

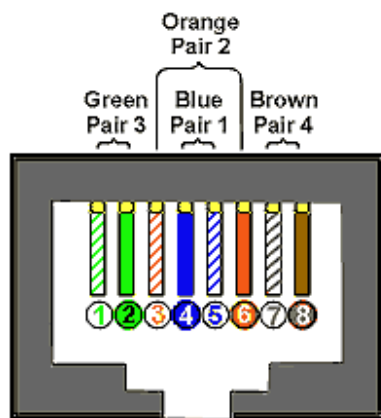


## Making a Straight-Through Cat 5 Patch Lead

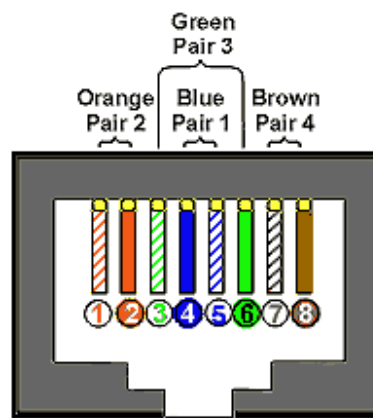
There are two wiring conventions in use for Cat 5 cable: 568-B, the most common, and 568-A. With **Straight-through** cables the same **wiring convention must be used at each end**. (With cross-over cables, used to connect two PCs, one end is wired 568A and the other end 568B.)

568-A Wiring Convention		
Pair	Wire	Pin*
1.White/Blue	White/Blue	5
	Blue/White	4
2.White/Green	White/Green	1
	Green/White	2
3.White/Orange	White/Orange	3
	Orange/White	6
4.White/Brown	White/Brown	7
	Brown/White	8

568-B Wiring Convention		
Pair	Wire	Pin*
1.White/Blue	White/Blue	5
	Blue/White	4
2. White/Orange	White/Orange	1
	Orange/White	2
3. White /Green	White/Green	3
	Green/White	6
4. White/brown	White/Brown	7
	Brown/White	8



**RJ-45 JACK  
TIA/EIA 568A STANDARD**



**RJ-45 JACK  
TIA/EIA 568B STANDARD**

**\* Note: The Pins refer to the physical locations on the plug and jack.**



### **Step by Step Instructions - Straight Through Cable.**

1. Skin off the cable jacket approximately 1" or more.
2. Untwist each pair and sort and bring together in the order shown in the diagram.
3. Hold the grouped and sorted wires together tightly between the thumb and forefinger.
4. Using a sharp pair of scissors, make a clean cut through all the wire at a perfect 90° angle from the cable ½" from the end of the cable jacket.
5. With the pins facing up, and the connector at a 90° angle Insert the wires into a connector.
6. Place the connector in to a crimp tool, making sure that all the wires reaches the end, and that the cable jacket goes into the connector.
7. Repeat the process at the other end.
8. Test the cable connectivity with a cable tester.

### **Tips**

- Wires untwisted for more than ½" make a poor quality connection.
- Do not confuse pair numbers used for reference and pin numbers that denote the physical wire location.
- If the jacket does not go into the connector, wires will not only look bad, but they will also be prone to failure.
- A simple cable tester can be used to check connectivity across the wire, although not data transmission, AND to check if straight through or cross over wiring is in use.