Method of connecting the heads of the network wire

First, you need :

Bulk Ethernet Cable - Category 5 or CAT5   Bulk RJ45 Crimpable Connectors
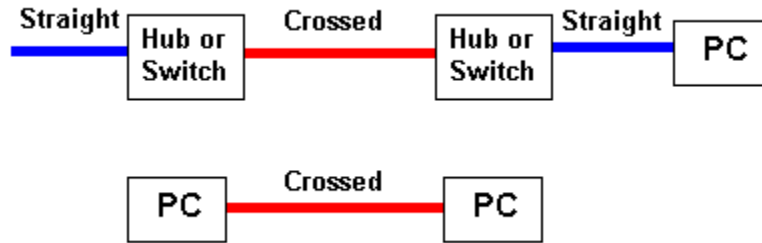
RJ-45 Crimping tool

Secondly, you must know that : There are two kinds of Ethernet cables you can make.
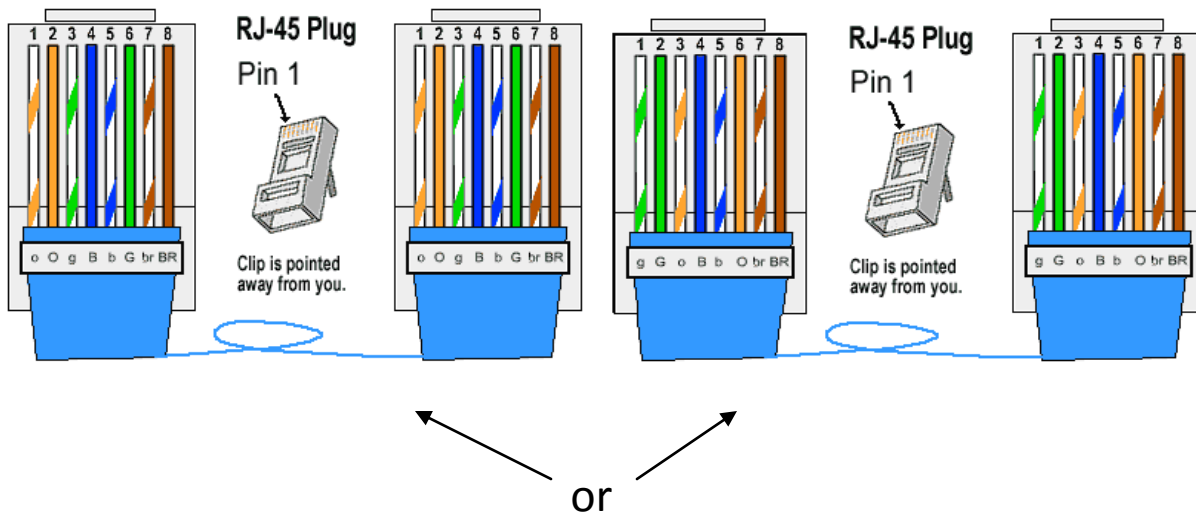
1- **Straight Through.**

2- **Crossover**.
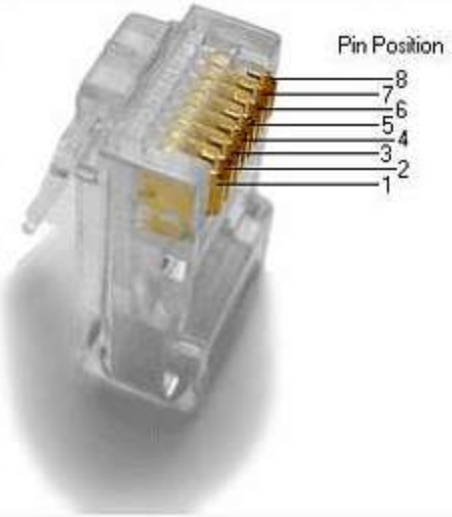

STRAIGHT THROUGH

Ethernet cables are the standard cable used for almost all purposes. It is highly recommend you duplicate the color order as shown on the left. Note how the orange pair is not side by side as are all the other pairs. This configuration allows for longer wire runs.

Straight cables are used to connect PCs or other equipment to a HUB or Switch.

or

Pin	Connection 1 pair	Connection 2 pair	Connection 1	Connection 2	Pins on plug face (jack is reversed)
1	2	2	white/orange stripe	white/orange stripe	
2	2	2	orange solid	orange solid	
3	3	3	white/green stripe	white/green stripe	
4	1	1	blue solid	blue solid	
5	1	1	white/blue stripe	white/blue stripe	
6	3	3	green solid	green solid	
7	4	4	white/brown stripe	white/brown stripe	
8	4	4	brown solid	brown solid	

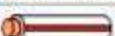## CROSSOVER CABLES

The purpose of a Crossover Ethernet cable is to directly connect one computer to another computer (or device) without going through a router, switch or hub.

