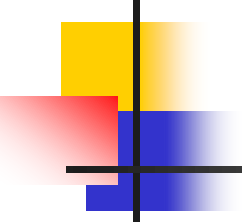




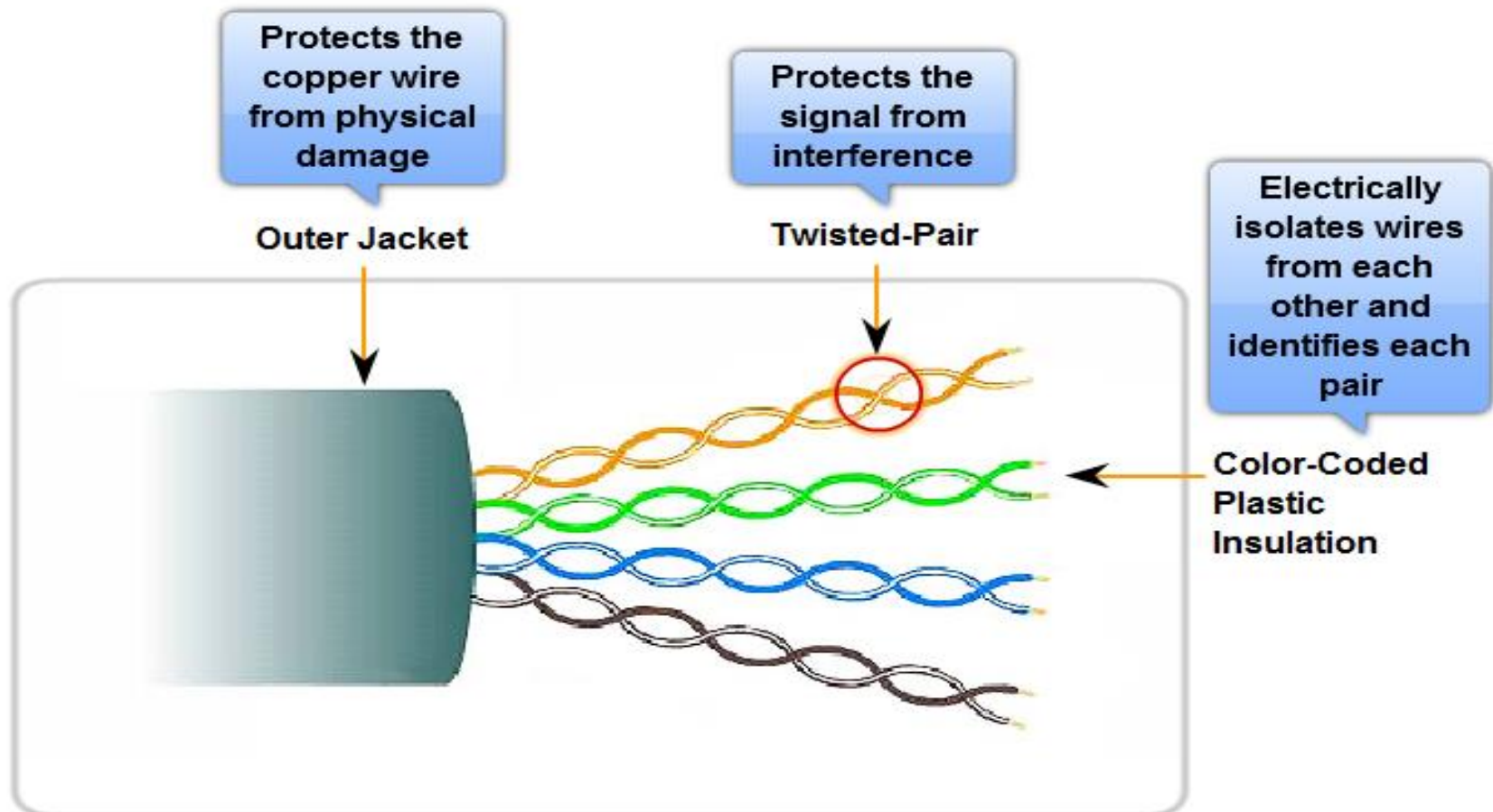
LAN Cabling



Implementing UTP

Unshielded Twisted Pair (Pair)

