USER MANUAL

MODEL 535/6
Secondary Token Ring Surge Protectors

PATTON Electronics Co.

Part# 07M535-A
Doc# 074131UA
Revised 03/23/94

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

1.0 WARRANTY INFORMATION

Patton Electronics warrants all Model 535/536 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**. *Packages received without an RMA number will not be accepted.*

The Patton Model 535/536 has no serviceable parts; therefore, it should not be opened by unauthorized personnel. If the Model 535/536 needs replacement, it *must* be returned to Patton Electronics.

Patton Electronics' technical staff is also available to answer any questions that might arise concerning the installation or use of your Model 535/536. 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

- IEEE 802.5 compliant secondary surge protection
- Protection for 4 Mbps or 16 Mbps Token Ring Networks
- Versions for Type 1 (DB-9) or Type 3 (UTP) cabling topologies
- Low insertion loss design handles repeated surges without degrading
- Shunts surges directly to chassis ground
- Made in the U.S.A.

2.2 DESCRIPTION

The Patton Model 535 and 536 Token Ring surge protectors guard your 802.5 Network against data loss and hardware damage due to data line transients. Working in concert with existing UPS devices (which protect only the AC power side), Patton's Token Ring protectors connect directly to Type 1 or Type 3 cable interfaces. Transients travelling along the data cables are shunted safely to chassis ground before they can impact your expensive 802.5 equipment. Both the Model 535 (Type 1) and the Model 536 (Type 3) operate passively at 4 or 16 Mbps. And both units can receive repeated surge hits from lightning strikes or other sources without sacrificing performance.

Housed in a miniature ABS plastic case, the Model 535 incorporates a DB-9 male connector on one side and a DB-9 female on the other. The Model 536 is also housed in a miniature ABS plastic case and incorporates two female RJ-45 jacks.

*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 535 and 536 are very easy to install: no special cables or batteries are needed. Simply unplug the cable from the AUI port and insert the unit between the cable and the port as shown in the appropriate diagram below.

If you are installing the Model 536, you will also need to connect the braided ground strap. Connect this strap directly to a frame ground connection on the protected device. If you are unsure where to locate a frame ground on your equipment, consult the equipment's user manual or contact the manufacturer—the ground connection is critical for proper operation of the Model 536.

Note: The Model 535 shunts surge current to chassis ground through the *connector shells* on both ends. If you have any questions as to whether your hardware is grounded properly, consult the manufacturer's user manual(s).

Figure 1. Connecting the Model 535

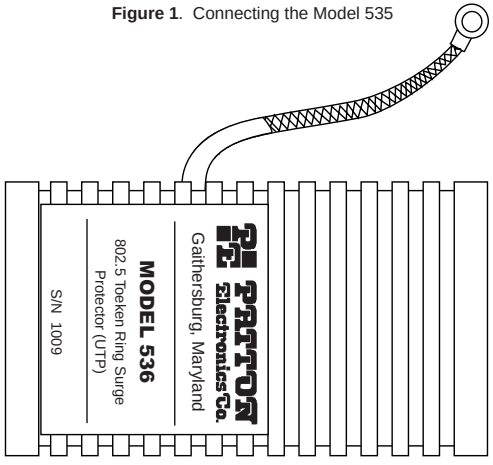

Figure 2. Connecting the Model 536

APPENDIX A
SPECIFICATIONS

Protocol/Application: Token Ring

Industry Standard: IEEE 802.5

Maximum Signal Rate: 4 Mbps / 16 Mbps

Connectors: One male, one female DB-9 connector (Model 535); two female RJ-45 connectors (Model 536)

Wires Protected: 1, 5, 6, 9 (535); 3, 4, 5, 6 (536)

Operating Bandwidth: 60MHZ Max. (535); 130MHZ (536)

Maximum Capacitance: 45pF (535); 19pF (536)

Peak Surge Current: 500A (535); 1000A (536)

Clamp Voltage: 27V @ 100A, line to ground (535); 5V @ 100A, line to shield (536); (ratings apply to transient, non-continuous current)

Grounding: Via connector shells (535); via grounding strap (536)

Size: 2.69"l x 1.22"w x 0.69"h (535); 3.05"l x 1.68"w x 0.81"h (536)