RJ45

RJ45 is a type of connector commonly used for Ethernet networking. It looks similar to a telephone jack, but is slightly wider. Since Ethernet cables have an RJ45 connector on each end, Ethernet cables are sometimes also called RJ45 cables.

The "RJ" in RJ45 stands for "registered jack," since it is a standardized networking interface. The "45" simply refers to the number of the interface standard. Each RJ45 connector has eight pins, which means an RJ45 cable contains eight separate wires. If you look closely at the end of an Ethernet cable, you can actually see the eight wires, which are each a different color. Four of them are solid colors, while the other four are striped.

RJ45 cables can be wired in two different ways. One version is called T-568A and the other is T-568B. These wiring standards are listed below:

T-568A	**T-568B**
1. White/Green (Receive +)	1. White/Orange (Transmit +)
2. Green (Receive -)	2. Orange (Transmit -)
3. White/Orange (Transmit +)	3. White/Green (Receive +)
4. Blue	4. Blue
5. White/Blue	5. White/Blue
6. Orange (Transmit -)	6. Green (Receive -)
7. White/Brown	7. White/Brown
8. Brown	8. Brown

The T-568B wiring scheme is by far the most common, though many devices support the T-568A wiring scheme as well. Some networking applications require a crossover Ethernet cable, which has a T-568A connector on one end and a T-568B connector on the other. This type of cable is typically used for direct computer-to-computer connections when there is no router, hub, or switch available.