern:LOOPback:FSField:CTAG
- (46):SOURce:ATM:PATtern:LOOPback:FSField:LOCation
- (47):SOURce:ATM:PATtern:LOOPback:FSField:SOURce
- (48):SOURce:ATM:PATtern:LOOPback:FSField:UNUSed
- (49):SOURce:ATM:PATtern:LOOPback:FSField:DEFault
- (50):SOURce:ATM:PATtern:LOOPback:REServe
- (51):SOURce:ATM:PATtern:FM:FSField:TSTP
- (52):SOURce:ATM:PATtern:FM:FSField:UNISed1
- (53):SOURce:ATM:PATtern:FM:FSField:DEFault
- (54):SOURce:ATM:PATtern:FM:REServe
- (55):SOURce:ATM:PATtern:BR:FSField:UNUSed1
- (56):SOURce:ATM:PATtern:BR:FSField:TUCO1
- (57):SOURce:ATM:PATtern:BR:FSField:TUCO
- (58):SOURce:ATM:PATtern:BR:FSField:TSTP
- (59):SOURce:ATM:PATtern:BR:FSField:UNUSed2
- (60):SOURce:ATM:PATtern:BR:FSField:DEFault
- (61):SOURce:ATM:PATtern:BR:REServe
- (62):SOURce:ATM:PATtern:BGRound:HAERDer
- (63):SOURce:ATM:PATtern:BGRound:PAYLoad
- (64):SOURce:ATM:PATtern:BGRound:CRc10
- (65):SOURce:ATM:PATtern:BGRound:DEFault
- (66):SOURce:ATM:PATtern:MEMorized:HEADer
- (67):SOURce:ATM:PATtern:MEMorized:PAYLoad
- (68):SOURce:ATM:PATtern:MEMorized:CRc10
- (69):SOURce:ATM:PATtern:MEMorized:DEFault
- (70):SOURce:ATM:PATtern:MEMorized:EDIT:PAStE
- (71):SOURce:ATM:PATtern:MEMorized:EDIT:CUT
- (72):SOURce:ATM:PATtern:MEMorized:EDIT:COpy
- (73):SOURce:ATM:PATtern:MEMorized:EDIT:INSert
- (74):SOURce:ATM:PATtern:MEMorized:CAPtUre
- (75):DISPlay:SEtUp[:NAME]
- (76):DISPlay:SEtUp:CELL[:NAME]
- (77):DISPlay:SEtUp:CELL:MOMorized:SCRoll
- (78):DISPlay:SEtUp:CELL:MOMorized:DSTsrt
- (79):DISPlay:SEtUp:CELL:MOMorized:PRINt

D.5 Command Correspondence of the Front Panel and Other Commands

Table D-21 Command Correspondence of the Front Panel and Other Commands

Each key	Start/Stop key Measurement	:SENSe:MEASure:START :SENSe:MEASure:STOP :SENSe:MEASure:STATe?
	Self-test	:TEST:START :TEST:STOP :TEST:STATe?
	Print key	:SYSTem:PRINt:ENABle
	Print Now key	:SYSTem:PRINt:COpy
	Paper Feed key	:SYSTem:PRINt:FEED
	History key	:SYSTem:LED:HISTory
	History Reset key	:SYSTem:LED:RESet
Others commands	:SYSTem:PRINt:TEXT :SYSTem:ERRor? :SYSTem:VERSIon? STATus Subsystem	

APPENDIX D CORRESPONDENCE BETWEEN COMMANDS AND SCREEN

Anritsu Service and Sales offices

America

Anritsu Company (ACUS)

685-A Jarvis Drive Morgan Hill, CA
95037-2809, U.S.A.
Phone: +1-408-776-8300
Fax: +1-408-776-1738

Anritsu Company (ACUS-NJ) Dist.5

10 New Maple Avenue, P.O. Box 836
Pine Brook, NJ 07058-0836, U.S.A.
Phone: +1-973-227-8999
Fax: +1-973-575-0092

Anritsu Company (ACUS-Maryland) Dist.6

19630 Club House Road, #710
Gaithersburg, MD20879, U.S.A.
Phone: +1-301-590-0300
Fax: +1-301-216-2893

Anritsu Company (ACUS-Tx) NARO

1155 East Collins Blvd
Richardson, TX 75081, U.S.A.
Phone: +1-972-644-1777
Fax: +1-972-644-3416

Anritsu Electronics Ltd (ACCA)

