

## NETWORK COMPONENTS AND SETUP

The components specified in this section, as well as precut and preassembled cables, are available through your computer dealer.

The following components make up an Ethernet network and are used with the Ethernet adapter unless otherwise specified. See Figure 1 in the "Introduction" section for specific adapter port references.

LAN ADAPTER--A LAN adapter is the interface between the computer and the network cable. Your Ethernet adapter has three types of network ports.

- \* The UTP port is used for 10BaseT unshielded twisted-pair connection.
- \* The BNC port is used for direct thin Ethernet network connection.
- \* The AUI port is used for connecting a transceiver to a network using thick cable or any Ethernet medium.

REPEATER--A repeater is used to connect cable segments. The repeater retimes and transmits data signals as they pass from one segment to another. Single port and multiport repeaters are available for coaxial or fiber optic cable.

TRANSCEIVER--An external transceiver is used to connect AUI drop-cables to thick Ethernet coaxial cable.

Transceivers are also available for connection to thin Ethernet, twisted-pair, and fiber-optic cable.

## THIN ETHERNET CABLE AND COMPONENTS

BNC "T" CONNECTOR--Used to attach the Ethernet adapter to thin Ethernet cable.

CABLE TERMINATOR--A terminator with 50-ohm nominal impedance must be installed at each end of every coaxial connector.

"T" CONNECTOR COVER--A plastic "clamshell" cover that insulates the BNC "T" connector from electrostatic discharge (ESD).

THIN ETHERNET CABLE--(RG58 A/U or C/U coaxial cable)--Stranded tinned copper, 50-ohm nominal impedance, for used with BNC-type coaxial connectors.

NOTE: Coaxial cable designated RG58 U is similar in appearance to RG58 A/U cable but does not comply with the IEEE thin Ethernet standard.

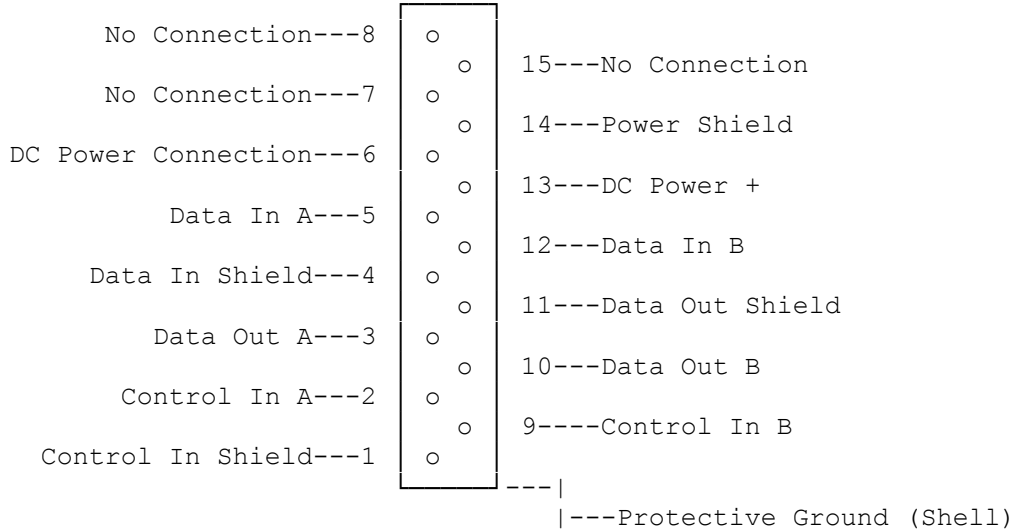
## THICK ETHERNET CABLE AND COMPONENTS

AUI DROP CABLE--The interface cable between the Ethernet adapter and a MAU attached to the trunk coaxial cable or other thick Ethernet medium. The drop-cable has a 15-pin AUI connector at each end and can be up to 50 meters in length.

CABLE TERMINATOR--A terminating resistor with 50-ohm nominal impedance must be installed at each end of every trunk coaxial cable segment. A thick Ethernet terminator has an N-type coaxial connector.

DB-15 AUI CONNECTOR--Used at each end of the AUI drop-cable.

Figure A-1 shows the pin locations for the male connector. The pin locations for the female are the mirror image of this. If the AUI connector has been shorted to ground, a thermistor type fuse will open the circuit and remove the voltage from Pin 13. It requires approximately one hour from the time the short circuit is removed for the thermistor to restore the +12 volts to Pin 13.



UNSHIELDED TWISTED PAIR CABLE

- \* Unshielded, twisted-wire pairs (2 pairs)
- \* 22, 24, or 26 gauge
- \* Characteristic impedance of 85 to 110 ohms at 10 MHz
- \* Maximum attenuation of 11.5 dB/100 meters at 10 MHz
- \* Maximum attenuation of 7.2 dB/100 meters at 5 MHz
- \* RJ-45 modular plugs
- \* Crimper tool for RJ-45 modular plugs
- \* RJ-45 modular wall socket

NOTE: Telephone-type cable commonly known as "silver satin" is NOT ACCEPTABLE. Silver Satin cable is flat and typically has a silver vinyl jacket. Use of silver satin cable can cause a false data collision on the network.

AT&T D-INSIDE WIRE (DIW and PDS)

4-Pair/Non-Plenum	DIW 4/24 W1000
4-Pair/Plenum	C-PLENUM 4 R1000
25-Pair/Non-Plenum	DIW 25/24 R1000
25-Pair/Plenum	C-PLENUM 25 R1000

IBM TYPE 3

6-Pair Twisted	Belden-9566
2-Pair Twisted	Belden-9562
4-Pair Twisted	Data Set Cable Company--2404

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