Unshielded Twisted-Pair (UTP) Cable



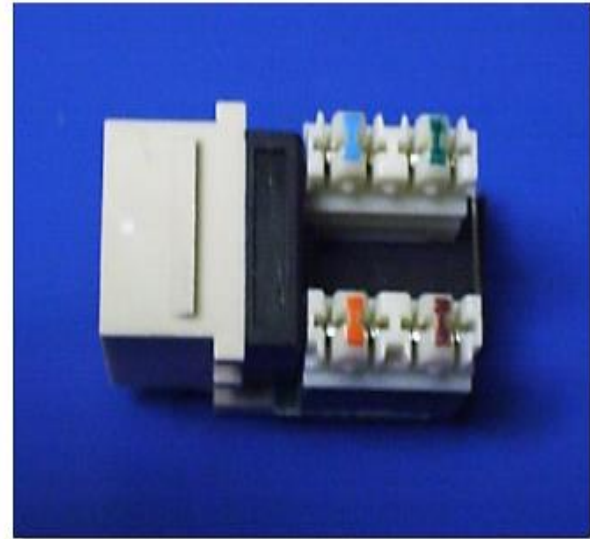
RJ-45 Connector



RJ-45 Jack

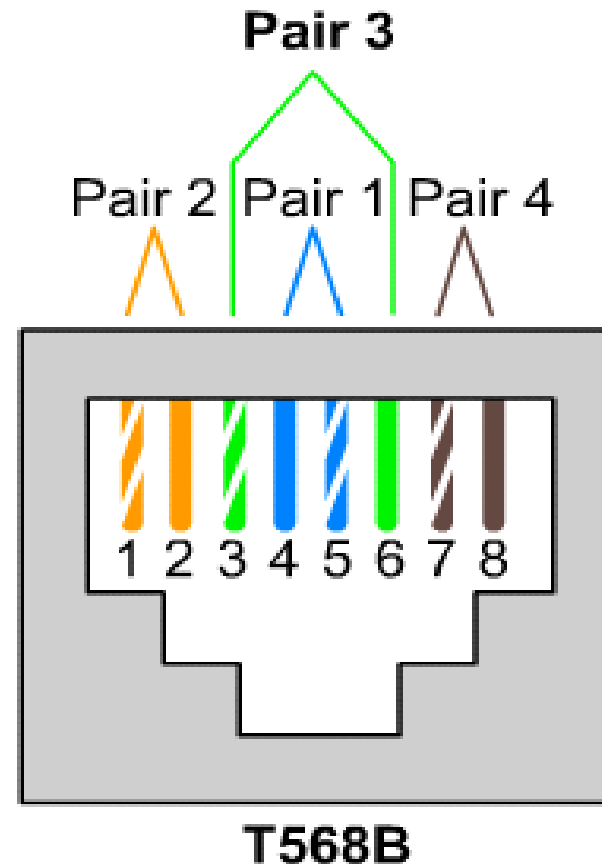
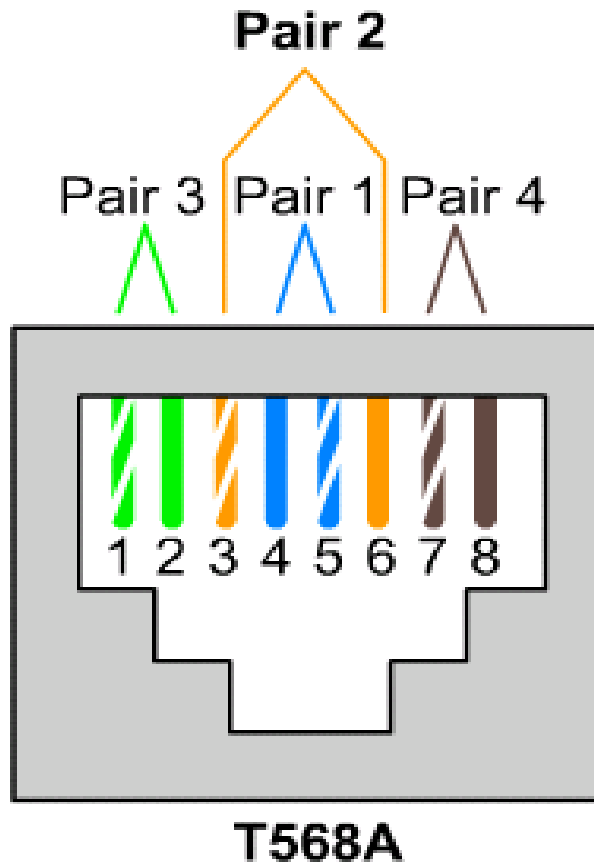


