

## L215/L216/L225/L226 Digital Indicator System







5

## **User Instructions**

www.valuetronics.com

## Table of Contents:

#### **About This Manual**

1	Gettin	ig started	
1.1	Introdu	1–1	
	1.1.1	Description	1–1
	1.1.2	External connectors	1–3
	1.1.3	Operating environment	1–4
1.2	Optional features		1–5
	1.2.1	Integral printer (L215/L225 only)	1–5
	1.2.2	Dual graduation	1–5
	1.2.3	4 – 20mA/trips interface	1–5
	1.2.4	Comms 2 and 3	1–5
	1.2.5	Battery power supply (L215/L225 only)	1–5
	1.2.6	Battery pack (L216/L226 only)	1–5
	1.2.7	Back–lit graphics panel	1–5
	1.2.8	Remote keyboard	1–5
	1.2.9	Dual platform weighing	1–5
1.3	Functionality		1–6
	1.3.1	Passwords	1–6
	1.3.2	User functions	1–6
	1.3.3	Supervisor functions	1–6
	1.3.4	Keyboard timeout	1–6
1.4	Operat	tion	1–7
	1.4.1	Switching on	1–7
	1.4.2	Reverting to standby mode	1–7
	1.4.3	LCD contrast (on power–up only)	1–8
	1.4.4	Keyboard keys	1–8
	1.4.5	Display overlay icons	1–11
	1.4.6	Display icons	1–11

2	Basic w	veighing operations	
2.1	Normal	weighing	2–1
	2.1.1	Weighing goods	2–1
2.2	Using ta	ares	2–2
	2.2.1	Semi-auto tare	2-2
	2.2.2	Auto preset tare	23 24
	2.2.4	Stored tares	2-5
2.3	Using P	PLUs (Product Look Up)	2–6
	2.3.1	Enabling a PLU by PLU number	2–7
	2.3.2	Enabling a PLU by part number	2–7
	2.3.3	Enabling a PLU using the 'browse' facility	2–9
	2.3.4	Disabling a PLU	2–10
3	Totalisi	ing	
3.1	Introduc	ction	3–1
	3.1.1	Clearing totals	3–1
3.2		btract from total key	3–2
3.3	lotals k	ey	3–3
	332	Trips totals	3—3 3—4
	3.3.3	Checkweigh totals	3–5
4	Advanc	ced features	
4.1	Introduc	ction	4–1
4.2	Passwo	ords	4–4
	4.2.1	Using passwords	4–4
4.3	Recall c	data (STATUS)	4–5
	4.3.1	Information recall mode (INFO)	4–5
	4.3.2	PLU recall mode (PLU)	4–6
4.4	Countin	ig mode (COUNT)	4–6
4.5	Trip valı	ues set–up mode (TRIPS)	4–6
4.6	Checkw	veigher mode (CHECK)	4–6
4.7	Filling (I	FILL)	4–6
4.8	Packing	g runs (PACK)	4–6
4.9	Convers	sion mode (CONV)	4-7
	4.9.1	Conversion factor set-up mode (SET)	4-7
	4.9.2 4.9.3	Disabling Conversion mode (DISABLE)	4–8 4–8
1 10	Printor t	type_through mode (TVPE)	4 9 4_9
т. I U	4.10.1	Using type-through	4—9 4—9
4.11	Product	t listing (LIST)	4–10
4.12	Weiahb	ridge applications (TRUCK)	4–10
	0 -		-

5	Counting (COUNT)	
5.1	Introduction	5–1
5.2	Fast sampling	5–2
5.3	Standard sampling	5–3
	5.3.1 Forward counting	5–3
	5.3.2 Reverse counting	5–4
5.4	Piece weight entry	5–6
	5.4.1 Displaying the piece weight	5-6
	5.4.2 To cancel the piece weight value	5-7
E	5.4.5 To change the piece weight	J—7 5 0
5.5	5.5.1 Displaying a count target	0—0 5—8
	5.5.2 To cancel the current target value	5-8
	5.5.3 To change the current target value	5–9
6	Trips (TRIPS)	
6.1	Introduction	6–1
6.2	Four independent alarm trips	6—1
6.3	Two filling pairs	6–4
6.4	One filling pair, two alarm trips	6–6
6.5	One filling combination, one alarm trip	6–6
6.6	Checkweigh outputs	6–9
	6.6.1 Enabling the checkweigh outputs	6–9
	6.6.2 Disabling the checkweigh outputs	6–9
6.7	Counting outputs	6–9
6.8	Manual fill outputs	6–9
6.9	Latched trips	6–9
6.10	Four filling trips	6–9
6.11	Miscellaneous	6–10
	6.11.1 Sequential operation and automatic taring	6–10
	6.11.2 Automatic printing	6-10
	6.11.3 Automatic totalising	6-10
7	Checkweighing (CHECK)	
7.1	Introduction	7–1
7.2	Setting checkweigher values	7–2
7.3	Enabling and using checkweigh	7–3
7.4	Disabling checkweigh	7–4

8	Filling (FILL)	
8.1	Introduction	8–1
8.2	Target, limits and low display values (SET) 8.2.1 LO DIS 8.2.2 LO OK 8.2.3 TARGET	8–2 8–2 8–2 8–3
	8.2.4 HI OK	8–3
83	6.2.5 Setting up procedure Enabling (ENABLE)	0-3 8_4
8.4		8-5
0.1	8.4.1 Filling procedure 8.4.2 Emptying procedure	8–5 8–5
8.5	Disable filling (DISABLE)	8–6
9	Packing runs (PACK)	
9.1	Introduction	9—1
9.2	Packing run set-up mode	9—1
9.3	Enabling and using packing runs	9–2
9.4	Disable packing run	9–3
9.5	Setting minimum weight	9–3
10	Product listing (LIST)	
10.1	Introduction	10–1
10.2	How to use product listing	10–1
11	Weighbridge applications (TRUCK)	
11.1	Introduction	11–1
	11.1.1 Multiple 1st weights	11-2
	11.1.2 Vehicle records	11-3
	11.1.4 Selecting PLUs in weighbridge mode	11-3
11.2	Stored 1st weight	11–5
	11.2.1 First weighing (1ST WT)	11–5
	11.2.2 Multiple first weighing (1ST WT)	11–6
	11.2.3 Second weighing (2ND WT)	11-6
11 2	II.2.4 Editing venicle tares (RET WT)	11-7
11.5	11.3.1 First weighing (1ST WT)	11-9
	11.3.2 Second weighing (2ND WT)	11–10
11.4	Stored/printed 1st weight	11–11
	11.4.1 First weighing (1ST WT)	11–11
	11.4.2 Multiple first weighing (1ST WT)	11-11
11 5	Conversion factors	11-12
11.5		11-13
11.6	Enormessages	11–13

v

12	Dual platform weighing	
12.1	Description	12–1
	12.1.1 Selecting single/dual weight display	12–2
12.2	Stored tares	12–2
12.3	PLUs	12-2
	12.3.1 Using PLUs	12-2
	12.3.3 Set PLU tare store	12-2
12.4	Totalising	12–3
12.5	Conversion mode	12–3
12.6	Counting	12–3
12.7	Trips	12–3
12.8	Checkweighing	12–4
12.9	Filling	12–4
12.10	Packing run	12–4
12.11	Product listing	12–4
12.12	Recall data (STATUS)	12–4
13	Supervisor mode (SUPER)	
13.1	Introduction	13–1
13.2	Altering the indicator's set-up (ALTER)	13–4
13.3	PLU mode (PLU)	13–5
	13.3.1 PLU Edit (EDIT)	13–5
	13.3.2 PLU printing functions (PRINT)	13-5
	13.3.4 PLU delete functions (DELETE)	13-8
13.4	Stored tares (TABES)	13-11
10.4	13.4.1 Edit stored tares (EDIT)	13–11
	13.4.2 Print stored tares (PRINT)	13–12
	13.4.3 Delete stored tares (DELETE)	13–12
13.5	User and supervisor passwords (PASSWD)	13–13
13.6	Conversion factor (CONV)	13–14
	13.6.1 Edit conversion factor units (EDIT)	13–14
	13.6.2 Print conversion factor units (PRINT)	13-15
107	Clock configuration (CLOCK)	12 16
13.7	13.7.1 Set date (DATE)	13-16
	13.7.2 Set time (TIME)	13–16
13.8	Auto shutdown (SLEEP)	13–17
13.9	Assigning password protection (ACCESS)	13–17
13.10	Integral printer (PRTER) – L215/L225 only	13–18
13.11	Adjust display contrast (LCD)	13–18

L215/L216/L225/L226 User Instructions

13.12	User fields (FIELDS)	13–19
	13.12.1 Editing user fields (EDIT)	13-19
	13.12.2 Philling user fields (PRINT) 13.12.3 Delete user fields (DELETE)	13-20
12 12	Edit chockweighing toxt (CHECK)	13 20
10.10	13 13 1 Editing the "UNDER" text (UNDER)	13-21
	13.13.2 Editing the "OVER" text (OVER)	13–21
	13.13.3 Editing the "ACCEPT" text (ACCEPT)	13–21
	13.13.4 Resetting the checkweighing text (RESET)	13–21
13.14	Vehicle records (VCL)	13–22
	13.14.1 Printing the vehicle records (PRINT)	13–22
	13.14.2 Deleting vehicle records (DELETE)	13–23
	13.14.3 Changing the vehicle registration prompt (MISC)	13–24
13.15	Printing a calibration security report (CALIB)	13–25
13.16	Set general modes (OTHER)	13–26
	13.16.1 Show indicator status (INFO)	13-26
	13.16.3 Selecting dual weight display (WT DIS)	13-27
		10-21
14	Editing PLUS (PLU)	
14.1	Introduction	14-1
14.2	Useful keys in PLU edit mode	14—1
14.3	PLU Edit (EDIT)	14–1
	14.3.1 Editing the PLU	14-2
111	Changing the PLU number	14-3
14.4	Changing the PLU number	14-4
14.5		14-4
14.6	Editing the PLU description	14-5
14./	Editing the PLU user text	14-5
14.8	Selecting the PLU units	14–5
14.9	PLU type	14–6
14.10	Edit PLU totals	14–6
14.11	Conversion factor	14-7
	14.11.1 Disabling the conversion factor	14-7
	14.11.2 Set conversion factor units	14-8
1/ 10		14-0
14.12	14 12 1 Disable packing run	14-0
	14.12.2 Enable packing run	14–9
	14.12.3 Set minimum pack weight	14–9
14.13	PLU product listing	14–9

14.14	PLU Co	unting	14–10
	14.14.1	Disable counting	14–10
	14.14.2	Count by sample	14–10
	14.14.3	Count by piece weight	14–11
	14.14.4	Set count target	14–11
	14.14.5	Derive piece weight	14–12
14.15	PLU che	eckweighing	14–13
	14.15.1	Disable checkweighing	14–13
	14.15.2	Set HI and LO ACCEPT limits	14–13
14.16	PLU filli	ng	14–14
	14.16.1	Disable fill target	14–14
	14.16.2	Set LO display	14–14
	14.16.3	Set fill target	14–15
	14.16.4	Set HI and LO tolerances	14–15
14.17	PLU trip		14–16
	14.17.1	Four alarm trips	14-16
	14.17.2	I wo filling trip pairs	14-17
	14.17.3	One filling combination, and everlead alarm trip	14-18
1110	DI I I I I I		14-10
14.18	PLU tar	Disable tere	14-19
	14.10.1	Set index to stored tare	14-19
	14.10.2	Set tare value	14-19
15		after your machine	14 20
15 1	Conour		15 1
15.1	Consum		15-1
15.2	Routine		15-1
	15.2.1	Cleaning the indicator	15-1
	15.2.2	Replacing the luse	15-2
15.3	Battery	power supply (L215/L225 only)	15-3
	15.3.1	Alkaline batteries (9V supply)	15-3
	15.3.2	Replacing the alkaline batteries	15-3
	15.3.3	External ballery (12V supply)	15-3
154	Batterv	pack (1 216/1 226 only)	15-4
16	Integral	nrinter (  215/  225 only)	
16 1		po Printer	16 1
10.1	ADOUL II	Advancing the printer roll	10-1
	16.1.2	Changing the printer roll	16-2
	16.1.2	Replacing the printer ribbon cartridge	16-3
	16.1.4	Cleaning the printhead	16–3
17	Append	lices	
17.1	Supervis	sor PLU Records	17–1
Index			

L215/L216/L225/L226 User Instructions

#### Figures

1.1	The L215/L225 Indicators (L215 Shown)	1–1
1.2	The L216/L226 Indicators (L216 Shown)	1–2
1.3	The L215/L216 Control Panel and Display	1–2
1.4	The L225/L226 Control Panel and Display	1–3
1.5	Location of Connectors (L215/L225)	1–3
1.6	Location of Connectors (L216/L226)	1–4
2.1	The Use of the Soft Keys in 'Browse'	2–8
5.1	Sample Print-out Using Counting Mode	5–1
7.1	Sample Print-out Using Checkweighing	7–1
7.2	Checkweighing Displays	7–3
8.1	Sample Print-out Using Filling Mode	8—1
8.2	Filling Mode Display	8—1
10.1	Example Print-out of Product Listing Showing PLU Totals	10–2
11.1	A Typical Weigh Ticket	11–2
12.1	Dual Platform Weighing – Single Weight Display	12–1
12.2	Dual Platform Weighing – Dual Weight Display	12–1
13.1	Position of Indicator Status Line	13–26
15.1	L216 Battery Pack and Charger	15–5
16.1	Typical print outs from the integral printer.	16–1
16.2	Printer with paper roll loaded	16–2

#### Introduction

This manual provides full operating and programming instructions for the L215, L216, L225 and L226 Digital Indicators.

### **Indicator Configuration**

Most of the menus, displays, flowcharts etc. throughout this manual that are configuration dependent (that is, they change depending on the options configured in the indicator) are shown with all possible options configured.

### Notation

In certain displays in this manual an **X** is shown to represent any alpha or numeric information that can change through programming or is dependent on indicator conditions or configuration. For example, **XXX** may represent a PLU number, say 011.

# Section 1 Getting started

## Table of Contents:

1.1	Introduction		1–1
	1.1.1	Description	1–1
	1.1.2	External connectors	1–3
	1.1.3	Operating environment	1–4
1.2	Optional features		1–5
	1.2.1	Integral printer (L215/L225 only)	1–5
	1.2.2	Dual graduation	1–5
	1.2.3	4 – 20mA/trips interface	1–5
	1.2.4	Comms 2 and 3	1–5
	1.2.5	Battery power supply (L215/L225 only)	1–5
	1.2.6	Battery pack (L216/L226 only)	1–5
	1.2.7	Back–lit graphics panel	1–5
	1.2.8	Remote keyboard	1–5
	1.2.9	Dual platform weighing	1–5
1.3	Functionality		1–6
	1.3.1	Passwords	1–6
	1.3.2	User functions	1–6
	1.3.3	Supervisor functions	1–6
	1.3.4	Keyboard timeout	1–6
1.4	Operation		1–7
	1.4.1	Switching on	1–7
	1.4.2	Reverting to standby mode	1–7
	1.4.3	LCD contrast (on power-up only)	1–8
	1.4.4	Keyboard keys	1–8
	1.4.5	Display overlay icons	1–11
	1.4.6	Display icons	1–11

#### 1.1 Introduction

The L215, L216, L225 and L226 machines are among the most powerful and versatile microprocessor–based industrial indicators available. They have a range of built–in functions which include product listing, counting, filling, checkweighing, weighbridge operations and packing runs, all configurable during installation.

For ease–of–use the indicators have a product look up (PLU) feature. PLUs can store product, totals and other information which can be recalled during operation. This is especially useful for repetitive operations and fundamental to product listing.

A dual platform weighing option allows you to connect two platforms to the indicator and display them simultaneously or singly using a key to switch from one platform to the other.

#### 1.1.1 Description

The L215/L216/L225/L226 multi-function digital indicators can be mounted in a variety of ways to suit their application and environment. The following lists some of their features:

- a clear display that can be read in any light conditions
- keyboard with function, alpha (L225/L226 only) and numeric keys
- internal clock allowing you to display and print time and date
- optional integral tally roll printer (L215/L225 only)
- splash-proof keyboard (L215/L225 only)
- waterproof to IP65 (L216/L226 only)

Figure 1.1 The L215/L225 Indicators (L215 Shown)



L215/L216/L225/L226 User Instructions



Figure 1.2 The L216/L226 Indicators (L216 Shown)

Figure 1.3 The L215/L216 Control Panel and Display





Figure 1.4 The L225/L226 Control Panel and Display

#### 1.1.2 External connectors

Some of the connectors may vary depending on the options fitted.

Figure 1.5 Location of Connectors (L215/L225)



L215/L225 Connector Configuration				rations
Trips input/output (25-way)	1	1	2	_
Additional trips input/output (25–way)	-	2	_	_
Comms 2 and 3 (25-way)	2	_	_	2
Load cell 2 (9-way)		_	1	1

L215/L216/L225/L226 User Instructions

### www.valuetronics.com



Figure 1.6	Location of Connectors	(L216/L226)
------------	------------------------	-------------

	L216/L226 Connector Configurations			
Trips input	2	_	1	
Trips output	3	_	2	
Comms 2 and 3	1	1	_	
Load cell 2	_	3	3	

#### 1.1.3 Operating environment

Operating temperature: -10°C to +40°C.

The correct voltage supply is shown on the rating plate.

Do not expose the indicator to:

- extremes of hot and cold
- vibration
- large amounts of dust (L215/L225 only)
- moisture (L215/L225 only)

The IP rating is only maintained with connectors or the sealing caps in position (L216/L226 only).

#### 1.2 Optional features

#### 1.2.1 Integral printer (L215/L225 only)

Integral, dot matrix, 24-column tally roll printer.

#### 1.2.2 Dual graduation

An additional key (kg/lb) on the keyboard allows you to select kilogram or pound weighing units.

#### 1.2.3 4 – 20mA/trips interface

The 4–20mA option provides an analogue signal for output to other existing equipment. The trips interface provides four trip outputs and four trip inputs.

#### 1.2.4 Comms 2 and 3

This option provides serial communications channels for remote devices to be connected by the service engineer.

#### 1.2.5 Battery power supply (L215/L225 only)

The L215/L225 will operate using battery power supply, however, not all features are supported with battery power supply. See Section 15.3 on Page 15–3.

#### 1.2.6 Battery pack (L216/L226 only)

The L216/L226 can be powered by a sealed, re–chargeable battery pack. See Section 15.4 on Page 15–5.

#### 1.2.7 Back–lit graphics panel

Cobalt blue back-lit graphics display panel that can be read in any lighting conditions.

#### 1.2.8 Remote keyboard

There is an option for a remote keyboard. The timeout (see Section 1.3.4) for this keyboard is configurable.

#### 1.2.9 Dual platform weighing

You can fit two platforms to your indicator and display them simultaneously, or singly using the Platform key to switch between them. See Section 12.

#### 1.3 Functionality

During installation your indicator will have been configured to suit your requirements. The installation or service engineer will have enabled the functions required and set up the appropriate communications channels for your peripheral equipment. Only those functions enabled for your system will appear on the display.

Should your requirements change at any time contact your local Avery Berkel service centre. Any or all of the functions listed in Section 1.3.2 on Page 1–6 can be enabled by the service engineer.

This manual assumes that all functions are configured and the displays used in the examples are consistent with this.

#### Text entry (L215/L216 only)

If you have the large key remote keyboard, in addition to numeric character entry you can use all the features in this manual requiring alpha character entry. For example, PLU description editing and product listing.

#### 1.3.1 Passwords

The user functions can be password protected by the supervisor to prevent unauthorised use. Supervisor functions may be password protected and require the supervisor password to access them.

The factory set default passwords are:

User: 1234

Supervisor: 5678

Instructions for changing and setting the passwords can be found in Sections 13.5 and 13.9. For using the passwords see Section 4.2.1.

#### 1.3.2 User functions

See Section 4.1 for details.

#### 1.3.3 Supervisor functions

See Section 13.1 for details.

#### 1.3.4 Keyboard timeout

After pressing a key on the keyboard, timeout is the period of time the indicator waits for another keypress. If one is not detected within the timeout the keypress is ignored and the indicator reverts to its previous condition.

Timeout is configurable for the indicator's keyboard and the remote keyboard. When a key is pressed on the remote keyboard the indicator's keyboard is locked during timeout.

#### 1.4 Operation

The indicators can operate in weighing or counting modes. In counting mode you will not be able to use the following functions even if they have been configured for your indicator:

- filling
- checkweighing
- conversion factor
- type-through.

#### 1.4.1 Switching on

When power is applied to the indicator the power on/off indicator illuminates and the indicator enters standby mode. To switch the indicator on press  $\boxed{|/(1)|}$ 

and hold down for one second, after which:

- the indicator bleeps twice
- all trip outputs are reset (this is a safety measure)
- the current supplied by the 4–20mA interface is zero.

Then the indicator performs a self check and enters the last operating mode used.

#### **Battery power**

If the battery is supplying power to the indicator the battery icon (bottom right-hand corner of the display) will illuminate. If the battery charge is low you will hear five bleeps in succession, the battery icon will flash and you will see the message **SUPPLY BATTERY LOW**. To clear the message press **ESC** or . Replace or recharge the batteries, as appropriate, as soon as possible. See Sections 15.3 (L215/L225) and 15.4 (L216/L226) on Page 15–3.

If the memory retention power supply is low you will hear five bleeps in succession, the battery icon will flash and you will see the message **MEMORY BATTERY LOW**. To clear the message press **ESC** or **L**. Call your Avery

Berkel service engineer.

#### 1.4.2 Reverting to standby mode

To switch to standby mode, with the indicator on, press  $\boxed{1/0}$  and hold down

for one second, after which the indicator will bleep once.

The indicator will also enter standby mode if it senses no activity within the time specified in the auto shut down configuration, or the power fails. (Activity is defined as: a key press, communication on any of the comms channels, weight change of 30 divisions or more, or trips being enabled.)

In standby mode the indicator only responds to the **On/Standby** key.

L215/L216/L225/L226 User Instructions

#### 1.4.3 LCD contrast (on power–up only)

If you cannot read the display after the indicator has been switched on you can adjust the LCD contrast:

- 1. Make sure the indicator is in standby mode. (Press 1/(2) if necessary.)
- 2. Hold down the **ESC** key and press I/U momentarily, just long enough to hear two bleeps. On releasing I/U you will hear another bleep then see the message **ADJUST CONTRAST XX**.
- Press F1 ↓ or F2 ↑ to decrease or increase the contrast level setting. Holding the key will cause the contrast level to change continuously contrast range is 00 to 31.
- 4. Press when you are happy with the display contrast. Indicator bleeps and runs through its warm-up sequence.

#### 1.4.4 Keyboard keys

<u>ا\ر</u> م	<b>On/Standby</b> key. Switches between the On and Standby modes.
	<b>Test</b> key. Causes the indicator to perform a display test, during which all the pixels on the graphics panel are activated for four seconds then de–activated for two seconds. At the end of the test the indicator returns to its previous state.
CE	<ul> <li>Clear key. Used to:</li> <li>clear the currently displayed entry when typing in data</li> <li>cancel any existing semi-auto tare when followed by the Tare key and any existing preset tare when followed by the Preset tare key</li> <li>clear the user print field when followed by the Print key</li> <li>cancel a PLU when followed by the PLU key</li> </ul>
•0•	<b>Zero</b> key. Sets the display to zero providing there are no tares active and the weight on the platform is within the zero range.
ESC	<ul> <li>Escape key. Enables you to:</li> <li>escape from data entry functions without making any changes</li> <li>exit to normal weighing mode</li> <li>access the display contrast adjustment menu by holding the key down at power-up (see Section 1.4.3).</li> </ul>

## www.valuetronics.com

- <b>-T</b> -	<b>Tare</b> key. Causes the weight on the platform to be displayed as zero provided that the indicator is configured either for single entry tares and no semi–auto tare is currently active, or to allow multiple semi auto tares.			
	<b>Note:</b> If the <b>Clear</b> key is pressed followed by the <b>Tare</b> key, any active semi–auto tare will be cancelled.			
B/G	<ul> <li>Gross/Net key. This key can be configured during installation to be inoperable or to operate in the following ways:</li> <li>when being held down, indicator displays gross weight</li> <li>on first press, indicator displays gross weight; on next press, indicator reverts to displaying net weight</li> </ul>			
	<b>Note:</b> This key will only operate when there is an active tare.			
→PT	<b>Preset Tare</b> key. Used to enter fixed tare weight values from the numeric keypad or to recall a stored tare.			
PLU	<b>PLU</b> key. Used to enable or disable a previously created PLU (Product Look Up).			
*	<b>Total</b> key. Displays grand, sub, trips and check totals for indicator and PLU.			
+/-* *	Add/Subtract from Total key. Takes you to an UPDATE TOTAL menu allowing you to select ADD or SUB to add to or subtract from the machine total. Displays grand total then reverts back to UPDATE TOTAL menu.			
	<ul> <li>Platform key. When using the two platforms option this selects platform 1 or platform 2 provided that:</li> <li>no PLU is active</li> <li>no trips are active</li> <li>both the platforms are in range, that is, they are not over or under range.</li> </ul>			

	<ul> <li>Print key. Sends data to the printer provided that:</li> <li>the configured printers are set up to respond to the print key</li> <li>enabled function is not configured for auto printing</li> <li>weight is within specified bands when indicator is configured for manual printing</li> <li>the weight is stable</li> <li>the weight is greater than the minimum allowed</li> <li>If user fields (see Section 13.12) are configured, on pressing the Print key you will be prompted by a user field title to enter data (for example, a description for the goods being processed) which will be printed out on the printer ticket. However, if you are using product listing the user field titles will appear after you select START to enable the product listing or recall a PLU set up for product listing.</li> <li>Pressing Print during a test sequence (initiated by pressing Test) will cause the integral printer, if fitted, to produce a test print.</li> </ul>
kg/lb	<ul> <li>kg/lb key. Allows you to select kg or lb weighing units, provided:</li> <li>the indicator is not configured for automatic variable resolution (AVR), that is, multi-range weighing</li> <li>there is no preset tare active</li> <li>the indicator is not in counting mode</li> <li>there are no trips active</li> <li>there is no product listing active</li> <li>interlock conditions are met</li> </ul>
0 to 9	Numeric keys. Used to enter numeric data.
and -	Cursor keys. Used to move along lines of text.
	Enter or Return key. Used to confirm data entry or clear any error or warning messages.
•	<b>Decimal Point/Full Stop</b> key. Can be configured as a decimal comma.
-	Minus/Dash key. For entry of negative weights.

