

Handheld Digital Storage Oscilloscope with DMM

GDS-200 & GDS-300 Series

QUICK START GUIDE

GW INSTRUMENT PART NO. 82DS-22000MH1



SAFETY INSTRUCTIONS

This section contains the basic safety symbols that may appear on the accompanying User Manual CD or on the instrument. For detailed safety instructions and precautions, please see the Safety Instructions chapter in the user manual CD.

Safety Symbols

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

- Warning: Identifies conditions or practices that could result in injury or loss of life.
- 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
- 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.
- The internal battery is not user-replaceable. Please return the unit back to your local dealer for assistance. For battery details, see the user manual.

Power Cord for the United Kingdom

When using the instrument in the United Kingdom, make sure the power cord meets the following safety instructions.

NOTE: This lead/appliance must only be wired by competent persons.

WARNING: THIS APPLIANCE MUST BE EARTHED
IMPORTANT: The wires in this lead are coloured in accordance with the following code:

Green/ Yellow: Earth
Blue: Neutral
Brown: Live (Phase)



As the colours of the wires in main leads may not correspond with the coloured marking identified in your plug/appliance, proceed as follows:
The wire which is coloured Green & Yellow must be connected to the Earth terminal marked with either the letter E, the earth symbol ⊕ or coloured Green/Green & Yellow.
The wire which is coloured Blue must be connected to the terminal which is marked with the letter N or coloured Blue or Black.
The wire which is coloured Brown must be connected to the terminal marked with the letter L or P or coloured Brown or Red.
If in doubt, consult the instructions provided with the equipment or contact the supplier.
This cable/appliance should be protected by a suitably rated and approved HBC mains fuse: refer to the rating information on the equipment and/or user instructions for details. As a guide, a cable of 0.75mm² should be protected by a 3A or 5A fuse. Larger conductors would normally require 13A types, depending on the connection method used.
Any exposed wiring from a cable, plug or connection that is engaged in a live socket is extremely hazardous. If a cable or plug is deemed hazardous, turn off the mains power and remove the cable, any fuses and fuse assemblies. All hazardous wiring must be immediately destroyed and replaced in accordance to the above standard.

GETTING STARTED

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

Series Lineup

There are 6 models in the series, divided by DSO bandwidth, DSO memory depth and DMM digit resolution.

Model Name	Bandwidth	Memory Depth	DMM Resolution	Temp. Meas.
GDS-207	70MHz	1M		
GDS-210	100MHz	points per channel	3½	No
GDS-220	200MHz			
GDS-307	70MHz	5M		
GDS-310	100MHz	points per channel	4½	Yes
GDS-320	200MHz			

- Performance
- 1 G Sa/s sampling rate max
 - 70/100/200MHz bandwidth
 - Acquisition memory: 1Mpts (GDS-200), 5Mpts (GDS-300)
 - Max 300Vrms(CAT II, DSO); 600V(CAT II) or 300V(CAT III) for DMM
 - 30,000 waveforms can be replayed

- Features
- Simultaneous DMM and DSO operation
 - Portrait and landscape modes
 - Large 800 x 480 TFT panel and capacitive touch panel
 - 7.4V/6100mAH battery for up to 4 hours operation
 - Support for differential probes
 - Handy APPs - EE calculator, chip resistance calculator, attenuation calculator
 - Shielded BNC terminals
 - DSO Features
 - X-Y mode
 - Go/No Go
 - 36 automatic measurement functions
 - Trend plot
 - Edge, Alt, Video and Pulse trigger functions
 - FFT, FFTrms, +, -, /, * math functions
 - Replay function
 - DMM Features
 - 50,000 counts
 - DCV, DCA, ACV, ACA, R, Diode, Continuity, Temperature
 - Fuse protection for the current ports
- Interface
- Mini-B USB device port

GDS-200/GDS-300 Product Packing List

No	Part	Description	Qty
1	GDS-200/ GDS-300	2 channels · Digital Oscilloscope	1
2	Probe	Switchable Passive Probe (10:1/1:1)	2
3	Test Lead	GTL-207A	1
4	GAP-001	Adaptor (Wall type, AC to DC)	1
5	GSC-010	Soft Carry	1
6	GSC-011	Soft Protect Bag	1
7	GWS-001	Wrist Strap	1
8	User Manual	CD User Manual	1
9	Quick Guide	Quick Start Guide	1

