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Client: Protective Systems Inc.  
Model: EMR50  
Standard: FCC Part 18  
FCC ID: WSK-EMR50  
Report #: 2008175

## **Appendix G: Manual**

Please see the following pages.

## **PROTECTIVE SYSTEMS, INC – EMR50 FCC CERTIFICATION EXHIBITS**

### **OPERATIONAL PROCEDURES (USER MANUAL)**

This device complies with Part 18 of the FCC rules.

### **SAFETY PRECAUTIONS**

The EMR50 Stabilization Tool should always be used in accordance with the Safety and Operating instructions contained herein. Failure to do so could result in damage to equipment or injury to personnel operating the system. Never try to operate the system if it shows obvious signs of damage or water penetration.

THERE ARE NO USER SERVICEABLE PARTS ON/IN THIS SYSTEM. REMOVING ANY COVERS WILL POTENTIALLY EXPOSE PERSONNEL TO HIGH VOLTAGE AND MAY RESULT IN ELECTRIC SHOCK. IF THE SYSTEM BECOMES DAMAGED OR CEASES TO FUNCTION PROPERLY, CONTACT PROTECTIVE SYSTEMS, INC IMMEDIATELY TO ARRANGE FOR SERVICING OF THE UNIT BY A QUALIFIED AUTHORIZED REPAIR TECHNICIAN.

### **OTHER WARNINGS**

The EMR50 is designed to interrupt the normal operation of certain components of any electronic circuitry when a device containing that circuitry is placed directly in front of the tool within its range. Therefore, avoid pointing this tool at any sensitive electronic equipment or systems where such interference would be undesirable. As long as the EMR50 is only directed at the electronic device of interest and care is taken not to place any other sensitive equipment in front of the tool, there will be no adverse effects on any other systems in proximity.

Avoid pointing the EMR50 at any communications systems, data storage devices or any other type of sensitive electronic system at close range. Interruption of normal operation of that system could result.

### **MOUNTING PLATFORM**

The EMR50 can be easily mounted to a stationary or mobile platform. Ensure when making your decision in this regard that you choose a solid, sturdy mounting surface that will be strong enough to support the unit and keep it from tipping over. Also take into consideration ease of operation and charging.

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### **OPERATION**

#### **1. Power Requirements of the EMR50.**

The EMR50 is powered by an internal 12 VDC battery system. It must be completely charged before operation. To charge the unit fully, connect the supplied cable to a 120V/60Hz facility power receptacle with 20A service. Let charge for a minimum of 6 hours before first use or before beginning a stabilization operation. THE CABLE IS FOR CHARGING ONLY AND SHOULD NOT BE PLUGGED IN WHILE THE UNIT IS IN OPERATION. The effective operational runtime of the tool when starting operations with a fully charged battery is fifteen (15) minutes. Use the charging cable supplied with the device – never modify the cable or improvise with one not designed to work with the EMR50. During operation, the built-in inverter and battery charging system will sound a steady alarm tone if the battery drain has caused a drop in voltage to 10.5 VDC. At a battery voltage level of 10 VDC the system will automatically shut down. The EMR50 should be shut down and recharged ***before*** this condition has been reached. (NOTE: Before connecting the tool to a power source for charging, ensure the switch is in the OFF position.)

#### **2. Activation of EMR50.**

Make sure the charging cable has been disconnected from the power source and from the unit before operation. The EMR50 is activated by inserting a finger through the hole in the top of the casing and depressing the power toggle switch to the 'ON' position (I = ON). Before unit is placed, verify proper function. The EMR50 can be operated for a maximum of fifteen (15) minutes before supporting equipment will need to be in place to maintain the stabilization field condition. **Make necessary preparations before commencing stabilization operations if the time needed to complete operations on the device of interest will be longer than 15 minutes.**

#### **3. Placement of the EMR50.**

**The EMR50 should be used in conjunction with all safety and operating procedures already in force with each respective organization using this tool.**

Verify the tool is fully functional before placement. Place the EMR50 directly in front of the electronic device of interest, or at a 45° angle, as determined by the on-scene analysis at the time of operation. EMR50 should be no further than one half of a meter (1/2m) from the device of interest. The EMR50 can be placed on the ground or supported on a platform

## **PROTECTIVE SYSTEMS, INC – EMR50 FCC CERTIFICATION EXHIBITS**

of the users choosing. Ensure the tool is secure and stable in it's placement to prevent disruption of field during operations.

### **4. Shut-down of EMR50.**

When operational procedures on the electronic device of interest are completed, deactivate the EMR50 Stabilization Tool by simply depressing the same switch back into the 'OFF' position (O = OFF). Connect power cable and recharge the unit as needed. Take measures to ensure intrusion by dust and dirt is minimized. Never allow the tool to come into contact with water as there are sources of high voltage inside. Allowing the EMR50 to be exposed to excessive moisture could potentially create a high risk of electric shock and/or injury to personnel.

## **MAINTENANCE**

Before each use of the EMR50 Stabilization Tool, check fuse by removing fuse cap below charging cord receptacle. If filament is broken replace fuse with extra one supplied. For more replacement fuses, contact Protective Systems, Inc. Do not use any other fuse than the one supplied with the unit. Keep the EMR50 dry and clean at all times and store in its original shipping container for safe keeping. Inspect both the tool and the cable frequently for signs or wear or damage. There are no user serviceable parts or features on this tool. Should the EMR50 show any signs of damage or cease to function properly, immediately contact Protective Systems, Inc directly for scheduling of an authorized repair.

## **CUSTOMER SERVICE, REPAIR, TECHNICAL SUPPORT & TRAINING**

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