1–10

F1 to F5	<b>Soft</b> keys. There are five 'soft keys', <b>F1</b> to <b>F5</b> , situated directly below the graphics panel. The function of each key is determined by the feature or mode currently active. This is
	displayed as text in the box immediately above each key in the graphics panel. If a soft key is not active during a particular function the box may be empty or not appear at all.

#### Keyboards with Alpha Keys

The following keys are available on all L225/L226 indicators. They are only available on L215/L216 indicators that have a remote large key keyboard.

A to Z	<b>Alpha</b> keys. Used for text entry, for example, PLU description or product listing.
	Space key. Used for entering spaces in text.

#### 1.4.5 Display overlay icons

→ᢕ←	Gross Zero indicator. Shows that the indicator is at gross zero.
Net	<b>Net</b> indicator. Shows that the weight displayed is the net weight, that is, there is a tare in operation.
-T-	<b>Semi-auto Tare</b> indicator. Shows that a semi-auto tare is in operation.
→ PT	<b>Preset Tare</b> indicator. Shows that a preset tare is in operation.

#### 1.4.6 Display icons

## 1 — Getting started

## www.valuetronics.com

# Section 2 Basic weighing operations

## Table of Contents:

2.1	Normal	weighing Weighing goode	2-1
	2.1.1	weighning goods	2-1
2.2	Using ta	ares	2–2
	2.2.1	Semi-auto tare	2–2
	2.2.2	Preset tare	2–3
	2.2.3	Auto preset tare	2–4
	2.2.4	Stored tares	2–5
2.3	Using P	LUs (Product Look Up)	2–6
	2.3.1	Enabling a PLU by PLU number	2–7
	2.3.2	Enabling a PLU by part number	2–7
	2.3.3	Enabling a PLU using the 'browse' facility	2–9
	2.3.4	Disabling a PLU	2–10

#### 2.1 Normal weighing

In normal weighing mode the weight and units are displayed and you can use any of the keyboard features. This means you can use the indicator as a simple weighing machine.

The 'soft key' options configured for your indicator are shown along the bottom edge of the graphics display and are selected by pressing the appropriate 'soft' function key below the option. If all options are set up you will see:



If there are more options configured than can be displayed on one screen, press  $\rightarrow$  (F5) to see the next screen display. If you are viewing the last screen, pressing  $\rightarrow$  (F5) takes you back to the first screen (shown above).

Your particular system may be configured for any or all of the options described in this manual.

#### 2.1.1 Weighing goods

1. Check that the indicator is at gross zero.



2. Place the goods on the platform.



- 3. If you require a weigh ticket and your indicator is not configured to print automatically press  $\bigcirc$ .
- 4. Remove the goods from the platform.



#### 2.2 Using tares

#### 2.2.1 Semi–auto tare

- 1. Check that the indicator is at gross zero.
- 2. Place the container on the platform.
- 3. Press ---- .
- 4. Fill container to required weight.
- 5. If you require a weigh ticket and your indicator is not configured to print automatically press  $\bigcirc$ .
- 6. Remove filled container. If your indicator is configured to show negative weights, the tare weight will be displayed. If not you will see the message **NET WEIGHT BELOW ZERO**.
- 7. If the display does not revert to zero automatically:
  - a) Press CE .
  - b) Press ---- .













#### 2.2.2 Preset tare

Preset tare is a keyboard entered tare.

- 1. Check that the indicator is at gross zero.
- To enter the required container weight: 2.
  - Type in weight of container. (You a) must type in the correct number of decimal places.)
  - b) Press ]. If your indicator is -PT configured to show negative weights, the tare weight will be displayed. If not you will see the message NET WEIGHT BELOW ZERO.
- 3. Place the container on the platform.
- 4. Fill container to required weight.
- 5. If you require a weigh ticket and your indicator is not configured to print automatically press  $(\cdot)$
- Remove filled container. 6.
- 7. Repeat Steps 2 to 5.
- 8. To clear the pre-set tare:
  - a) Press CE .
  - b) Press -PT>

L215/L216/L225/L226 User Instructions

F1^-**F**4 ] [F5















#### 2.2.3 Auto preset tare

Auto preset tare is a keyboard entered tare that cancels at gross zero.

- 1. Check that the indicator is at gross zero.
- 2. Place filled container on platform.
- 3. Type in weight of container. (You must type in the correct number of decimal places.)
- 4. Press .
- 5. Remove filled container.













## www.valuetronics.com

#### 2.2.4 Stored tares

Stored tares are tare values that are stored in the indicator. Each stored tare has a code number which is used to recall the tare. To use a stored tare it must be set up before you start weighing (see Section 13.4 on Page 13–11) and the container you are using must be the same weight as the stored tare value.

- **NOTE:** If your indicator is configured for auto preset tare you cannot activate a stored tare with the indicator at gross zero.
- 1. Check that the indicator is at gross zero.
- 2. Press .
- 3. Type in stored tare code for the container weight required.
- 4. Press . If your indicator is configured to show negative weights, the tare weight will be displayed, if not you will see the message **NET WEIGHT BELOW ZERO**.
- 5. Place the container on the platform.
- 6. Fill container to required weight.





- 7. If you require a weigh ticket and your indicator is not configured to print automatically press  $\bigcirc$ .
- 8. Remove filled container.
- 9. Repeat Steps 2 to 8.
- 10. Press **CE** then **to clear the** current tare.





#### L215/L216/L225/L226 User Instructions

#### 2.3 Using PLUs (Product Look Up)

It is recommended that, wherever possible, all products be allocated a PLU. Especially products that are used regularly or in repetitive operations, such as packing runs or counting. Also, each product used in product listing should have a PLU. This will enable you to to gain maximum benefit from the PLU feature.

A PLU is a pre-defined, short-cut code which contains product information such as description and associated options. Sub-totals and grand totals information can also be stored in a PLU.

When a PLU is enabled, the information stored in it is used to set the current state of the indicator. So, for example, if filling is set up within a PLU then recalling this PLU will set up the filling function which will use the PLU's preset values.

## **NOTE:** You must create a PLU using the PLU Editor before you can enable it. Instructions for creating and configuring PLUs are detailed in Section 14.

"PART NUMBER", "DESCRIPTION" and "USER TEXT" are the **TEXT 1**, **TEXT 2** and **TEXT 3** fields which are printed on the tally roll. These can be altered by the supervisor from the **MISC** menu (see Section 14.3 on Page 14–1).

You can use either the PLU number or its associated part number to enable a PLU. PLU numbers are three–digit numbers but part numbers can contain up to twenty alphanumeric characters. If you select the PLU by part number a 'browse' facility lets you choose the PLU from a list.

**NOTE:** If your indicator is configured for PLU cancelling on zero and you recall a PLU with stored tare with your indicator at gross zero, the PLU will be disabled. To avoid this, place the container, either empty or filled, on the platform before recalling the PLU.

#### 2.3.1 Enabling a PLU by PLU number

If you know the PLU number you require you can enable it by:

- 1. With the indicator in weighing or counting mode, type in the PLU number.
- 2. Press **PLU**.
- 3. Press . (Display is dependent on PLU set up.)

	27			
STATUS CO	υντ τ	RIPS	CHECK	+
F1 F2		=3	F4	F5



PLU 027<000111WX> ACTIVE				
STATUS	COUNT	TRIPS	CHECK	ŧ
F1	F2	F3	F4	F5

#### 2.3.2 Enabling a PLU by part number

If you know the part number of the PLU you require you can enable it by:

- 1. With the indicator in weighing or counting mode, press **PLU**.
- 2. Type in the part number of the PLU you wish to enable.
- 3. Press . (If the PLU has no number it will automatically become active.)
- 4. Press . (Display is dependent on PLU set up.)

ENTER PART NUMBER			
		BROWSE	
F1 F2 F3	F4	F5	





PLU 027<000111WX> ACTIVE					
STATUS	COUNT	TRIPS	CHECK	Ļ	
F1	F2	F3	F4	F5	

L215/L216/L225/L226 User Instructions



Figure 2.1 The Use of the Soft Keys in 'Browse'
## 2.3.3 Enabling a PLU using the 'browse' facility

If you do not know the PLU or part number you require you can use the 'browse' facility which allows you to choose the PLU from a displayed list, sorted by part number or description.

- **NOTE:** As the "PART NUMBER" and "DESCRIPTION" titles can be edited they may be different from those appearing in this section. Also, as the options that appear above the soft key **F5** in 'browse' (that is, **PART** and **DESCR**) use the first five digits of these titles, they will differ accordingly.
- 1. With the indicator in weighing or counting mode, press **PLU**.

ENTER PART NUMBER	
	BROWSE
F1 F2 F3	F4 F5

2. Select **BROWSE** by pressing **F5**.

— PART NUMBER ———	PLU
* 0123456789012345678	001
1ABCDEF	234
5F12HOF7146	800
A123456	089
A125VUV – 52	468
	1
ተ ነ ቀ ነ ተተ	

- **NOTE:** You may first see the message **SORTING PLUS. PLEASE WAIT**. This message only appears the first time you use 'browse' after switching on the indicator.
- 3. Use the soft keys to move the asterisk next to the PLU you require (for example, PLU number 089). Refer to Figure 2.1.

— PART NUMBER ———	PLU
0123456789012345678	001
1ABCDEF	234
5F12HOF7146	800
* A123456	089
A125VUV – 52	468
A 4 4 AA	
. I 🛧 I	

4. Press to select. (If the PLU has no number it will automatically become active.)



## L215/L216/L225/L226 User Instructions

5. Press . (Display is dependent on PLU set up.)

PLU 027	<000111	WX> ACT		
STATUS	COUNT	TRIPS	CHECK	+
F1	F2	F3	F4	F5

## 2.3.4 Disabling a PLU

To disable a PLU press **CE** followed by **PLU**. You will see the message **PLU DISABLED**.

If you try to disable a PLU when none is active you will see the message **NO PLU ACTIVE**.

**NOTE:** If your indicator is not configured for cancelling PLU settings, then disabling a PLU does not clear its associated functionality (that is, counting, checkweighing, filling and trips). For example, if the PLU you were using was set up for counting and you disable it, the indicator will remain in counting mode. To return to normal weighing you must deselect the feature activated by the PLU from the user functions menu (see Section 1.3.2).

## Section 3 Totalising

## Table of Contents:

Introdu	uction	3–1
3.1.1	Clearing totals	3–1
Add/su	ubtract from total key	3–2
Totals	key	3–3
3.3.1	Subtotals and grand totals	3–3
3.3.2	Trips totals	3–4
3.3.3	Checkweigh totals	3–5
	Introde 3.1.1 Add/se Totals 3.3.1 3.3.2 3.3.3	Introduction 3.1.1 Clearing totals Add/subtract from total key Totals key 3.3.1 Subtotals and grand totals 3.3.2 Trips totals 3.3.3 Checkweigh totals

## 3.1 Introduction

Totals information is held in battery–backed stores in the indicator. If your indicator has been configured for certain features such as a packing run or trips, totals can be updated automatically. You can update totals manually by using the  $\lceil_{+/- *}\rceil$  (add/subtract from total) key.

Each PLU has its own associated sub and grand totals stores. If a PLU is enabled the stores for that PLU are updated. If a counting PLU is enabled then totalising in that PLU is performed as the number of components counted. All other totalising is as net weight.

Dual graduation indicators have two sets of default totals stores, one for the kilogram units and one for the pound units. Only the stores relevant to current weighing units are updated. A PLU has only one set of totals stores and can only be enabled if its weighing units match those currently active.

If no PLU is enabled then the default totals stores and transaction counters are updated.

If automatic trip totals has been configured, it is the trips stores that are updated when the trip value is reached. Your indicator may also have been configured so that trips totalising automatically updates any active PLU total.

**NOTE:** Trips totalising operations do not affect default totals.

If you see the message **TOTAL NEAR OVERFLOW** then the totalising operation would cause the store to overflow and is not carried out.

## 3.1.1 Clearing totals

Printing a total does not mean that the values held in the totals store are lost immediately. The data is retained until the totals store is next updated. This enables you to obtain multiple print–outs of a total if required.

## 3.2 Add/subtract from total $_{+/-*}$ key

When you press this key you enter the **UPDATE TOTAL** menu where you can select **ADD** or **SUB** to add to or subtract from the totals store, and the transaction count is increased by one provided that:

- the weight is steady
- the weight has returned to zero or changed by at least 30 divisions (depending on indicator configuration) since the last totalising operation
- the weight is within the scale capacity
- the totals being updated are not about to overflow.

If you have just printed a total (sub or grand) then the associated totals store and the transaction count will be cleared before the new value is added or subtracted.

- 1. Place the goods on the platform.
- 2. Press  $_{+/-*}$
- 3. Select **ADD** or **SUB** to add to or subtract from grand total.



UPDATE	TOTAL			
ADD	SUB			
F1	F2 ~	F3	F4	F5











Press 🔔 .

4.

5. Remove the goods from the platform.

## 3.3 Totals key 🛛 🛞

You can display, print and clear the grand, sub, trips and checkweigh totals stored within the indicator using this key. The totals can be accessed from normal weighing state or counting mode but not from set up modes.

Totalising is performed as net weight except where a counting PLU is enabled in which case totalising to that PLU is as an item count.

If password protection has been configured for totals clearing on your indicator you will have to enter the **user** or **supervisor** password before printing the sub-total.

You must always enter the supervisor password before printing **grand** totals irrespective of any password protection.

- 1. Indicator in normal operating mode.

Use the soft (F) key to select the type of total you require.

## 3.3.1 Subtotals and grand totals

Select **SUBTOT (F1)** to display the subtotal or **GRAND (F2)** to display the grand total. If a PLU is active the total you see in either case will be that for the current PLU.

TOTAL	27.00 kg	IJ
UPDATES	3	
F1 F2	F3 F	F4 F5

Press  $\bigcirc$  and enter password if required to obtain a print–out of the total and set it for zeroing on the next update:

SELEC	T PRINT	CHANNEI	_	
INT	COM 1	COM 2	COM 3	
F1	F2	F3	F4	F5
	L2	215/L2	225	

Use the soft (F) key to select the printer you want to use for the print-out.

L215/L216/L225/L226 User Manual

## 3.3.2 Trips totals

What you see on the display when you select **TRIPS (F3)** will depend on how the trips have been configured.

## Four alarm trips



Two filling trip pairs

SELEC	T TOTAL			
PAIR 1	PAIR 2			
F1	F2	F3	F4	F5

One filling pair and two alarm trips

SELEC	T TOTAL			
FILL	TRIP 3	TRIP 4		
F1	F2	F3	F4	F5

Use the soft (F) key to select the total you wish to print.

## One coarse/fine filling combination and one alarm trip

TOTAL	27.00 kg	
UPDATES	3	
F1 F2	F3	F4 F5

Press <u></u> and enter password, if required, to obtain a print–out of the total and set it for zeroing on the next update:

SELEC	T PRINT	CHANNE	L 🔽	
INT	COM 1	COM 2	COM 3	
F1	F2	F3	F4	F5
	L2	215/L	225	

Use the soft (F) key to select the printer you want to use for the print-out.

## Four filling trips



## 3.3.3 Checkweigh totals

This option provides the under, over and accept totals from checkweighing. Select **CHECK**:

SELEC.	T TOTAL			
UNDER	ACCEPT	OVER		
F1	F2	F3	F4	F5

Select the totals you require, that is, UNDER, ACCEPT or OVER:

TOTAL	0.235 kg	
UPDATES	11	
F1 F2	F3 F	4 F5

Press <u></u> and enter password if required to obtain a print–out of the total and set it for zeroing on the next update:



Use the soft (F) key to select the printer you want to use for the print-out.

## Section 4 Advanced features

## Table of Contents:

4.1	Introduction	4–1	
4.2	Passwords	4–4	
	4.2.1 Using passwords	4–4	
4.3	Recall data (STATUS)	4–5	
	4.3.1 Information recall mode (INFO)	4–5	
	4.3.2 PLU recall mode (PLU)	4–6	
4.4	Counting mode (COUNT)	4–6	
4.5	Trip values set-up mode (TRIPS)	4–6	
4.6	Checkweigher mode (CHECK)	4–6	
4.7	Filling (FILL)	4–6	
4.8	Packing runs (PACK)	4–6	
4.9	Conversion mode (CONV)	4–7	
	4.9.1 Conversion factor set–up mode (SET)	4–7	
	4.9.2 Enabling Conversion mode (ENABLE)	4–8	
	4.9.3 Disabling Conversion mode (DISABLE)	4–8	
4.10	Printer type-through mode (TYPE)	4–9	
	4.10.1 Using type-through	4–9	
4.11	Product listing (LIST)		
4.12	Weighbridge applications (TRUCK)		

L215/L216/L225/L226 User Instructions

## 4.1 Introduction

The menu on Page 4–2 is available on exiting standby mode. It gives access to the following functions:

Function	Screen display	What it does
Status	STATUS	Displays active parameters for the indicator or PLU at any time.
Counting	COUNT	Uses the weight of a single item to calculate the total number of items in the batch.
Trips	TRIPS	Allows target and compensation values to be set for filling operations.
Checkweighing	CHECK	Compares load to a pre-set weight and shows whether goods are under, within or over the tolerance limits set.
Filling	FILL	Allows filling or emptying operations. Shows exact weight and percentage away from target weight.
Packing run	PACK	Automatic totalising and printing for a pre-set number of items or batches.
Conversion factor	CONV	Converts weight displayed into any units from a previously determined list.
Type-through	TYPE	Information relating to a weighing operation can be entered and printed.
Product listing	LIST	Prints individual product information during a batch sequence and a total at the end.
Weighbridge	TRUCK	Records first and second weight readings from a weighbridge and sends the information to a suitable ticket printer.
Supervisor mode	SUPER	Access, alter and print management data and configure certain indicator functions.

## 4 — Advanced features





L215/L216/L225/L226 User Instructions



In the printer options  $\ensuremath{\text{INT}}$  is the internal printer available on L215/L225 indicators only.

## L215/L216/L225/L226 User Instructions

## 4.2 Passwords

All of the advanced features and also totals clearing and supervisor mode can be password protected. See Sections 13.5 and 13.9 for changing the passwords and setting up password protection.

## 4.2.1 Using passwords

If the indicator prompts you for a password and you are authorised to continue, type in the password as follows:

 In this example you are trying to enter **TRIPS SET–UP MODE** (which is password protected) from the **TRIPS** menu. After selecting the **TRIPS** option the display shows:



2. Type in your password.

ENTER PASSWORD

3. Press .

 TRIPS SET-UP MODE

 TRIP 1
 TRIP 2
 TRIP 3
 TRIP 4

 F1
 F2
 F3
 F4
 F5

If, in Step 2, you typed in an incorrect password you will see the message **PASSWORD INCORRECT: PRESS ENTER** after pressing . Press and try again.

## 4.3 Recall data (STATUS)

Status mode can be accessed from either normal weighing or counting modes. When you exit status mode the indicator will revert to the previous mode.

The **STATUS**, or **SELECT DATA TO DISPLAY**, menu looks like this:

SELECT DATA TO DISPLAY					
INFO	PLU				
F1	F2	F3	F4	F5	

## 4.3.1 Information recall mode (INFO)

In this mode you can find out which indicator options are currently active. The graphics panel displays a list of active indicator parameters such as pre-set tare value, count limit, trip values etc.

Only those functions that have been enabled by the service engineer will appear in the list (see Section 4.1).

1. In normal weighing or counting modes select **STATUS**.

SELECT DATA TO DISPLAY					
INFO	PLU				
F1	F2	F3	F4	F5	

DATE/TIME: 05-06-93 07-40 AM S-A TARE : NONE P.S. TARE : 0.04 kg FILLING MODE DISABLED CHECK WEIGHING DISABLED PACK RUN SIZE : 4 STATUS 1 4 MIN PACK WEIGHT: 100 kg

SELECT	DATA TO	) DISPLA	Y	
INFO	PLU			
F1	F2	F3	F4	F5

Select INFO by pressing F1.

2.

3. Press **F1** (**STATUS**) to exit information

Press **F3** to select  $\downarrow$ , to go to next

- 4. Press **ESC** to return to normal weighing or counting mode.

screen.

recall mode.

## 4.3.2 PLU recall mode (PLU)

The graphics panel displays a list of parameters associated with an active PLU such as description, part number, count limit, trip values etc.

Only information relating to those functions that have been enabled by the service engineer will appear in the list.

 In the STATUS menu select PLU by pressing F2. (If you see the message NO PLU ACTIVE there is no PLU enabled.)

TARE S	PLU NU PART NU DESCRII USER TI TORE NU ACK RUI	MBER : 5 IMBER : 1 PTION : B EXT : IMBER : I N SIZE : N	23456AE OLT NONE IONE	3
STATUS	1	↓ ↓		

2. Select **STATUS** to exit.

SELECT DATA TO DISPLAY						
INFO	PLU					
	F2	F3	F4	F5		

3. Press ESC .

## 4.4 Counting mode (COUNT)

Refer to Section 5.

## 4.5 Trip values set–up mode (TRIPS)

Refer to Section 6.

## 4.6 Checkweigher mode (CHECK)

Refer to Section 7.

## 4.7 Filling (FILL)

Refer to Section 8.

## 4.8 Packing runs (PACK)

Refer to Section 9.

## 4.9 Conversion mode (CONV)

This option allows you to apply a known conversion factor to the net weight on the platform. You can enter the required conversion factor and select the appropriate units from a previously determined list. Units can be created in supervisor mode (see Page 13–14).

If your indicator is configured to display converted weight, the conversion factor can be in the range from 0.001 to 100.

**NOTE:** The displayed units are those specified and are **not** weight units.

If the converted weight is not displayed the conversion factor can only be entered within the range 0.1 to 10. The converted weight may appear on print–outs.

Once you have selected the correct conversion factor and units, normal weighing and filling operations are carried out as described in the relevant sections of this manual.

Conversion mode is automatically disabled if counting mode is enabled.

The **CONV**, or **CONVERSION MODE**, menu looks like this:



## 4.9.1 Conversion factor set–up mode (SET)

- 1. Make sure you are in the **CONVERSION MODE** menu and select **SET**. The display will show the current conversion factor value.
- 2. To change the conversion factor type in the new value required.





CONVERSION FACTOR UNITS

1. PER CENT \*2. LITRE/KG 3. GALL/LB

3. Select **UNITS**. The display will show the list of units available with the current selection indicated by an asterisk.

L215/L216/L225/L226 User Instructions

To change the conversion factor press the numeric key corresponding to the units you require. For example, press 1 to select **PER CENT**. Or press 1 to accept the current units.

CON	VERSION	MODE		
ENABLE	DISABLE	SET	UNITS	
F1	F2	F3	F4	F5

## 4.9.2 Enabling Conversion mode (ENABLE)

1. Select ENABLE from the CONVERSION MODE menu.



**6.00** Ii F1 F2 F3 F4 F5

2. Press **ESC** to exit.

## 4.9.3 Disabling Conversion mode (DISABLE)

1. Select **DISABLE**.

CONVERSION MODE ENABLE DISABLE SET UNITS F1 F2 F3 F4 F5

UNITS

CONVERSION DISABLED

F2



2. Press **ESC** to exit.

## 4.10 Printer type-through mode (TYPE)

Printer type-through mode allows you to use the alphanumeric keys to type in text and print it out.

You can only use this feature on L216/L226 indicators if you have a printer connected.

