WT-1800 DUAL OPERATOR WORKSTAION MONITOR (FOR DUAL WIRE WRIST STRAPS)

I. Description

The WT-1800 monitor system continuously monitors two wrist straps and work surfaces. This flexible system has the capability to be used with dual wire "resistance" style wrist straps.

II. Contents

* WT-1035 low voltage monitor with 2 cords for mat connection and an UL listed 12V transformer

* WT-1060 resistance adapter with 2 remote ground cords and WB-6090 parking block

III. Specifications:

Audible alarm: 90 dB
Power source: 12V UL listed AC/DC transformer
Test voltage: 5 volts
Test current: 5 µA
Tolerance: ± 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. Work surface monitoring:
"SAFE" - < 3.7 megohms

IV. Setup for work surface

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. This auxiliary cord is not included. Please contact us if you need it.

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. Set-up for personnel monitoring

A. See page 4, figure 4 for a diagram of proper set-up using the WT-1035 with WT-1060 Adapter.

B. The WT-1060 Adapter with light colored cord connects to the light colored phone jack on the WT-1035. The WT-1060 Adapter with black cord connects to the black phone jack on the WT-1035.

C. Match the wrist strap ground cord with the same color mat connection cord on the monitor. Light colored wrist strap and worksurface ground cords are for operator #1, black cords are for operator #2.

Operator Wrist Strap Jack (Monitored) | Guest Wrist Strap Jack (Unmonitored)

Figure 1: Front panel of WT-1060 adapter cord

Static Technologies Corporation ♦ 61 Pleasant Street ♦ Randolph, MA 02368 U.S.A.
Telephone: 781-961-7220 **Fax: 781-961-1858**
Email: statictech@xensei.com **Website: www.static-tech.com**

VI. Display/Alarm for monitoring

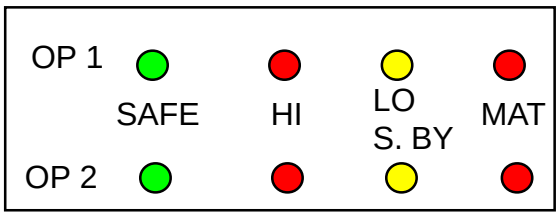


Figure 2. Front panel of WT-1035 monitor

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

C. Amber “LO / S.BY” LEDs: 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 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.

D. 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. Dual wire wrist straps:

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

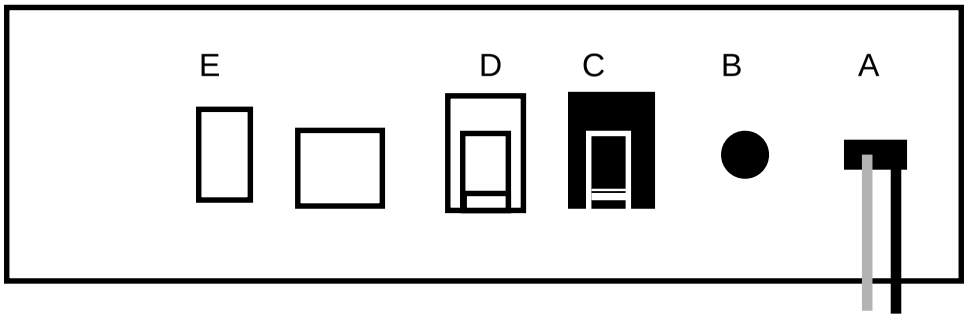
WB-6050: fabric band with 6’ cord

WB-6060: fabric band with 12’ cord

WB-7050: metal band with 6’ cord

WB-7060: metal band with 12’ cord

This WT-1800 monitor system is also compatible with 3M and Semtronics dual wire (resistance type) wrist straps.



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

Figure 4: Layout for WT-1800 System
(WT-1035 Low Voltage Work Station Monitor with WT-1060 Adapters)