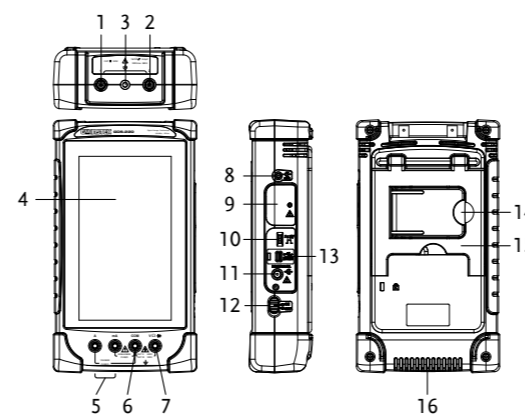
Package Contents and Accessories

Standard Accessories	
Item	Part Number
User Manual CD	
Quick Start Guide (this document)	
150MHz passive probe; for GDS-207 /307, GDS-210 /310	GTP-150B-2
250MHz passive probe; for GDS-220 /320	GTP-250B-2
Multimeter test lead x1	GTL-207A
Soft carrying case (large)	GSC-010
Protection bag (small)	GSC-011
Wrist strap	GWS-001

Optional Accessories	
Item	Part Number
Dual-channel differential probe, Only for GDS-200/300	GDP-040D
Type A - Mini-B USB cable	GTL-253
Vertical calibration cable	GCL-001
Protective film for LCD screen	GPF-700

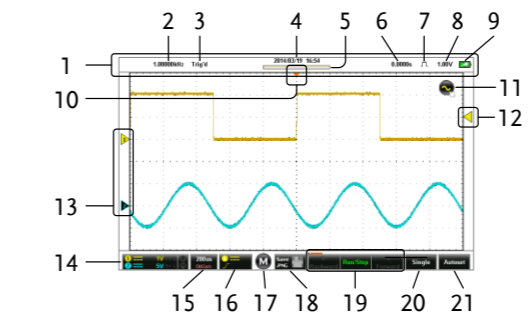
Download	
Item	Part Number
USB driver	dso_vpo.inf

Panel Overview



- | Description | |
|---------------------------------------|---|
| 1. Channel 1 BNC input | 2. Channel 2 BNC input |
| 3. Tapped hole for options | 4. 800 x 480 TFT screen, cap. touch panel |
| 5. A and mA range DMM ports | 6. Com port |
| 7. Voltage, resistance and diode port | 8. External power port for optional extras |
| 9. Internal Use Port. Restricted use | 10. Calibration port: 2Vpp, 1kHz, square wave |
| 11. 12V DC input | 12. Power switch |
| 13. Mini-B USB device port | 14. Horizontal stand port |
| 15. Vertical stand | |

Display Overview



Note: Background color has been inverted for clarity.

- | Description | |
|--------------------------|-----------------------------------|
| 1. Drop down menu | 2. Trigger frequency |
| 3. Trigger status | 4. Date and Time |
| 5. Memory bar | 6. Horizontal position |
| 7. Acquisition mode | 8. Trigger level |
| 9. Battery Indicator | 10. Horizontal position indicator |
| 11. Gesture control icon | 12. Trigger level indicator |
| 13. Channel indicators | 14. Vertical scale |
| 15. Horizontal scale | 16. Trigger mode |
| 17. Measurement/DMM key | 18. Hardcopy key |
| 19. Run Mode keys | 20. Single trigger |
| 21. Autoset | |

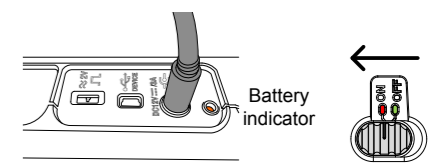
Setting up the Oscilloscope

This section describes how to set up the oscilloscope properly including setting the stand, power up and basic touch gestures.

Power Up

Before the unit is powered up for the first time, it is recommended that the unit is first fully charged.

1. Plug the AC-DC power pack into the mains outlet.
2. Connect the 12V plug into the 12V socket on the interface panel. The unit will begin charging. An orange battery indicator light indicates charging, while green indicates charged.
3. Slide the power switch to the ON position, located on the interface panel.
4. The unit will turn on in a short while.



5. The battery indicator is shown on the top right-hand corner of the main display.



This manual contains proprietary information, which is protected by copyright. All rights are reserved. No part of this manual may be photocopied, reproduced or translated to another language without prior written consent of Good Will Corporation.

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.