Printer type-through is not available in Counting mode.

The TYPE, or TYPE THROUGH MODE, display:

TYPE THROUGH MODE
F1 F2 F3 F4 F5

SELECT PRINT CHANNEL

TYPE THROUGH MODE

TYPE THROUGH MODE OPERATOR 1 FRED BLOGGS

TYPE THROUGH MODE

F2

F2

F2

COM 1 COM 2 COM 3

F4

F4

F5

F5

F5

F3

F3

INT

## 4.10.1 Using type–through

You can edit the text as you are entering it using the  $[\leftarrow]$ ,  $[\rightarrow]$  and CE keys. The number of characters you can enter depends on the printer but will generally be 80 characters.

- 1. Enter **TYPE THROUGH MODE**. (If you have only one printer available display will be as in Step 2.)
- 2. Select the printer channel required. (If you see the message **NO PRINTER CHANNEL: PRESS RETURN**, then there is no printer attached to your indicator.)
- 3. Type in the text you wish to print.
- 4. Press 📕 . Text is printed out.
- 5. Repeat Steps 3 and 4 for any more lines of text you wish to send to the printer.
- 6. Press **ESC** to exit.



F3

F4

## L215/L216/L225/L226 User Instructions

## 4.11 **Product listing (LIST)**

Refer to Section 10.

## 4.12 Weighbridge applications (TRUCK)

Refer to Section 11.

# Section 5 Counting (COUNT)

## Table of Contents:

5.1	Introdu	uction	5—1
5.2	Fast s	ampling	5–2
5.3	Standa	ard sampling	5–3
	5.3.1	Forward counting	5–3
	5.3.2	Reverse counting	5–4
5.4	Piece	Piece weight entry	
	5.4.1	Displaying the piece weight	5–6
	5.4.2	To cancel the piece weight value	5–7
	5.4.3	To change the piece weight	5–7
5.5	Enterir	ng a count target	5–8
	5.5.1	Displaying a count target	5–8
	5.5.2	To cancel the current target value	5–8
	5.5.3	To change the current target value	5–9

## 5.1 Introduction

In counting mode you can configure the indicator to perform counting operations.

When sampling, the indicator uses the weight of a specified number of items to determine the piece weight, and from this calculates the total number of items in the batch.

When the **COUNT** soft key is pressed, if information exists from a previous counting operation you will see the count display immediately. If there has been no previous count operation the display still shows the weight.

The **COUNT** mode display:

SAMPLE PCE WT TARGET		STATUS
F1 F2 F3	F4	F5

While the count is active the display changes to show the count and an icon to indicate the counting function. Counting operations can be initiated by either **sampling** or **piece weight** operations. A **target value** for the counting operations can be set if required. Please note the following:

- If the goods on the platform are equal to or exceed the target value the display will flash, and you will hear a bleep if the audible warning has been set up by the service engineer.
- If you are using a piece weight it *must not* be less than 1/20th of an indicator increment. For example, an indicator weighing by 2 g intervals will reject any piece weight less than 0.1 g. If you try to use a piece weight that is too small you will see the message **PIECE WEIGHT TOO SMALL**.

To cancel a counting operation press **CE** followed by either **F1** (**SAMPLE**) or **F2** (**PCE WT**). The indicator will remain in counting mode but will display a weight value.

To cancel a target value press **CE** followed by **F3** (**TARGET**).

Figure 5.1 Sample Print–out Using Counting Mode

3MM BRASS I	NUTS
GROSS WGT:	2.313 kg
NET WGT:	1.445 kg
S/A TARE:	0.547 kg
P/S TARE:	0.321 kg
PIECE WGT:	0.00125 kg
COUNT:	1156
TIME:	01-12 PM
DATE:	15-01-92
OPEROTOR:	527

L215/L216/L225/L226 User Instructions

## 5.2 Fast sampling

- 1. In normal weighing mode, make sure the indicator is at gross zero and place the sample on the platform.
- 2. Select the **COUNT** option.
- 3. Type in the sample size.
- 4. Select **SAMPLE** from the menu.





6	
SAMPLE PCE WT TARGET	STATUS
F1 F2 F3 F4	F5



|F5

|F2

- **NOTE:** If the indicator fails to detect a valid sample within 10 seconds you will see the message **SAMPLING ERROR**. Repeat the operation.
- 5. Remove the sample from the platform.



- 6. Carry out the required counting operation.
- 7. Press **ESC** to return to normal weighing mode.



## 5.3 Standard sampling

## 5.3.1 Forward counting

## 1. Either:

Check that the indicator is at gross zero.

## Or:

If you are using a container, place the container on the platform and tare off the container weight.





**NOTE**: You can use either semi–auto, preset or stored tares. The display above indicates a preset or stored tare in operation.

- 2. Select the **COUNT** option.
- 3. Select **SAMPLE**.







F3

SAMPLE PCE WT TARGET

F2



STATUS

F5





L215/L216/L225/L226 User Instructions

## Or:

If you require a different sample size, type it in ....









### Note:

As a check, remove the items from the container. The display should show 0.



- 6. Carry out the required counting operations.
- 7. To return to normal weighing mode at any time press **ESC** .

## 5.3.2 Reverse counting

1. If you are using a container, place the container on the platform and tare off the container weight.



- **NOTE**: You can use either semi–auto, preset or stored tares. The display above indicates a preset or stored tare in operation.
- 2. Fill the container with the sample.



3. Select the **COUNT** option.

 SAMPLE
 PCE WT
 TARGET
 STATUS

 F1
 F2
 F3
 F4
 F5

L215/L216/L225/L226 User Instructions

## 5–4

4. Select **SAMPLE**.



 10
 20
 50
 100
 SAMPLE

 F1
 F2
 F3
 F4
 F5





## Or:

Either:

**F1** for 10).

5.

6.

If you require a different sample size, type it in ....

Remove the sample from the container.

Select the sample size (for example, press



.... then press 📕.







7. Carry out the required counting operation.

As a check, replace the items in the container. The display should show the selected or entered sample size: in this

8. To return to normal weighing mode at any time press **ESC** .

Note:

example 7.



2.

3. Type in the piece weight (kg).

Select the **COUNT** option.

- 4. Press PCE WT (F2).
- 5. Carry out the required counting operation.
- 6. To return to normal weighing mode at any time press **ESC** .

## 5.4.1 Displaying the piece weight

- 1. Make sure the indicator is in **COUNT** mode.
- 2. Select **PCE WT**.

F2

F1

## 5.4 Piece weight entry

1. Check that the indicator is at gross zero.

## Or:

If you are using a container, place the container on the platform and tare off the container weight.

**NOTE**: You can use either semi–auto, preset or stored tares. The display above indicates a preset tare in operation.









F3

F5

F4

5-6



## 5.4.2 To cancel the piece weight value

To cancel the piece weight value, press **CE** then select **PCE WT** while the **COUNT** mode is displayed.

## 5.4.3 To change the piece weight

You can type in a new piece weight or overwrite the existing piece weight using the **PCE WT** menu.

## Typing in the piece weight

- 1. Type in the new piece weight.
- 2. Press PCE WT.

## Overwriting the piece weight

- 1. Type in the new piece weight value while the existing piece weight is displayed.
- 2. Press 🛃 .

L215/L216/L225/L226 User Instructions

SA	MPLE	PCE WT	TARGET		STATUS
F1	^	F2	F3	F4	F5



SAMPLE PCE WT TARGET	STATUS
F1 F2 F3 F4	F5

0.050 kg				
	PCE WT			
F1	F2	F3	F4	F5



## 5.5 Entering a count target

- 1. Make sure the indicator is in **COUNT** mode.
- 2. Enter the number of pieces for the required target value.
- 3. Select **TARGET**.





- 4. Carry out the required counting operation.
  - **NOTE**: If the goods on the platform reach or exceed the target value the display will flash and the indicator will bleep (if configured to do so).
- 5. To return to normal weighing mode at any time press **ESC**.

## 5.5.1 Displaying a count target

- 1. Make sure the indicator is in **COUNT** mode.
- 2. select TARGET.

## **U.UU** kg ↔





## 5.5.2 To cancel the current target value

Cancelling the current target value resets it to 0.

- 1. Press CE .
- 2. Select TARGET .





## 5.5.3 To change the current target value

You can type in a new target value or overwrite the existing target value using the **TARGET** menu.

## Typing in the target value

- 1. Type in the new target value.
- 2. Select TARGET.

## Overwriting the target value

- 1. Type in the new target value while the existing target value is displayed.
- 2. Press 📕 .





120				
		TARGET		
F1	F2	F3	F4	F5



## Section 6 Trips (TRIPS)

## Table of Contents:

Introduc	6—1	
Four ind	6–1	
Two filli	6–4	
One filli	6–6	
One filli	6–6	
6.6 Checkweigh outputs		
6.6.1	Enabling the checkweigh outputs	6–9
6.6.2	Disabling the checkweigh outputs	6–9
Countin	ng outputs	6–9
Manual	6–9	
Latched	6–9	
Four fill	6–9	
Miscella	6–10	
6.11.1	Sequential operation and automatic taring	6–10
6.11.2	Automatic printing	6–10
6.11.3	Automatic totalising	6–10
	Introduc Four inc Two filli One filli One filli Checkw 6.6.1 6.6.2 Countir Manual Latchec Four fill Miscella 6.11.1 6.11.2 6.11.3	Introduction Four independent alarm trips Two filling pairs One filling pair, two alarm trips One filling combination, one alarm trip Checkweigh outputs 6.6.1 Enabling the checkweigh outputs 6.6.2 Disabling the checkweigh outputs Counting outputs Counting outputs Manual fill outputs Latched trips Four filling trips Miscellaneous 6.11.1 Sequential operation and automatic taring 6.11.2 Automatic printing 6.11.3 Automatic totalising
This section details trips set up and operation for indicators configured for standard trips operation. However, your indicator may be configured for extended trips operation (see Page 4–2) which provides additional trips. All relevant information for these trips can be found in this section.

## 6.1 Introduction

Refer to menu on Page 4-2.

The four trip outputs provided are configured to operate in one of the following ways:

- four alarm trips
- two filling trip pairs
- one filling pair and two alarm trips
- one filling combination and one alarm trip
- checkweigh outputs
- counting outputs
- manual fill outputs
- latched trips
- four filling trips.

The trips may also have been configured for sequential operation, automatic totalising, printing and taring. They can be configured to operate on gross, net or displayed weight.

You can enable automatic overrun compensation if required. This provides greater accuracy for filling operations.

To enter **TRIPS SET–UP MODE** select **TRIPS** in normal weighing mode. The menu is dependent upon the configured trip option.

If you see the message **INVALID ENTRY** at any time you are typing in an unacceptable value. Try again.

**NOTE:** Up to eight trips can be fitted, the additional four outputs having the same features available as the original four.

## 6.2 Four independent alarm trips

Each alarm trip operates independently and can be programmed so that its weight can be larger or smaller than the previous or next trip.

Alarm trips can have two weight values, target weight and over-run compensation weight. The overrun compensation weight is automatically compensated, that is, values are initially entered by the user but the indicator will update the value as it tries to keep track with any overrun errors. The maximum over-run compensation value allowed is 50% of the target value.

The trip is activated when the weight on the platform exceeds the target weight minus the over-run compensation (if enabled).

#### The TRIPS SET-UP MODE menu:

TRIPS S	SET-UP I	NODE		
TRIP 1	TRIP 2	TRIP 3	TRIP 4	
F1	F2 ~	F3	F4	F5

All trips are set up in the same way. To set up a trip carry out the following:

TRIP 1 TRIP DISABLED TARGET VALUE : AUTO COMP ENABLED CURRENT VALUE : () 1. Make sure the indicator is in **TRIPS** SET-UP MODE. Then select the trip you 1.00 ka 0.01 kg wish to enable by pressing the appropriate soft key (for example, F1). ENABLE DISABLE SET NO COMP COMP TRIP 1 TRIP ENABLED TARGET VALUE : AUTO COMP ENABLED CURRENT VALUE : 2. Select **ENABLE** to enable the trip. 1.00 kg 0.01 kg ENABLE DISABLE SET NO COMP COMP TRID 1 3. Select SET to display the current trip TRIP ENABLED TARGET VALUE : AUTO COMP ENABLED CURRENT VALUE : 1.00 kg value. 0.01 kg 1.00 kg SET 4. Type in the new value (if you do not wish TDID 1 TRIP 1 TRIP ENABLED TARGET VALUE : AUTO COMP ENABLED CURRENT VALUE : () 1.00 kg to change the current value press | 1 ) .... 0.01 kg 1.50 kg SET TRIP 1 TRIP ENABLED TARGET VALUE : 1.50 AUTO COMP ENABLED CURRENT VALUE: 0.01 kg .... then press 1.50 kg ENABLE DISABLE SET NO COMP COMP 5. Select NO COMP to disable automatic TRIP 1 TRIP 1 TRIP ENABLED TARGET VALUE : AUTO COMP DISABLED 1.50 kg over-run compensation. ENABLE DISABLE SET NO COMP COMP 6. Press COMP (F5) to display the current TRIP TRIP I TRIP ENABLED TARGET VALUE : AUTO COMP DISABLED 1.50 kg automatic over-run compensation value. 0.01 kg COMP Type in the new value (if you do not wish to change the current value press ) ....

.... then press

- 8. Press to return to **TRIPS SET-UP MODE**.
- 9. Repeat Steps 1 to 8 for remaining trips.

TRIP EL TARGE AUTO (	TRIP 1 NABLED T VALUE COMP DIS	ABLE	1.50 kg	
	0.02	kg		
				COMP
TRIP EI TARGE AUTO ( CURRE	TRIP 1 NABLED T VALUE COMP DIS NT VALU	: ABLEI E : 0.0	1.50 kg ) 2 kg	
ENABLE	DISABLE	SET	NO COMP	СОМР

TRIPS S	SET-UP I	MODE		
TRIP 1	TRIP 2	TRIP 3	TRIP 4	
F1	F2	F3	F4	F5

## 6.3 Two filling pairs

You can enter two values against each pair of filling trips, the target value and a compensation value.

There are two types of compensation available with this configuration, manual and auto. Manual compensation values are entered by the user and remain constant for each filling operation performed. Auto compensation values are initially entered by the user but are updated on each filling cycle as the indicator compensates for any overrun errors by adjusting the cut–off point to achieve an accurate fill.

# **NOTE:** Disabling manual compensation automatically selects auto compensation.

To disable compensation completely, enable manual compensation with a value of 0.

The TRIPS SET-UP MODE menu:

TRIPS	SET-UP I	MODE		
PAIR 1	PAIR 2			
F1	F2	F3	F4	F5

Both trip pairs are set up in the same way. To set up a trip pair carry out the following:

- Make sure the indicator is in TRIPS SET-UP MODE. Then select the trip pair you wish to enable by pressing the appropriate soft key (for example, F1).
- 2. Select ENABLE to enable the trip pair.

Select SET to display the target value for

Type in the new value (if you do not wish to change the current value press ) ....

PAIR 1 TRIP DISABLED TARGET VALUE : AUTO COMP ENABLED CURRENT VALUE : 0.1	1.00 kg 2 kg	I
ENABLEDISABLE SET	MAN	AUTO

PAIR 1 TRIP ENABLEI TARGET VALU AUTO COMP E CURRENT VAL	) E : NABLED UE : (	1.00 ) ).12 kg	kg	
	ESET	MAN		AUTO

	PAIR 1			
TRIP E	NABLED			
TARGE	T VALUE		1.00 k	(g
AUTO 0	COMP EN	IABLED		•
CURRE	CURRENT VALUE: 0.12 kg			
	1.00	) kg	Ũ	
		SET		

TRIP EL TARGE AUTO ( CURRE	PAIR 1 NABLED T VALUE COMP EN INT VALU	:: IABLED JE: 0.1	1.00 kg	g
	1.50	кд		
		SET		

PAIR 1 TRIP ENABLED TARGET VALUE : AUTO COMP ENABLED CURRENT VALUE: 0.12	1.50 kg	
ENABLE DISABLE SET	MAN	AUTO

L215/L216/L225/L226 User Instructions

3.

4.

the trip pair.

.... then press 📕 .

5. Select **MAN** to display the current manual compensation value ....

.... then type in the new value (if you do not wish to change the current value press to select it and enable manual compensation) ....

	then	press	┛	-
--	------	-------	---	---

6. Select **AUTO** to display the current automatic over-run compensation value ....

.... then type in the new value (if you do not wish to change the current value press to select it and enable auto compensation) ....

.... then press

- 7. Press to return to **TRIPS SET–UP MODE**.
- 8. Repeat Steps 1 to 7 for next pair.

If you are trying to enter trip values that are not consistent with the application you will see the following:

TRIP EI TARGE AUTO ( CURRE	NABLED T VALUE COMP EN/ NT VALU 0.10	: ABLED E: 0 kg	1.50 kg .12 kg	
			MAN	
TRIP E	PAIR 1 NABLED			

PAIR 1

TARGE AUTO ( CURRE	T VALUE COMP EN NT VALU 0.08	: ABLED E: 0 kg	1.50 kg .12 kg	
			MAN	

PAIR 1 TRIP ENABLED TARGET VALUE MANUAL COMP CURRENT VALU	: ENABL E : 0.0	1.50 kg .ED 8 kg	
ENABLE DISABLE	SET	MAN	AUTO

TRIP EN TARGET MANUA CURREI	PAIR 1 IABLED VALUE : L COMP EN NT VALUE : 0.12 kg	1.50 kg ABLED 0.08 kg	
			AUTO

TRIP EI TARGE MANUA CURRE	PAIR 1 NABLED T VALUE L COMP NT VALU 0.06	: ENABL E: kg	1. ED 0.08	50 kg kg	
					AUTO

PAIR 1 TRIP ENABLED TARGET VALUE : AUTO COMP ENABLED CURRENT VALUE : 0.0	1.50 kg 6 kg	
ENABLE DISABLE SET	MAN	AUTO

TRIPS SET-UP MODE					
PAIR 1	PAIR 2				
F1	F2	F3	F4	F5	

SET	DISABLE					
F1	F2	F3	F4	F5		

Select **SET** to revert to **TRIPS SET–UP MODE** and enter the correct values. Select **DISABLE** to disable the trip and exit **TRIPS SET–UP MODE**.

L215/L216/L225/L226 User Instructions

## 6 — Trips (TRIPS)

#### One filling pair, two alarm trips 6.4

Set up the pair of filling trips as detailed in Section 6.3 and the two alarm trips as detailed in Section 6.2.

The TRIPS SET-UP MODE menu:



#### One filling combination, one alarm trip 6.5

You can enter three values for the filling combination trip, a target value, a coarse shut off value and an initial compensation value.

The alarm trip in this configuration is an overload alarm trip so you cannot enter compensation values.

The TRIPS SET-UP MODE menu:

Select ENABLE.

.... then press 📘 .

the trip.



FILLING TRIP

either [

To set up the trips carry out the following:

1. Make sure the indicator is in TRIPS SET-UP MODE. Then select FILL to display the filling trip options.

Select SET to display the target value for

Type in the new value (if you do not wish to change the current value press () ....

	TRIF TAR COARSE MAN	P DISABLI GET VALI SHUT-O NUAL COI	ED: UE: FF: MP:	5.00 0.10 0.05	kg kg kg	
	ENABLE	DISABLE	SET	COARS	E	COMP
or	TRIF TAR COARSE	FILL P DISABLI GET VALI SHUT-O AUTO COI	ING TF ED : UE : FF : MP :	RIP 5.00 0.10 0.05	kg kg kg	
	ENABLE	DISABLE	SET	COARS	E	COMP
	ENABLE	DISABLE	SET	COARS	E	COMP
	ENABLE TF TAR COARSE MAN	FILL FILL RIP ENAB GET VALI SHUT-O NUAL COI	ING TF LED UE : FF : MP :	COARS RIP 5.00 0.10 0.05	kg kg kg	СОМР
	ENABLE TAR COARSE MAN ENABLE	FILL FILL RIP ENABI GET VALI SHUT-O NUAL COI DISABLE	SET LED UE : FF : WP : SET	COARS 31P 5.00 0.10 0.05 COARS	kg kg kg	СОМР
	ENABLE TAR COARSE MAN ENABLE	FILL FILL RIP ENABI GET VALI SHUT-O VUAL COI DISABLE	ING TF LED UE : FF : MP :	COARS 5.00 0.10 0.05 COARS	kg kg kg	СОМР

TRI TAR COARSE MAI	FILL P ENABLI GET VALI SHUT-O NUAL COI	ING TR ED: UE: FF: MP: .00 kg	5.00 0.10 0.05	kg kg kg	
		SET			

TRI TAR COARSE	5.00 0.10	kg kg			
MAI	NUAL COI	00 kg	0.05	кg	
		SET			
то		ING TF	RIP		
	GET VAL		6.00	ka	
COARSE	SHUT-O	FF :	0.10	kg	
IAM	NUAL COI	MP:	0.05	kğ	
		OFT	00400	-	00140
ENABLE	DISABLE	SEI	COARS	E	COMP

L215/L216/L225/L226 User Instructions

2.

3.

4.

- 5. Select **COARSE** to display the cut off value for the trip.
- Type in the new value (if you do not wish to change the current value press ) ....
  - $\dots$  then press  $\blacksquare$ .
- 7. Select **COMP** to display compensation options for the trip.
- 8. Select **AUTO** to display the current automatic over–run compensation value ....

.... then type in the new value (if you do not wish to change the current value press to select it and enable automatic over-run compensation) ....

•••	then	press	┢	
-----	------	-------	---	--

9. Select **MAN (F2)** to display the current manual compensation value ....

.... then type in the new value (if you do not wish to change the current value press to select it and enable manual compensation) ....

.... then press  $\blacksquare$  .

	FILLING TRIP						
TRI	TRIP ENABLED						
TAB				kα			
	TARGET VALUE :						
COARSE	SHUT-O	FF :	0.10	ĸg			
I MAI	MANUAL COMP :			kg			
	0 10 kg						
0.10 Kg							
			COARS	E I			
			004110	-			

FILLING TRIP TRIP ENABLED : TARGET VALUE : 6.00 kg COARSE SHUT-OFF : 0.10 kg MANUAL COMP : 0.05 kg 0.08 kg					
			COARS	E	
FILLING TRIP TRIP ENABLED : TARGET VALUE : 6.00 kg COARSE SHUT-OFF : 0.08 kg MANUAL COMP : 0.05 kg					
ENABLE	DISABLE	SET	COARS	Е	COMP

TRI TAR COARSE MAI	FILL P ENABL GET VAL SHUT-O NUAL COI	ING TF ED : UE : FF : MP :	RIP 6.00 0.08 0.05	kg kg kg	
AUTO	MAN				

TRI TAR COARSE MAI	FILL P ENABLI GET VALI SHUT-O NUAL COI	ING TF ED : UE : FF : MP : 0.05 kg	6.00 0.08 0.05	kg kg kg	
AUTO					

TRI TAR COARSE MAI	FILL P ENABL GET VAL SHUT-O NUAL COI	ING TF ED : UE : FF : MP : 0.04 kg	RIP 6.00 0.08 0.05 g	kg kg kg	
AUTO					

TRI TAR COARSE	FILL P ENABLI GET VALI SHUT-O AUTO COI	ING TF ED : JE : FF : MP :	RIP 6.00 0.08 0.04	kg kg kg	
AUTO	MAN				

TRI TAR COARSE	FILL P ENABLI GET VALI SHUT-O AUTO COI 0.0	.ING TF ED : UE : FF : MP : 05 kg	RIP 6.00 0.08 0.04	kg kg kg	
	MAN				

FILL	FILLING TRIP					
TRIP ENABL TARGET VALI COARSE SHUT-O AUTO COI	ED : UE : FF : MP :	6.00 0.08 0.04	kg kg ka			
0.04 kg						
MAN						

FILLING 1 TRIP ENABLED : TARGET VALUE : COARSE SHUT-OFF : MANUAL COMP :	TRIP 6.00 kg 0.08 kg 0.04 kg

L215/L216/L225/L226 User Instructions

## 6 — Trips (TRIPS)

10.	Press 📕 twice to return to <b>TRIPS</b>	
	SET-UP MODE.	FILL ALARM
		F1 F2 F3 F4 F4
11.	Select <b>ALARM</b> to display the overload alarm trip options.	ALARM TRIP DISABLED TARGET VALUE : 6.40 kg
12.	Select <b>ENABLE</b> to enable the alarm trip. (Select <b>DISABLE</b> to disable it.)	ALARM TRIP ENABLED TARGET VALUE : 6.40 kg
13.	Select <b>SET</b> to display the overload value.	ALARM TRIP ENABLED TARGET VALUE : 6.40 kg
		6.40 kg
	then type in the new value (if you do not wish to change the current value press	ALARM TRIP ENABLED TARGET VALUE : 6.40 kg
		6.00 kg
	then press 📕 .	ALARM TRIP ENABLED TARGET VALUE : 6.00 kg
14.	Press J to return to TRIPS SET–UP MODE.	
		F1 F2 F3 F4 F4
15.	Press <b>ESC</b> to exit.	
		STATUS COUNT TRIPS CHECK
If you	are trying to enter trip values that are not istent with the application you will see the	INVALID TRIP VALUES
follo	ving:	SET         DISABLE           F1         F2         F3         F4         F4

6–8

TRIPS SET-UP MODE

ENABLEDISABLE

F2

F1

## 6.6 Checkweigh outputs

Checkweigh outputs are enabled and disabled in **TRIPS SET–UP MODE**.:

## 6.6.1 Enabling the checkweigh outputs

Select ENABLE.

