

USER MANUAL

MODEL 510, 511 and 512 Modular Surge Protectors



PE **PATTON**
Electronics Co.

Part# 07M510/11/12-B2
Doc# 074251UB2
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1.0 WARRANTY INFORMATION

Patton Electronics warrants all Model 510/511/512 components to be free from defects, and will—at our option—repair or replace the product should it fail within one year from the first date of shipment.

This warranty is limited to defects in workmanship or materials, and does not cover customer damage, abuse or unauthorized modification. If this product fails or does not perform as warranted, your sole recourse shall be repair or replacement as described above. Under no condition shall **Patton Electronics** be liable for any damages incurred by the use of this product. These damages include, but are not limited to, the following: lost profits, lost savings and incidental or consequential damages arising from the use of or inability to use this product. **Patton Electronics** specifically disclaims all other warranties, expressed or implied, and the installation or use of this product shall be deemed an acceptance of these terms by the user.

1.2 SERVICE

All warranty and non-warranty repairs must be returned freight prepaid and insured to Patton Electronics. All returns must have a Return Materials Authorization number on the outside of the shipping container. This number may be obtained from Patton Electronics Technical Service at **(301) 975-1007**. *Packages received without an RMA number will not be accepted.*

Patton Electronics' technical staff is also available to answer any questions that might arise concerning the installation or use of your Model 510/511/512. Technical Service hours: **8AM to 5PM EST, Monday through Friday.**

2.0 GENERAL INFORMATION

Thank you for your purchase of this Patton Electronics product. This product has been thoroughly inspected and tested and is warranted for One Year parts and labor. If any questions or problems arise during installation or use of this product, please do not hesitate to contact Patton Electronics Technical Support at (301) 975-1007.

2.1 FEATURES

- Superior surge protection clamps voltages in 0.5 μ S
- Power handling capability up to 600 watts peak per wire
- Clamping voltages of 6 volts (RS-422) or 25 volts (RS-232)
- Available with RJ-11, RJ-12 and RJ-45 connectors
- Heavy braided ground strap shunts surges directly to chassis ground
- Fits into tight installation spaces
- Made in USA

2.2 DESCRIPTION

The Patton Model 510/511/512 data line surge protector uses the latest in transient surge suppression technology to guard against loss of data or damage to equipment. Featuring a power handling capacity up to 600 watts per wire, the Model 510/511/512 diverts harmful surges to ground before they reach your sensitive equipment.

The Model 510/511/512 is equipped with a heavy duty braided metal strap to shunt harmful over-voltages safely to chassis ground. Housed in a sturdy, flame retardant plastic case, the Model 510/511/512 connects in-line to data communication equipment using modular interfaces.

The Model 510 protects all 4 lines on an RJ-11 interface. The Model 511 protects all 6 lines on an RJ-12 interface. The Model 512 protects all 8 lines on an RJ-45 interface. All three models are available in either RS-232 (25 volt clamping threshold) or RS-422 (6 volt clamping threshold) versions.

Warning—Should your equipment or building be subject to a direct lightning strike, this product will not provide complete protection.

3.0 INSTALLATION

The Patton Model 510/511/512 is easy to install. The following instructions will clearly explain each step:

1. Connect the unit between the data line and the equipment that is to be protected. We use a bi-directional circuit, so you don't need to worry about an input side and an output side.
2. Connect the braided ground strap directly to a chassis ground connection on the protected device. If you are unsure where to locate a frame ground connection on your equipment, be sure to consult the equipment's user manual or contact the manufacturer—the ground connection is critical for proper operation of the Model 510/511/512.

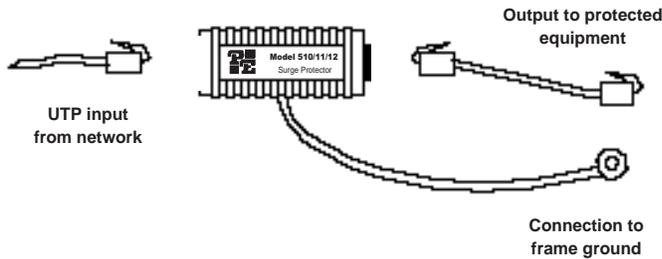


Figure 1. How to Connect the Model 510/11/12 Braided Ground Strap to the Chassis Ground Connection

APPENDIX A

PATTON MODEL 510/11/12 SPECIFICATIONS

Models 510/6 and 510/25

Connectors:	RJ-11 (4-wire)
Pins Wired/Protected:	All 4 pins on RJ-11 interface
Surge Capacity:	600 W for 1 mS
Response Time (RS-422):	Clamped to + or - 6 volts after 0.5 μ S, 200 Amps with a 8/20 μ S pulse
Response Time (RS-232):	Clamped to + or - 25 volts after 0.5 μ S, 200 Amps with a 8/20 μ S pulse

Models 511/6 and 511/25

Connectors:	RJ-12 (6-wire)
Pins Wired/Protected:	All 6 pins on RJ-12 interface
Surge Capacity:	600 W for 1 mS
Response Time (RS-422):	Clamped to + or - 6 volts after 0.5 μ S, 200 Amps with a 8/20 μ S pulse
Response Time (RS-232):	Clamped to + or - 25 volts after 0.5 μ S, 200 Amps with a 8/20 μ S pulse

Models 512/6 and 512/25

Connectors:	RJ-45 (8-wire)
Pins Wired/Protected:	All 8 pins on RJ-45 interface
Surge Capacity:	600 W for 1 mS
Response Time (RS-422):	Clamped to + or - 6 volts after 0.5 μ S, 200 Amps with a 8/20 μ S pulse
Response Time (RS-232):	Clamped to + or - 25 volts after 0.5 μ S, 200 Amps with a 8/20 μ S pulse

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