What? DCE and DTE for Ethernet?
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Tutorial on Ethernet AUI Ports

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Most data communication protocols specify communications between two types of equipment. Typically, one is called DTE (Data Terminal Equipment) and the other is called DCE (Data Circuit-Terminating Equipment). For instance, in EIA-232 communications, DTE devices (terminals, PCs, mini-computers) are quite stubborn and only want to talk to DCE devices (modems, multiplexers), and vice versa. For this reason, you may connect a PC COM port to a modem using a "straight through" EIA-232 cable. However, when you must connect a PC COM port to another PC COM port, you must use a "null-modem" cable. The function of the null modem cable is to "trick" the DTE device into believing that it is talking to a DCE device by cross-wiring the data and control pins in the cable. Ethernet AUI (Attachment Unit Interface) also uses the DTE/DCE convention, However, it's not as simple as it is with EIA-232.

The AUI port of a Workstation's NIC (Network Interface Card) is a female DB-15 DTE. So is the AUI port on a multiport hub/repeater such as Patton's Model 2108. The AUI port of an Transceiver like the Model 2100, is a male DB-15 configured DCE. Therefore, it can plug directly into AUI port of the NIC or to the Model 2108.

The problem comes with the need to connect a DTE to another DTE, or a DCE to another DCE. The answer is simple: Unlike RS-232, it can't be done with just a cable.

If it were simply a matter of crossing the DI (Data In) pins to the DO (Data Out) pins via a null modem cable, the matter could be solved simply. However, the CI (Control In) signals are used specifically by the DCE to indicate to the DTE that a collision has been detected or during a Signal Quality Error. If one were to connect a DTE device to another DTE device with a null modem cable, there would be no provision for this signal. Similarly, connection between two DCEs would cause these signals to conflict with one another. There are CO (Control Out) signals in Ethernet, but these signals are used for another function and are almost never used. So what's the solution when connecting two DTEs together?

In order to connect two DTEs together, such as a workstation to a Model 2108 hub, two Model 2100s may be used, one connects to the workstation's AUI port, and the other to the AUI port of the Model 2108 with 10Base-T twisted pair connections in between. The Model 2108 also allows up to 8 additional 10Base-T connections at UTP connections up to 330 ft.