ENABLEDISABLE	
	F4 F5
TRIPS SET-UP MODE	
ENABLEDISABLE	
F1 F2 F3	F4 F5

F3

F4

F5

## 6.6.2 Disabling the checkweigh outputs

Select **DISABLE**.



## 6.7 Counting outputs

Refer to Section 6.6 for enabling and disabling the counting outputs.

## 6.8 Manual fill outputs

Refer to Section 6.6 for enabling and disabling the manual fill outputs.

## 6.9 Latched trips

Refer to Section 6.2 for setting up the four trips.

## 6.10 Four filling trips

Refer to Section 6.2 for setting up the four filling trips.

L215/L216/L225/L226 User Instructions

## 6.11 Miscellaneous

## 6.11.1 Sequential operation and automatic taring

Automatic taring is only available when sequential operation has been enabled and is normally used with the trips set for net weight operation. The current trip is disabled and the next one enabled when a semi-auto tare operation is performed.

These features are not available for one filling combination and one alarm trip configuration.

## 6.11.2 Automatic printing

This option initiates an automatic print–out at the target or alarm value depending on the type of trips configuration.

## 6.11.3 Automatic totalising

This option causes the trips to automatically totalise to the trips totals stores and, if set, to an active PLU store at the target or alarm value.

# Section 7 Checkweighing (CHECK)

# Table of Contents:

7.1	Introduction	7–1
7.2	Setting checkweigher values	7–2
7.3	Enabling and using checkweigh	7–3
7.4	Disabling checkweigh	7–4

## 7.1 Introduction

In this mode the indicator can be used to indicate whether the goods are under, within or over the tolerance limits that have been set.

The CHECKWEIGHING SET-UP mode menu:

CHECK	WEIGHING	G SET-U	, <b>V</b>	
ENABLE	DISABLE	SET		
F1	F2	F3	F4	

Figure 7.1 Sample Print–out Using Checkweighing



Note:

In sample, conversion factor is enabled, PLU is active and product description and warning message are shown.

## 7 — Checkweighing (CHECK)

## 7.2 Setting checkweigher values

- 1. Make sure you are in the **CHECKWEIGHING SET–UP** mode menu. Then select **SET**.
- 2. Select LO LIM.
- 3. Type in low weight limit.
- 4. Press 🛃 .
- 5. Select HI LIM.
- 6. Type in high weight limit.
- 7. Press 🛃 .
- 8. Press **ESC** to exit.

СНЕСК	WEIGHIN	IG SET-U	IP	
LO LIM	HI LIM			
F1	F2	F3	F4	F5

	0.	00 kg		
LO LIM				
F1	F2	F3	F4	F5

	0.	45	kg		
LO LIM					
F1	F2	F3	`	F4	F5

CHECKWEIGHING SET-UP				
LO LIM	HI LIM			
F1	F2 ~	F3	F4	F5

	0.	00 kg		
	HI LIM			
F1	F2	F3	F4	F5

	0.	55 kg		
	HI LIM			
F1	F2	F3	F4	F5

CHECKWEIGHING SET-UP				
O LIM	HI LIM			
F1	F2	F3	F4	F5

STATUS	COUNT	TRIPS	CHECK	+
F1	F2	F3	F4	F5

## 7.3 Enabling and using checkweigh

Your indicator may have been configured for one of two displays. The reduced size weight display option is used in this manual. The other option replaces the weight display with three large boxes. See Figure 7.2.





Reduced size weight display

No weight display

- **NOTE**: If filling mode is enabled it will automatically be disabled when **ENABLE** is selected.
- 1. Make sure you are in the **CHECKWEIGHING SET–UP** mode menu. Then select **ENABLE**.



2. Press **ESC** to exit.

- **NOTE:** If you see the message **INVALID CHECK VALUES** then the **LO LIM** is greater than the **HI LIM**.
- 3. Place goods on platform. The appropriate box on the display will be highlighted:



**NOTE**: If the load on the platform is in the accept band the three display boxes will flash and the indicator will bleep (if configured to do so).

L215/L216/L225/L226 User Instructions

## 7 — Checkweighing (CHECK)

 If your indicator is not configured to print automatically press 

 <u>O</u> to obtain a ticket when the load meets the required conditions.

## 7.4 Disabling checkweigh

- 1. Make sure you are in the **CHECKWEIGHING SET–UP** mode menu. Then select **ENABLE**.
- 2. Select DISABLE.
- 3. Press **ESC** to exit.



F2

F1

=

F3

STATUS COUNT TRIPS CHECK

ᅚ

F4

→

F5

CHECK	WEIGHING	G SET-U	P	
ENABLE	DISABLE	SET		
F1	F2	F3	F4	

		].(	][	<b>]</b> kç	<b>)</b>	-0- Net -T- +17
F1	F2	F3	F4	F5		

# Section 8 Filling (FILL)

# Table of Contents:

8.1	Introdu	uction	8–1
8.2	Target	t, limits and low display values (SET)	8–2
	8.2.1	LO DIS	8–2
	8.2.2	LO OK	8–2
	8.2.3	TARGET	8–3
	8.2.4	HI OK	8–3
	8.2.5	Setting up procedure	8–3
8.3	Enabli	ing filling (ENABLE)	8–4
8.4	Using	Filling	8–5
	8.4.1	Filling procedure	8–5
	8.4.2	Emptying procedure	8–5
8.5	Disabl	le filling (DISABLE)	8–6

## 8.1 Introduction

Filling mode allows you to carry out filling or emptying operations using a container on the platform.

Figure 8.1 Sample Print–out Using Filling Mode

```
FILLING
P/N:PM-872-J258-210
DES:POLISHING COMPOUND
GROSS WGT: 3.612 kg
NET WGT: 2.973 kg
TARGET: 3.000 kg
DISP LOW: 2.500 kg
TOL LOW: 0.050 kg
TOL HI: 0.030 kg
```

The FILLING SET-UP MODE menu:



For each filling operation you can set up the following using the **SET** option (see Section 8.2):

- required fill weight final target value (TARGET)
- load at which the graphics display is activated low display limit (LO DIS)
- minimum fill weight low tolerance value (LO OK)
- maximum fill weight high tolerance value (HI OK)

After enabling filling, the filling display appears which shows, numerically and graphically, the percentage of the filling operation completed, that is, the percentage of the target value.

Figure 8.2 Filling Mode Display



When the filling target is reached the display will flash and you may hear a bleep, depending on the indicator's configuration.

L215/L216/L225/L226 User Instructions

## 8.2 Target, limits and low display values (SET)

The **FILLING SET–UP MODE** menu after selecting **SET**:

FILLING	SET-UP	MODE		
LO DIS	lo ok	TARGET	ні ок	
F1 F2 F3 F4 F5				

In this section the displays shown are for the following example:

#### Example:

You require a target value of 5 kg with a minimum weight value of 4.95 kg and a maximum weight value of 5.02 kg. You wish to activate the display when the weight reaches 4 kg.

So:

	-4.00 kg
	= 4.00 Kg
LO OK	= 0.05 kg
TARGET	= 5.00 kg
HI OK	= 0.02 kg

### 8.2.1 LO DIS

**LO DIS** is the weight at which the graphics display is activated (see diagram below). As the container on the platform is filled more arrows change in proportion to the change in weight. The arrows on the left (pointing right) represent the weight range between **LO DIS** and **LO OK**.

The LO DIS value must always be less than minimum weight value.

The **LO DIS** value can be negative for the emptying procedure, depending on type of tare used.

	80% — >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>					- <b>T</b> - →PT
reached (for example	STATUS	COUNT	TRIPS	CHECK	÷	
4.00 kg)	F1	F2	F3	F4	F5	

## 8.2.2 LO OK

**LO OK** value, which is always positive, is a tolerance of the target value and is obtained by subtracting the minimum weight value from the target value. In our example, **LO OK** value (0.05 kg) = 5.00 kg - 4.95 kg. The blocks to the left represent the weight range between **LO OK** and **TARGET**.



LO OK value has been reached (for example, 4.95 kg)

## 8.2.3 TARGET

The **TARGET** value is always positive for filling but can be negative for the emptying procedure, depending on type of tare used.



**TARGET** value has been reached (for example, 5.00 kg), display flashes and indicator bleeps if configured to do so

## 8.2.4 HI OK

**HI OK** value, which is always positive, is a tolerance of the target value and is obtained by subtracting the target value from the maximum weight value. In our example, **HI OK** value (0.02 kg) = 5.02 kg - 5.00 kg. The blocks to the right of **TARGET** represent the weight range between **TARGET** and **HI OK**.

100% — >>>>>> =============================					- <b>T</b> -	
FIL	LING SET	-UP MODE				→PT〉
STATUS	COUNT	TRIPS	CHECK	÷		
F1	F2	F3	F4	F5		

HI OK value has been reached (for example, 5.02 kg)

## 8.2.5 Setting up procedure

To set up the target, low display limit and high and low tolerances for filling carry out the following:

- After selecting SET from the FILLING SET-UP MODE menu in Section 8.1 select TARGET. The current target value will be displayed.
- 2. To change the target value type in the value you require ....

				<b>V</b>	
5.00 kg					
		TARC	ЭЕТ		
F1	F2	F3	F4		F5





8-3

.... then press 🛃.

L215/L216/L225/L226 User Instructions

## 8 — Filling (FILL)

- 3. Select LO DIS.
- 4. To change the **LO DIS** value type in the value you require ....

•••	then	press	┢	
-----	------	-------	---	--

		9.00 kg			
LO DIS					
F1 F2 F3 F4 F5					



FILLING SET-UP MODE							
LO	DIS	LO	ок	TARGET	н	ок	
F1	$\widehat{}$	F2		F3	F4	$\widehat{}$	F5

- 5. Repeat Steps 3 and 4 for LO OK.
- 6. Repeat Steps 3 and 4 for **HI OK**.
- 7. Press 📕.

Error messages:

- INVALID ENTRY. PRESS ENTER the value entered is unacceptable, that is, you have entered the wrong number of decimal places or it is outside the indicator's capacity
- **INVALID FILL VALUES** the entered values are inconsistent with each other

## 8.3 Enabling filling (ENABLE)

Press **ESC** to exit.

If checkweighing mode was enabled it will be disabled when the filling **ENABLE** option is selected.

1. In the **FILLING SET–UP MODE** menu in Section 8.1 select **ENABLE**.

0% - ₩₩₩₩ 0000 - ₩₩₩₩ + FILLING SET-UP MODE					
ENABLE	DISABLE	SET			
F1	F2	F3	F4	F5	

L215/L216/L225/L226 User Instructions

2.

## 8.4 Using Filling

### 8.4.1 Filling procedure

1. Either:

Place the container on the platform and press  $\boxed{-\mathbf{T}}$  .

Or:

Type in the container weight then press for a pre-set tare.

2. Fill the container until the display flashes to indicate that the load has reached target value. You may hear a bleep.

STATUS	COUNT	TRIPS	CHECK	+	
F1	F2	F3	F4	F5	

STATUS	COUNT	TRIPS	СНЕСК	ŧ	
F1	F2	F3	F4	F5	

- 3. If you require a ticket and your indicator is not configured to print automatically press  $\bigcirc$  .
- 4. Repeat Steps 2 and 3 until you have filled all the containers.
- 5. To clear a pre-set or stored tare:
  - a) Press CE .
  - b) Press for pre-set or stored tare, press ---- for semi-auto tare.



## 8.4.2 Emptying procedure

To use the emptying procedure the indicator *must* be configured for negative weight display.

It is recommended that, if you are using tares use semi auto tares only.

- 2. Empty the container until the weight display flashes to indicate that the load removed is at target value. You may hear a bleep.

STATUS	COUNT	TRIPS	CHECK	+		
F1	F2	F3	F4	F5		

100% - **********************************					
FILL	PACK	CONV	TYPE	ţ	
F1 F2 F3 F4 F5					

## 8 — Filling (FILL)

- 3. If you require a ticket and your indicator is not configured to print automatically press  $\bigcirc$ .
- 4. Repeat Steps 1 to 3 until you have completed the required operation.
- 5. To clear a tare:
  - a) Press CE .
  - b) Press for pre-set or stored tare, press --- for semi-auto tare.



## 8.5 Disable filling (DISABLE)

- 1. Make sure you are in **FILLING SET–UP MODE** menu.
- 2. Select **DISABLE**.
- 3. Press **ESC** to exit.

0% - ₩₩₩₩₩ 0000 - 000 + 0000 + 0000 + 0000 + 00000 + 00000 + 00000 + 00000 + 000000						
ENABLE DISABLE SET						
F1 F2 F3	F4	F5				

FILLING SET-UP MODE			
ENABLE DISABLE	SET		
F1 F2	F3	F4	



# Section 9 Packing runs (PACK)

# Table of Contents:

9.1	Introduction	9—1
9.2	Packing run set-up mode	9—1
9.3	Enabling and using packing runs	9–2
9.4	Disable packing run	9–3
9.5	Setting minimum weight	9–3

## 9.1 Introduction

You can set your indicator to carry out automatic totalising and printing for a pre-set number of items or batches. When the weight is greater than the configured minimum value and is steady the totals store is updated and, if your indicator is configured for printing, a print-out is automatically initiated. At the end of the packing run a final print-out is produced which can contain a total of all packs weighed and the number of packs.

If you are using another function with the packing run (for example, checkweighing) then the printing is still automatic, even if the other function is configured for manual printing.

If the packing run is used with the checkweighing function:

- print-out is in the format configured for checkweighing
- only prints in bands configured for checkweighing
- checkweighing totals are updated.

If you are using a PLU (see Page 2–6) then the totals updated are those relating to that PLU and checkweighing.

The PACKING RUN SET-UP MODE menu:

PACKING RUN SET-UP MODE				
ENABLE	DISABLE	SET	MIN WT	
F1	F2	F3	F4	F5

## 9.2 Packing run set–up mode

1. Make sure you are in the **PACKING RUN SET–UP MODE**. Then select **SET**. The display will show the existing pack run number, if set.



2. Enter the number of items or batches required (in the range 0 to 1000).



- **NOTE**: If you enter a run size of 0 then the indicator will assume an indefinite sized packing run. Packing run totals will not then be reset automatically and you will have to print the subtotal manually to clear them. See Section 3.3 on Page 3–3.
- 3. Press 📕 .

PACKIN	IG RUN SET-UP M	ODE
NABLE	DISABLE SET	MIN WT
F1	F2 F3	F4 F5

#### L215/L216/L225/L226 User Instructions

## 9.3 Enabling and using packing runs

1. Make sure you are in **PACKING RUN SET-UP MODE**, then select **ENABLE**.

- 2. Press ESC to exit PACKING RUN SET-UP MODE.
- 3. Press .
- 4. Type in stored tare code for the container weight required.
- 5. Press 📕 .
- 6. Place the batch on the platform. When the weight is greater than the configured minimum value and is steady the net weight is added to the totals store and a print–out is produced.
- 7. Remove batch.
- 8. Repeat Steps 3 and 7 until the pack run is completed.





9. Press 📕 .

With pack run enabled you can continue with more pack runs for the *same* pre-set number of items. Disable pack run to return to normal weighing.

PACKING RUN DISABLED

PACKING RUN SET-UP MODE ENABLE DISABLE SET

F3

MIN WT

MIN WT

F4

F4

ENABLE DISABLE SET

F2

F2

F1

#### **Disable packing run** 9.4

1. In PACKING RUN SET-UP MODE select DISABLE.

2. Press **ESC** to exit **PACKING RUN** SET-UP MODE.

#### 9.5 Setting minimum weight

The minimum weight setting determines the load that initiates a print-out.

- 1. In PACKING RUN SET-UP MODE select MIN WT. The display will show the existing minimum weight if set.
- 2. If you want to change the minimum weight type in the new value.
- 3. Press 🔒 .
- 4. Press **ESC** to exit.

25.00 kg MIN WT F1 F2 F3 F4 F5









# Section 10 Product listing (LIST)

Table of Contents:

10.1	Introduction	10–1
10.2	How to use product listing	10–1

## 10.1 Introduction

This mode enables you to print a list of products or items being weighed and to print a total of the items at the end. If any user text fields have been configured you may enter information such as customer, address or batch number into the appropriate text field, as described in Section 10.2. Some or all of this information may be printed at the end of the listing operation.

The **PRODUCT LISTING** menu:

PRODUCT LISTING				
START	END	DISABLE		
F1	F2	F3	F4	F5

It is recommended that, to make the most of product listing, you set up a PLU for every product you are going to weigh.

## 10.2 How to use product listing

Before using the product listing option make sure that:

- you have set up a PLU for every product you are going to weigh
- each PLU is set up with Packing Run enabled and with the batch target set to zero (this allows auto print and auto totalise)
- you have activated the status line (see Section 13.16.1) to show you which PLU is active.

The product listing total can be displayed and printed at any time by pressing **ESC** followed by +, then select **SUB**. Individual PLU totals are also available.



L215/L216/L225/L226 User Instructions

### Figure 10.1 Example Print–out of Product Listing Showing PLU Totals

NAME OF CLIENT JONES AND SON LTD SALE OR PURCHASE SALE 09–15 AM 22–05–95 HERRINGS 20kg HERRINGS 20kg MACKEREL 30kg MACKEREL 30kg MACKEREL 30kg PRAWNS 10kg PRAWNS 10kg	Product listing header User field 1 title User field 1 text User field 1 text
	User field 2 title SALE OR PURCHASE
END OF TRANSACTION 09-34 AM 22-05-95	User field 2 text SALE
END OF TRANSACTION 09-34 AM 22-05-95 TOTAL WEIGHT 180kg SIGNATURE OF CLIENT	User field 2 text Difference of the constraints of
	PLU 003 PRAWNS 10kg
SIGNATURE OF EMPLOYEE	MACKEREL 20kg MACKEREL 20kg
START OF TRANSACTION NAME OF CLIENT MACREADY FISHING SALE OR PURCHASE SALE 11–41 AM 23–05–95 PRAWNS 10kg PRAWNS 10kg	Product listing footer
PRAWNS 10kg PRAWNS 10kg PRAWNS 10kg	Grand total — GRAND TOTAL FOR WEEK ENDING 23–05–95 GRAND TOTAL ITEMS WEIGHED 22 GRAND TOTAL WEIGHT 400kg
END OF TRANSACTION 11-46 AM 23-05-95	Total PLU 001 - FRESH UNSMOKED HERRINGS TOTAL 110kg
TOTAL WEIGHT 60kg SIGNATURE OF CLIENT	Total PLU 002 - FRESHLY CAUGHT MACKEREL TOTAL 190kg
	Total PLU 003 - FROZEN PRAWNS TOTAL 100kg
SIGNATURE OF EMPLOYEE	

Press 📕 . no previous entry ENTER SALE OR PURCHASE SALE last entry ENTER SALE OR PURCHASE Repeat Steps 3 and 4 until all the fields PLU 001<HERRING>PACK/LIST ACTIVE have been displayed and you see the STATUS COUNT TRIPS CHECK following: F2 F3 Weigh the required goods for this PLU. Recall the next PLU (for example, PLU PLU 002<MACKERE>PACK/LIST ACTIVE 002) as in Step 2. STATUS COUNT TRIPS CHECK F1 F2 F3 F4 Weigh the required goods for this PLU. Repeat Steps 7 and 8, as necessary. When you have finished weighing select PRODUCT LISTING LIST. START END DISABLI F2 F3 F4 Select END. The sub-total and TOTAL 27.00 kg transaction count are displayed and the UPDATES 3 operation is then the same as for printing a sub-total. F2 F3 F4 . (The product listing total Press  $(\cdot)$ PRODUCT LISTING can be displayed and printed by pressing START END DISABLE ESC followed by then select \* F2 F3 F4 SUB.)

13. Select **DISABLE** to disable product listing, then press **ESC** to exit.

F5

F5

F5

F5

4.

5.

6.

7.

8.

9.

10.

11.

12.

14. At the end of the day, printing out a PLU summary will provide totals for the weight of product stored against each PLU:

GRAND TOTAL FOR WEE GRAND TOTAL ITEMS WI GRAND TOTAL WEIGHT	K ENDING 23–05 95 EIGHED 22 400kg
FRESH UNSMOKED TOTAL	HERRINGS 110kg
FRESHLY CAUGHT TOTAL	MACKEREL 190kg
FROZEN TOTAL	PRAWNS 100kg
GRADE A TOTAL	COD Okg
# Section 11 Weighbridge applications (TRUCK)

# Table of Contents:

11.1	Introduction	11–1
	11.1.1 Multiple 1st weights	11–2
	11.1.2 Vehicle records	11–3
	11.1.3 Selecting a vehicle record by registration number	11–3
	11.1.4 Selecting PLUs in weighbridge mode	11–4
11.2	Stored 1st weight	11–5
	11.2.1 First weighing (1ST WT)	11–5
	11.2.2 Multiple first weighing (1ST WT)	11–6
	11.2.3 Second weighing (2ND WT)	11–6
	11.2.4 Editing vehicle tares (RET WT)	11–7
11.3	Re-entered 1st weight	11–9
	11.3.1 First weighing (1ST WT)	11–9
	11.3.2 Second weighing (2ND WT)	11–10
11.4	Stored/printed 1st weight	11–11
	11.4.1 First weighing (1ST WT)	11–11
	11.4.2 Multiple first weighing (1ST WT)	11–11
	11.4.3 Second weighing (2ND WT)	11–12
11.5	Conversion factors	11–13
11.6	Error messages	11–13

#### **IMPORTANT NOTE:**

Before you start using the weighbridge function it is recommended that:

The PLU "DESCRIPTION" prompt is changed to read, for example, "PLU DESCRIP.". See Section 13.3.4.

PLUs are set up for the products that will be weighed on the weighbridge. See Section 14.

## 11.1 Introduction

The weighbridge function, which is only available on the L215/L225 indicators, allows you to record 1st and 2nd weight readings from a weighbridge and send the information to a suitable ticket printer. The weigh ticket can show the vehicle's registration number, date, time and consecutive number for each weighing and also the calculated net weight.

The weighbridge option will be configured to operate in one of the following ways:

- STORED 1ST WEIGHT first weight is stored against the vehicle's registration and can be recalled using 'browse'; vehicle tares are available
- RE–ENTERED 1ST WEIGHT first weight is printed out and typed in during the second weighing sequence
- STORED/PRINTED 1ST WEIGHT first weight is automatically stored when it is printed out and can be recalled using 'browse' during the second weighing sequence

The following diagram shows the menu after selecting the **TRUCK** option (the **RET WT** option only appears if your indicator is configured for retained vehicle tares):

	•	<b>_</b> / /_		
1ST WT	2ND WT	RET WT		STATUS
F1	F2	F3	F4	F5

A multiple 1st weight function allows you to perform more than one 1st weight weighing for vehicles carrying multiple loads.

Vehicle records, containing 1st weight and other information, are created automatically for each vehicle and stored against the vehicle's registration number.

The **STATUS** option gives access to **INFO** and **PLU** options (see Section 4.3).



Figure 11.1 A Typical Weigh Ticket

## 11.1.1 Multiple 1st weights

The multiple 1st weight function allows you to repeat 1st weight weighings up to six times. You can then print the calculated net weights of multiple, distinct loads for a particular vehicle on the weigh ticket.

You can select a different PLU for each 1st weight weighing, if required.

To use multiple 1st weights your system must be set up for multiple 1st weight operation and the print strings configured correctly.

## 11.1.2 Vehicle records

Vehicle records contain vehicle related information. They enable you to associate many vehicles with the same PLU at the same time.

A vehicle record is created automatically when the initial 1st weight weighing is stored for a vehicle.

Each vehicle's record is stored against its registration number, which is typed in on its initial 1st weight weighing, and is recalled using this number (see Section 11.1.3).

An expiry date can be assigned to a vehicle record, after which date it can no longer be selected. In stored 1st weight and stored/print 1st weight modes each vehicle record is deleted when its 2nd weighing has been carried out. However, in re-entered 1st weight mode the vehicle record is deleted both at the end of the 1st weight sequence and at the end of the 2nd weight sequence.

#### 11.1.3 Selecting a vehicle record by registration number

There are two methods of selecting a vehicle record. You can type it in or select it from a list using the 'browse' feature.

The VEHICLE REGISTRATION prompt:

		BROWSE
F1 F2 F3	F4	F5

#### Selecting a vehicle registration number by typing it in

1. Press **CE** to delete existing vehicle registration, if any, then type in the vehicle registration.

VEHICLE REGISTRATION	1	
A123 BCD		BROWSE
F1 F2 F3	F4	F5

2. Press  $\blacksquare$  to select.

**NOTE:** If there is a retained vehicle tare against the vehicle record the record is not deleted but held for further use.