5A-245 Matheson Blvd. East, Mississauga,
Ontario, L4Z 3C9, Canada
Phone: +1-905-890-7799
Fax: +1-905-890-2290

Anritsu Electronics Ltd (ACCA)

Unit 102, 215 Stafford Road West Nepean,
Ontario, K2H 9C1, Canada
Phone: +1-613-828-4090
Fax: +1-613-828-5400

Anritsu Electronics Ltd (ACCA)

Unit 200, 1405 Trans Canada Highway
Dorval, Quebec H9P 2V9, Canada
Phone: +1-514-421-3737
Fax: +1-514-685-9839

Anritsu Electronics Ltd (ACCA-Calgary)

Deerfoot Atrium, Suite 129, 6715-8th Street
N.E., Calgary, AB, T2E 7H7, Canada
Phone: +1-403-275-9855
Fax: +1-403-275-3609

Anritsu Eletrônica Ltd (ACBR)

Praia de Botafogo, 440-Sala 2401
CEP 22250-040, Rio de Janeiro, RJ, Brazil
Phone: +55-21-5276922
Fax: +55-21-537-1456

Anritsu Eletrônica Ltd (ACBR) Sao Paulo Branch Office

Praca Amadeu Amaral
27-10 Andar, Conj. 101/102
CEP 01327-010, Sao Paulo-SP, Brazil
Phone: +55-11-283-2511
Fax: +55-11-288-6940

Data Lab S.R.L

Edif. Ayfra, Pdte. Franco y Ayolas
Asuncion, Paraguay
Phone: +595-21-443-046
Fax: +595-21-441+935

Electro-Impex S.A.

P.O. Box 620-1000, San Jose, Costa Rica
Phone: +506-2-31-5701
Fax: +506-2-31-6531

Electronica 2000, S.A. DE C.V.

Bldv. Adolfo Lopez Mateos No.2016, Col.
Tlacopac, Del. Lopez Mateos, 01010,
Mexico D.F.
Phone: +525-662-8800
Fax: +525-662-5862

Electronic Engineering S.A.

Carretera de Circunvalacion, Sabanilla, Av
Novena, San Jose, Costa Rica
Phone: +506-2-25-8793
Fax: +506-2-25-1286

HDM Elquitecnica Cia. Ltda., Equitronics S.A.

Av. Republica de El Salvador, No.880,
Edificio, Almirante Colon 4to piso,
Quito, Ecuador
Phone: +593-9-704890
Fax: +593-2-48-2627

KRM Ingenieria Socias.

Viamonte 377,7' Piso 1053 Buenos Aires,
Argentina
Phone: +54-1-311-4165
Fax: +54-1-311-2297

SI Ltda.

E. Conchy Y Toro 65, Casilla 51888,
Santiago, Chile
Phone: +56-2-696-7534
Fax: +56-2-696-9665

Radiocom S.A.

Carrera 21 No.85-71, Conmutador
6100077, Santafe de Bogota, Colombia
Phone: +57-1-218-2054
Fax: +57-1-610-3272

Radiocomunicaciones cruz C.A.

Avda La Colina QTA. Elison, URB Colina
De Los Caobos, Caracas, Venezuela
Phone: +58-2-793-2322
Fax: +58-2-793-3429

Sakata Ingenieros S.A.

Av. Canaval Moreyra 840, Lima 27, Peru
Phone: +51-1225-7555
Fax: +51-1224-8148

Suministros Industriales S.A.

Casa 102, Calle 68 Este,
San Francisco, Balboa, Panama
Phone: +507-270-2328
Fax: +507-270-2329

Cabonorte S.A.

