

**WT-1035 LOW VOLTAGE WORKSTATION MONITOR****I. Description**

The WT-1035 monitor continuously monitors two wrist straps and work surfaces. This flexible system has the capability to be used in three distinct formats.

With the WT-1050 Converter system the unit monitors standard single wire wrist straps using impedance technology. Refer to TB-WT1050.

With the WT-1060 Adapter system the unit monitors dual wire "resistance" style wrist straps. Refer to TB-WT1060.

**II. Specifications**

Audible alarm: 90 dB

Power source: 12V UL listed AC/DC transformer

Test voltage: 5 volts

Test current: 5  $\mu$ A

Tolerance:  $\pm$  10%

A. Personnel grounding with WT-1060 resistance adapters:

"LO" - < 1.5 megohms

"S. BY" (Stand By) - 1.5 to 2.0 megohms

"SAFE" - 2.05 megohms to selected upper limit (10 or 35 megohms)

"HI" - > user selected (10 or 35 megohms)

B. Personnel grounding with WT-1050 impedance converter:

"SAFE" -  $\leq$  3 megohms

"HI" - > 3 megohms

Wrist strap testing with WT-1050:

"Fail" - < 800K ohms or  $\geq$  2 megohms (Note: fail will be indicated by alarm and lit LED marked "HI" if wrist strap is either below or above "Safe" limits).

"Safe" - 800k ohms to 2 megohms

C. Work surface monitoring:

"SAFE" - < 3.7 megohms

**III. Contents**

1 monitor with 2 cords for mat connection  
1 UL listed 12V transformer

**IV. Setup for work surface (see page 3, figure 2 for details).**

A. Monitoring for mats with snap-to-snap resistance < 3.7 megohms

Attach light mat connection cord from the monitor to a snap on work surface 1 and black mat connection cord to a snap on work surface 2.

Connect standard work surface ground cords (not included with monitor) to ground.

B. Monitoring for mats with snap-to-snap resistance > 3.7 megohms

Attach snaps on mat connection cords to auxiliary cord. Connect auxiliary cord to ground. Note that even though the work surface monitoring function is not utilized, failure to ground the two mat connection cords will result in an "alarm" state.

C. Monitoring a single work surface

This monitor is designed for two work stations. To use for a single work surface the unused mat connection cord must be bypassed or a constant mat alarm state will exist. Attach the snap on unused mat cord to an auxiliary cord (available from Static Technologies Corp.). Connect auxiliary cord to ground.

**V. Setup for personnel monitoring**

Setup for personnel monitoring varies by the Adapter selected by the user. Refer to the Technical Bulletin as listed in section 1.

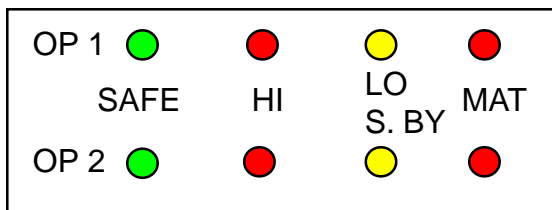


Figure 1. Front panel of WT-1035 monitor

## VI. Display/Alarm for monitoring

**Top LEDs are for operator and mat 1 (light colored cords) and bottom LEDs are for operator and mat 2 (black cords).**

### A. Green “SAFE” LEDs

Flashing green - corresponding mat(s) properly grounded - wrist strap(s) not in use

Steady green “SAFE” - corresponding operator(s) and mat(s) properly grounded

### B. Red “HI” LEDs for use with WT-1060 adapters

Steady red LED and intermittent alarm – corresponding operator(s) not properly grounded

### C. Red “HI” LEDs for use with WT-1050 impedance converter

Steady red LED and intermittent alarm - corresponding operator(s) resistance to ground is above limits of converter (3 megohms)

### D. Amber “LO / S.BY” LEDs (does not apply for use with WT-1050 impedance converter)

Steady amber LED and intermittent alarm – corresponding operator(s) resistance to ground below 1.5 megohms indicating possible hazard condition

Flashing amber - corresponding operator(s) in “Stand By” mode (see below)

Note: Stand By mode indicates user to ground resistance between 1.5 and 2.0 megohms. Although this is within the acceptable working range for wrist straps, the total resistance of the user’s skin and the one megohm resistor generally make this type of reading with a resistance wrist strap unattainable.

Stand By mode is generally an indication that the wrist cord is “parked” on a designated parking unit and not being worn by the operator. Workers may choose to park the cord when leaving the work area, rather than disconnecting the cord from the adapter. When wrist straps are parked the alarm will not sound.

To prevent situations where workers forget to put on the wrist strap after returning to the work station, the stand by mode has been added. Periodic visual inspection of the monitor to assure the green “SAFE” LED is lit, ensures wrist straps are worn properly.