#### Selecting a vehicle registration number using 'browse'

1. Select **BROWSE** to choose a previously entered registration.



**NOTE:** You may first see the message **SORTING VEHICLES. PLEASE WAIT**. This message only appears the first time you use 'browse' after switching on the indicator.

2. Use the soft keys (refer to Figure 2.1) to move the asterisk next to the vehicle registration you require, for example, vehicle registration number X2.



3. Press 📕 to select.

## 11.1.4 Selecting PLUs in weighbridge mode

You can configure the indicator to prompt for PLU selection during:

- the 1st weight sequence, just before the load is weighed
- the 2nd weight sequence, just after the load has been weighed
- neither sequence, where no products are used.

## 11.2 Stored 1st weight

## 11.2.1 First weighing (1ST WT)

- 1. In the **TRUCK** menu select **1ST WT**.
- 2. Select the vehicle registration as detailed in Section 11.1.3.

VEHICLE REGIST	RATION		
			BROWSE
F1 F2	F3	F4	F5
PLU DESCRIP.	_		
SAND			BROWSE
F1 F2	F3	F4	F5

3. Select a PLU (if your indicator is configured to do so):

#### Either:

Press **CE** to delete existing PLU, if any, then type in new PLU description.

#### Or:

Select **BROWSE** to choose an existing PLU (see Section 2.3.3 page 2–9).

NOTE:

If you do not select a PLU at this stage then the PLU selection defaults to PLU 001, a miscellaneous PLU.

- 4. Press  $\blacksquare$  to select the PLU.
- 5. With vehicle on weighbridge, select **STORE**.





6. Vehicle drives off weighbridge.

## 11.2.2 Multiple first weighing (1ST WT)

You may repeat a **1ST WT** operation, as detailed in Section 11.2.1, up to six times for the same vehicle. You can select a different PLU each time (if your indicator is configured to do so), as required.

## 11.2.3 Second weighing (2ND WT)

1. Select **2ND WT**.



2. Select the vehicle registration as detailed in Section 11.1.3.

PLU DESCRIP. SAND		BROWSE
F1 F2 F3	F4	F5

3. Select a PLU (if your indicator is configured to do so):

#### Either:

Press **CE** to delete existing PLU, if any, then type in new PLU description.

#### Or:

Select **BROWSE** to choose an existing PLU (see Section 2.3.3 page 2–9).

 Press . If any user fields (see Section 13.12) are configured you will be prompted for data; enter the data and press . each time.

Either:	
	PRESS PRINT KEY PRESS ESCAPE TO EXIT
	F1 F2 F3 F4 F5
Or:	
	INSERT TICKET
	F1 F2 F3 F4 F5

STATUS

E5

1ST WT 2ND WT RET WI

F2

- With vehicle on weighbridge, insert a ticket in the printer, if necessary, then press
   A ticket is printed.
- 6. Vehicle drives off weighbridge.

## 11.2.4 Editing vehicle tares (RET WT)

**RET WT**, which is a configurable option, allows you to create or clear a vehicle's tare weight. There are two ways to obtain the tare weight: by selecting the **STORE** option with the vehicle on the weighbridge or by typing it in. To clear a tare weight select **CLEAR**.

A vehicle tare weight can be used as a **1ST WT** if you wish to carry out a **2ND WT** operation without entering a **1ST WT**.

You cannot use a vehicle tare weight if a **1ST WT** operation has already been performed but you can use a **1ST WT** operation to override an existing vehicle tare weight.

To enter the **RET WT** option you must first type in the supervisor password, then the required vehicle registration:

#### Entering password and selecting vehicle registration

- 1. Select RET WT. ENTER PASSWORD F5 F1 F2 F3 |F4 2. Type in supervisor password. ENTER PASSWORD F1 | F2 F3 F4 F5 3. Press 📕. VEHICLE REGISTRATION BROWSE F1 F2 F3 F4 F5 4. Select the vehicle registration as detailed in Section 11.1.3. VEHICLE REG A123BCD 0.00 kg STORE CLEAR F1 F2 E3 F4 E5 To create a vehicle's tare by typing in the vehicle's tare weight
- 5. Type in the known tare value of the vehicle, for example, 1,763.00 kg. After pressing the first numeric key the display will change.

Į				
ENTER TARE	1763. VALUE	00 kg		
F1 F2	F3	F4	F5	

6. Press 📕 .



#### L215/L216/L225/L226 User Instructions

7. Press 📕.

VEHICLE REGISTRATION	<u>v</u>	
A100DCD		
A123BCD		BROWSE

VEHICLE RE 0.00

F1

F1

F1

F2 F3

VEHICLE REG N789LMN 1586.00 kg

F2

N789LMN ENTER VEHICLE REG

F2

|F4 |F5

F3

F3

F4

\_

F4

-0-Net -T-

g

STORE CLEAR

F5

F5

STORE CLEAR

#### Creating a vehicle's tare by weighing the vehicle on the platform

- 8. Follow Steps 1 to 4. Make sure empty vehicle is on weighbridge.
- 9. Select **STORE**.
- 10. Press 📕 .
- 11. Vehicle drives off weighbridge.

#### Clearing a vehicle's tare

- 12. Follow Steps 1 to 4.
- 13. Select CLEAR.
- 14. To exit press  $\blacksquare$  then **ESC**.

_	
VEHICLE REG A123BC	D
1586.00 kg	STORE CLEAR
F1 F2 F3	F4 F5



## 11.3 Re-entered 1st weight

Multiple 1st weights are not allowed in this mode of operation.

## 11.3.1 First weighing (1ST WT)

- 1. In the **TRUCK** menu select **1ST WT**.
- 2. Select the vehicle registration as detailed in Section 11.1.3.

VEHICLE REGIST	RATION		
			BROWSE
F1 F2	F3		F5
PLU DESCRIP.			PROWEE
			BRUWSE
F1 F2	F3	F4	F5

3. Select a PLU (if your indicator is configured to do so):

#### Either:

Press **CE** to delete existing PLU, if any, then type in new PLU description.

#### Or:

Select **BROWSE** to choose an existing PLU (see Section 2.3.3 page 2–9).

Either

Or

INSERT TICKET

F1

F1

F2

1ST WT 2ND WT

F2

Press 
 I any user fields (see Section 13.12) are configured you will be prompted for data; enter the data and press 
 each time.

:	
	PRESS PRINT KEY PRESS ESCAPE TO EXIT
	F1 F2 F3 F4 F5

F3

F4

F5

STATUS

F5

- With vehicle on weighbridge, insert a ticket in the printer, if necessary, then press
   A ticket is printed.
- 6. Vehicle drives off weighbridge.

L215/L216/L225/L226 User Instructions

#### 11.3.2 Second weighing (2ND WT)

- 1. In the TRUCK menu select 2ND WT
- 2. Select the vehicle registration as detailed in Section 11.1.3.



F3

F4

F5

F1

F2

3. Select a PLU (if your indicator is configured to do so):

#### Either:

Press **CE** to delete existing PLU, if any, then type in new PLU description.

#### Or:

Select **BROWSE** to choose an existing PLU (see Section 2.3.3 page 2–9).

- Press 
   If any user fields (see
   Section 13.12) are configured you will be prompted for data; type in the data and press 
   each time.
- 5. Type in 1st weight (using the correct number of decimal places).
- 6. Press 📕 .

With vehicle on weighbridge, insert a ticket in the printer, if necessary, then press
 A ticket is printed.

0.00 kg RE ENTER 1ST WEIGHT







8. Vehicle drives off weighbridge.

L215/L216/L225/L226 User Instructions

## 11.4 Stored/printed 1st weight

## 11.4.1 First weighing (1ST WT)

- 1. In the **TRUCK** menu select **1ST WT**.
- 2. Select the vehicle registration as detailed in Section 11.1.3.
- 3. Select a PLU (if your indicator is configured to do so):

#### Either:

Press **CE** to delete existing PLU, if any, then type in new PLU description.

## Or:

Select **BROWSE** to choose an existing PLU (see Section 2.3.3 page 2–9).

- Press I . If any user fields (see Section 13.12) are configured you will be prompted for data; enter the data and press I each time.
- With vehicle on weighbridge, insert a ticket in the printer, if necessary, then press
   A ticket is printed.
- 6. Vehicle drives off weighbridge.

## 11.4.2 Multiple first weighing (1ST WT)

If configured, you may repeat a **1ST WT** operation up to six times for the same vehicle – see Section 11.4.1. You can select a different PLU each time as required.

VEHICLE REGISTRAT	ION
	BROWSE
F1 F2 F3	F4 F5
PLU DESCRIP. SAND	BROWSE
F1 F2 F3	F4 F5

Either:					
	PRESS   PRES	PRINT KI SS ESCA	EY PE TO EX	кіт	
	F1	F2	F3	F4	F5
Or:					
	INSERT	TICKET			
	F1	F2	F3	F4	F5
		-			
	1ST WT	2ND WT			STATUS
	F1	F2	F3	F4	F5

#### 11.4.3 Second weighing (2ND WT)

- 1. Select 2ND WT.
- 2. Select the vehicle registration as detailed in Section 11.1.3.



3. Select a PLU (if your indicator is configured to do so):

#### Either:

Press **CE** to delete existing PLU, if any, then type in new PLU description.

#### Or:

Select **BROWSE** to choose an existing PLU (see Section 2.3.3 page 2–9).

Either:

Or:

F1

F2

- Press I. If any user fields (see Section 13.12) are configured you will be prompted for data; enter the data and press I each time.
- With vehicle on weighbridge, insert a ticket in the printer, if necessary, then press
   A ticket is printed.
- F1
   F2
   F3
   F4
   F5

   INSERT TICKET

   F1
   F2
   F3
   F4
   F5

   IST WT 2ND WT
   STATUS

F3

F4

F5

PRESS PRINT KEY PRESS ESCAPE TO EXIT

6. Vehicle drives off weighbridge.

## 11.5 Conversion factors

In weighbridge mode conversion factors can either be set up for the PLUs that you will be using (see Section 14.11) or they can be enabled from **CONV** (see Section 4.9.2).

However, if your machine is configured for multiple 1st weight operation, conversion factors in PLUs will not work and the message **WEIGHT CONVERSION NOT ALLOWED** will appear. The sequence can be continued but the indicator will only display the unconverted weight, that is, the weight will be shown in the units configured for the indicator.

**NOTE:** It is recommended that, if you are using converted PLUs in stored/printed 1st weight mode, your indicator is configured to prompt for PLU selection during the 1st weight sequence.

## 11.6 Error messages

#### PRINT FAILED : RETURN TO ZERO. PRESS ENTER

The load on the weighbridge has not returned to zero since the preceding weighing sequence. Remove load, then re-apply it.

#### PRINT FAILED : NO WEIGHT CHANGE. PRESS ENTER

The indicator has not detected a sufficiently large change in the load on the weighbridge since the preceding weighing sequence. If the preceding weighing sequence was **2ND WT** then the load on the weighbridge must return to zero before another 2nd weighing sequence is allowed.

#### PRINT FAILED : WEIGHT BELOW MIN. PRESS ENTER

The load on the weighbridge is not large enough to be detected, or there is no load on the weighbridge.

#### PRINT FAILED : WEIGHT NOT STEADY. PRESS ENTER

 $\odot$  was pressed when load was not steady. Repeat sequence.

#### NO STORED WEIGHT PRESENT

A **2ND WT** sequence was was attempted for a vehicle with no previous 1st weight entered.

#### WEIGHT CONVERSION NOT ALLOWED

A PLU with a conversion factor has been selected inappropriately. Conversion factors in PLUs are not allowed when your machine is configured for multiple 1st weights (see Section 11.5).

# Section 12 Dual platform weighing

# Table of Contents:

12.1	Descrip	otion	12–1
	12.1.1	Selecting single/dual weight display	12–2
12.2	Stored	tares	12–2
12.3	PLUs		12–2
	12.3.1	Using PLUs	12–2
	12.3.2	Assigning/changing a PLU's platform	12–2
	12.3.3	Set PLU tare store	12–3
12.4	Totalising		12–3
12.5	Conversion mode		12–3
12.6	Counting		12–3
12.7	Trips		12–3
12.8	Checkv	veighing	12–4
12.9	Filling		12–4
12.10	Packing run		12–4
12.11	Product listing		12–4
12.12	Recall	data (STATUS)	12–4

This option is only available on your machine if it has a 2nd load cell fitted and has been appropriately configured by a service engineer.

Unless stated otherwise in this section, all of the advanced features (for example, checkweighing, filling etc.), function keys and display icons act upon, or indicate the status of, only the active platform.

## 12.1 Description

The dual platform weighing option allows you to connect two platforms to the indicator and display them singly or simultaneously.

When displaying the options singly (see Figure 12.1) the active platform is indicated by **P1** or **P2** shown on the display. The  $\boxed{\_\_\_\_\_}$  key is used to change to the other platform which then becomes the active platform

to the other platform which then becomes the active platform.





Platform 1 is active

Platform 2 is active



The dual weight display (see Figure 12.2) shows both platforms simultaneously. The active platform is outlined, with the message **P1 ACTIVE** or **P2 ACTIVE** underneath the weight.







#### 12.1.1 Selecting single/dual weight display

The **WT DIS** option allows you to select single or dual weight display and can be found in the **SUPER** (supervisor) menu, under **ALTER** then **OTHER**. To select single or dual weight display follow the procedure detailed in Section 13.16.3

## 12.2 Stored tares

Refer to Section 13.4, Stored tares (TARES).

The 20 stored tares available are divided equally between the two platforms as follows:

- stored tares 1 to 10 are assigned to platform 1;
- stored tares 11 to 20 are assigned to platform 2.

The selection of a stored tare is made for the active platform only. The message **INVALID STORED TARE** appears if you try to select a stored tare that is allocated to the non-active platform.

You can only clear a stored tare on the active platform.

## 12.3 PLUs

#### 12.3.1 Using PLUs

When a PLU is recalled, the platform assigned to that PLU becomes active. No switching to the other platform is permitted while the PLU is active.

**NOTE:** Each PLU must have a platform assigned to it. The default is platform 1.

#### 12.3.2 Assigning/changing a PLU's platform

Refer to Section 14.3.1.

The **PLU PLATFORM** option is an additional option in the **SELECT PLU EDITOR OPTION** menu. When selected, it takes you to the **PLU PLATFORM EDITOR** which enables you to select the appropriate platform for your PLU.

To assign a platform to a PLU carry out the following:

- Obtain the SELECT PLU EDITOR OPTION menu for your PLU, as detailed in Steps 1 and 2 in Section 14.3.1. Make sure the PLU PLATFORM option is displayed (press 1, if necessary).
- 2. Select the PLU PLATFORM option.

SELECT PLU EDITOR OPT	ION			
1. EDIT PLU TOTALS				
2. CONVERSION FACTOR				
3. PACKING RUN SET-UP				
4. PRODUCT LISTING				
5. PLU PLATFORM				
6. SET PLU TARE STORE	t	Т	ŧ	

PLU	J PLATFO	ORM EDIT	OR	
PLATFORM 1				
PLAT 1	PLAT 2			

- Select required platform, for example, platform 2. Where PLAT 1 is platform 1 and PLAT 2 platform 2.
- 4. Press .

PLU PLATFO	ORM EDIT	OR	
PLATFORM 2			
PLAT 1 PLAT 2			
· · ·			

SELECT PLU EDITOR OPTION 1. EDIT PLU TOTALS 2. CONVERSION FACTOR 3. PACKING RUN SET-UP 4. PRODUCT LISTING 5. PLU PLATFORM 6. SET PLU TARE STORE

## 12.3.3 Set PLU tare store

As stored tares are allocated to each platform (refer to Section 12.2), if you try to enter a store tare number meant for the other platform (refer to Section 14.18.2) you will see the message **INCORRECT CURRENT PLATFORM**. Press and try again using a store tare number in the correct range for the active platform.

## 12.4 Totalising

Each platform holds its own totals information. Only the totals for the active platform can be accessed.

## 12.5 Conversion mode

Conversion factors are supported in both single and dual weight displays. Any selected conversion factor, along with its units, applies to both platforms.

## 12.6 Counting

When the counting option is selected both platforms operate in counting mode, although their piece weight and target values are independent of each other. However, your machine can be configured (by the service engineer) for the piece weight entry to be common to both platforms; it can then be edited from either platform. The common piece weight will be used to derive the count on both platforms.

## 12.7 Trips

The trip configuration for the indicator, for example, four alarm trips, two filling pairs, latched trips etc., applies to both platforms. However, each platform has its own independent set of trip and compensation values, so that, when the unit is switched from one platform to another, these values change according to the platform selected.

Trip settings for a particular platform are only accessible when that platform is active. It is not possible to switch platforms when trips are enabled, they must be disabled first.

## 12.8 Checkweighing

The checkweighing values for each platform are independent of each other. Only the reduced size weight display, as shown in Figure 7.2, is available. The checkweighing display is controlled from the active platform settings.

## 12.9 Filling

The filling values for each platform are independent of each other. The filling display is controlled from the active platform settings.

## 12.10 Packing run

Pack run values for each platform, that is, target and minimum weight print, are independent of each other. Pack run operates off the active platform.

## 12.11 Product listing

When a print is executed the active platform total is updated/cleared.

## 12.12 Recall data (STATUS)

Refer to Section 4.3.

The INFO option shows you which platform is currently active.



The PLU option shows the platform allocated to the active PLU.



# Section 13 Supervisor mode (SUPER)

# Table of Contents:

13.1	Introdu	13–1	
13.2	Altering	g the indicator's set-up (ALTER)	13–4
13.3	PLU m	ode (PLU)	13–5
	13.3.1	PLU Edit (EDIT)	13–5
	13.3.2	PLU printing functions (PRINT)	13–5
	13.3.3	PLU delete functions (DELETE)	13–8
	13.3.4	PLU Miscellaneous functions (MISC)	13–10
13.4	Stored	tares (TARES)	13–11
	13.4.1	Edit stored tares (EDIT)	13–11
	13.4.2	Print stored tares (PRINT)	13–12
	13.4.3	Delete stored tares (DELETE)	13–12
13.5	User a	nd supervisor passwords (PASSWD)	13–13
13.6	Conver	rsion factor (CONV)	13–14
	13.6.1	Edit conversion factor units (EDIT)	13–14
	13.6.2	Print conversion factor units (PRINT)	13–15
	13.6.3	Delete conversion factor units (DELETE)	13–15
13.7	Clock of	configuration (CLOCK)	13–16
	13.7.1	Set date (DATE)	13–16
	13.7.2	Set time (TIME)	13–16
13.8	Auto sł	hutdown (SLEEP)	13–17
13.9	Assigni	ing password protection (ACCESS)	13–17
13.10	Integra	l printer (PRTER) – L215/L225 only	13–18
13.11	Adjust	display contrast (LCD)	13–18
13.12	User fie	elds (FIELDS)	13–19
	13.12.1	1 Editing user fields (EDIT)	13–19
	13.12.2	2 Printing user fields (PRINT)	13–20
	13.12.3	3 Delete user fields (DELETE)	13–20

## Contents

13.13	Edit checkweighing text (CHECK)	13–21
	13.13.1 Editing the "UNDER" text (UNDER)	13–21
	13.13.2 Editing the "OVER" text (OVER)	13–21
	13.13.3 Editing the "ACCEPT" text (ACCEPT)	13–21
	13.13.4 Resetting the checkweighing text (RESET)	13–21
13.14	Vehicle records (VCL)	13–22
	13.14.1 Printing the vehicle records (PRINT)	13–22
	13.14.2 Deleting vehicle records (DELETE)	13–23
	13.14.3 Changing the vehicle registration prompt (MISC)	13–24
13.15	Printing a calibration security report (CALIB)	13–25
13.16	Set general modes (OTHER)	13–26
	13.16.1 Show indicator status (INFO)	13–26
	13.16.2 Enable/disable function keys (KEYBRD)	13–27
	13.16.3 Selecting dual weight display (WT DIS)	13–27

## 13.1 Introduction

In supervisor mode you can access, alter and print management data if required. You can also configure certain indicator functions.

When you select supervisor mode, if a counting, checkweighing, filling, packing run or conversion function is active it will be disabled.

The SUPERVISOR MODE menu:

SUPERVISOR MODE				
QUIT	PRINT	ALTER		
F1	F2	F3	F4	F5

Your indicator may be password protected. If so, you will have to enter the supervisor password to gain access to supervisor mode.

#### Table 13.1Top Level Menu in Supervisor Mode

Function	Screen display	What it does
Exit	QUIT	Exits supervisor mode.
Print set–ups	PRINT	Prints the supervisor set-up data for the indicator.
Alter set–ups	ALTER	Enables you to change the indicator's set-up and configure its functions, listed in Table 13.2.





L215/L216/L225/L226 User Instructions

## 13.2 Altering the indicator's set–up (ALTER)

To change the set–up or configure any of the indicator functions you must select the **ALTER** option.

Function	Screen display	What it does
Exit	EXIT	Exits to top level of supervisor mode (Table 13.1), after asking if you wish to save any changes.
PLUs	PLU	Enables editing, printing, creating and deleting of PLUs
Tares	TARES	Edit, print and delete stored tares.
Passwords	PASSWD	Allows viewing and changing of user and supervisor passwords.
Conversion factor	CONV	Create, edit, print and delete conversion factor units.
Clock	CLOCK	Set date and time and select display format for them.
Auto shutdown	SLEEP	Select time delay before auto shutdown or no auto shutdown.
Access	ACCESS	Select password protection for enabled indicator functions
Integral printer (L215/L225 only)	PRTER	Enable or disable integral printer.
LCD	LCD	Adjust contrast level for graphics panel.
User fields	FIELDS	Edit, print and delete user field titles (used as prompts for the user).
Check	CHECK	Allows editing of checkweighing under, over and accept text.
Vehicle	VCL	Print and delete vehicle records, and edit vehicle field title.
Calibration security report	CALIB	Print out report.
Miscellaneous	OTHER	Allows you to display/hide indicator status (displayed just above soft menu) and also to enable/disable certain function keys.

Table 13.2	ALTER	Menu in	Supervisor	Mode

To change the indicator's set-up carry out the following:

1. Make sure indicator is in supervisor mode then select **ALTER**. See Page 13–2 for the alter menu.

SELEC		ON		
EXIT	PLU	TARES	PASSWD	+
F1	F2	F3	F4	F5

- Select the option you wish to configure by pressing the appropriate soft (F) key. Then edit as necessary – see Sections 13.3 to 13.16.
- 3. Repeat Step 2 as required.
- 4. When you have finished configuration select **EXIT** (see Step 2).
- Select YES to save the changes you have made. (Select NO if you do not want to save any changes – you will briefly see the message CHANGES IGNORED.)

SELECT OPTION				
CONV	CLOCK	SLEEP	ACCESS	ŧ
F1	F2	F3	F4	F5





6. Select **QUIT** to exit and go back to normal weighing mode.

# 13.3 PLU mode (PLU)

The functions available in PLU mode enable you to control the PLUs stored in the indicator. Enabling and disabling PLUs is carried out using the **PLU** key as described in Section 2.3 on Page 2–6.

The SUPERVISOR PLU MODE menu:

SUPERVISOR PLU MODE				
EDIT	PRINT	DELETE	MISC	
F1	F2	F3	F4	F5

## 13.3.1 PLU Edit (EDIT)

Selecting **EDIT** enables the PLU editor. Using the editor you can configure the PLUs in the indicator or create new PLUs to suit the application. The PLU editor features are explained in detail in Section 14 'Using the PLU editor'.

## 13.3.2 PLU printing functions (PRINT)

This option allows you to print out one or all of the PLUs stored. You can also clear the totals associated with a particular PLU or all the PLU totals.

1. Select the **PLU** option in the **ALTER** menu (see Section 13.2).

SUPERVISOR PLU MODE				
EDIT	PRINT	DELETE	MISC	
F1	F2	F3	F4	F5

#### 2. Select **PRINT** in the **SUPERVISOR PLU MODE** menu.

If any PLUs are corrupt you will see:



PLU PRINT MODE				
ONE	ALL	1 TOT	TOTALS	DUDS
F1	F2	F3	F4	F5

Press the soft (F) key for the feature you wish to select. What you then see on the display will depend on the feature selected and is described under the appropriate heading.

#### Print one PLU (ONE)

1. Select ONE .

ENTER PLU NUMBER	4	
		BROWSE
F1 F2 F3	F4	F5

F3

F4

F5

CHOOSE PLU FORMAT

SHORT

F2

FULL

2. Either:

Type in the PLU number and press or select the PLU using the 'browse' feature (see Section 2.3.3).

#### Or:

Press . You will see the message ENTER PART NUMBER – type in the part number and press . again.

 Select either the FULL or SHORT options for PLU print-out – if your indicator is configured for more than one printer, select the one you wish to use ....