Front View



Top down View

T568A and T568B Color Code



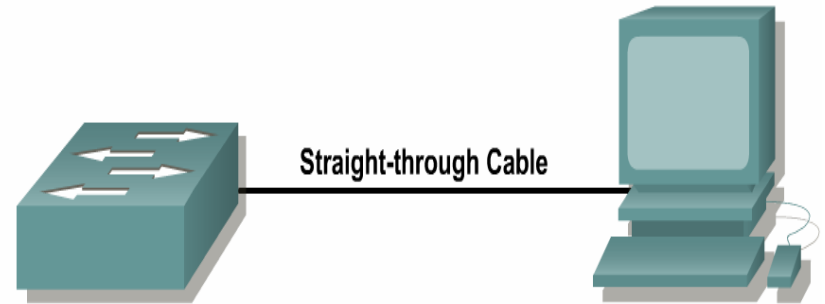


Cabling Instruction

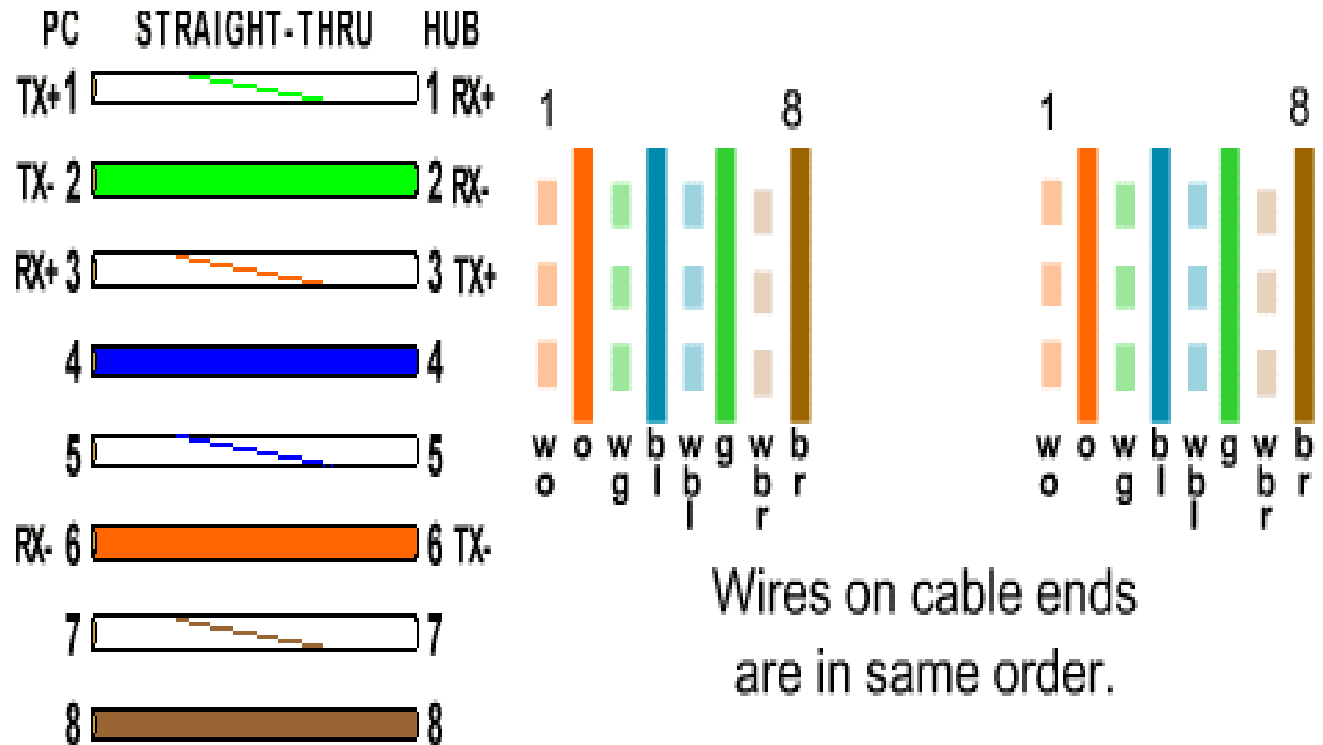
- Determine the EIA/TIA category of cable
 - Use the documentation of the device
 - Look for a label on the device near the jack.
 - Otherwise use Category 5E or greater
- Determine the type of Connection
 - Straight Through
 - Crossover
- Make proper connection following color code (TIA568A or TIA568B)

Straight-through Cable

- Connects different layer devices
 - Switch to router
 - Switch to PC or server
 - Hub to PC or server
- Orders of colored wires are same at each end of connection