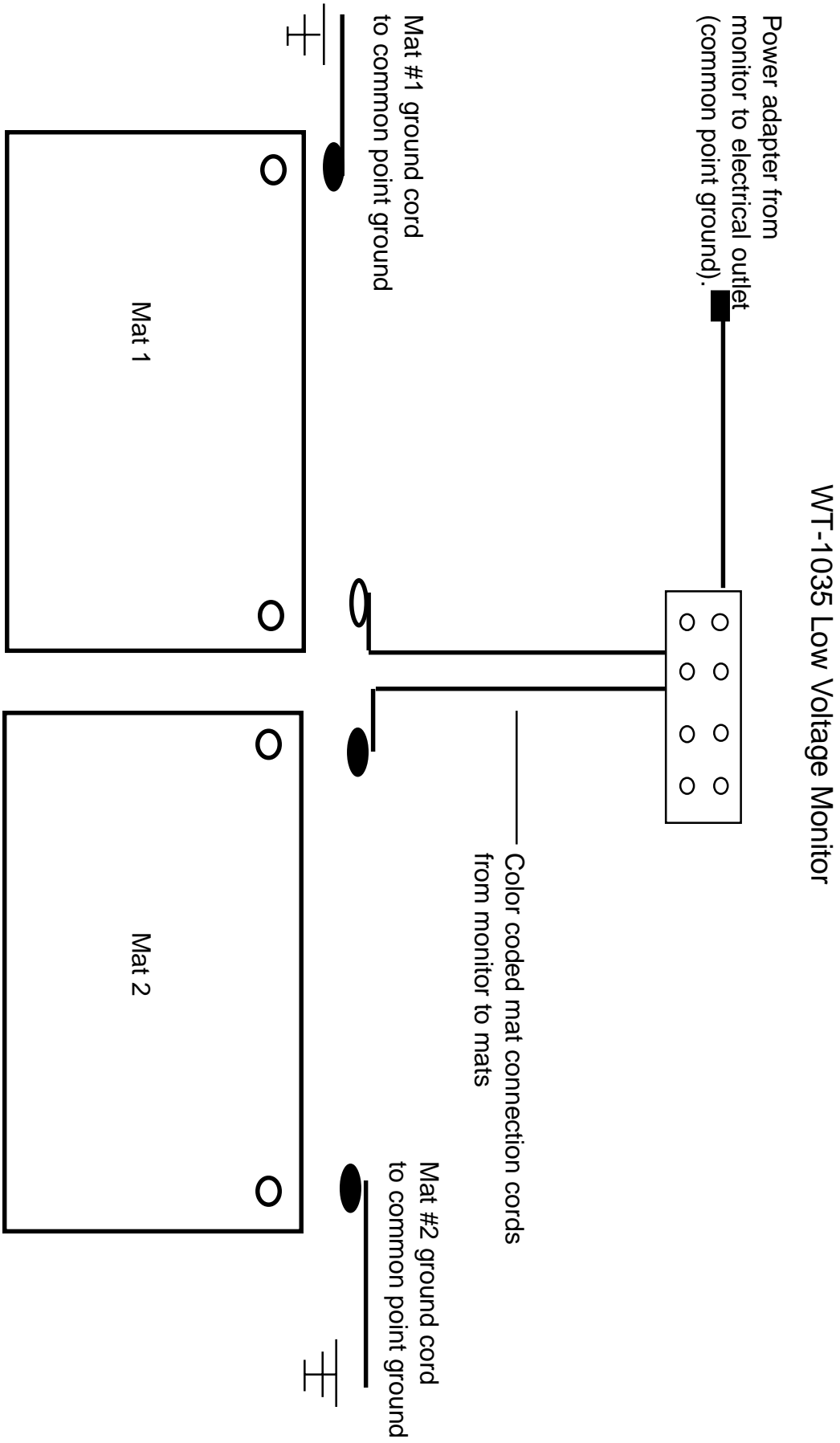
### E. Red “MAT” LEDs

Steady red LED and intermittent alarm - corresponding mat(s) not properly grounded or above range limits (3.7 megohms) of monitor.

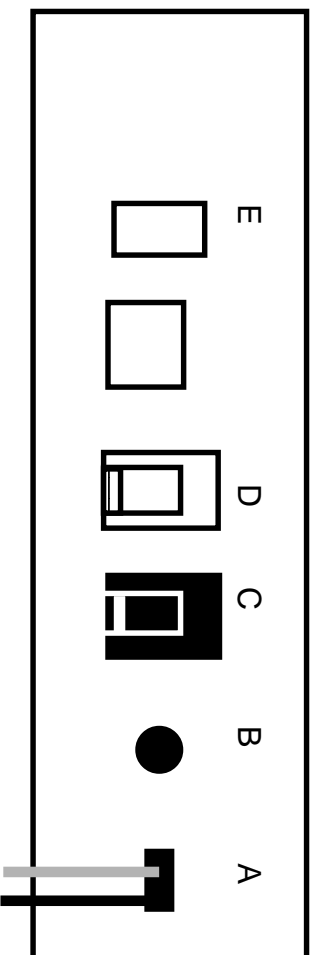
VII. Use STATIC TECH dual wire wrist straps for resistance monitoring in conjunction with the WT-1035 Monitor and WT-1060 Adapter.

Use STATIC TECH single wire wrist straps for impedance monitoring in conjunction with the WT-1035 monitor and WT-1050 Impedance Converter.

All statements, technical information and recommendations related to the seller’s products are based on information believed to be reliable, but the accuracy or completeness thereof is not guaranteed. Before using the product, the user should determine the suitability of the product for its intended use. The user assumes all risks and liability whatsoever in connection with such use.



**Figure 2: Layout for WT-1035 Low Voltage Work Station Monitor**



**Note:**

- A = Mat Connection Cords
- B = Power Connection for 12V DC transformer
- C = Operator # 2 modular connection (black cord)
- D = Operator # 1 modular connection (light colored cord)
- E = Toggle switch for selecting upper end limits for dual wire resistance wrist straps. Up position for 35 megohms. Down position for 10 megohms.

**Figure 3: Back Panel of WT-1035 Low Voltage Work Station Monitor**