

## **GROUNDING:**

All transients are taken to the RackShield enclosure ground stud.

The RackShield ground must be connected to the same AC ground reference used by the system being protected. The RackShield must also be located as close as possible to the system being protected. (i.e. communication adapter, CRT, etc.) The ground lead should be as short as possible. It must be at least No. 14AWG wire with no bends of less than a two inch radius.

The RackShield ground stud must be connected to the same reference point used by the AC power line transient suppressor. This is the power safety ground wire (green wire) such as in an AC receptacle.

**NOTE:** The protected device should also have AC suppression or it will be vulnerable to transients from the incoming AC power. This can show up as failures on the communication interface.

If devices are received in a damaged condition, please notify the transportation company. Please retain all containers and packing materials for inspection.



# **INSTALLATION INSTRUCTIONS/ USER MANUAL**

## **RackShield Series**

**Communication Transient Voltage Surge Suppressor**

**CONGRATULATIONS! YOU HAVE JUST PURCHASED THE BEST SURGE PROTECTION IN THE INDUSTRY!**

***INTRODUCTION***

The RackShield is a modular data/telephone communications transient suppression system specifically designed to protect the communication I/O ports on sensitive equipment from the harmful effects of transient voltages and surges caused either externally by sources such as lightning and utility load switching or internally by electrostatic discharge (ESD) or even a user's own equipment. The RackShield Series can incorporate up to 12 protection modules that can be individually configured to meet a wide variety of standard communications protocols including RS232, RS422, RS485, Lease Line Telephone Networks (LLTN) and Public Switched Telephone Networks (PSTN).

**IMPORTANT SAFETY INSTRUCTIONS**

**CAUTION:**

1. Never install external data communication wiring during a lightning storm.
2. This product is intended for INDOOR USE ONLY.

**INSTALLATION** (see page 3)

1. Read and understand all instructions.
2. Slide modules into any open bay and press firmly to ensure that the module locks into place.
3. To remove module apply pressure to the release mechanism under the unit and gently pull out.

4. Mount the enclosure in a 19" rack or to the wall by removing and rotating the mounting brackets.
5. Route the data communication line(s) from the equipment and connect the line to the "OUT" connector(s) on the enclosure.
6. Route the line side of the data communication line(s) and connect this line to the "IN" connector(s) on the enclosure.
7. Be sure to keep the protected and unprotected lines separated.
8. Connect the ground to the enclosure ground stud (see grounding section).
9. ***SAVE THESE INSTRUCTIONS***

Modules easily slide-in to the RackShield and ground automatically (provided that the rack housing ground wire is connected to the same reference used by the system being protected). See page 4 for grounding instructions.

