



GZ-1600 DUAL WORKSTATION MONITOR

INSTALLATION AND OPERATION INSTRUCTIONS

Remove device from the carton and inspect for damage. Included in the carton should be:

1. GZ-1600 Dual workstation monitor
2. Two remote terminals boxes
3. Plug-in Power Supply (12V DC, 500mA, 2.1mm center positive output)
4. Two 10 ft. 6 wire telephone cables
5. Installation and Operation Instructions

INSTALLATION

Please read following instructions before proceeding with installation.

1. Install GZ-1600 monitor in the location where alarm indicators will be visible.
2. Install remote wrist strap terminals in the convenient location for operators.
3. Plug telephone cable from the left remote to **OP1** connector on the back of the monitor.
4. Plug telephone cable from the right remote to **OP2** connector on the back of the monitor.
5. Connect grounding Zero Ohm wire to the terminal on the back of the monitor labeled **ESD GROUND**.

*If there are no **grounded** ESD mats to be monitored, connect a wire from **M1** and **M2** terminals to the **ESD GROUND** terminal on the back of the monitor and skip steps 6 and 7.*

6. Connect monitor wire from the first grounded Mat to the terminal on the back of the monitor labeled M1.
7. Connect monitor wire from the second grounded Mat to the terminal on the back of the monitor labeled M2.

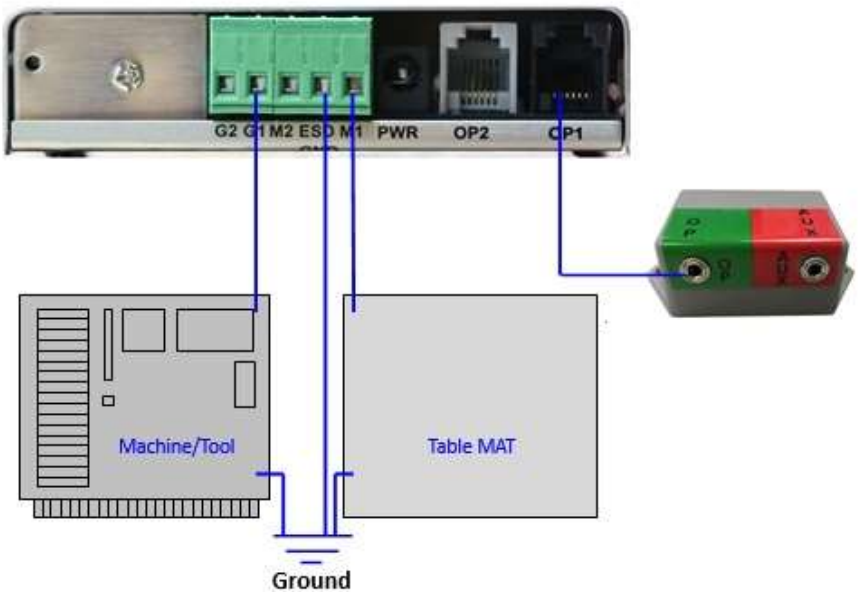
Note: Mat has to be grounded with Zero Ohm wire for proper mat monitoring operation. Grounding mat with wire having 1M Ohm resistor may cause alarms due to the electrical noise.

If your particular workstations are grounded with 1M Ohm resistance due to safety concerns, please indicate that at the time of the order. Monitor will be modified to accommodate that requirement.

If monitor has low resistance monitoring called “GND” monitoring, but there are no **grounded** connections needed to be monitored, connect a wire from **G1** and **G2** terminals to **ESD GROUND** terminal on the back of the monitor and skip steps 8 and 9.

8. Connect monitor wire the first grounded connection to the terminal on the back of the monitor labeled **G1**.
9. Connect monitor wire the second grounded connection to the terminal on the back of the monitor labeled **G2**.
10. Plug power supply into the **PWR** connector on the back of the monitor and into the power line.

