

## Ranger Two™ CM1602 Resistance Monitor Installation Instructions

Confirm you have received all the items in the "Parts Included List". You will also need a small flat head screw driver and two small screws.

### Wiring

Insert the exposed end of **FM1515CM** to the jack label **ESD GND** and tighten the screw. Connect the eye bolt of the **FM1515CM** to ESD ground - typically the center screw of a properly grounded outlet.

Insert the exposed end of the cord **FM1515NR** to the jack label **M** and tighten the screw. Snap the other end to the 10mm snap on your ESD work surface.

Snap the **FM1515** to a 2nd snap on the ESD work surface and connect the eye bolt to ESD ground.

Connect one end of the flat cable to the **OP** jack on the monitor and the other to the Wrist Strap Jack.

### Mounting

Mount the constant monitor with the provided Velcro where its alarm indicators can be seen or heard by the operator. Mount the Wrist Strap Jack with two screws in an easily accessible area of the workstation.

Connect the power cable. Your constant monitor is now ready to use.

### Operation

Wrist Strap - 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, "OP" (operator) LED will be turned off.

Low wrist strap alarm - If the resistance of the wrist strap is less than 1.8M, "OP" led will be yellow and alarm will sound.

Normal wrist strap indication - For normal operating resistance "OP" led will be green.

High wrist strap alarm - If the wrist strap resistance is higher than 35M, "OP" led will be red and audible alarm will sound.

If Wrist Strap Jack 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.

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

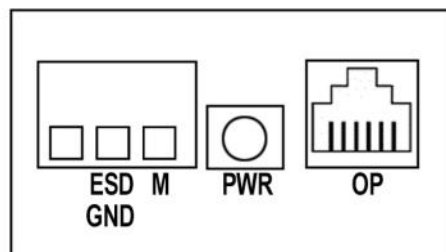
Normal mat indication - For normal operating resistance led will be green.

High mat alarm - If MAT resistance is higher than 100M, led will be red and audible alarm will sound.

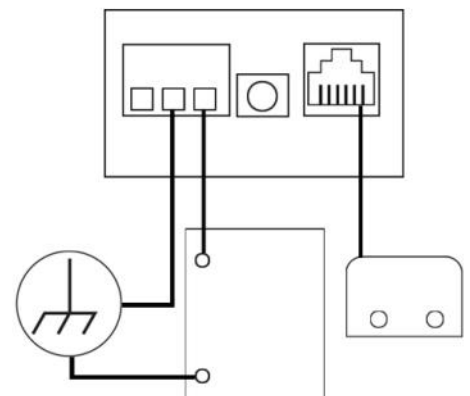
### Parts Included List

- CM1602 - 1
- Wrist Strap Jack - 1
- Flat Cable - 1
- Power Cord - 1
- FM1515 - 1
- FM1515NR - 1
- FM1515CM - 1
- Velcro - 1

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Wiring Diagram





## **Ohm Metrics CM1602 Resistance Monitor**

### **Calibration and Periodic Testing**

Alarm resistance limits are set by the precision resistors inside the tester and never need calibration. You can verify proper operation of the monitor by periodically testing monitor with a resistance limit comparator box, part number CM2015PV.

### **Product Specifications**

Dimensions: 2" W x 3" D x 1" H  
Weight: 6.8oz

### **Unit monitoring capabilities**

**CM1602** 1 Person/Wrist Strap & 1 Worksurface Mat

### **Performance Specifications**

Wrist Strap Alarm: Low Alarm: 1.8 megohm.  
High Alarm: 35 meg ohm.  
Mat Alarm: 100 meg ohm.  
Power: 9-12V,100mA.  
Temp. Limits: 50° F (10°C) to 122° F (50°C)

### **Unit Accessories**

FM1515 Work Surface Ground Cable (1 included)  
FM1515CM Monitor Ground Cable (1 included)  
FM1515NR Monitor To Work Surface Cable (1 included)  
CM2015 Periodic Verification Unit  
CMREMOTE-IR Cyclops™ Operator Presence Check  
CP3000 Wrist Strap Parking Station for Mono Plug Coil Cords

### **Compatible Wrist Bands\***

WB2800 Series Two Snap, Dual Wire Wrist Bands  
WB2695 Series One Snaps Dual Wire Wrist Bands  
WB5000 Series Mono Plug Dual Wire Metal Wrist Bands  
WB7000 Series Mono Plug Dual Wire Fabric Wrist Bands

\*Most Standard Dual Wire Wrist Band Sets are Compatible with the CM1601 and CM1602

### **About Transforming Technologies**

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