USER MANUAL

MODEL 532S

Ethernet 10Base-T (STP) Surge Protector

PATTON Electronics Co.

An ISO-9001 Certified Company

Part# 07M532S
Doc# 074171U-A
Revised 11/26/96

SALES OFFICE
(301) 975-1000
TECHNICAL SUPPORT
(301) 975-1007
http://www.patton.com

1.0 WARRANTY INFORMATION

Patton Electronics warrants all Model 536S 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.

1.1 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**; **http://www.patton.com**; or, **support@patton.com**.

Note: 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 532S. Technical Service hours: **8AM to 5PM EST, Monday through Friday.**

1.2 CE NOTICE

The CE symbol on your Patton Electronics equipment indicates that it is in compliance with the Electromagnetic Compatibility (EMC) directive and the Low Voltage Directive (LVD) of the Union European (EU). A Certificate of Compliance is available by contacting Technical Support.

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 arise during installation or use of the unit, contact Patton Electronics Technical Support: **(301) 975-1007**; **http://www.patton.com**; or, **support@patton.com**.

2.1 FEATURES

- Uses a multi-stage hybrid circuit for the best possible protection for shielded twisted pair applications
- Handles surge energy up to 1.5 kW
- Conforms to the IEEE 802.5 specification
- Works at speeds 4 Mbps / 16 Mbps Token Ring environments
- Diverts surges directly to chassis ground through braided metal ground strap
- STP wire shield connected directly to chassis ground
- Easy to install
- Made in the U.S.A.

2.2 DESCRIPTION

The potential threats to your Token Ring network are vast: lightning, AC power induction, electrostatic discharge, ground potential differences, EMI/RFI interference and more. The Patton Model 532S has been designed to greatly reduce these risks. Just attach one unit to each of your 802.5 Token Ring devices and rest easy.

The Model 532S connects directly between your shielded or unshielded twisted pair (UTP) network cables and respective I/O ports. By shunting all threatening voltages to the chassis ground, the Model 532S insures the integrity of the data in your LAN and protects connected equipment from damage. Using a solid state design and sophisticated multistage hybrid circuits, these units can operate at speeds of 4 or 16 Mbps. Grounding is accomplished via an external ground strap that provides a separate unit-ground to chassis-ground connection. In addition, the wire shield is connected directly to chassis ground (when shielded modular plugs are used).

Warning: This product will not provide complete protection should your equipment or building be subject to a direct lightning hit.

3.0 INSTALLATION

Patton's Model 532S units are easy to install and should give you years of trouble-free service. Here are a few simple instructions to help you get things hooked up right.

1. Unplug (disconnect) the existing connection between the network cable and the equipment's I/O port.

2. Install the Model 532S between the incoming network cable and the protected equipment using the 6" (15.24cm) modular patch cable (supplied). Place the surge protector as close as possible to the device being protected.

3. Connect the braided ground strap directly to a chassis ground connection on the protected device. If you are unsure where to locate a chassis ground connection on your equipment, consult the equipment's user manual or contact the manufacturer—the ground connection is critical for proper operation of the Model 532S.

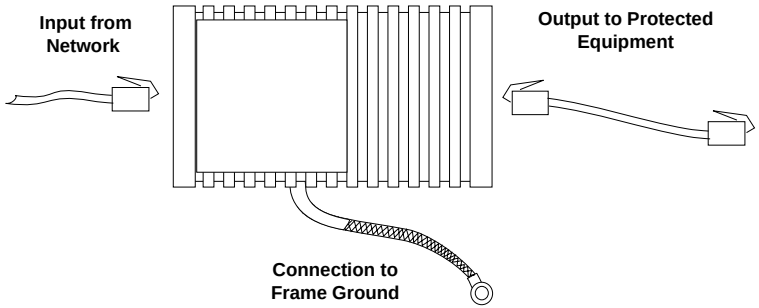

Figure 1. How to Connect the Patton Model 532S

APPENDIX A

532S SPECIFICATIONS

Protocol/Application:	IEEE 802.5 Token Ring, shielded or unshielded twisted pair
Circuit:	Bipolar, Solid State, 4-wire bi-directional protection on RJ-45 connectors
Maximum Signal Rate:	10 Mbps
RJ-45 Pins Protected:	3, 4, 5 and 6
Response Time:	Clamps to 7.5V in 0.5µ Sec
Capacitance:	18 pF
Surge Current:	400A (8 x 20 S.C. Waveform)
Energy Handling:	1.5 KW for 1 msec
Grounding:	External connection provides separate unit-ground to chassis-ground contact
Size:	3.05" x 1.68" x 0.81" (7.74cm x 4.26cm x 2.06cm)

Dear Valued Customer,

Thank you for purchasing Patton Electronics products! We do appreciate your business. I trust that you find this user manual helpful.

We manufacture one of the widest selections of data communications products in the world including CSU/DSU's, network termination units, powered and self-powered short range modems, fiber optic modems, interface converters, baluns, electronic data switches, data-line surge protectors, multiplexers, transceivers, hubs, print servers and much more. We produce these products at our Gaithersburg, MD, USA, facility, and can custom manufacture products for your unique needs.

We would like to hear from you. Please contact us in any of the following ways to tell us how you like this product and how we can meet your product needs today and in the future.

Web:	http:www.patton.com
Sales E-mail:	sales@patton.com
Support E-mail:	support@patton.com
Phone - Sales	(301) 975-1000
Phone - Support	(301) 975-1007
Fax:	(301) 869-9293
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We are committed to a quality product at a quality price. Patton Electronics is BABT and ISO 9001 certified. We meet and exceed the highest standards in the industry (CE, UL, etc.).

Please contact us and let us know how we may provide you with the answers to your needs.

Thank you.

Burton A.Patton
Vice President

P.S. Please tell us where you purchased this product.

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