.... display shows:

				_	_
L215/L225					
	SELEC		CHANNEI	_	
	INT	COM 1	COM 2	СОМ 3	
	F1	F2	F3	F4	F5
1 04 0/1 000					_
L216/L226	SELEC		CHANNEI		
	COM 1	COM 2	COM 3		
		·	^	· · ·	^
	F1	F2	F3	F4	F5
					•
	TRAN	ISMIT	TING E	DATA	
			_		
			<b>•</b>		
	PLU PR		DE		
	ONE	ALL	1 TOT	TOTALS	
				^_	
	F1	F2	F3	F4	F5

L215/L216/L225/L226 User Instructions

#### Print all PLUs (ALL)

After selecting **ALL**, choose between **FULL** and **SHORT** PLU format. Then, if your indicator is configured for more than one printer, select the one you want. When the printer is selected or if there is only one you will see the prompt: **TRANSMITTING DATA: PRESS ESCAPE TO EXIT**.

### Print and clear one PLU total (1 TOT)

To print and clear one PLU total, select **1 TOT (F3)** then follow Steps 2 and 3 in the **Print one PLU (ONE)** section on Page 13–6.

The PLU is printed out and the associated totals are cleared when next updated.

However, if your indicator is configured to clear totals after printing, your indicator will display the following. Select **YES** to clear PLU total immediately or **NO** to wait for next update.

CLEAR TOTALS NOW				
YES	NO			
F1	F2	F3	F4	F5

#### Print and clear all PLU totals (TOTALS)

After selecting **TOTAL**, choose between **FULL** and **SHORT** PLU format. Then, if your indicator is configured for more than one printer, select the one you want. When the printer is selected or if there is only one you will see the prompt: **PRINTING AND ZEROING : PRESS ESCAPE TO EXIT**.

All the PLUs are printed out and the associated totals are cleared when next updated.

However, if your indicator is configured to clear totals after printing, your indicator will display the following. Select **YES** to clear PLU totals immediately or **NO** to wait for next update.

## Print corrupt PLUs (DUDS)

If the display indicates that there are corrupt PLUs (DUDS) present you can print them out if required. The procedure is the same as for printing all PLUs except that only corrupt PLUs are printed.

CLEAR TOTALS NOW				
YES	NO			
F1	F2	F3	F4	F5

## 13.3.3 PLU delete functions (DELETE)

**PLU DELETE MODE** enables you to delete individual PLUs or all of the PLUs stored in your indicator.

- 1. Select the **PLU** option in the **ALTER** menu (see Section 13.2).
- 2. Select **DELETE** in the **SUPERVISOR PLU MODE**.

If any PLUs are corrupt you will see:



PLU DE	ELETE MO	DDE		
1 PLU	ALL			
F1	F2	F3	F4	F5

PLU DELETE MODE				
1 PLU	ALL	DUDS		
F1	F2	F3	F4	F5

## Delete one PLU (1 PLU)

- 1. Select 1 PLU.
- 2. Follow Steps 2 and 3 in **Print one PLU** (**ONE**) section on Page 13–6.
- 3. Select YES.



DELETE PLU				
		YES	NO	
F1	F2	F3	F4	F5



PLU DELETE MODE							
1 PLU	ALL						
F1	F2	F3	F4	F5			

#### Delete all PLUs (ALL)

- 1. Select ALL.
- 2. Follow Step 3 in **Print one PLU (ONE)** section on Page 13–6.
- 3. Select YES.

CHOOSE PLU FORMAT						
FULL	SHORT					
	F2	F3	F4	F5		





PLU DELETE MODE						
1 PLU	ALL					
F1	F2	F3	F4	F5		

#### **Delete corrupt PLUs (DUDS)**

If the display indicates that there are corrupt PLUs (**DUDS**) present you can delete them. The procedure is the same as for deleting all PLUs except that the corrupt PLUs are not printed.

If corrupt PLUs exist when the indicator is switched on, a warning message is displayed.

#### **13.3.4 PLU Miscellaneous functions (MISC)**

The titles of the three text fields associated with the PLUs can be modified to suit your application. The default titles for the fields are:

- PART NUMBER
- DESCRIPTION
- USER TEXT

If you have the remote large key keyboard you can edit the text description or enter a new description for any of these fields.

1. Select MISC in SUPERVISOR PLU MODE.



 Select the text field. You will see the current title for the field you selected. For example, if you select **TEXT 1** you will see the title associated with the part number.



3. Press to accept the current text description. To change the text description overwrite the displayed text and press .

#### Reset (RESET)

If you select **RESET (F4)** all the field titles will be reset to the default settings as listed above.



If you select YES (F1) you will see the message RESTORING PLU DEFAULTS.

## 13.4 Stored tares (TARES)

There are 20 stored tares available, unless your indicator is configured for dual graduations (kg/lb) in which case there will be 40 in total, 20 for kg and 20 for lb.

```
The SUPERVISOR TARE OPTION menu:
```

SUPER	VISOR T		
EDIT	PRINT	DELETE	
F1	F2	F3 F4	F5

You will only see this option if your indicator has been set up for pre-set tares.

## 13.4.1 Edit stored tares (EDIT)

Selecting **EDIT** enables you to change the tare values currently stored in your indicator.

If your indicator is configured for dual graduations, pressing kg/lb will allow you to switch between the kg and lb stored tare lists.



Move up and down the list of stored tares by selecting  $\bigcirc$  or  $\uparrow$  until the

one you want is displayed. The currently stored tare value for that tare store is shown above the prompt. A stored tare value of 0 indicates that the tare store is not in use.

You can change the value by:

a) Type in new tare value and press . (The prompt will change to **ENTER NEW TARE VALUE** while the new value is being entered.)

or:

b) Placing the appropriate container on the platform and pressing \_\_\_\_\_. When the following is displayed select YES.

USE CURRENT WEIGHT	VES	NO	
F1 F2 F3	F4	F5	

To exit press ESC

## 13.4.2 Print stored tares (PRINT)

Selecting **PRINT** enables you to print out the contents of all the tare stores.

If your indicator is configured for more than one printer you will be able to select the one you want in the same way as for printing a PLU.

SELECT PRINT CHANNEL				
F1	COM 1	<b>COM 2</b>	COM 3	F5
	L2	215/L2	225	

Select the printer you require; the message **PRINTING TARES: PRESS ESCAPE TO EXIT** is displayed as the contents of the tare stores are sent to the printer.

## 13.4.3 Delete stored tares (DELETE)

Selecting **DELETE (F3)** enables you to delete all the stored tares.

DELETE ALL TARES					
YES	NO				
	F2	F3	F4	F5	

Selecting YES displays **DELETING TARES** and the stored tares are deleted. **NO** does not delete the stored tares and takes you back to **SUPERVISOR TARE OPTION**.

To exit the supervisor tare option press **ESC** .
## 13.5 User and supervisor passwords (PASSWD)

This feature allows you to view and, if required, change the supervisor and user passwords.

The **PASSWORDS** menu:



Select **SUPER** or **USER** depending on which password you want to view or alter. The procedure is the same for both.



To change the password type in the new one and press . (Press **ESC** if you do not wish to change the password.) You will then see the prompt **RE-ENTER PASSWORD** – you must enter the password a second time to confirm it.

## 13.6 Conversion factor (CONV)

The conversion factor units created or edited in this option can be assigned to a PLU or used in normal weighing or filling operations.

Units created or edited must be in an acceptable format, with the derived units to the left of the '/', for example, **ITEMS/KG** where the derived units are **ITEMS**. Recognised units to the right of the '/' are **Ib**, **kg** or **t**: no other entered units will be recognised by the system

The SELECT CONVERSION FACTOR OPTION menu:

SELECT CONVERSION FACTOR OPTION					
EDIT	PRINT	DELETE			
F1	F2	F3	F4	F5	

#### 13.6.1 Edit conversion factor units (EDIT)

The **EDIT** option enables you to create or edit the conversion factor units currently stored in your indicator.

- **NOTE:** Conversion factor units 1 (per cent) cannot be altered. If you attempt to edit a fixed factor store you will see the message **CANNOT EDIT FIXED FACTOR: PRESS ENTER**.
- Use **1** and **†** to display the required conversion factor units.

2. NOT .	ALLOCA	ATED		
1	ŧ	SET		
F1	F2	F3	F4	F5

To edit the units select SET:

/	SET		
F1	F2 F3	F4	F5

Type in the derived units (to the left of '/'). Then press **F1** to select '/' and type in the units to the right of '/' (that is, lb, kg or t):

L/KG				
/		SET		
F1	F2	F3	F4	F5

Select **SET** to store the conversion factors. Press **\_\_**.

#### 13.6.2 Print conversion factor units (PRINT)

Selecting **PRINT** enables you to print out all the currently stored conversion factor units.

If your indicator is configured for more than one printer you will be able to select the one you want to use in the same way as for printing a PLU.

SELEC	T PRINT	CHANNE	L	
INT	COM 1	COM 2	СОМ 3	
F1	F2	F3	F4	F5
	L2	215/L2	225	

Select printer. The message **PRINTING CONVERSION FACTORS: PRESS ESCAPE TO EXIT** is displayed and the conversion factors are printed.

#### **13.6.3** Delete conversion factor units (DELETE)

Selecting **DELETE** enables you to delete all the currently stored conversion factor units.

WIPE A	LL CONV	FACTOR		
YES	NO			
F1	F2	F3	F4	F5

Selecting **YES** displays **WIPING FACTOR UNITS** and the conversion factors are deleted. If you select **NO** the conversion factors are not deleted and the display reverts to **SELECT CONVERSION FACTOR OPTION**.

**NOTE:** You cannot delete store 1 which is a fixed store.

## 13.7 Clock configuration (CLOCK)

This option allows you to set the date and time and select the formats for date and time displays.

The REAL TIME CLOCK menu:



#### 13.7.1 Set date (DATE)

Select **DATE** to enter **DATE FORMAT** mode. An asterisk  $\ast$  indicates the currently selected option.

DATE F	ORMAT			
*D-M-Y	M-D-Y	Y-M-D	SET	
F1	F2	F3	F4	F5

Select the required format then select **SET** to view or change the date (example shows date as 26th May, 1995):

DATE 26-05-95	
F1 F2 F3 F4 F5	

Type in the new date and press  $\blacksquare$  . If you enter an unacceptable value you will see the message **INVALID ENTRY: PRESS ENTER**.

#### 13.7.2 Set time (TIME)

Press **TIME (F2)** to enter time format mode. An asterisk \* is displayed next to the currently selected option.



Select the required format then select **SET** to view or change the time.



Type in the new time and press . If you enter an unacceptable value you will see the message **INVALID ENTRY: PRESS ENTER**.

## 13.8 Auto shutdown (SLEEP)

This option allows you to select whether or not your indicator automatically shuts down. Auto shutdown occurs when the following conditions are satisfied:

- there is no detected weight disturbance
- there are no key presses
- no printing occurs.

There are four time delays (in minutes) before shutdown to choose from.

- **NOTE 1:** If trips are configured for your system then it will **not** automatically shutdown regardless of which setting is selected. This is a safety measure.
- **NOTE 2:** We recommend that for maximum performance in weighbridge mode, the auto shutdown option is not enabled.

The AUTOMATIC SHUTDOWN menu:



Select the required time delay for automatic shutdown or no automatic shutdown. Press  $\boxed{\text{ESC}}$  to exit.

## 13.9 Assigning password protection (ACCESS)

Password protection can be applied to any of the functions available from normal weighing mode. Functions that can be password protected are:

- Counting mode
- Trips set-up mode
- Checkweighing set-up mode
- Filling set-up mode
- Packing run set-up mode
- Conversion mode
- Product listing
- Type through mode
- Weighbridge mode
- Totals clearing
- Supervisor mode

The functions enabled for your indicator are listed in the display which shows if the function is already protected or not.

1. Select **ACCESS** in the **ALTER** menu.



L215/L216/L225/L226 User Instructions

 Select YES or NO to apply or remove password protection to the function adjacent to the asterisk \* . The asterisk \* moves to the next function.

#### Note:

There may be two screens to scroll between.



3. Press **ESC** to exit.

## 13.10 Integral printer (PRTER) – L215/L225 only

On L215/L225 indicators fitted with an integral printer, use this mode to enable or disable the printer.

The **INT PRINTER STATUS** menu (the asterisk \* indicates the current status):

INT PRI	NTER ST	TATUS		
OFF	*ON			
F1	F2	F3	F4	F5

Select required status then press **ESC** to exit.

## 13.11 Adjust display contrast (LCD)

The contrast level for the graphics panel can be adjusted in this mode or at power up (see Section 1.4.3).

The **ADJUST CONTRAST** menu (the number denotes the current contrast level):

ADJUST CONTRAST - 20						
t t	<b>†</b>					
F1	F2	F3	F4	F5		

Select the required contrast level using  $\mathbf{I}$  or  $\mathbf{\uparrow}$  (holding down the soft key

will cause the contrast level to change continuously): the contrast level of the display changes accordingly. When the contrast is satisfactory press  $\square$ .

## 13.12 User fields (FIELDS)

You can use these user data fields to provide additional information on print–outs. To use this feature on L215/L216 indicators they must be connected to a large key remote keyboard.

There are 20 fields available each of which holds up to 35 characters. Each field has an associated title which may be up to 25 characters long. This mode enables you to enter new text or edit the existing field's titles. These titles are then used as prompts when the user presses  $\boxed{\bigcirc}$ .

**NOTE:** The amount of user field text printed on the tally roll is printer dependent. So, although all of the user field text is shown in the display, you may lose some of the last characters on the print–out.

If you leave a field title empty the user will not be prompted to enter any data for that particular field.

The USER FIELDS TITLES menu:

USER F	IELDS T	ITLES		
EDIT	PRINT	DELETE		
F1	F2	F3	F4	F5

#### 13.12.1 Editing user fields (EDIT)

- 1. Select **EDIT**. (Display shows the user field number with its title above.)
- Select the user field you wish to edit using the ↓ and ↑ keys. Then, if necessary, press CE to clear the displayed title.
- 3. Type in the title.
- 4. Press to accept the changes. (Takes you to the next user field.)
- 5. Repeat Steps 2, 3 and 4 for other user fields, if required. Then press **ESC** to exit.

L215/L216/L225/L226 User Instructions

NAME		
USER FIELD 1	t	ł
F1 F2 F3	F4	F5



NAME OF CLIENT ENTER NEW FIELD TITLE
F1 F2 F3 F4 F5

USER FIELD 2	<b>†</b>	۲.
F1 F2 F3	F4	F5

1.

2.

#### 13.12.2 Printing user fields (PRINT)

You can print out all the currently stored user field titles.

In the USER FIELDS TITLES menu	L215/L225	SELECT PRINT CHANNEL		
		INT COM 1 COM 2 COM 3		
		F1 F2 F3 F4 F5		
	L216/L226	SELECT PRINT CHANNEL		
		COM 1 COM 2 COM 3		
		F1 F2 F3 F4 F5		
Select the printer required.		PRINTING USER FIELDS PRESS ESCAPE TO EXIT		
		F1 F2 F3 F4 F5		
		EDIT PRINT DELETE		
		F1 F2 F3 F4 F5		

#### 13.12.3 Delete user fields (DELETE)

Use this option only if you want to clear all the current user field titles.

- 1. In the USER FIELDS TITLES menu select DELETE.
- 2. Select **YES**. (Select **NO** to exit without deleting user fields.)





USER FIELDS TITLES				
EDIT	PRINT	DELETE		
F1	F2	F3	F4	F5

## **13.13** Edit checkweighing text (CHECK)

This function allows you to edit the default checkweighing "UNDER", "OVER" and "ACCEPT" text for printing. Each text field can contain up to 10 alphanumeric characters. Use **RESET** to change the three text fields back to their default settings.

The CHECKWEIGH FUNCTIONS menu:



#### 13.13.1 Editing the "UNDER" text (UNDER)

- 1. Select UNDER.
- 2. Type in the new text (for example, **BELOW**).
- 3. Press  $\blacksquare$  to accept the new text.

<b></b>	
CHECKWEIGH UNDER TEXT UNDER	
F1 F2 F3 F4 F5	_
CHECKWEIGH UNDER TEXT	
BLLOW	

CHECKWEIGH FUNCTIONS				
UNDER	OVER	ACCEPT		RESET
F1	F2	F3	F4	F5

#### 13.13.2 Editing the "OVER" text (OVER)

To edit the "OVER" text see Section 13.13.1.

#### 13.13.3 Editing the "ACCEPT" text (ACCEPT)

To edit the "ACCEPT" text see Section 13.13.1.

#### 13.13.4 Resetting the checkweighing text (RESET)

1. Select **RESET**.

2. Select **YES**. (Select **NO** to exit.)



L215/L216/L225/L226 User Instructions

#### Vehicle records (VCL) 13.14

The functions available in this option enable you to control the vehicle records stored in the indicator.

#### The SUPERVISOR VEHICLE MODE menu:



#### 13.14.1 Printing the vehicle records (PRINT)

Selecting **PRINT** allows you to print out vehicle records that have 1st weight(s) stored but are still awaiting a final, 2nd weight operation (IN USE) and also vehicle records that contain a retained tare weight (TARED).

The VEHICLE PRINT MODE menu: In the VEHICLE PRINT MODE menu 1. L215/L225 SELECT PRINT CHANNEL select IN USE or TARED. COM 1 COM 2 COM 3 INT F1 F2

VEHICLE PRINT MODE				
IN USE	TARED			
F1	F2	F3	F4	F5

L216/L226	
	0



F3

F4

F5

2. Select the printer required.

TRANSMITTING DATA PRESS ESCAPE TO EXIT F2 F3 F4 F5 VEHICLE PRINT MODE ALL IN USE F1 F2 F3 F4 F5

The information printed out for every vehicle record is determined by print string configuration. If you wish to change this at any time contact your local Avery Berkel service centre.

## 13.14.2 Deleting vehicle records (DELETE)

Selecting **DELETE** allows you to delete one or all of your vehicle records.

The VEHICLE DELETE MODE menu:

## Deleting a vehicle record (1 VCL)

- 1. In the VEHICLE DELETE MODE menu select 1 VCL.
- 2. Obtain the vehicle registration number you wish to delete (see Section 11.1.3).
- 3. Select **YES** to delete vehicle record. (Selecting **NO** takes you back to the **VEHICLE DELETE MODE** menu.)









#### Deleting all the vehicle records (ALL)

- 1. In the VEHICLE DELETE MODE menu select ALL.
- 2. Select **YES** to delete all vehicle records. (Selecting **NO** takes you back to the **VEHICLE DELETE MODE** menu.)





L215/L216/L225/L226 User Instructions

#### 13.14.3 Changing the vehicle registration prompt (MISC)

Selecting **MISC** allows you to edit the vehicle registration prompt. This appears on the display whenever you are required to select a vehicle registration number, for example, at the start of first or second weighing, or when printing vehicle records in supervisor mode.

The VEHICLE MISC FUNCTIONS menu:

VEHICLE MISC FUNCTIONS				
TEXT	RESET			
F1	F2	F3	F4	F5

#### Changing the prompt (TEXT)

- 1. In the VEHICLE DELETE MODE menu select TEXT.
- 2. Type in the required text, for example, "VEHICLE REG. NO.".
- 3. Press  $\blacksquare$  to accept the new text.





1 VCL	ALL			
F1	F2	F3	F4	F5

#### Resetting the vehicle registration prompt (RESET)

This option allows you to change the vehicle registration prompt back to its original setting, that is, "VEHICLE REGISTRATION". To do this select **RESET** in the **VEHICLE MISC FUNCTIONS** menu, then select **YES** in the **SET DEFAULT VEHICLE HEADINGS** menu. "RESTORING VEHICLE DEFAULTS" will be displayed briefly and the display will return to the **VEHICLE MISC FUNCTIONS** menu.

## 13.15 Printing a calibration security report (CALIB)

This function enables you to print out a single report detailing the calibration status of the indicator. However, this is normally only of use to a service engineer.

The CALIBRATION SECURITY REPORT menu:



To print out a calibration security report select **PRINT** from the **CALIBRATION SECURITY REPORT** menu and then select the appropriate printer. The report will be printed while the following is displayed:

<b></b>
PRINTING SET-UPS PRESS ESCAPE TO EXIT
F1 F2 F3 F4 F5

## 13.16 Set general modes (OTHER)

This function allows you to show indicator status line, enable/disable function keys and select dual weight display.

The SET GENERAL MODES menu:



#### 13.16.1 Show indicator status (INFO)

The information displayed in the indicator status line is a summary of the information given in the **INFO** option in the **STATUS** menu (see Section 4.3.1). The status line only informs you of active functions or PLUs so that there may be times when this line is blank, even though it has been selected as **YES** in this option.

The status line will be activated when you return to normal weighing mode.

Figure 13.1 Position of Indicator Status Line



#### 13.16.2 Enable/disable function keys (KEYBRD)

- 1. Select **KEYBRD**. (Asterisk \* denotes selected option.)
- 2. Use ↑ and ↓ to move up and down the list of function keys until you reach the required key (for example, the **PLATFORM KEY**).
- 3. Select **DISABLE** to disable it. (Selecting **ENABLE** enables a key.)

*	ON O	FF KEY	E	INABLE	
	PRINT	Γ KEY	E	ENABLE	
	PLU M	(EY	E	ENABLE	
	PRES	ET TARE	KEY E	ENABLE	
	TARE	KEY	E	ENABLE	
	B/G K	EY	E	ENABLE	
	1	1	DISABLE	ENABLE	
	•	<b>V</b>			



TOTA +/- TC * PLAT	L KEY DTALS H FORM K	(EY (EY	ENABLE ENABLE DISABLE	
1	l t	DISA	BLE ENABLE	

- 4. Repeat Steps 2 and 3 to enable/disable any other function keys.
- 5. Press 📕 .

SET GENERAL MODES				
INFO	KEYBRD	WT DIS		
F1	F2	F3	F4	F5

#### 13.16.3 Selecting dual weight display (WT DIS)

This option only appears if your machine has been set up for dual platform weighing. See Section 12.

- 1. Select **WT DIS**. (Asterisk \* denotes selected option.)
- Select YES for dual weight display. (Selecting NO gives you the single weight display.)
- 3. Press 🚺 to accept.

DUAL WEIGHT DISPLAY EDITOR				
* NO	YES			
F1	F2 ~	F3	F4	F5

DUAL WEIGHT DISPLAY EDITOR				
NO	* YES			
F1	F2	F3	F4	F5

SET GENERAL MODES				
INFO	KEYBRD	WT DIS		
F1	F2	F3	F4	F5

L215/L216/L225/L226 User Instructions

# Section 14 Editing PLUs (PLU)

## Table of Contents:

14.1	Introduction	14–1
14.2	Useful keys in PLU edit mode	14–1
14.3	PLU Edit (EDIT)	14–1
	14.3.1 Editing the PLU	14–2
	14.3.2 Printing out the PLU	14–3
14.4	Changing the PLU number	14–4
14.5	Changing the PLU part number	14–4
14.6	Editing the PLU description	14–5
14.7	Editing the PLU user text	14–5
14.8	Selecting the PLU units	14–5
14.9	PLU type	14–6
14.10	Edit PLU totals	14–6
14.11	Conversion factor	14–7
	14.11.1 Disabling the conversion factor	14–7
	14.11.2 Set conversion factor	14–8
	14.11.3 Set conversion factor units	14–8
14.12	PLU pack run	14–8
	14.12.1 Disable packing run	14–9
	14.12.2 Enable packing run	14–9
	14.12.3 Set minimum pack weight	14–9
14.13	PLU product listing	14–9
14.14	PLU Counting	14–10
	14.14.1 Disable counting	14–10
	14.14.2 Count by sample	14–10
	14.14.3 Count by piece weight	14–11
	14.14.4 Set count target	14–11
	14.14.5 Derive piece weight	14–12

## Contents

PLU checkweighing	14–13
14.15.1 Disable checkweighing	14–13
14.15.2 Set HI and LO ACCEPT limits	14–13
PLU filling	14–14
14.16.1 Disable fill target	14–14
14.16.2 Set LO display	14–14
14.16.3 Set fill target	14–15
14.16.4 Set HI and LO tolerances	14–15
PLU trips	14–16
14.17.1 Four alarm trips	14–16
14.17.2 Two filling trip pairs	14–17
14.17.3 One filling pair, two alarm trips	14–18
14.17.4 One filling combination, one overload alarm trip	14–18
PLU tare store	14–19
14.18.1 Disable tare	14–19
14.18.2 Set index to stored tare	14–19
14.18.3 Set tare value	14–20
	<ul> <li>PLU checkweighing</li> <li>14.15.1 Disable checkweighing</li> <li>14.15.2 Set HI and LO ACCEPT limits</li> <li>PLU filling</li> <li>14.16.1 Disable fill target</li> <li>14.16.2 Set LO display</li> <li>14.16.3 Set fill target</li> <li>14.16.4 Set HI and LO tolerances</li> <li>PLU trips</li> <li>14.17.1 Four alarm trips</li> <li>14.17.2 Two filling trip pairs</li> <li>14.17.3 One filling pair, two alarm trips</li> <li>14.17.4 One filling combination, one overload alarm trip</li> <li>PLU tare store</li> <li>14.18.1 Disable tare</li> <li>14.18.2 Set index to stored tare</li> <li>14.18.3 Set tare value</li> </ul>

## 14.1 Introduction

The functions available in **SUPERVISOR PLU MODE** allow you to create and configure up to 300 PLUs. You can set up a PLU for products that you handle most frequently. They can be identified by the PLU number or a unique part number. Each PLU can be configured to meet the individual needs of that product and the type of operation required.

