

Ethernet Cable

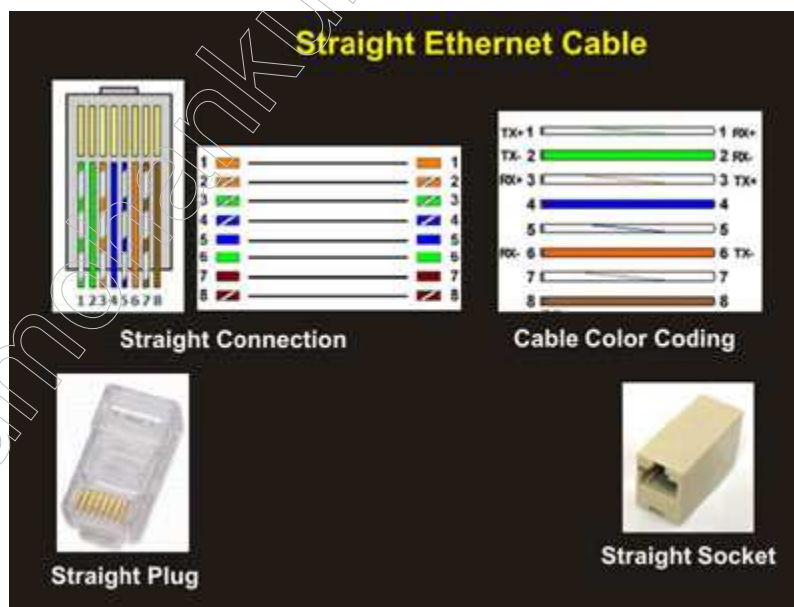
It is the type of Cable used to connect network devices like Modem, Hub or Router to the PC. If you want to purchase a new cable, it is necessary to make sure that you are going to purchase the right cable. There are **Straight** and **Cross over** Ethernet cables used in Modems. This note will help you to identify the types of Ethernet cables.



The Ethernet cable consists of 4 pairs of cables having twisted pairs of wires. Both the ends are connected to **RJ 45 socket** and **RJ 45 Plug**. The cable belongs to the types **Cat 5**, **Cat 5E**, **Cat 6 UTP cable** etc which are designed to support data transmission at the rate of 10Mbps, 100 Mbps, 1000 Mbps respectively. The common Ethernet cable may be **Straight type** or **Cross over** type. The only difference between them is the wire arrangement.

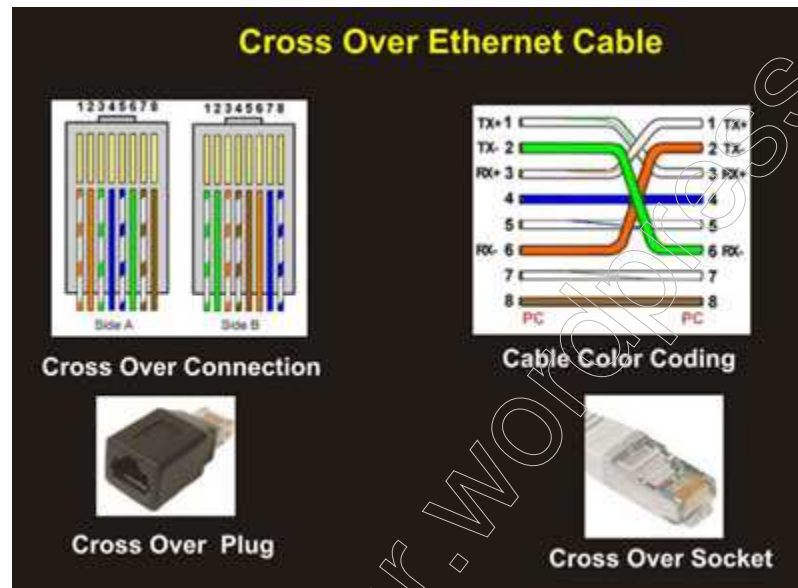
Straight Ethernet Cable

This type of cable is generally used to connect the Network devices like Modem, Hub, WAN Port etc. with the PC. When straight cables are used, one of the two devices must in effect perform the crossover function. The Hub or Switch is designed so that The RJ 45 jacks are pre wired with transmits and receive pairs already reversed.



Crossover Ethernet cable

This is usually used to connect two Computers directly. It can be used to connect a Router's LAN port to Hub's normal port or to connect the Hub / Switch using normal ports. The Crossover cable must be used to connect the devices of identical interfaces.



Colour Code standard of Ethernet cable

There are two colour code standards like EIA / TIA 568 A and EIA / TIA 568 B. These standards have pairs of wires correspond to four telephone lines each with its own line pair.

EIA / TIA 568 A standard

Pin	Colour of Wire
1	White with Green stripes
2	Green with White stripes
3	White with Orange stripes
4	Blue with White stripes
5	White with Blue stripes
6	Orange with White stripes
7	White with Brown stripes
8	Brown with White stripes

EIA / TIA 568 B Standard

Pin	Colour of Wire
1	White with Orange stripes
2	Orange with White stripes
3	White with Green stripes
4	Blue with White stripes
5	White with Blue stripes
6	Green with White stripes
7	White with Brown stripes
8	Brown with White stripes

Only pairs 2 and 3 are used for Standard Ethernet wiring. Pairs 1 and 4 can be used for other purposes such as telephones or even a second separate, complete Ethernet connection.