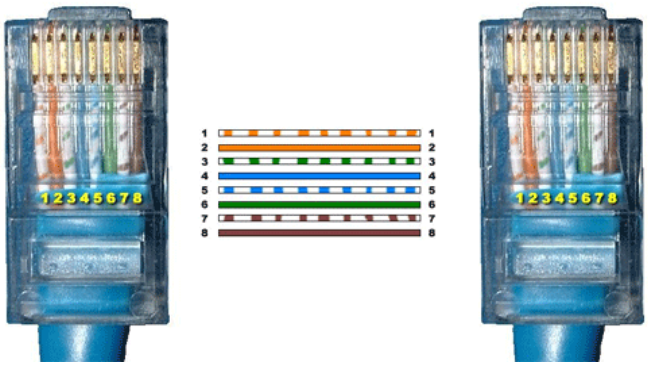
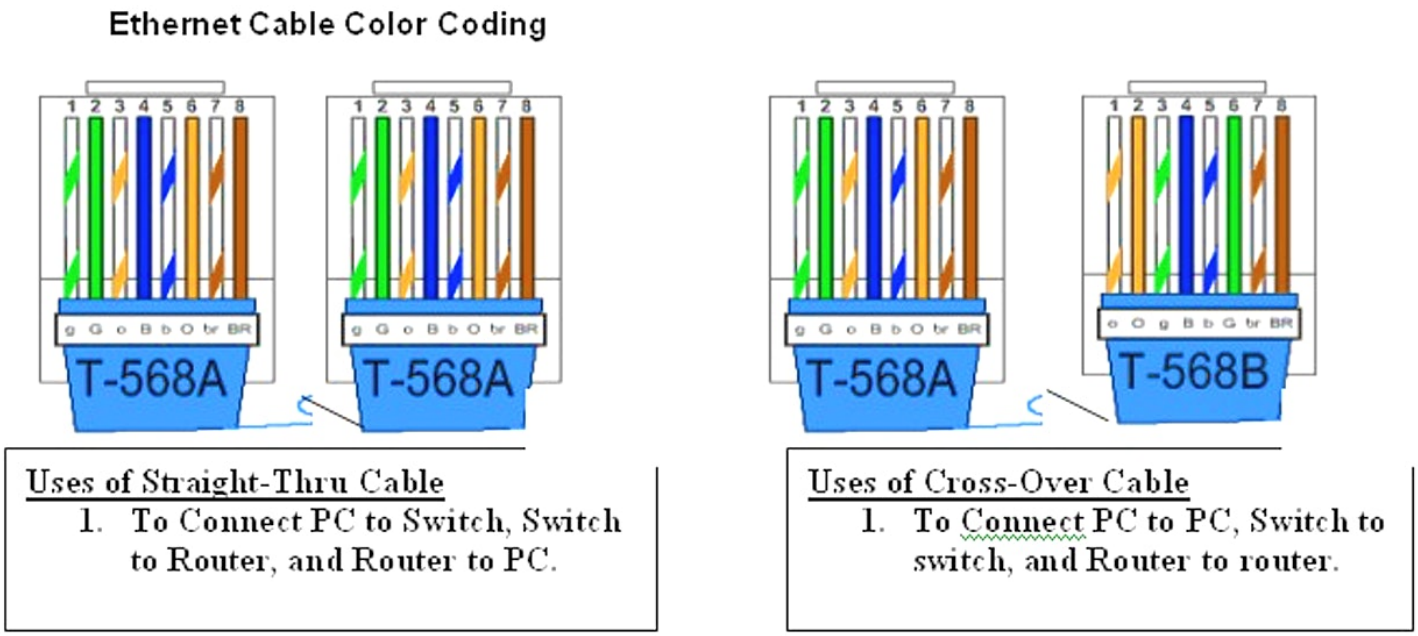
Color coding of straight and crossover cable

