

# USER MANUAL

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## MODEL 533 ArcNet (BNC) Surge Protectors



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**PE PATTON**  
**Electronics Co.**

Part# 07M533-B  
Doc# 074121UB  
Revised 1/13/94

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

## 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 Customer Service at (301) 975-1007.

## FEATURES

- Uses a multi-stage hybrid circuit for the best possible protection
- Can handle large surges caused by storms, power outage etc.
- Conforms to the IEEE 802.3 specification
- Operates with either 4 or 20 Mbps ArcNet
- Provides separate connection to chassis ground for surge handling
- Easy to install
- Made in the U.S.A.

## DESCRIPTION

The potential threats to your ArcNet LAN are vast: lightning, AC power induction, electrostatic discharge, ground potential differences, EMI/RFI interference and more. The Patton Model 533 has been designed to greatly reduce these risks. Just attach one unit to each of your ArcNet devices and rest easy.

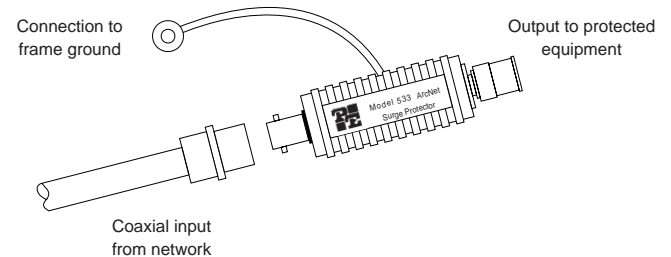
The Model 533 connects directly between ArcNet data cables and LAN I/O ports. By shunting all threatening voltages to the chassis ground, the Model 533 insures the integrity of the data in your LAN and protects connected equipment from damage. Using an all solid state design and sophisticated multistage hybrid circuits, these units can handle up to 1.8 KiloWatts of electricity. Grounding is accomplished via an external ground strap that provides a separate unit-ground to chassis-ground connection.

*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 533 is 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 coaxial cable and the equipment's I/O port.
2. Install the Model 533 between the incoming coax cable and the protected equipment (see below). Place the surge protector as close as possible to the device being protected.
3. Connect the braided ground strap directly to a frame ground connection on the protected device. If you are unsure where to locate a frame 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 533.

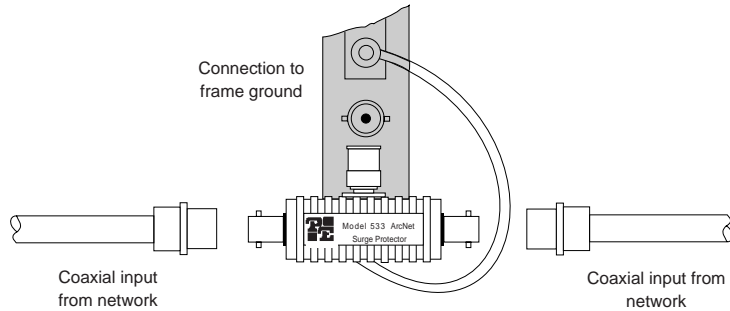


### T-Splitter Model 533 MFF:

1. Remove the existing T-splitter from the Network Interface Card and disconnect the coaxial cables.
2. Install the Model 533 directly on the Network Interface Card and reattach the coaxial cables.

(continued)

3. Connect the braided ground strap directly to a frame 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 user manual or contact the manufacturer — the ground connection is critical for proper operation of the Model 533.



## APPENDIX A SPECIFICATIONS

**Interface:** ArcNet (IEEE 802.3) BNC coaxial

**Size:** 2.0" long x 1.0" diameter

**Circuit:** Bipolar, solid state, bi-directional protection on BNC connectors

**Response Time:** Less than 5 nanoseconds

**Input Capacitance:** 18 pF

**Clamp Voltage:** 35 volts at 100A (8/20  $\mu$  Waveform)

**Surge Current:** 400A (8/20  $\mu$  Waveform)

**Energy Handling:** 1500 Watts per wire

**Transfer Loss:** -.05dB at 100 MHz

**Group Delay:** None, 1 MHz to 100 MHz

**Series Resistance:** None

**Grounding:** External connection provides separate unit-ground to chassis-ground contact