Colonia 1900, ESC. 603,
Montevideo, Uruguay
Phone: +598-2-430522
Fax: +598-2-418594

Europe

Anritsu Ltd (ACUK)

200 Capability Green, Luton
Bedfordshire, LU1 3LU, United Kingdom
Phone: +44-1582-433200
Fax: +44-1582-731303

Anritsu Ltd (ACUK-Manchester)

Kansas Avenue, Langworthy Park Salford,
Manchester M5 2GL, United Kingdom
Phone: +44-161-873-8041
Fax: +44-161-873-8040

Anritsu Ltd (ACUK-Bristol)

1230 Aztec West, Almondsbury
Bristol BS12 4SG, United Kingdom
Phone: +44-1454-615252
Fax: +44-1454-618017

Anritsu Ltd (ACUK-Livingston)

Unit 1, Knightsridge Industrial Estate
Turnbull Way, Knightsridge Livingston
EH54 8RB, United Kingdom
Phone: +44-1506-436111
Fax: +44-1506-436112

Anritsu GmbH (ACDE)

Grafenberger Allee 54-56
D-40237 Düsseldorf 1, Germany
Phone: +49-211-96855-0
Fax: +49-211-96855-55

Anritsu GmbH (ACDE-Sales Center South)

An der Steinernen Brücke 1 D-85757
Karlshof, Germany
Phone: +49-8131-38250
Fax: +49-8131-382595

Anritsu S.A. (ACFR)

9, avenue du Québec ZA de
Courtaboef 91951 Les Ulis Cedex,
France
Phone: +33-1-60-92-15-50
Fax: +33-1-64-46-10-65

**Anritsu S.A. (ACFR)
(Toulouse Office)**

Bureau de Toulouse
Région Centre Sud Ouest
Phone: +33-5-62070484
Fax: +33-5-62070668

**Anritsu S.A. (ACFR)
(Toulon Office)**

Bureau de Toulon
Région Centre Sude Est
Phone: +33-4-94040264
Fax: +33-4-94040265

**Anritsu S.A. (ACFR)
(Rennes Office)**

Bureau de Rennes
Région Ouest
Phone: +33-2-99521214
Fax: +33-2-99521224

Anritsu S.p.A. (ACIT)

Via Elio Vittorini, 129
00144 Roma EUR, Italy
Phone: +390-6-502-2666
Fax: +390-6-502-2425

Anritsu S.p.A (ACIT-Milano)

C.D. Colleoni, Via Paracelso, 420041
AGRATE B.ZA(MI), Italy
Phone: +390-39-605-7813
Fax: +390-39-605-6396

Anritsu AB (ACSE)

BOTVID CENTER
145 84 STOCKHOLM, Sweden
Phone: +46-8-53470700
Fax: +46-8-53470730

**Anritsu AB-Norway Branch
Office (ACNO)**

Øvre Måsan 10C 1370 Asker, Norway
Phone: +47-66-901190
Fax: +47-66-901212

**Anritsu AB-Finland Branch
Office (ACFI)**

Kappelitie 8 02200 Espoo, Finland
Phone: +358-9-435-5220
Fax: +358-9-435-522-50

**Anritsu AB-Denmark Branch
Office (ACDK)**

SOHOJ 11, DK-2690 KARLSLUNDE
Denmark
Phone: +45-46155199
Fax: +45-46155299

C.N. Rood B.V.

Cort van der Linddenstraat 11-13, 2288
EV Rijswijk ZH, The Netherlands
Phone: +31-70-3996360
Fax: +31-70-3905740

C.N. Rood SANV

Pontbeeklaan 45, 1731 Zellik, Belgium
Phone: +32-2-4668199
Fax: +32-2-4662500

ELSINCO GMBH

h.e. Strelbishte, str. Koflenski Prohod, bl.
96/6/14, BG-1408 Sofia, Bulgaria
Phone: +359-2-58-61-31
Fax: +359-2-58-16-98

ELSINCO Praha Spol.

Novedvorska 994, CZ 142 21 Praha
4-Branik, Czecho Republic
Phone: +42-2-49-66-89
Fax: +42-2-49-54-83

ELSINCO Budapest KFT

Pannonia utca 8. IV/I.
H-1136 Budapest, Hungary
Phone: +36-1-269-18-50
Fax: +36-1-132-69-27

ELSINCO Polska Sp. Z.O.O

ul. Dziennikarska 6/1, PL 01 605
Warszawa, Poland
Phone: +48-22-39-69-79
Fax: +48-22-39-44-42

ELSINCO Bratislava Spol. s.r.o.

Kudlakova 4, SK 844 15 Bratislava,
Slovakia
Phone: +42-7-784-165
Fax: +42-7-784-454

G'Amungason Co.

Skulagata 40, 101 Reykjavik, Iceland
Phone: +354-1-677887
Fax: +354-1-625045

GMP S.A.

