Differential Probe

GDP-040D for GDS-200 & GDS-300 Series

QUICK START GUIDE

GW INSTEK PART NO. 82DP-040D0MA1

ISO-9001 CERTIFIED MANUFACTURER

GW INSTEK

The information in this manual was correct at the time of printing. However, Good Will continues to improve its products and therefore reserves the right to change the specifications, equipment, and maintenance procedures at any time without notice.

Good Will Instrument Co., Ltd. No. 7-1, Jhongsing Rd., Tucheng Dist., New Taipei City 236, Taiwan.

SAFETY INSTRUCTIONS

This section contains the basic safety symbols that may appear on the accompanying Quick Start Guide or on the instrument.

Safety Symbols

These safety symbols may appear in the user manual or on the instrument.

 Warning	Warning: Identifies conditions or practices that could result in injury or loss of life.
 Caution	Caution: Identifies conditions or practices that could result in damage to the instrument or to other properties.
	DANGER High Voltage
	Attention Refer to the Manual
	Protective Conductor Terminal
	Earth (ground) Terminal
	Do not dispose electronic equipment as unsorted municipal waste. Please use a separate collection facility or contact the supplier from which this instrument was purchased.

GETTING STARTED

The Getting started chapter introduces the main features, appearance, and set up procedure.

Main Features

Features

- 600V CATII input.
- DC~40MHz bandwidth
- x200 attenuation.
- Dual channel
- Locked attachment for GDS-200/300
- Integrated test leads

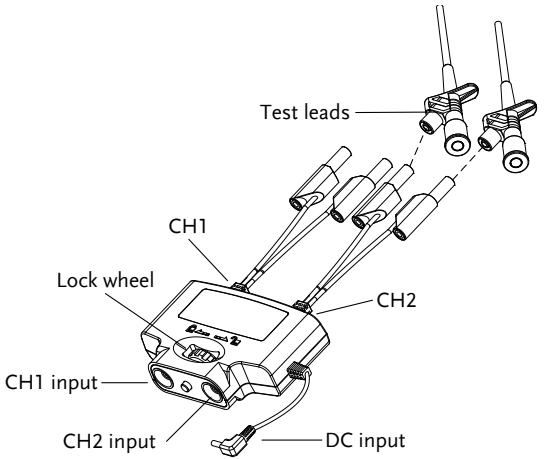
Package Contents and Accessories

Standard Accessories

Item	Part Number
Quick Start Guide	
Differential Probe	GDP-040D
Test Lead	GTL-131 x2

Overview

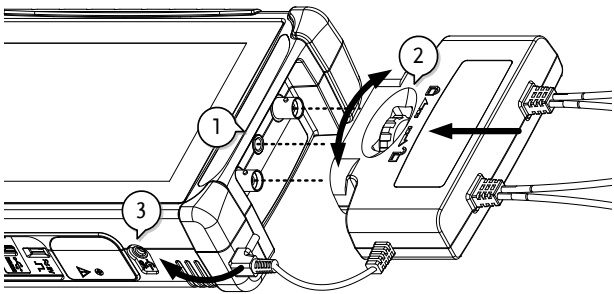
Front Panel



Item	Description
CH1	CH1 output. 600V CAT II
CH2	CH2 output. 600V CAT II
CH1 Input	CH1 input from the GDS-200/300 CH1 terminal.
CH2 Input	CH2 input from the GDS-200/300 CH2 terminal.
Lock wheel	Used to fix the differential probe to the GDS-200/300.
DC Input	DC5V, 150mA

Connection

1. Connect the CH1 and CH2 inputs to the gds-200/300 channel inputs. Make sure the face of the differential probe is top-side up, as shown below.
2. Turn the lock wheel to the left to fix the probe to the scope.
3. Connect the DC input to the external power port on the GDS-200/300.



GDS-200/300 Setup

To use the differential probe on the GDS-200/300, simply set the probe attenuation to X200.

1. Press the 

vertical icon.
2. Select 

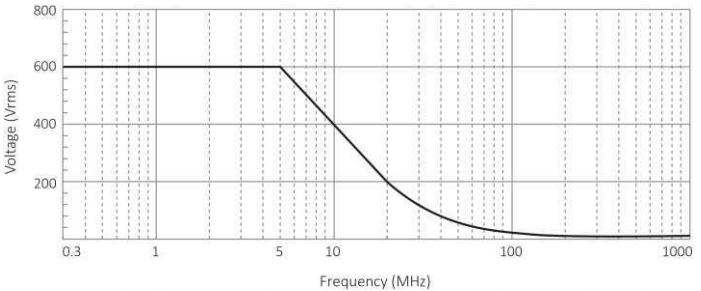
CH1.
3. Press the  Option button.
4. Press Probe and set the probe to x200.
5. Repeat the procedure for CH2.

SPECIFICATIONS

The specifications apply when the oscilloscope is powered on for at least 30 minutes under +20°C~+30°C.

Differential Probe Specs

Channels	2 channels
Bandwidth (-3dB)	DC-40MHz (x200)
Attenuation	x200
Accuracy	± 2%
Voltage Input Range	600Vrms for x200
Input Impedance	Differential: 2MΩ//1.2pF Between terminal and GND: 1MΩ//2.4pF
Output	≤±3V
Output Impedance	50Ω
Rise Time	8.75ns for x200
CMRR	80dB at 60Hz, 60dB at 100Hz, 50dB at 1MHz
Power Supply	5V DC from GDS-200
Dimensions	81.7(H) x 123.0(W) x 28.0(D) (unit:mm)



Voltage derating curve of GDP- 040D (Voltage between either input and ground)

EC Declaration of Conformity

We
GOOD WILL INSTRUMENT CO., LTD.
No.7-1, Jhongsing Rd., Tucheng Dist., New Taipei City 236, Taiwan
GOOD WILL INSTRUMENT (SUZHOU) CO., LTD.
No. 69, Lushan Road, Suzhou New District Jiangsu, China
declares that the below mentioned product
GDP-040D
Is herewith confirmed to comply with the requirements set out in the Council Directive on the Approximation of the Law of Member States relating to Electromagnetic Compatibility (2004/108/EC) and Low Voltage Equipment Directive (2006/95/EC). For the evaluation regarding the Electromagnetic Compatibility and Low Voltage Equipment Directive, the following standards were applied:

◎ EMC

EN 61326-1 : EN 61326-2-1: EN 61326-2-2:	Electrical equipment for measurement, control and laboratory use — EMC requirements (2013)
Conducted and Radiated Emissions EN 55011: 2009+A1: 2010	Electrostatic Discharge EN 61000-4-2: 2009
Current Harmonic EN 61000-3-2: 2006+A1: 2009+A2: 2009	Radiated Immunity EN 61000-4-3: 2006+A1: 2008+A2: 2010
Voltage Fluctuation EN 61000-3-3: 2013	Electrical Fast Transients EN 61000-4-4: 2012
----------	Surge Immunity EN 61000-4-5: 2006
----------	Conducted Susceptibility EN 61000-4-6: 2009
----------	Power Frequency Magnetic Field EN 61000-4-8: 2010
----------	Voltage Dips/Interrupts EN 61000-4-11: 2004

Safety

Low Voltage Equipment Directive 2006/95/EC
Safety Requirements EN 61010-2-031+A1: 2008