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Client: Protective Systems Inc.
Model: EMR100
Standard: FCC Part 18
FCC ID: WSK-EMR100
Report #:   2008176

Appendix G: Manual

Please see the following pages.

<u>OPERATIONAL PROCEDURES (USER MANUAL)</u>

This device complies with Part 18 of the FCC rules.

<u>SAFETY PRECAUTIONS</u>

The EMR100 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.

<u>THERE ARE NO USER SERVICEABLE PARTS ON/IN THIS SYSTEM. REMOVING ANY SEALED 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.</u>

<u>OTHER WARNINGS</u>

The EMR100 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 EMR100 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.

<u>Avoid pointing the EMR100 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</u>.

<u>MOUNTING PLATFORM</u>

The EMR100 can be easily mounted to a stationary, mobile or robotic platform. Ensure when making your decision in this regard that you choose a solid, sturdy mounting surface that will be strong enough to support a minimum of ninety (90) lbs and keep the unit from tipping over. Also take into consideration ease of operation and charging. For remote

operation of the unit, as in the situation where the EMR100 has been mounted on a robotic platform, follow the manufacturers instructions for your specific platform to achieve proper connection to the remote switch leads on the unit.

OPERATION

1. Power Requirements of the EMR100.

   The EMR100 is powered by an internal 12 VDC battery system or can be connected to a gas operated field generator with a minimum power rating of 1200W. If operating under battery power, it _must_ be completely charged before operation. To charge the unit fully, make sure the tool is turned off and open the cover on the battery compartment. Connect a standard, off-the-shelf deep-cycle battery charger with a minimum amperage rating of 2A (MAX 10A) to the internal battery following the instructions of the battery manufacturer. The effective operational runtime of the tool when starting operations with a fully charged battery is twenty-five (25) minutes. _DO NOT operate the tool while charging. Damage to the inverter system may result_. 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 EMR100 should be shut down and recharged **before** this condition has been reached.

   The EMR100 can function indefinitely for operations where it is connected to a gas powered generator and the generator is maintained. Use the supplied power cable to couple the A/C power port on the tool to a grounded A/C power outlet on the generator. The cable can only be connected one way.

2. Activation of EMR100.

   Make sure the battery charger has been disconnected before operation. The EMR100 is activated manually by lifting the red switch cover on the inside of the battery compartment lid then flipping the silver toggle switch underneath to the 'UP' position. Before unit is placed, verify proper function. When powered by it's internal battery, the EMR100 can be operated for a maximum of twenty-five (25) minutes before supporting equipment or a gas powered generator (min 1200W) 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 25 minutes._**

3. <u>Placement of the EMR100</u>.

   The EMR100 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 EMR100 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. EMR100 should be no further than one half of a meter (1/2m) from the device of interest. The EMR100 can be placed on the ground or supported on a platform of the users choosing. Ensure the tool is secure and stable in it's placement to prevent disruption of field during operations.

4. <u>Shut-down of EMR100</u>.

   When operational procedures on the electronic device of interest are completed, deactivate the EMR100 Stabilization Tool by simply flipping the red switch cover back into the 'DOWN' position. This will automatically turn off the switch. Connect battery charger 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 EMR100 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 EMR100 Stabilization Tool, check fuse by removing fuse cap above battery in battery compartment. If filament is broken replace fuse with extra one supplied. For more replacement fuses, contact Protective Systems, Inc. <u>Do not use any other fuse than the one supplied with the unit.</u> Keep the EMR100 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 EMR100 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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