Av. des Baumettes 19, CH-1020 Renens
1 Lausanne, Switzerland
Phone: +41-21-6348181
Fax: +41-21-6353295

Instrutek Oeriferi A/S

Christiansholmsgade DK-8700 Horsens,
Denmark
Phone: +45-75-611100
Fax: +45-75-615658

Kostas Karayannis SA

58, Kapodistriou str., GR-142 35 Nea Ionia,
Athens, Greece
Phone: +30-1-680-0460-4
Fax: +30-1-685-3522

Omnitecnica S.A.

Estrada Alfragide 2700 Amadora, Portugal
Phone: +351-1-471-55-17
Fax: +351-1-471-36-10

Pema Ltd.

Doromiskin, Dundalk, Co. Louth, Ireland
Phone: +353-42-72899
Fax: +353-42-72376

Unitronics S.A.

Plaza Espana 18, Torre de Madrid,
Pl. 12-ofc. 9, 28019 Madrid, Spain
Phone: +34-1-5425204
Fax: +34-1-5591957

Wien CHALL GMBH

Krichbaumgasse 25, 1120 Wien, Austria
Phone: +43-1-811-55140
Fax: +43-1-811-55180

**Asia, Pacific
and Africa****Anritsu Private Ltd (ACSG)**

6, New Industrial Rd., #06-01/02
Hoe Huat Industrial Building
Singapore 536199
Phone: 65-282-2400
Fax: 65-282-2533

Anritsu Company Ltd (ACHK)

Suite 812, 8/F., Chinachem Golden Plaza,
77 Mody Road, Tsimshatsui
East, Kowloon, Hong Kong
Phone: +852-2301-4980
Fax: +852-2301-3545

**Anritsu Company Incorporated
(ACTW)**

96, Sec. 3, Chien Kou North Rd.
Taipei, Taiwan
Phone: +886-2-2515-6050
Fax: +886-2-2509-5519

**Anritsu Corporation, Ltd (ACKR)
Head Office**

Room No. 901 Daio Bldg, 26-5,
Yeoido-dong, Youngdeungpo-ku
Seoul, Korea
Phone: +82-2-782-7151-6
Fax: +82-2-782-4590

**Anritsu Corporation, Ltd (ACKR)
Taegu Branch Office**

Room No. 1004 Samkwang Bldg, 317-7,
Shincheon 4 Dong, Dong-Ku, Taegu, Korea
Phone: +82-53-745-6061
Fax: +82-53-745-6062

Anritsu Proprietary Ltd (ACAU)

Unit 3, 170, Forster Rd., Mt. Waverley
Victoria 3149, Australia
Phone: +61-3-9558-8177
Fax: +61-3-9558-8255

Anritsu Proprietary Ltd (ACAU)

Suite 304/2 Rowe Street Eastwood
NSW 2122, Australia
Phone: +61-2-9874-9044
Fax: +61-2-9874-9920

**Anritsu Corporation
Beijing Liaison Office**

Room No.1515, Beijing Fortune Bldg. 5
Dong-San-Huan-Bei-Lu Chao-Yang
District Beijing 100004, P.R. China
Phone: +86-10-6590-9230~9234
Fax: +86-10-6590-9235

**Anritsu Corporation
Shanghai Liaison Office**

No.511 Shanghai Jing Tai Building
No.58, Mao Ming Nan Rd. Shanghai
200020 P.R. China
Phone: +86-21-6415-5137
Fax: +86-21-6472-6677

**Anritsu Corporation
New Delhi Liaison Office**

Room No. 508, Prakash Deep,
7 Tolstoy Marg, New Delhi-110001, India
Phone: +91-11-331-9133
Fax: +91-11-371-3948

**Associated Electric Trading
Corp.**

Zia Chambers, 25 McLeod Rd., Lahore,
Pakistan
Phone: +92-42-722-1716
Fax: +92-42-7221456

Chris Radiovision Ltd.

Kouloumbri Building, 23 Crete Street,
P.O. Box 1989, Nicosia, Cyprus
Phone: +357-2-466121
Fax: +357-2-365177

**Electronic Equipment
Marketing Co.**

P.O. Box 3750, Riyadh 11481,
Saudi Arabia
Phone: +966-1-4771650
Fax: +966-1-4785140

Etecsa (Pty) Ltd.