Posted under: **CCNA**

Straight and crossover cable color code



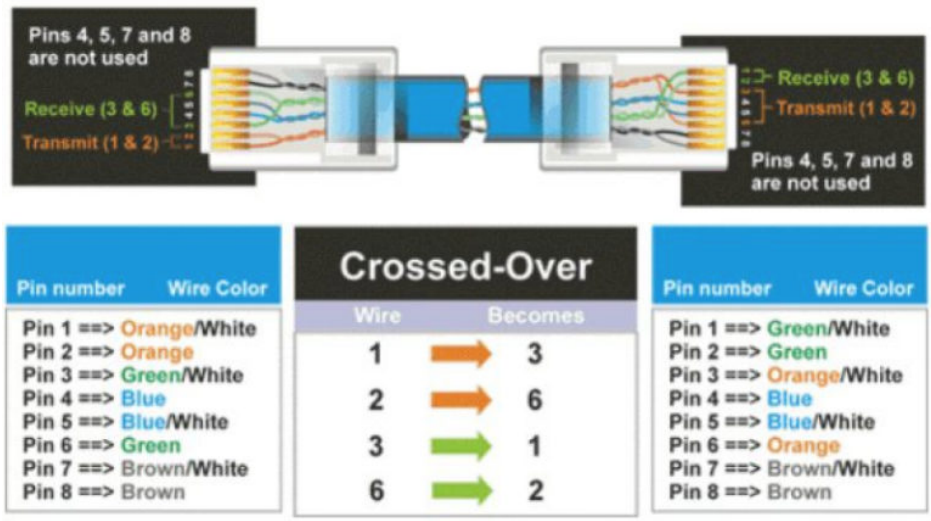


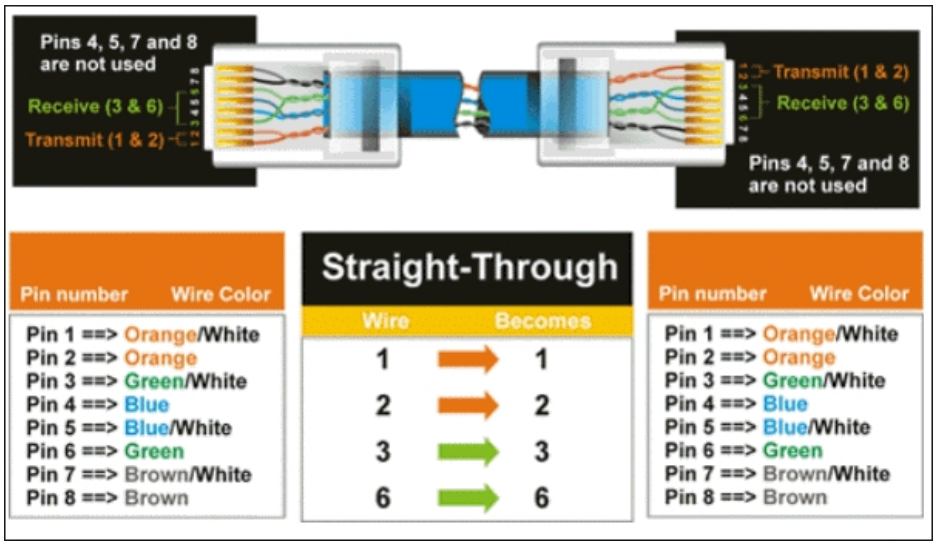
UTP has 4 twisted pairs of wires, we'll now look at the pairs to see what colour codes they have:

As you can see in the picture above, the 4 pairs are labeled. Pairs 2 & 3 are used for normal 10/100Mbit networks, while Pairs 1 & 4 are reserved. In Gigabit Ethernet, all 4 pairs are used.

UTP CAT5, 5e & 6 cable is the most common type of UTP around the world ! It's flexible, easy to install and very reliable when wired properly.

There are two wiring standards for these cables, called "T568A" (also called "EIA") and "T568B" (also called "AT&T" and "258A"). They differ only in connection sequence - that is, which color is on which pin, not in the definition of what electrical signal is on a particular color.





Pin Number Designations for T568B-T568B

Note that the odd pin numbers are always the white with stripe color (1,3,5,7). The wires connect to RJ-45 8-pin connectors as shown below:

Color Codes for T568B

Pin Color Pair Name

1 white/orange (pair 2) TxData +

2 orange (pair 2) TxData -

3 white/green (pair 3) RecvData+

4 blue (pair 1)

5 white/blue (pair 1)

6 green (pair 3) RecvData-

7 white/brown (pair 4)

8 brown (pair 4)

Pin Number Designations for T568A

The T568A specification reverses the orange and green connections so that pairs 1 and 2 are on the centre 4 pins, which makes it more compatible with the telecom voice connections. (Note that in the RJ-11 plug at the top, pairs 1 and 2 are on the centre 4 pins.) T568A goes:

5 thoughts on Color coding of straight and crossover cable