Crossed cables are used to connect PCs to one other PC or to connect a HUB to a HUB. Crossed cables are sometimes called Crossover, Patch or Jumper cables.
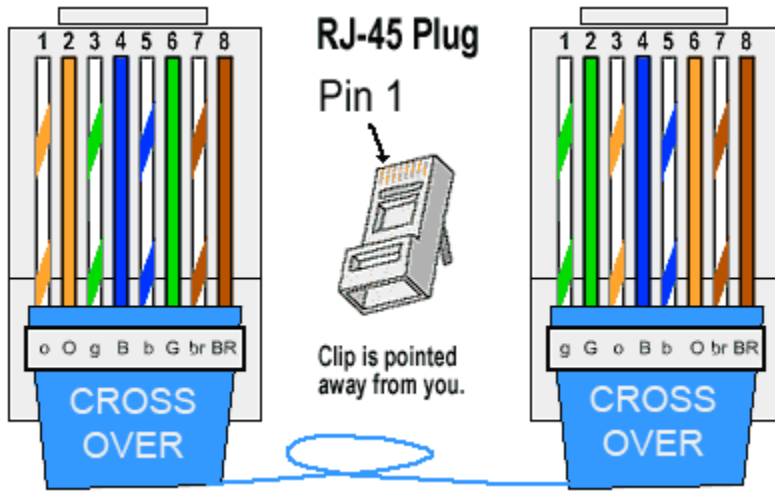
Or

Pin	Connection 1 pair	Connection 2 pair	Connection 1	Connection 2	Pins on plug face (jack is reversed)
1	3	2	white/green stripe	white/orange stripe	
2	3	2	green solid	orange solid	
3	2	3	white/orange stripe	white/green stripe	
4	1	1	blue solid	blue solid	
5	1	1	white/blue stripe	white/blue stripe	
6	2	3	orange solid	green solid	
7	4	4	white/brown stripe	white/brown stripe	
8	4	4	brown solid	brown solid	

Thirdly, how to make a standard cable:

1-cut into the plastic sheath **1 inch** from the end of the cut cable. The crimping tool has a razor blade that will do the trick with practice.
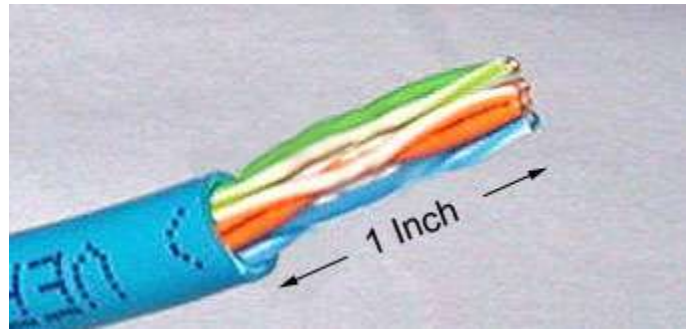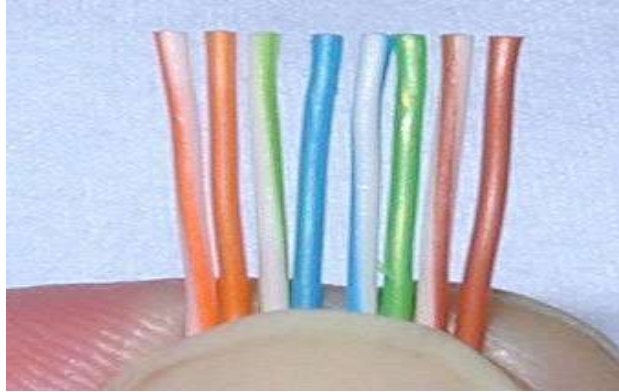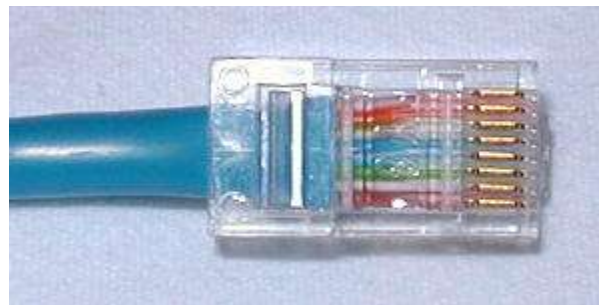

2-Unwind and pair of the similar colors.
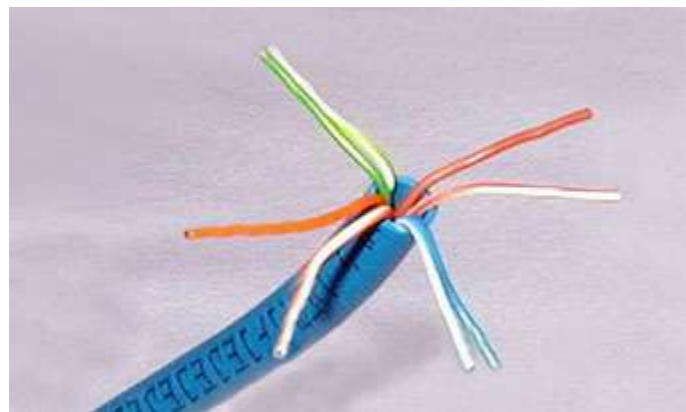
3- Pinch the wires between your fingers and straighten them out as shown. (The wire colors line up to form a straight through standard cat 5 cable as described above)

4-Push the wires into the connector. Note the position of the blue plastic shielding. Also note how the wires go all the way to the end.

5-CRIMPING THE CABLE . carefully place the connector into the Ethernet Crimper and cinch down on the handles tightly. The copper splicing tabs on the connector will pierce into each of the eight

wires. There is also a locking tab that holds the blue plastic sleeve in place for a tight compression fit. When you remove the cable from the crimper, the cable is ready to use.

6-For a standard cable, repeat all steps on the other end of the Ethernet cable exactly. For a cross-over cable, make sure to get the color order right.