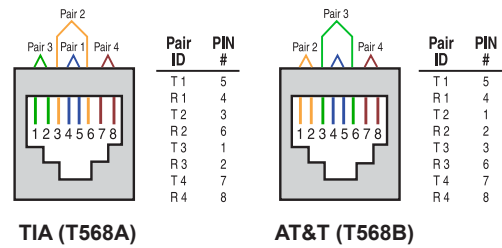
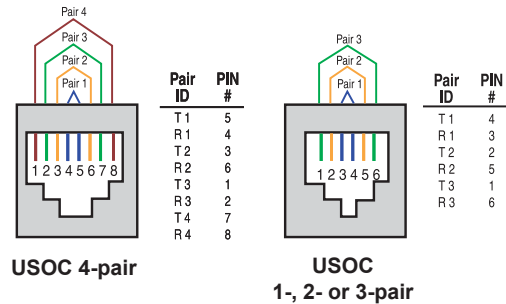


## Common wiring configurations

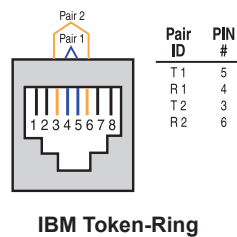
The EIA/TIA 568 has adopted the AT&T and TIA wiring schemes. These two wiring schemes are identical, except for pairs 2 and 3, which trade places. The preferable scheme is TIA (T568A), which is compatible with 1- or 2-pair USOC Systems. Either configurations under the Universal Service Ordering Codes (USOC).



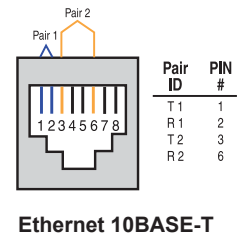
USOC wiring is available for 1-, 2-, 3- or 4-pair systems. Pair 1 occupies the center conductors, pair 2 occupies the next two contacts, etc. A major advantage of this design is that a 6-position plug configured with 1, 2 or 3 pairs can be inserted into an 8-position jack without sacrificing pair continuity. But be aware that this practice may result in damage to pins 1 and 8 on the jack. Unfortunately, this type of pairing may lead to poor transmission performance.



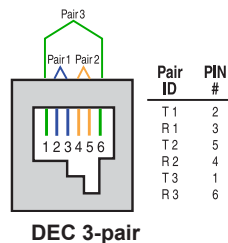
IBM Token-Ring wiring can utilize either an 8-position jack (compatible) or 6-position jack (compatible with AT&T (T568B), TIA (T568A) and USOC wiring schemes) or 6-position jack (compatible with 2-pair or 3-pair USOC wiring).



An 8-position jack is called for in the Ethernet 10BASE-T wiring, but only two pairs are used—these being pairs two and three of AT&T (T568B) and TIA (T568A) schemes.



DEC has custom-designed their equipment's wiring scheme, coming up with something totally their own.



### Straight Through or Reversed?

Modular cords can serve two fundamental purposes; patching between modular patch panels; and connecting office equipment to the modular outlet. When patching between modular panels, modular cords should be wired directly (pin 1 to pin 1, pin 2 to pin 2, etc.). For workstation "networking," modular cords may either be wired directly (straight through) or reversed (pin 1 to pin 6, pin 2 to pin 5, etc.). Most voice systems rely on the reversed wiring.

### Modular Plug Pair Configurations

To avoid crossed signals, you must make sure the wire pairings in the modular plug match those in the modular jack, as well as the horizontal and backbone wirings.

The color-coding system (T568B), illustrated above is for TIA (T568A) wiring. Note: the orange and green pairs (pairs 2 & 3) are swapped for T&T wiring. Modular cords wired to the TIA (T568A) are compatible with AT&T (T568B).

