USER MANUAL

MODEL 405
ArcNet Balun / Filter

PATTON Electronics Co.

WARRANTY

Patton Electronics warrants all Model 405 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.

SERVICE & SUPPORT

All warranty and non-warranty repairs must be returned freight pre-paid 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 405. Technical Service hours: **8AM to 5PM EST, Monday through Friday.**
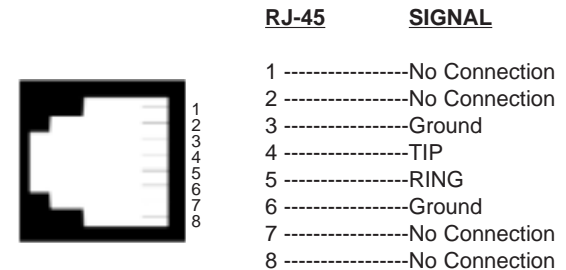
PRODUCT DESCRIPTION

The Patton Model 405 ArcNet Balun/Filter allows the RG62 or RG59 coax cable used in ArcNet Local Area Networks to be replaced with a single 24 AWG twisted pair wire. Data rates up to 2.5 Mbps and distances up to 330 feet are supported between the local Model 405 and the remote Model 405 (one unit is required at each end of the twisted pair cable). The Model 405 is compatible with ArcNet controller cards and active ArcNet repeaters.

The Model 405 is housed in Patton's sturdy pop-open, snap-shut ABS plastic case. Requiring no user configuration or AC power supply, the Model 405 is equipped with a male BNC–for connection to ArcNet cards and repeaters–and an RJ-45 jack for twisted pair connection.

INSTALLATION

Patton's Model 405 units are easy to install and should give you years of trouble-free service. When installing the Model 405, follow these guidelines carefully:

- Since these units work in pairs, you must have one unit at <u>each end</u> of your twisted pair cable run.

- The total cable distance between the two Model 405s should be <u>no greater than 330 feet</u>.

- <u>All</u> cabling between the Model 405s must be wired **straight through.** If your twisted pair cable is terminated to wall jacks, check to see that the pin connections are straight through from jack to jack, and that the patch cable from the wall jack to the the Model 405 is straight through at <u>both ends</u>.

- If the distance from the Model 405 to the wall jack is greater than <u>12 feet</u>, construct patch cables using twisted pair wire (22, 24 or 26 AWG), rather than flat silver cable.

- The Model 405 is equipped with an RJ-45 jack for twisted pair connection. Whether you are connecting two Model 405s with a single twisted pair cable, or using patch cables, the RJ-45 terminations at each end should be made according to the diagram below:

RJ-45	**SIGNAL**
1	No Connection
2	No Connection
3	Ground
4	TIP
5	RING
6	Ground
7	No Connection
8	No Connection

- The Model 405 is equipped with a male BNC for connection to an ArcNet card, repeater or other device. Female BNC is available by special order.

Connectors: Male BNC for RG59 or RG62 coax connections; RJ-45 jack for twisted pair connection

Environment: ArcNet baseband token-passing LAN

Devices: IBM PC/XT/AT and compatible systes euipped with ArcNet LAN controller cards and Active ArcNet multiport hubs and repeaters

Cable: 25-gauge (or lower) solid copper twisted pair with impedance of 100 ohms at 1 MHz and Max capacitance of 20 pF/foot with attenuation of 6.6dB/1000 feet at 1 MHz

Data Rate: 2.5 Mbps

Typical Networks: Datapoint, standard Microsystems, Pure Data and other ArcNet LANs

Distance: 330 feet over 24 gauge wire and 425 feet over 22 gauge twisted pair

Operating Temperature: 32° to 130°F

Storage Temperature: 0° to 185°F

Humidity: 5 to 95% non-condensing

Dimensions: 1.75"l x 1.0"d