1st Floor Montrose Place, Waterfall Park,
Bekker Rd., Midrand, South Africa
Phone: +27-11-315-1366
Fax: +27-11-315-2175

Giza Systems Engineering

2 El Mesaha Square, Dokki A.R.E.,
P.O.Box 1913, Cairo 11511, Egypt
Phone: +20-2-349-0140
Fax: +20-2-360-9932

Infotechs Ltd.

23-1, Jaya Rd., Colombo 4, Sri Lanka
Phone: +94-1-580088
Fax: +94-1-584644

**Inter Muhendislik Danismanlik
ve Ticaret A.S.**

Farabi Sokak No: 24/14
Cankaya-06680 Ankara, Turkey
Phone: +90-312-4277792
Fax: +90-312-4277937

**Jasmine Telecom
Systems Co., Ltd.**

333 Laksi Plaza 6th Floor, Tower 2,
Chaengwatana Rd., Donmuang, Bangkok
10210, Thailand
Phone: +66-2-576-0200
Fax: +66-2-576-0420

Meera Agencies (P) Ltd.

A-23 Hauz Khas New Delhi 110 016, India
Phone: +91-11-685-3959
Fax: +91-11-685-2275

UAE**Utmost Electronics Trading
(L.L.C.)**

P.O. Box 41175 Abu Dhabi, U.A.E.
Phone: +971-2-768909
Fax: +971-2-768907

Martwell Electronics Pvt., Ltd

3rd Floor, Francis House, Stanley Avenue,
P.O. Box 1737, Harare, Zimbabwe
Phone: +263-4-793578
Fax: +263-4-737956

Mandeno Electronic Equip. Co.

463 Mt. Eden Rd. Mt. Eden,
Auckland 1003, New Zealand
Phone: +64-9-630-7871
Fax: +64-9-630-1720

**National Projects and
Technology Co. L.L.C**

P.O. Box 97, Wadi Al Kabir, Postal Code 117,
Sultanate of Oman
Phone: +968-791704
Fax: +968-791697

**O'Connors Engineering
& Trading (Malaysia) Bhd**

3rd Floor, Wisma Siong Huat,
Lot 13, Jalan 51A/223
46100 Petaling Jaya,
Selangor Darul Ehsan, Malaysia
Phone: +60-3-757-2828
Fax: +60-3-757-7871

P.T. Subur Sakti Putera

Jalan Musi No.32, Jakarta 10150,
Indonesia
Phone: +62-21-3803644
Fax: +62-21-3845043

Qatar Communications Ltd.

P.O. Box 2481, Doha, Qatar
Phone: +974-424347
Fax: +974-324777

Trading and Agency Services

P.O. Box 1884, Doha, Qatar
Phone: +974-432212
Fax: +974-422255

Rajab & Silsilah & Co.

P.O. Box 203 Jeddah 21411, Saudi Arabia
Phone: +966-2-6610006
Fax: +966-2-6610558

**Salritsu International Trading
Corporation**

50B ODC International Plaza
Condominium, 219 Salcedo St., Legaspi
Village, Makati, Metro Manila, Philippines
Phone: +63-2-816-2646
Fax: +63-2-815-0986

Sedel

24, 26, Bd, Resistance, Casablanca,
Morocco
Phone: +212-2-302444
Fax: +212-2-449311

Superior Electronics Associated

B-98 Block H, North Nasimabad, Karachi-
33, Pakistan
Phone: +92-21-613655

Tareq Company

P.O. Box 20506 Safat, 13066 Safat, Kuwait
Phone: +965-2336-100
Fax: +965-2437-700

Tech-Cent Ltd.

Haarad St. No.7, Ramat Haahayal,
Tel-Aviv 69710, Israel
Phone: +972-3-6478563
Fax: +972-3-6478334

Test

Sehit Adem Yavuz Sokak No.6/17,
Kizilay-Ankara, Turkey
Phone: +90-41-71086
Fax: +90-41-74384



Japan

Head Office

5-10-27, Minamiazabu, Minato-ku,
Tokyo 106-8570
Phone: 03-3446-1111
Fax: 03-3442-0235

Atsugi Factory

1800, Onna, Atsugi-si, Kanagawa 243-8555
Phone: 0462-23-1111
Fax: 0462-25-8379

