

## ESD Workstation Bundle

ESD Table Mat, Dual Wire Constant Monitor, Wrist Strap, Grounding Hardware, and ESD Sign

**Protect your sensitive items and comply to ESD standards with our ESD workstation kit.**

### Work Surface

The 4500 series ESD control mats from Transforming Technologies are made of a durable 0.080" thick rubber. A conductive layer backs the static dissipative top layer that creates outstanding electrical performance characteristics. The 4500 series offers excellent resistance to hot solders, soldering irons and most solvents. Our cut mats are packaged individually with 10mm snaps and a common point ground cord. Available in nasa blue, royal blue, green and gray colors.

### RangerTWO Dual Wire Constant Monitor

The RangerTWO constant monitor provides continuous protection against failing dual wire wrist straps and a ESD work surface. A constant pulse of an ultra-low voltage signal measures the electrical resistance of the wrist band and work surface and alarms if there is a problem. The RangerTWO saves time by eliminating the time consuming testing of grounding products. The system uses special dual wire wrist band sets that contain two independent elements which provide fail-safe protection. The series can be used with most common dual wire wrist straps available.

### Grounding: Wrist Strap and Hardware

Each monitor uses a dual wire wrist strap sets such as the WB7000 from Transforming Technologies, although other compatible wrist strap sets may be substituted. Dual conductor wrist straps enable efficient, accurate resistance monitoring and grounding redundancy.

The one-size-fits-all WB7000 features a silver plated, monofilament, continuous thread woven together with elastic nylon for full conductivity and comfort. The CC3000's double insulated jacket provides incredible durability and unmatched reliability via a redundant grounding path.



Meets or exceeds ANSI/ESD-S20.20



## Features

- Complete ESD Workstation Kit
- Monitors One Dual Wire Wrist Strap, and One Work Surface
- Two Layer Rubber: Excellent Resistance to Hold Solders, Soldering Irons and Most Solvents
- Includes Grounding Hardware and Wrist Strap
- Kit Meets or Exceeds Requirements of ANSI ESD-S20.20

### Applications:

**Creates an ESD-Safe workstation for electronics repair, manufacturing, and more. ESD constant monitors reduce production costs by eliminating the time spent on testing wrist straps. Further savings may be realized by reduced ESD damage from broken wrist straps**

This document is prepared for our customers as a service, and is to the best of our knowledge true and accurate. However, it is understood and agreed by the users of this document that we will accept no liability for the conclusions reached. Users of this document may therefore wish to perform additional testing before determining that products mentioned are suitable.

## ESD Workstation Bundle

### Part Numbers:

TTB2A-RB Kit, CM1602, Mat 2x3, WB7050, Sign, Hardware  
 TTB2A-2448RB Kit, CM1602, Mat 2x4, WB7050, Sign, Hardware

Replace "RB" with "LB" for Light Blue, "GY" for Gray and "GN" for Green



### Model CM1602

**DC Power Supply:**  
**AC Input:**  
**Temperature limits:**  
**Adjustments:**

**Dimensions:**  
**Weight:**  
**Monitoring Capabilities**  
**Alarm Limits**  
**Wrist Strap**

**Low Resistance:** 1.8 megohm.

**High Resistance:** 35 meg ohm.  
 100 meg ohm.

**Mat Resistance:**  
**Typical Operator Voltage at 10M:**  
**Max Mat Voltage (open circuit):**  
**Max Mat Voltage (alarm at 100M):**

### Specifications

7-15 VDC, 100mA.  
 100-240 VAC, 1A.  
 50° F (10°C) to 122° F (50°C)  
 No serviceable components;  
 see periodic verification tools  
 3" W x 2" D x 1" H  
 6.8oz  
 1wrist strap and 1 work surface

max 0.1V (100mV)

0.2V (200mV)

0.15V (150mV)

### Unit Accessories

**FM1515**  
**FM1515CM**  
**FM1515NR**  
**CM2800-REMOTE**  
**CM-REMOTE-IR**  
**CM2015PV**

Work Surface Ground Cable  
 Monitor Ground Cable  
 Monitor To Work Surface Cable  
 Remote Jack Replacement  
 Proximity Sensing Remote  
 Verification Unit



### Product Specifications

#### Wrist Band WB7050

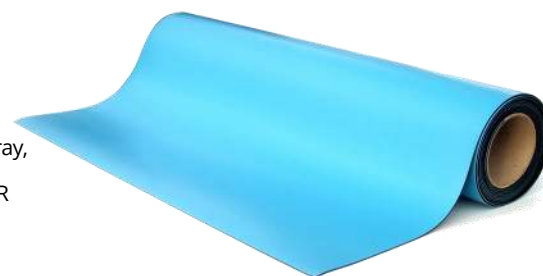
**Fabric:** Polyester with silver-plated nylon  
**Resistance:** 100 ohms typical  
**Contact:** 360 degrees around wrist  
**Color:** Blue  
**Back Plate:** Stainless Steel  
**Fabric Resistance:** 100 megohms typical

#### Coil Cord

**Length:** 5, 10, 20 feet, practical  
 7, 12, 24 feet, extended  
**Tip:** Stainless Steel  
**Barrel:** Ni Plated Brass  
**Plug Tip Diameter:** 3.0 mm (+/- 0.08mm)  
**Plug Barrel Diameter:** 0.135 in. (+/- 0.003 in)  
**Flex Life:** > 50,000 flexes  
**Electrical Resistance**  
 Tip To Tip/ Barrel  
 To Barrel:  
 1 Megohm (+/- 10%)

### Specifications:

**Thickness:** 0.080"  
**Hardness:** 60 Shore A  
**Tensile Strength:** >1000 PSI  
**Elongation:** >300%  
**Temperature:** 190F (87C)  
**Color:** Nasa Blue, Gray,  
 Royal Blue  
**Rubber:** Premium NBR  
**RTGP:** 8 x 10<sup>6</sup>ohms  
**RTT:** 2 x 10<sup>6</sup>ohms  
**Charge Decay:** 0.01Seconds



The ESD matting is rated to 190F (87C). The mats are heat resistant, not heat proof. They will withstand exposure to high temperatures, but it is dependant on exposure time.

### About Transforming Technologies

Since 1998, Transforming Technologies has helped electronic manufacturing facilities to protect their products and processes from the many serious problems associated with static electricity.

Transforming Technologies offers a wide range of unique and outstanding products to detect, protect, eliminate and monitor electrostatic charges. Our products are integral components of an effective static control program.