GZ-1600 Wiring Diagram



OPERATION

Wrist strap monitor operation

The status of a dual wrist strap resistance is indicated by a tricolor LED.

Stand-by indication

If operator wrist strap is not plugged into the remote terminal box, “OP1/OP2” (operator) led will be turned off.

Low wrist strap alarm

If operator wrist strap is plugged into the remote and resistance is less than 1.8M Ohm, “OP1/OP2” led will be yellow and audible alarm will sound.

Normal wrist strap indication

For normal operating resistance “OP1/OP2” led will be green.

High wrist strap alarm

1. If operator wrist strap is plugged into the remote and resistance is higher than maximum, led will be red and audible alarm will sound.
2. If remote is not plugged into the monitor, or there is a break in the connection between the monitor and remote, “OP” led will be red and audible alarm will sound.

MAT monitor operation

Normal MAT indication

For normal operating resistance led will be green.

High MAT alarm

If MAT resistance is higher than maximum limit, led will be red and audible alarm will sound.

GND monitor operation

Normal GND indication

For normal operating resistance led will be green.

High GND alarm

If GND resistance is higher than maximum limit, led will be red and audible alarm will sound.

Standard alarm settings

For standard alarm setting, please refer to the technical specification table below. For alarm settings different from standard, contact us or local sales representative at the time of order.



Figure1: Front View



Figure2: Back View

PERIODICAL VERIFICATION

In general, we recommend to do the periodical verification annually with dedicated inspection tool **RBOX-35M10**. If the verification result is out of the specification, please contact your authorized distributor for calibration service.

PERFORMANCE AND TECHNICAL SPECIFICATION

GZ-1600 is designed to be used indoors at a temperature range 10°C to 50°C. Operator wrist strap is grounded through 2M resistors inside the monitor.

| ALARM LIMITS | Min. | Factory Default | High |
|------------------------|-------|-----------------|-------|
| Wrist strap low limit | 1.6MΩ | 1.8MΩ | 2.0MΩ |
| Wrist strap high limit | 30MΩ | 35MΩ | 40MΩ |
| Mat high limit | 90MΩ | 100MΩ | 110MΩ |
| GND (tool) high limit | 9Ω | 10Ω | 11Ω |

Listed in below table is the circuit-based performance data.

| | |
|--|---------|
| Typical operating voltage on operator | < 0.2V |
| Voltage on operator when wrist-strap is open circuit | 0.7V |
| Typical operating voltage on 10M Ω MAT | < 2.5V |
| Voltage on MAT when connection is open circuit | 2.5V |
| Typical operating voltage of 5 Ω GND | < 2.5mV |
| Voltage on GND when connection is open circuit | 0.25V |

TECHNICAL SUPPORT

Please contact your local authorized distributor

LIMITED WARRANTY

Megalin Source International expressly warrants that for a period of one (1) year from the date of purchase, GZ-1600 will be free of defects in material (parts) and workmanship (labor). Within the warranty period, a unit will be tested, repaired, or replaced at Megalin option, free of charge. Any unit under warranty should be shipped prepaid to Megalin office. Include a copy of your original packing slip, invoice, or other proof of purchase date.

If the unit is out of warranty, Megalin Source International will quote repair charges necessary to bring your unit up to factory standards.

NOTE: *Wrist strap remotes terminal boxes are subject to mechanical wear and considered to be "consumable items". They have separate warranty of 6 month.*

WARRANTY EXCLUSIONS

The foregoing express warranty is made in lieu of all other product warranties, expressed and implied, including merchantability and fitness for a particular purpose that is specifically disclaimed. The express warranty will not apply to defects or damage due to accidents, neglect, misuse, alterations, operator error, or failure to properly maintain, clean or repair products.

LIMIT OF LIABILITY

The user shall determine the suitability of the product for their intended use, and the user assumes all risk and liability whatsoever in connection therewith.