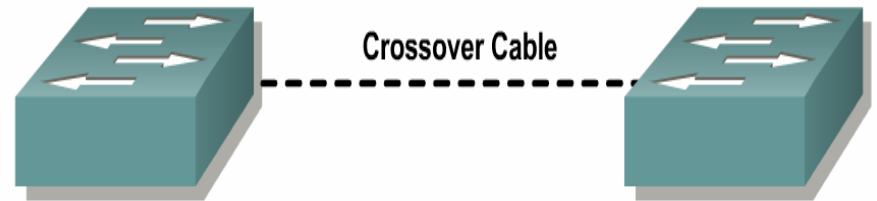


Straight-through Cable

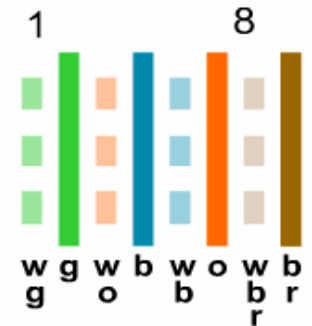
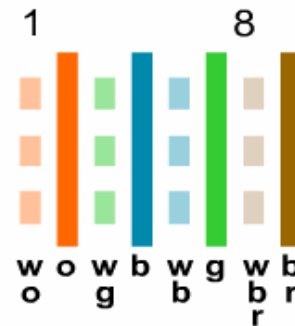
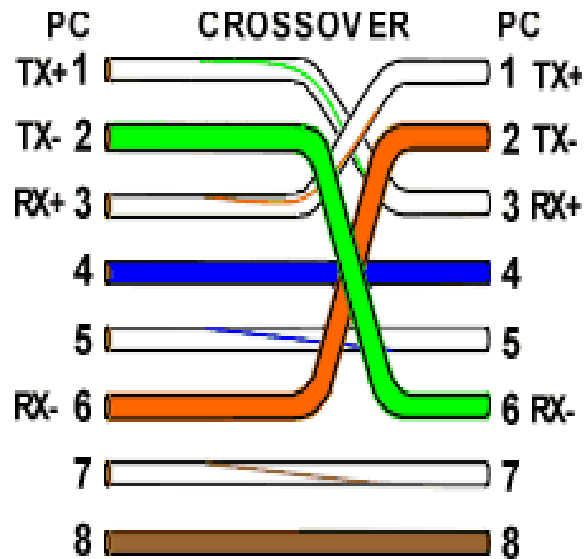


Crossover Cable

- Connects Similar Devices
 - Switch to switch
 - Switch to hub
 - Hub to hub
 - Router to router
 - PC to PC
 - Router to PC

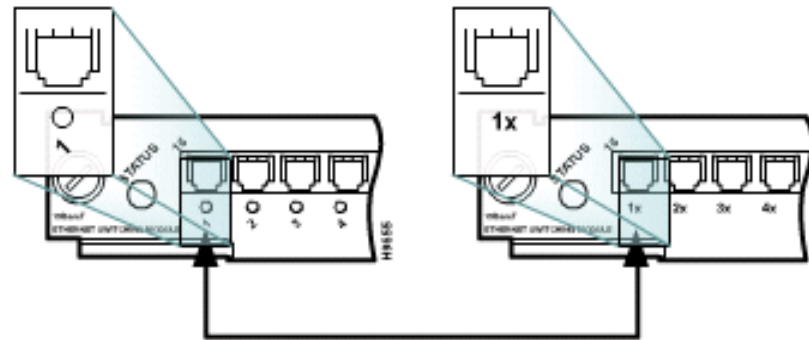


Crossover Cable

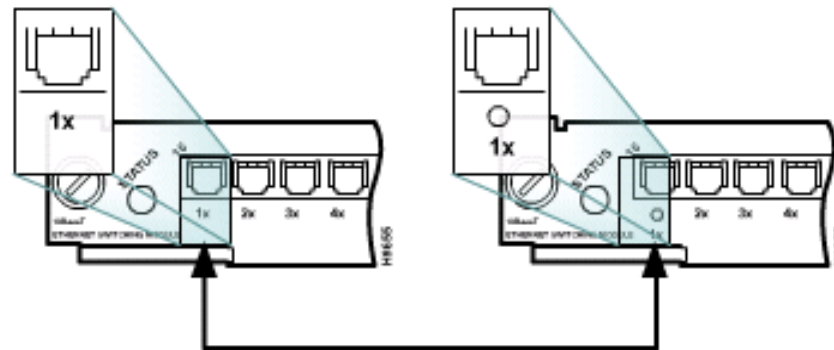


The orange wire pair and the green wire pair switch places on one end of the cable.

Connecting Cisco Devices



Use straight-through when only one port is designated with an "x".



Use crossover cable when BOTH ports are designated with an "x" or neither port is designated with an "x".

Interconnecting Devices

