

### RJ-45 ANSI/TIA-568 Wiring Conventions

Two wiring standards were adopted. Both configurations are based on maximum transmission performance.

8 Position / 8 Wire



- 1: Green/White
- 2: Green
- 3: Orange/White
- 4: Blue
- 5: Blue/White
- 6: Orange
- 7: Brown/White
- 8: Brown

- Preferred method
- Directly compatible with 2-pair voice and token ring systems utilizing 6-position connectors

8 Position / 8 Wire



- 1: Orange/White
- 2: Orange
- 3: Green/White
- 4: Blue
- 5: Blue/White
- 6: Green
- 7: Brown/White
- 8: Brown

- Optional method
- AT&T® standard
- Directly compatible with AT&T phone systems

### Wiring Conventions

Local area network (LAN) standards designed to operate over UTP specify pin/pair assignments on modular connectors for various signal transmission protocols. While T568A and T568B conventions support all these designations, there are some cases where the user chooses to cable only the number of pairs required to support these applications.

8 Position / 4 Wire



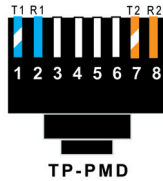
- 10 Mbps Ethernet over UTP
- Uses only two pairs
- 100 Mbps Ethernet

8 Position / 4 Wire



- 4/16 Mbps token ring over copper
- Uses only two pairs

8 Position / 4 Wire



- 100 Mbps FDDI over copper
- Uses only two pairs

8 Position / 8 Wire



- 1000 Mbps Ethernet over UTP
- Uses all four pairs

### USOC Conventions

Universal Service Ordering Codes (USOC) are a series of Registered Jack (RJ) wiring configurations for connection of customer premises equipment to the network. FCC regulations govern these configurations.

6 Position / 6 Wire



6 Position / 2 Wire



#### Color Coding

TIP		RING	
Pair 1	T1 – White/Blue	Pair 1	R1 – Blue
Pair 2	T2 – White/Orange	Pair 2	R2 – Orange
Pair 3	T3 – White/Green	Pair 3	R3 – Green
Pair 4	T4 – White/Brown	Pair 4	R4 – Brown