Refer to Figure 7.1 on Page 7–1 for sample print–out showing typical PLU information. "PART NUMBER", "DESCRIPTION" and "USER TEXT", which are printed out on the tally roll, are the default text entries for a PLU and can be edited to suit the application.

The SUPERVISOR PLU MODE menu:

SUPERVISOR PLU MODE				
EDIT	PRINT	DELETE	MISC	
F1	F2	F3	F4	F5

## 14.2 Useful keys in PLU edit mode

To accept the current value press  $\blacksquare$  .

Move the cursor on the display using the  $\leftarrow$  and  $\rightarrow$  keys while editing text or numbers.

Use **CE** to delete the character at the cursor position or clear a text field.

Press **ESC** to exit from the current menu.

## 14.3 PLU Edit (EDIT)

Selecting **EDIT** enables the PLU editor. Using the editor you can configure the PLUs in the indicator or create new PLUs to suit the application. A PLU can contain the following information:

- PLU number (000 to 999)
- Part number (20 alphanumeric characters)
- Description (20 alphanumeric characters)
- User text (20 alphanumeric characters)
- PLU units (kg/lb indicators only)
- Type of PLU
- Sub and grand totals
- Conversion factor information
- Product listing configuration
- Pack run information
- Tare store number

L215/L216/L225/L226 User Instructions

A PLU can also contain optional information (any one of the following):

- Count target, sample size/piece weight
- Checkweighing Low/High limits
- Filling parameters
- Trip values
- **NOTE 1:** On L215 and L216 indicators, if you have the large key remote keyboard connected you will be able to use alpha and numeric characters to enter information for part number, description and user text.
- **NOTE 2:** On dual graduation indicators it is recommended that you configure the PLU units first (see Section 14.8) as certain options cannot be selected until the units have been determined.

#### 14.3.1 Editing the PLU

1. Select EDIT in the SUPERVISOR PLU MODE menu.



- 2. Select the PLU by one of the following methods:
  - a) Type in its number (new or existing).
     If you are creating a new PLU you will see the following display select YES to create a new PLU or NO to cancel.
  - b) Use 'browse' (see Section 2.3.3).
  - c) Press (you will see the following display). Then type in its part number followed by (if no PLU has this part number you will see the display in Step 2a).

After selecting the PLU you will see the following (if you see the message **PLU NOT FOUND: PLU STORES FULL** there is no space left to create another PLU):

Select **1** to obtain the next screen:



ENTER PART NUMBER
F1 F2 F3 F4 F5

SELECT PLU EDITOR OPTION		
1. PLU NUMBER EDITOR		
2. PART NUMBER		
3. DESCRIPTION		
4. USER TEXT		
5. PLU UNITS		
6. PLU TYPE I TI		

SELECT PLU EDITOR OPTION			
1. EDIT PLU TOTALS			
2. CONVERSION FACTOR	2. CONVERSION FACTOR		
3. PACKING RUN SET-UP			
4. PRODUCT LISTING			
5. SELECT PLU TARE STORE			

**NOTE:** The list of options will vary according to the PLU type assigned to the current PLU and the configuration of the indicator (that is, kg/lb, stored tares, conversion factors, packing run and product listing).

- 3. Edit the PLU as necessary. Enter the number alongside the feature you wish to select. What you then see on the display will depend on the feature selected and is described under the appropriate heading (see Sections 14.4 to 14.17).
- 4. When you have finished editing the PLU press
- Select YES. (If you select NO you will see the message CHANGES IGNORED and you will exit without saving the changes. Selecting CANCEL will take you back to the SELECT PLU EDITOR OPTION menu.)

SELECT PLU EDITOR OPTION		
SAVE E	DITED P	LU
YES	NO	CANCEL

SELECT PLU EDITOR OPTION
SAVING DATA
₹
SUPERVISOR PLU MODE

#### 14.3.2 Printing out the PLU

You can print out the current PLU, including any changes made but not yet saved, while in the PLU editor by carrying out the following:

1.	Press <u></u> .		CHOOSE PLU FORMAT           FULL         SHORT           F1         F2         F3         F4         F5
2.	Select either the <b>FULL</b> or <b>SHORT</b> options for PLU to be deleted.	L215/L225	SELECT PRINT CHANNEL           INT         COM 1         COM 2         COM 3           F1         F2         F3         F4         F5
		L216/L226	SELECT PRINT CHANNEL           COM 1         COM 2         COM 3           F1         F2         F3         F4         F5
3.	Select the printer by pressing the appropriate soft key. The PLU is printed out.		TRANSMITTING DATA
			SELECT PLU EDITOR OPTION 1. PLU NUMBER EDITOR 2. PART NUMBER 3. DESCRIPTION 4. USER TEXT 5. PLU UNITS 6. PLU TYPE

L215/L216/L225/L226 User Instructions

## 14.4 Changing the PLU number

You can alter the number assigned to a PLU or assign a number to a PLU which previously only had a part number assigned to it. PLU numbers are in the range 0 to 999.

To enter the **PLU NUMBER EDITOR** screen type in its option number from the **SELECT PLU EDITOR OPTION** menu:



A flashing cursor indicates that you should enter a PLU number (three-digits maximum) and press

If the PLU is selected by part number only and has no PLU number assigned to it you will be prompted to enter a new number:



If you enter a number that is already assigned you will see the message **ENTRY ALREADY EXISTS**. Press and enter a new number.

If you enter **000** then any existing PLU number will be deleted and you will only be able to access the PLU through its part number or using 'browse'.

## 14.5 Changing the PLU part number

You can use this option to alter the part number of the PLU you are currently editing. PLU part numbers can be a combination of alpha and numeric characters up to a maximum of 20 characters.

**NOTE:** To print alpha characters on L215/L216 indicators you will need a remote large key keyboard connected.

To enter the **EDIT PART NUMBER** screen type in its option number from the **SELECT PLU EDITOR OPTION** menu:

EDIT PART NUMBER	
PART NUMBER 000777MB ENTER NEW PART NUMBER 000777MB	

Type in the new part number and press . It may take a few seconds to store the new part number. If there is a PLU with an identical part number you will see the message **ENTRY ALREADY EXISTS** at the bottom of the display – press . and type in a different part number.

## 14.6 Editing the PLU description

You can change the description for the PLU, or create a new one if the current PLU description is empty.

To enter the **EDIT DESCRIPTION** screen type in its option number from the **SELECT PLU EDITOR OPTION**. menu:



Type in the new description. You can enter up to 20 characters, including spaces. Press when you have finished.

## 14.7 Editing the PLU user text

This option allows you to edit the PLU's user text.

**NOTE:** To print alpha characters on L215/L216 indicators you will need a remote large key keyboard connected.

To enter the **EDIT USER TEXT** screen type in its option number from the **SELECT PLU EDITOR OPTION** menu:



Type in the new user text. You can enter up to 20 characters, including spaces. Press when you have finished.

## 14.8 Selecting the PLU units

This option allows you to choose the units in which the PLU will operate if you have a dual graduation indicator. If your indicator is not configured for dual graduation this option will not be displayed.

To enter the **PLU UNITS SELECTION** screen type in its option number from the **SELECT PLU EDITOR OPTION** menu. Initially no units are selected, however, if you previously selected the units an asterisk  $\times$  denotes selection:

PLU UNITS SELECTION	
PLU OPERATES IN KG PLU OPERATES IN LB	
<b>↑</b>	l t

Select required units then press  $\square$  .

**NOTE:** In normal weighing mode, the PLU can only be used if its selected units correspond to the units the indicator is currently using.

L215/L216/L225/L226 User Instructions

#### 14.9 PLU type

You can select which optional feature is to be used with the PLU you are editing. The display prompts you to select the PLU type and the possible options are listed with an asterisk  $\times$  against the current selection. Your indicator will only list those options for which it has been configured.

To enter the **PLU TYPE** screen type in its option number from the **SELECT PLU EDITOR OPTION** menu:

SELECT PLU TYPE		
* NO OPTION COUNTING CHECK WEIGH FILLING PLU		
WEIGHBRIDGE PLU	1	۰.

Select the required option and press **\_\_**.

If you are changing the current selection you will be prompted to confirm the selection (unless **NO OPTION** has been previously selected):

SEI	LECT PL	U TYPE		
DELETE	EEXISTI		?	
YES	NO			

Select **YES** to confirm the selection. Selecting **NO** cancels the change.

#### 14.10 Edit PLU totals

In this option you can edit the sub and grand totals for the PLU and the corresponding sub and grand total transaction counters.

To enter the **PLU TOTALS EDITOR** screen type in its option number from the **SELECT PLU EDITOR OPTION** menu (press **1** to page down, if necessary):

PLU TOTALS EDITOR
1. EDIT SUB-TOTAL 2. EDIT SUB-TOTAL UPDATE COUNT 3. EDIT GRAND TOTAL 4. EDIT GRAND TOTAL UPDATE COUNT

Type in the option number of the feature you wish to select. If you select **EDIT SUB–TOTAL** or **EDIT GRAND TOTAL** the current sub or grand total for the selected PLU is shown. To change the total overwrite the value displayed.

**NOTE:** If the PLU has been configured for counting, this value will be a count and not a weight.

If you select **EDIT SUB-TOTAL UPDATE COUNT** or **EDIT GRAND TOTAL UPDATE COUNT** the current number of updates for the sub or grand total store for the selected PLU is shown. To change the total overwrite the value displayed. If you see the message **INVALID ENTRY** you have tried to enter an unacceptable value. Press

If you see the message **NO UNITS ASSIGNED TO PLU** in the **PLU TOTALS EDITOR** you have not selected units for the PLU. Press **ESC**, then select the units as in Section 14.8 and enter **PLU TOTALS EDITOR** again.

## 14.11 Conversion factor

This option allows you to set and enable/disable a conversion factor for the current PLU. This option is configuration dependent.

**NOTE:** Conversion factors are not available for counting PLUs.

1. To enter the PLU CONVERSION FACTOR EDITOR select CONVERSION FACTOR from the SELECT PLU EDITOR OPTION menu by typing in its option number. (If there is no conversion factor enabled you will see the message CONVERSION DISABLED.)

2.	Select YES.	

PLU CONVERSION FACTOR EDITOR CONV FACTOR : 1.500000				
FACT	FACTOR UNITS : L/KG ALTER VALUES			
YES	NO			

PLU CONVERSION FACTOR EDITOR 1. DISABLE CONVERSION FACTOR 2. SET CONVERSION FACTOR 3. SET FACTOR UNITS

- 3. Type in the number of the feature you wish to select. See Sections 14.11.1, 14.11.2 and 14.11.3.
- 4. Press 📕 .

#### 14.11.1 Disabling the conversion factor

To disable the conversion factor option press 1 to select **DISABLE CONVERSION FACTOR** in the **PLU CONVERSION FACTOR EDITOR** menu.

#### 14.11.2 Set conversion factor

Setting a conversion factor automatically enables the conversion factor for the current PLU.

If you select this option the current conversion factor is displayed:

PLU CONVERSION FACTOR EDITOR
0.987600
0.307000
ENTER CONVERSION FACTOR

Type in the new conversion factor value and press  $\square$ .

If the value entered is too small or too large you will see the message **INVALID ENTRY: PRESS ENTER**.

#### 14.11.3 Set conversion factor units

This function displays a list of all conversion factor units allocated. An asterisk \* indicates the current selection; **PER CENT** is the default setting.

CONVERSION FACTOR UNITS
1. PER CENT ★2. LITRE/KG 3. GALL/LB

To select the conversion factor units, press the numeric key corresponding to the units you require.

#### 14.12 PLU pack run

- Select PACKING RUN SET-UP from the SELECT PLU EDITOR OPTION menu by typing in its option number. (If pack run is disabled you will see the message NO PACK RUN SET IN PLU.)
- 2. Select **YES**.

PLU PACKING RUN EDITOR				
CURRENT PACK RUN SIZE 123				} ka
ALTER VALUES				
YES	NO			

- 3. Type in the number of the feature you wish to select. See Sections 14.12.1, 14.12.2 and 14.12.3.
- 4. Press 📕 .

#### 14.12.1 Disable packing run

To disable the packing run press 1 to select **DISABLE PACKING RUN** in the **PLU PACKING RUN EDITOR** menu.

#### 14.12.2 Enable packing run

To enable the packing run press **2** to select **ENABLE PACKING RUN** in the **PLU PACKING RUN EDITOR** menu. The current packing run size is displayed:



Type in the packing run size and press  $\blacksquare$ . If the value entered is too large you will see the message **INVALID ENTRY. PRESS ENTER**. You can enter a pack run size in the range 0 to 1000.

#### 14.12.3 Set minimum pack weight

To set the minimum pack weight press **3** to select **SET MIN PACK WEIGHT** in the **PLU PACKING RUN EDITOR** menu. The current minimum pack weight is displayed:

PLU PACKING RUN EDITOR	
MIN PACK WEIGHT : 0.00 kg	

Type in the minimum pack weight and press  $\blacksquare$ . If the value entered is too large or too small you will see the message **INVALID ENTRY**.

## 14.13 PLU product listing

This option allows you to enable or disable the product listing feature. See Section 4.11.

Select the **PRODUCT LISTING** option from the **SELECT PLU EDITOR OPTION**:



Select ENABLE or DISABLE then press .

#### 14.14 PLU Counting

You will only see this option listed if the current PLU has a PLU type set to **counting**.

1. Select the SET PLU COUNTING option in the SELECT PLU EDITOR OPTION. (If the PLU COUNTING is disabled you will see the message PLU COUNTING DISABLED.)

	PLU COL	INTING E	DITOR	
COU PIEC ALT	NT TARG E WEIGH 'ER VALL	et : It : Jes	25 0.0250	kg
YES	NO			

	PLU COL	INTING F	DITOR	
cou		ET:	25	
AL	TER VALU	JES	'	
YES	NO			

OR

2. Select **YES**.



- 3. Type in the number of the feature you wish to select. See Sections 14.14.1 to 14.14.5.
- 4. Press 📕 .

#### 14.14.1 Disable counting

To disable counting press 1 to select **DISABLE COUNTING** in the **PLU COUNTING EDITOR** menu.

#### 14.14.2 Count by sample

In this option you can configure the PLU to initiate a sampling operation when the PLU is activated. When you select this option the current sample size is displayed:

PLU COUNTING EDITOR	
ENTER SAMPLE SIZE 12	

Type in the sample size and press  $\blacksquare$  . If the sample size is valid then counting by sample is automatically enabled within the PLU and counting by piece weight is disabled.

You can enter a sample size in the range 1 to 999. If the value entered is invalid you will see the message **INVALID ENTRY. PRESS ENTER**.

#### 14.14.3 Count by piece weight

In this option you can configure the PLU to initiate counting by piece weight when the PLU is activated. When you select this option the current piece weight is displayed:

PLU COUNTING EDITOR	
PIECE WEIGHT : 0.0250 kg	

Type in the piece weight and press  $\blacksquare$ . If the piece weight is valid then counting by piece weight is automatically enabled within the PLU and counting by sample is disabled.

A piece weight must be greater than  $^{1}/_{20}$ th of an indicator increment. If the piece weight entered is invalid you will see the message **INVALID ENTRY**. **PRESS ENTER**.

#### 14.14.4 Set count target

You can set the count target for the current PLU in this option. The current count target value, if there is one, is shown on the display.



Type in the target value and press  $\blacksquare$ . You can enter a target value from 0 to 100,000. Entering 0 disables the count target function.

If the target value entered is outside the acceptable range you will see the message **INVALID ENTRY. PRESS ENTER**.

#### 14.14.5 Derive piece weight

This option allows you to derive the piece weight by sampling.

1. Select the **DERIVE PIECE WEIGHT** option in the **PLU COUNTING EDITOR**.



2. Place sample on platform.



Select sample size by either pressing the appropriate soft key for the sample size you require, or typing it in and pressing
 .



You may see the message **SAMPLING ERROR** if the weight on the platform is unsteady, or **PIECE WEIGHT TOO SMALL** if the calculated piece weight is below 1/20th of a division.

4.

Press

┛

## 14.15 PLU checkweighing

You will only see this option listed if the current PLU has a PLU type set to checkweighing.

- Select the SET CHECK–WEIGHING option in the SELECT PLU EDITOR OPTION. (If PLU checkweighing is not enabled you will see the message PLU CHECKWEIGHING DISABLED.)
- 2. Press YES.

PLU CHECKWEIGHING EDITOR		
LO ACCEPT : 2.49 kg HI ACCEPT : 2.51 kg		
ALTER VALUES		
YES	NO	

PLU CHECKWEIGHING EDITOR 1. DISABLE CHECKWEIGHING 2. SET LO ACCEPT LIMIT 3. SET HI ACCEPT LIMIT

- 3. Type in the number of the feature you wish to select. See Sections 14.15.1 and 14.15.2.
- 4. Press 📕 .

#### 14.15.1 Disable checkweighing

To disable checkweighing select 1 (DISABLE CHECKWEIGHING) in the PLU CHECKWEIGHING EDITOR.

#### 14.15.2 Set HI and LO ACCEPT limits

This allows you to set the high and low accept limits for the checkweighing function of the PLU. When you select either of these options the current high or low accept limit is displayed:

PLU CHECKWEIGHING EDITOR	
LO ACCEPT : 2.49 kg	

OR

PLU CHECKWEIGHING EDITOR HI ACCEPT : 2.51 kg

Type in the new limit and press  $\blacksquare$  . If the limit is valid then checkweighing is automatically enabled within the PLU.

Error messages:

- **INVALID ENTRY . PRESS ENTER** the value entered is unacceptable, that is, you have entered the wrong number of decimal places or it is outside the indicator's capacity
- INVALID CHECK VALUES the HI ACCEPT value is less than the LO ACCEPT value

L215/L216/L225/L226 User Instructions

#### 14.16 PLU filling

You will only see this option listed if the current PLU has a PLU type set to **filling**.

- 1. Select the SET PLU FILLING option in the SELECT PLU EDITOR OPTION. (If PLU filling is not enabled you will see the message PLU FILLING DISABLED.)
- 2. Press YES.

PI L F	LU FILLIN O DISPL ILL TARC LO ( HI C FER VAL	NG EDITO .AY: 4.9 GET: 5.0 OK: 4.9 OK: 5.0 UES	R 0 kg 0 kg 8 kg 2 kg	
YES	NO			

PLU FILLING EDITOR 1. DISABLE FILLING 2. SET LO DISPLAY 3. SET FILL TARGET
4. SET LO TOLERANCE 5. SET HI TOLERANCE

- 3. Type in the number of the feature you wish to select. See Sections 14.16.1 to 14.16.4.
- 4. Press 🛃 .

#### 14.16.1 Disable fill target

To disable filling press 1 (DISABLE FILLING) in the PLU FILLING EDITOR.

#### 14.16.2 Set LO display

The low display limit is the load at which the graphics display is activated; for example, with a target weight of 10 kg the **LO DISPLAY** could be set at 9.50 kg. If you are performing an emptying operation these values should be entered as negative weights.



Type in the low display limit and press  $\blacksquare$  .

#### 14.16.3 Set fill target

You use this option to set the target (100%) fill value for the filling operation. To select fill target press **3** (**SET FILL TARGET**) in the **PLU FILLING EDITOR**.



Type in the target value and press  $\blacksquare$  . If the target value is valid then filling is automatically enabled within the PLU.

## 14.16.4 Set HI and LO tolerances

This allows you to set the high and low tolerances for the filling operation of the PLU. When you select either of these options the current high or low tolerance is displayed:



Type in the **LO OK** or **HI OK** tolerance value. Both are entered as tolerances and are always positive regardless of whether the target and low display values are positive or negative. Then press  $\square$ .

#### Example:

For a target value of 10 kg and low display limit of 9 kg you might want a **LO OK** value of 9.96 kg and a **HI OK** value of 10.06 kg. These are typed in as 0.04 kg and 0.06 kg respectively.

Error messages:

- **INVALID ENTRY. PRESS ENTER** the value entered is unacceptable, that is, you have entered the wrong number of decimal places or it is outside the indicator's capacity
- **INVALID FILL VALUES** the entered values are inconsistent with each other

#### 14.17 PLU trips

You will only see this option listed if the current PLU has a PLU type set to **PLU trips**. The PLU trips editor will operate in one of four ways depending on how trips have been configured for your system:

- four alarm trips, latched trips or four filling trips
- two filling trip pairs
- one filling pair and two alarm trips
- one coarse/fine filling combination and one overload alarm trip.

#### 14.17.1 Four alarm trips

PLU TRIPS EDITOR 1. TRIP 1 2. OVERRUN COMP TRIP 1 3. TRIP 2 4. OVERRUN COMP TRIP 2 5. TRIP 3	AND	PLU TRIPS EDITOR 1. TRIP 4 2. OVERRUN COMP TRIP 4		
6. OVERRUN COMP TRIP 3			Ĵ	Ļ

Select the option you wish to edit by pressing its option number.

#### TRIP n



Type in the required trip value and press . If the value entered is unacceptable you will see the message **INVALID ENTRY PRESS ENTER**.

#### **OVERRUN COMP TRIP n**

Using the appropriate soft key, select **ENABLE** to enable auto comp and select **DISABLE** to disable it.



Select SET:



Type in the overrun compensation value and press \_\_\_\_\_. If the value entered is unacceptable you will see the message **INVALID ENTRY PRESS ENTER**.

Error messages:

- INVALID ENTRY. PRESS ENTER the value entered is unacceptable
- **INVALID TRIP VALUES** the entered values are inconsistent, that is, the auto comp value is greater than 10% of the target value.

#### 14.17.2 Two filling trip pairs

In this mode you can edit the target value and set up the compensation options for each of the filling trip pairs.

PLU TRIPS EDITOR	
1. TARGET 1 2. COMPENSATION 1 3. TARGET 2 4. COMPENSATION 2	

Select the option you wish to edit by pressing its option number.

#### TARGET n

PLU TRIPS EDITOR	
CURRENT VALUE :	
7.00 kg	

Type in the new target value and press  $\blacksquare$ . If the value entered is unacceptable you will see the message **INVALID ENTRY PRESS ENTER**.

#### **COMPENSATION n**

PLU TRIPS EDITOR		PLU TRIPS EDITOR
MANUAL COMP : -0.05 kg	OR	AUTO COMP: –0.05 kg
AUTO MAN SET		AUTO MAN SET

Select **AUTO** (automatic) or **MAN** (manual) for the type of over-run compensation.

Select SET:



L215/L216/L225/L226 User Instructions

Error messages:

- INVALID ENTRY. PRESS ENTER the value entered is unacceptable
- **INVALID TRIP VALUES** the entered values are inconsistent, that is, the auto comp value is greater than 10% of the target value.

#### 14.17.3 One filling pair, two alarm trips

This mode allows you to edit the target value and compensation values for the trip pair and for two alarm trips.



See Sections 14.17.1 and 14.17.2 for editing procedures.

#### 14.17.4 One filling combination, one overload alarm trip



You can enter three values for the filling combination trip: a target value, a coarse shut off value and an initial compensation value.

The alarm trip in this configuration is an overload alarm trip so you cannot enter compensation values.

The procedure for editing the **target**, **coarse shut–off** and **overfill alarm** values is the same in each case. See Section 14.17.2.

The **compensation** value is edited in exactly the same way as for the filling pairs in Section 14.17.2.
# 14.18 PLU tare store

Use this option to allocate a tare store number when you want to assign a pre-set tare to a PLU. If a tare store is already allocated to the selected PLU then the display will show the current value of the stored tare.

- 1. Select the SELECT PLU TARE STORE option in the SELECT PLU EDITOR OPTION. (If there is no tare stored in the PLU you will see the message NO TARE SET IN PLU.)
- 2. Press **YES**.

PLU TARE STORE EDITOR							
TARE V	TARE VALUE 3.33 kg						
TAILE VALUE 5.05 Kg							
	ALTER VALUES						
VES	NO						
125							

- 3. Type in the number of the feature you wish to select. See Sections 14.18.1 to 14.18.3.
- 4. Press 📕 .

### 14.18.1 Disable tare

To disable the stored tare press 1 (DISABLE TARE) in the PLU TARE STORE EDITOR.

### 14.18.2 Set index to stored tare

To enter the **SET INDEX TO STORED TARE** option type in its option number from the **PLU TARE STORE OPTION** menu:

PLU TARE STORE EDITOR NO TARE SET IN PLU ENTER NEW STORE NUMBER

Type in the new tare store number and press . You can enter a store number from 0 to 20. Entering a store number 0 indicates there is no stored tare associated with that PLU.

### 14.18.3 Set tare value

To enter the **SET TARE VALUE** option type in its option number from the **PLU TARE STORE OPTION** menu:

PLU TARE STORE EDITOR	
ENTER TARE VALUE 0.00 kg	

Type in the new tare value and press  $\blacksquare$ .

# Section 15 Looking after your machine

# Table of Contents:

15.1	Consumables	15–1
15.2	Routine maintenance	15–1
	15.2.1 Cleaning the indicator	15–1
	15.2.2 Replacing the fuse	15–2
15.3	Battery power supply (L215/L225 only)	15–3
	15.3.1 Alkaline batteries (9V supply)	15–3
	15.3.2 Replacing the alkaline batteries	15–3
	15.3.3 External battery (12V supply)	15–3
	15.3.4 Recharging the external battery	15–4
15.4	Battery pack (L216/L226 only)	15–5

# 15.1 Consumables



We strongly recommend that you use consumables approved by Avery Berkel. This is to ensure that you use only the best and appropriate materials for your machine, thereby maximizing its working life and performance and avoiding unnecessary wear or damage.

You may obtain these consumables from your local Avery Berkel supplier. A list of AVERY BERKEL ADDRESSES WORLDWIDE is given at the back of this book.

*If you have any difficulty please contact Avery Berkel Consumables Department (UK).* 

# 15.2 Routine maintenance

### 15.2.1 Cleaning the indicator

### WARNING

TO AVOID THE POSSIBILITY OF ELECTRIC SHOCK OR DAMAGE TO THE INDICATOR, ALWAYS SWITCH OFF THE INDICATOR AND ISOLATE IT FROM THE POWER SUPPLY BEFORE CARRYING OUT ANY ROUTINE MAINTENANCE.

### CAUTION

Harsh abrasives, solvents, scouring cleaners and alkali cleaning solutions, such as washing soda, should not be used especially on the display windows.

The outside of standard products may be wiped down with a soft, clean cloth moistened with water containing no more than 5% of a proprietary detergent. The outside of waterproof products (that is, with ingress protection ratings of IP65, IP66 and IP67) may be washed down with water containing no more than 5% of a proprietary detergent.



For food environments the outside of the machine can be cleaned with a sanitizer spray available from Avery Berkel. See Section 15.1.

The printhead should be cleaned regularly – see Section 16.1.4 on Page 16–3.

### 15.2.2 Replacing the fuse

### WARNING

TO AVOID THE POSSIBILITY OF ELECTRIC SHOCK OR DAMAGE TO THE INDICATOR, ALWAYS SWITCH OFF THE INDICATOR AND ISOLATE IT FROM THE POWER SUPPLY BEFORE CARRYING OUT ANY ROUTINE MAINTENANCE.

### CAUTION

# You must use the same type of fuse. If in doubt contact your local Avery Berkel service centre.

The fuse holder contains a safety fuse which you can replace if it has blown. The fuse used is 500mA slow blow (Avery Berkel part number 70662–153).

To change the fuse:

- 1. Switch the indicator to standby.
- 2. Disconnect the indicator from the mains supply.
- 3. Unplug the power cable.
- 4. Pull open the fuse holder drawer. It is located directly below the mains input socket (see Figure 1.5 on Page 1–3).
- 5. Discard the old fuse. Place the new fuse in the holder.
- 6. Close the fuse holder drawer.
- 7. Plug in the power cable.
- 8. Connect the indicator to the mains and make sure it is working correctly.

# 15.3 Battery power supply (L215/L225 only)

Your L215/L225 will operate from a 9-volt or 12-volt battery power supply.

**NOTE:** It is impossible to document all combinations of factors affecting battery life. Contact your local Avery Berkel service centre for detailed guidance.

# 15.3.1 Alkaline batteries (9V supply)

### WARNING

### DO NOT ATTEMPT, UNDER ANY CIRCUMSTANCES, TO RECHARGE PRIMARY BATTERIES, SUCH AS ALKALINE TYPE BATTERIES, THAT ARE NOT DESIGNED FOR RECHARGING.

For the 9V power supply Avery Berkel recommend that you use six 'C' type alkaline batteries. These are fitted in the battery compartment shown in Figure 1.1.

This mode of operation is only recommended on indicators with non-backlit displays.

## **15.3.2** Replacing the alkaline batteries

To replace the six alkaline batteries carry out the following:

- 1. Switch the indicator to standby.
- 2. Open the door of the battery compartment by removing the screw at the top of the door and pulling the door downwards.
- 3. Remove the old batteries from the battery holder, noting their alignment with regards to polarity.
- 4. Fit the new batteries making sure they are properly aligned.
- 5. Close the door and secure it by tightening the screw at the top.

## 15.3.3 External battery (12V supply)

You can use an external 12V battery to power your indicator. For this you will require two kits:

- battery interface lead kit (L1150J0000AA00)
- external battery kit (L1150J0000HA00).

Although this mode of operation can be used on indicators with backlit displays, proper operation is dependent upon the capacity and charge condition of the external battery.

### Calculation of battery capacity required

Typical power consumption on a non–backlit L215/L225 with no printer, no options, and with four load cells ( $350\Omega$  impedance) connected is 250mA from an external 12V lead acid battery.

So, for a 40-hour week the battery capacity required would be: 0.25A x 40 hours = 10 ampere hours (Ah)

As we recommend that the battery is recharged at approximately 50% of discharge (see Section 15.3.4), battery capacity required would then be:  $\frac{100\%}{50\%} \times 10Ah = 2 \times 10Ah = 20Ah$ 

### Recommendation of battery type and capacity required

From the calculation above, it can be seen that a battery capacity of approximately 20Ah is required. However, as this capacity is not commonly available, it may be necessary to use the next size up, for example, 45Ah.

For battery type we recommend that you use a battery designed for standby steady current, cyclic use as in, for example, motoring, caravanning or boating applications, rather than those designed for high peak currents as used for starter motors etc.

## 15.3.4 Recharging the external battery

We recommend that the battery is recharged at approximately 50% of discharge. This is because fully discharging the battery could reduce battery life significantly.

# 15.4 Battery pack (L216/L226 only)

The indicator can be powered from a sealed, re-chargeable battery pack.

The pack is a 12–volt, 7Amp/hr unit and, depending on installation and usage, will give up to one month's life before re–charging when used on indicators with non–backlit displays. Charging time is 12 hours for a fully discharged battery.

Although this mode of operation can be used on indicators with backlit displays, proper operation is dependent upon the capacity and charge condition of the external battery. Battery pack life will be extended by avoiding total discharge. A re-charging schedule that prevents the battery from becoming completely discharged is recommended.

It is impossible to document all combinations of factors affecting battery life. Contact your local Avery Berkel service centre for detailed guidance.

When not in use, batteries should be stored in a cool place to avoid self-discharge.



Figure 15.1 L216 Battery Pack and Charger

# Section 16 Integral printer (L215/L225 only)

# Table of Contents:

16.1	About t	About the Printer			
	16.1.1	Advancing the printer roll	16–2		
	16.1.2	Changing the printer roll	16–2		
	16.1.3	Replacing the printer ribbon cartridge	16–3		
	16.1.4	Cleaning the printhead	16–3		

# 16.1 About the Printer

Genuine	
Parts	-

Approved printer rolls and cartridges are available from Avery Berkel. See Section 15.1.

The printer fitted inside the L215 and L225 indicators is a dot matrix, 24-column, tally roll printer.

You should always ensure that the correct type of printer roll is loaded before you start to use the indicator.

The printer uses a paper roll 58 mm wide.

The  $\bigcirc$  key sends data to the printer provided the following conditions are satisfied:

- the weight is stable
- the weight is greater than the minimum allowed
- the printer set-up is not configured to 'OFF'
- there is a weight change of 30 divisions or more or the weight has returned to zero.

Depending on the feature you are using you can print:

- gross or net weights
- grand, sub or trips totals
- automatic tickets for packing runs
- PLU details
- user defined text

Figure 16.1 Typical print outs from the integral printer.

P/N:QW-123 3MM BRASS GROSS WGT: NET WGT: S/A TARE: P/S TARE: PIECE WGT: COUNT: TIME: DATE: OPEPOTOP:	-02104BN NUTS 2.313 kg 1.445 kg 0.547 kg 0.321 kg 0.00125 kg 1156 01-12 PM 15-01-92
OPERATOR	527

FILLING	
P/N:PM-872	-J258-210
DES:POLISH	ING COMPOUND
GROSS WGT:	3.612 kg
NET WGT:	2.973 kg
TARGET:	3.000 kg
DISP LOW:	2.500 kg
TOL LOW:	0.050 kg
TOL HI:	0.050 kg

L215/L216/L225/L226 User Instructions

### 16.1.1 Advancing the printer roll

You can advance the printer roll by typing in a number (between 1 and 99), when no other data is being entered, and pressing \_\_\_\_\_. The paper will advance by that number of line feeds. To stop the paper advancing press \_\_\_\_\_.

## 16.1.2 Changing the printer roll

### CAUTION

The use of non-approved printer rolls may reduce the life of the print head and invalidate your warranty.



Approved printer rolls are available from Avery Berkel. See Section 15.1.

A coloured line down the sides of the paper will indicate when the printer roll has only approximately one metre of paper left.



Figure 16.2 Printer with paper roll loaded

- 1. Feed the remaining paper through by advancing the printer roll as described in Section 16.1.1.
- 2. Remove the empty core from the printer roll hub.
- 3. Fit the new roll onto the hub with the free end of the paper facing towards the front of the printer compartment.

- 4. Set the printer to advance about 60 line feeds as explained in Section 16.1.1.
- 5. While the printer is running, guide the free end of the paper in front of the paper guide and feed it into the paper slot under the print head.
- **NOTE:** If the paper jams in the printer and the printer will not operate, switch the indicator to standby and remove the paper by gently pulling it out of the printer slot. Switch the indicator back on and try again.

## 16.1.3 Replacing the printer ribbon cartridge



Approved printer ribbon cartridges are available from Avery Berkel. See Section 15.1.



- 1. Remove any paper from the printer.
- 2. The ribbon cartridge is attached by two clips and can be gently pulled off
- 3. Locate the new cartridge on the clips and press.
- 4. Reload the paper as described in Section 16.1.2

### 16.1.4 Cleaning the printhead

### WARNING

TO AVOID THE POSSIBILITY OF ELECTRIC SHOCK OR DAMAGE TO THE INDICATOR, ALWAYS SWITCH OFF THE INDICATOR AND ISOLATE FROM THE POWER SUPPLY BEFORE CARRYING OUT ANY ROUTINE MAINTENANCE.

### CAUTION

Do not use metallic objects on the print head.

The print head should be cleaned regularly using an aerosol can of clean, non-toxic, non-corrosive and non-flammable inert gas to blow away any accumulation of dust etc.



Further information on print head cleaning can be obtained from Avery Berkel. See Section 15.1.

L215/L216/L225/L226 User Instructions

# Section 17 Appendices

Table of Contents:

17.1 Supervisor PLU Records

17–1

# 17.1 Supervisor PLU Records

The following table is provided for you to fill in details of your PLUs.

PLU NO.	PART NO.	DESCRIPTION	USER TEXT	PLU TYPE	TARE STORE	CONV. FACTOR	PACK RUN SIZE	PACK RUN MIN. WT.	PLAT- FORM NO.

# 17 — Appendices

PLU NO.	PART NO.	DESCRIPTION	USER TEXT	PLU TYPE	TARE STORE	CONV. FACTOR	PACK RUN SIZE	PACK RUN MIN. WT.	PLAT- FORM NO.

# Index

L215/L216/L225/L226 User Instructions

# Α

Access, 13–17 Add/subtract from total key, 3–1 Alter set–up, 13–4 Auto shutdown (sleep), 13–17

# В

Batteries, 15–2 Battery icon, 1–7 Battery low, 1–7 Battery pack, 15–2, 15–3 Battery power supply, 15–2 replacing the batteries, 15–2

# С

Calibration security report, printing, 13-25 CAUTION, 15-1, 16-3 Charger, 15-3 Checkweighing, 4-6, 7-1 disabling, 7-4 displays, 7-3 enabling, 7-3 setting values, 7-2 text editing ACCEPT, 13-21 OVER, 13-21 RESET, 13-21 UNDER, 13-21 using, 7-3 Cleaning, 15-1 Clock configuration, 13–16 set date, 13-16 set time, 13-16 Control panel L215/L216, 1-2 L225/L226. 1-3 Conversion factor, 13-14 delete, 13-15 edit units, 13-14 print, 13-15 weighbridge, 11-12 Conversion mode, 4-7 disabling, 4-8 enabling, 4-8 set factor, 4-7 set units, 4-7 Counting mode, 4-6, 5-1 cancelling a count, 5-1

cancelling a target, 5-1 cancelling piece weight value, 5-7 changing piece weight, 5-7 fast sampling, 5-2 forward counting, 5-3 piece weight, 5-1 piece weight display, 5-6 piece weight entry, 5-6 reverse counting, 5-4 sampling, 5-1 standard sampling, 5-3 target value, 5-1 cancelling, 5-8 changing, 5-9 displaying, 5-8 entering, 5-8

# D

Display L215/L216, 1-2 L225/L226, 1-3 Display icons, 1-11 battery, 1–11 Display overlay icons, 1-11 gross zero, 1-11 net, 1-11 preset tare, 1-11 semi-auto tare, 1-11 Dual platform weighing, 12–1 checkweighing, 12-4 conversion mode, 12-3 counting, 12-3 filling, 12-4 packing run, 12-4 PLUs, 12-2 product listing, 12-4 recall data, 12-4 stored tares, 12-2 totalising, 12-3 trips, 12–3 Dual weight display, selection, 13-27

# Ε

Environment, 1–4 operating temperature, 1–4 voltage supply, 1–4 External connectors L215/L225, 1–3 L216/L226, 1–4

L215/L216/L225/L226 User Instructions

## Index

## F

Filling, 4-6, 8-1 disabling, 8-6 emptying procedure, 8-5 enabling, 8-4 filling procedure, 8-5 high limit, 8-3 low display value, 8-2 low limit, 8-2 setting up, 8-3 target value, 8-3 using, 8-5 First weight multiple, 11-2 re-entered, 11-9 stored. 11-5 stored/printed, 11-11 Function keys disable, 13-27 enable, 13-27 Functions supervisor, 1-6 user, 1-6 Fuse, replacing, 15-1 Fuse holder, 15-1

# Η

Hard keys, 1-8 add/subtract from total, 1-9 alpha, 1-11 clear, 1-8 cursor, 1-10 decimal point/full stop, 1-10 enter/return, 1-10 escape, 1-8 gross/net, 1-9 kg/lb, 1–10 minus, 1-10 numeric, 1-10 on/standby, 1-8 platform, 1-9 PLU, 1-9 preset tare, 1-9 print, 1-10 space, 1-11 tare, 1-9 test, 1-8 total, 1-9 zero, 1-8

Indicator status, show, 13-26

# Κ

Keyboard timeout, 1–6 Keys, description, 1–8

# L

LCD contrast, 1–8, 13–18 adjustment at power–up, 1–8

# Μ

Multiple 1st weights, 11-2

# 0

On/Standby mode, 1–7 Operating modes, 1–7 Optional features, 1–5 4–20mA, 1–5 back–lit graphics panel, 1–5 batteries, 1–5 battery pack, 1–5 comms 2 and 3, 1–5 dual graduation, 1–5 dual platform weighing, 1–5 integral printer, 1–5 remote keyboard, 1–5 trips interface, 1–5

# Ρ

Packing run, 4-6, 9-1 disabling, 9-3 enabling, 9-2 minimum weight, 9-3 set-up, 9-1 using, 9-2 Passwords, 1-6, 13-13 default, 1-6 PLU editor, 14-1 checkweighing, 14-13 counting, 14-10 filling, 14–14 pack run, 14-8 PLU number, 14-4 product listing, 14-9 tare store, 14-19 trips, 14-16

L215/L216/L225/L226 User Instructions

PLU mode, 13-5, 14-1 clearing totals, 13-7 deleting, 13-8 editing, 13-5 miscellaneous, 13-10 PLU edit, 14-1 printing, 13-5 useful keys, 14-1 PLU trips, 14-16 four alarm, 14-16 one combination, one alarm, 14-18 one pair, two alarm, 14-18 two filling pairs, 14-17 PLUs checkweighing, 14-13 conversion factor, 14-7 count by piece weight, 14-11 counting, 14-10 counting by sample, 14-10 derive piece weight, 14-12 description, 14-5 disable counting, 14-10 disable fill target, 14-14 disabling, 2-10 enable pack run, 14-9 enabling 'browse', 2-9 part number, 2-7 PLU number, 2-7 filling, 14-14 number, 14-4 packing run, 14-8 part number, 14-4 product listing, 14-9 set count target, 14-11 set fill target, 14-15 set HI and LO limits, 14-13 set HI and LO tolerances, 14-15 set LO display, 14-14 supervisor records, 17-1 tare store. 14-19 totals, 14-6 type, 14-6 units, 14-5, 14-8 user text, 14-5 using, 2-6 Printer, 16-1 advancing the roll, 16-1 changing the roll, 16-2 cleaning, 16-3 integral, 13-18 paper roll, 16-1 ribbon cartridge, 16-3

Printer type-through, 4–9 using, 4–9 Product listing, 4–10, 10–1 start pack run listing, 10–1

# S

Second weight re-entered 1st weight, 11-10 stored 1st weight, 11-6 stored/printed 1st weight, 11-12 Sleep (auto shutdown), 13-17 Soft keys, 1-11 Status, 4-5 information recall, 4-5 PLU recall, 4-6 Stored tares, 13-11 delete, 13-12 edit, 13-11 print, 13-12 Supervisor mode, 13-1 Switching on, 1-7

# Т

Tares. 2-2 auto preset tare, 2-4 preset tare, 2-3 semi-auto tare, 2-2 stored tare, 2-5 vehicle, 11-7 Totals, 3-1 add/subtract, 3-2 checkweigh, 3-5 clearing, 3-1 grand totals, 3-3 subtotals, 3-3 trips totals, 3-4 Totals key, 3-3 Trips, 4-6, 6-1 automatic printing, 6-10 automatic taring, 6-10 automatic totalising, 6-10 checkweigh outputs, 6-9 counting outputs, 6-9 four alarm, 6-1 latched trips, 6-9 manual fill outputs, 6-9 one combination, one alarm, 6-6 one filling, two alarm, 6-6 sequential operation, 6-10 two filling pairs, 6-4

# Index

# U

User fields, 13–19 delete, 13–20 editing, 13–19 printing, 13–20

# V

Vehicle records, 11–3, 13–22 delete, 13–23 printing, 13–22 selecting, 11–3 Vehicle registration prompt, changing, 13–24

# W

WARNING, 15–1, 16–3 Weighbridge, 4–10, 11–1 conversion factors, 11–12 editing vehicle tares, 11–7 error messages, 11–13 multiple 1st weights, 11–2 re–entered 1st weight, 11–9 stored 1st weight, 11–5 stored/printed 1st weight, 11–11 vehicle records, 11–3 weigh ticket, 11–1 Weighing, 2–1 goods, 2–1

## AVERY BERKEL ADDRESSES WORLDWIDE

### Europe

Austria Schember Berkel Ges.m.b.H. A-2355 Wiener Neudorf Industrie Zentrum Nörd–Süd Strasse 3 Objekt 30 Tel: 43 2236 62631 Fax: 43 2236 626316

### Belgium

Berkel n.v./s.a. Hermesstraat 2 B–1930 Zaventem Tel: 32 2 722 6911 Fax: 32 2 725 3930

### France

Berkel S.A. 36 Avenue de l'Europe 95335 Domont Cedex Tel: 33 1 39 35 57 00 Fax: 33 1 39 35 57 57

### Germany

Berkel Deutschland G.m.b.H. Heltorfer Strasse 12 40472 Düsseldorf Tel: 49 211 9513 0 Fax: 49 211 9513 130

### Holland

Van Berkel Nederland B.V. Klompenmakerstraat 3 – 5 2984 BB Ridderkerk Tel: 31 1804 40600 Fax: 31 1804 62935

Berkel Produktie Rotterdam B.V. c/o Klompenmakerstraat 3 – 5 2984 BB Ridderkerk Tel: 31 1804 40600 Fax: 31 1804 62935

### Ireland

Avery Berkel Ireland Western Industrial Estate Naas Road Dublin 12 Tel: 353 1 4600088 Fax: 353 1 4600096

### Italy

Brevetti van Berkel S.p.A. Via F. Olgiati 19 20143 Milan Tel: 39 2 81861 Fax: 39 2 810945

### Norway

Berkel Scanvekt AS PO Box 303 – Økern 0511 Oslo Tel: 47 22 63 11 66 Fax: 47 22 63 11 26

### Spain

Avery Berkel, S.A. Calle Ignacio Iglesias 19 Local 1–4 08940 Cornellá de Llobregat Barcelona Tel: 34 3 474 2552 Fax: 34 3 474 2992

### Sweden

Berkel AB Ormkärrsvägen 78 Postbox 453 S–124 04 Bandhagen Tel: 46 8 7496380 Fax: 46 8 7490557

### Switzerland

Berkel Obrecht AG Giessenstrasse 15 Postfach 328 CH–8952 Schlieren Tel: 41 1 741 12 11 Fax: 41 1 741 14 77

### United Kingdom

Avery Berkel UK Sertec House West Bromwich Road Tame Bridge Walsall West Midlands WS5 4BD England Tel: 44 1922 434343 Fax: 44 1922 616806



Avery Berkel Consumables Department (UK) Intec House Woodruff Way Tame Bridge Walsall West Midlands WS5 4AE England Tel: 44 1922 430108 Fax: 44 1922 434275 **Americas** 

### Canada

Berkel Products Co., Limited 5169 Bradco Boulevard Mississauga Ontario L4W 2A6 Tel: 1 905 625 4160 Fax: 1 905 625 3166

### Mexico

Constructora de Basculas S.A. de C.V. Norte 59 No 880–B local B Col. Industrial Vallejo 02300 Mexico DF Tel: 52 5 36 84033 Fax: 52 5 58 70156

### USA

Berkel Incorporated 1 Berkel Drive La Porte Indiana 46350 Tel: 1 219 326 7000 Fax: 1 219 324 2928

### Africa

Ghana Avery Ghana Limited Labadi Industrial Estate P.O. Box 0106 Christianborg Accra Tel: 233 21 775402 Fax: 233 21 667909

### Kenya

Avery Kenya Limited Factory Street P.O. Box 30417 Nairobi Tel: 254 2 559004 Fax: 254 2 543956

### Malawi

W & T Avery Malawi (Pty) Ltd PO Box 51295 Limbe Tel: 265 640950 Fax: 265 640627

### Namibia

W & T Avery Namibia (Pty) Ltd PO Box 2660 Windhoek Tel: 264 61 227807 Fax: 264 61 224055

### Nigeria

Avery Nigeria Limited Obasa Road Off Aba Akran Avenue P.O. Box 2 Ikeja Lagos Tel: 234 1 4963627

### Republic of South Africa

S. A. Scale Co. (Pty) Ltd. Blackburn Street Apex Industrial Sites P.O. Box 1252 Benoni 1500 Tel: 27 11 845 2935 Fax: 27 11 845 4752

### Zimbabwe

Avery Berkel Zimbabwe 4 Conald Road Graniteside P.O. Box 392 Harare Tel: 263 4 758492–9 Fax: 263 4 758490

# AVERY BERKEL ADDRESSES WORLDWIDE

# Asia and Pacific

Australia GEC Avery Australia Limited 12 Rachel Close Silverwater New South Wales 2141 Tel: 61 2 748 6688 Fax: 61 2 748 6535

### India

Avery India Limited Ballabgarh Works Plot Nos 50 – 59 Sector 25 Ballabgarh Haryana Tel: 91 129 23 4625 Fax: 91 129 23 2557

### Malaysia

Avery Malaysia Sdn. Bhd No 8A Jalan 213 46050 Petaling Jaya Selangor Tel: 60 3 791 4344 Fax: 60 3 791 5623

### New Zealand

GEC Avery (NZ) Limited 21–23 Pretoria Street P.O. Box 44–155 Lower Hutt Wellington Tel: 64 4 569 8588 Fax: 64 4 569 8822

### Pakistan

GEC Avery (Private) Ltd. 8 West Wharf Road P.O. Box 4838 Karachi 74000 Tel: 92 21 2314620 92 21 2314622 Fax: 92 21 2310616

### Singapore

GEC Singapore (PTE) Ltd No 3 Tai Seng Drive Singapore 1953 Tel: 65 382 8233 Fax: 65 382 8200

### Hong Kong

The General Electric Company of Hong Kong Ltd CC Wu Building 302–308 Hennessy Road Wanchai PO Box 15 GPO Hong Kong Tel: 852 919 8282 Fax: 852 834 5773

Address of local service branch:



Avery Berkel Weighing

The right is reserved to vary or modify any specification without prior notice.