



Building an Ethernet Crossover Cable

Lab 1

Computer Network

Objectives

Part 1: Analyze Ethernet Cabling Standards and Pinouts

Part 2: Build an Ethernet Crossover Cable

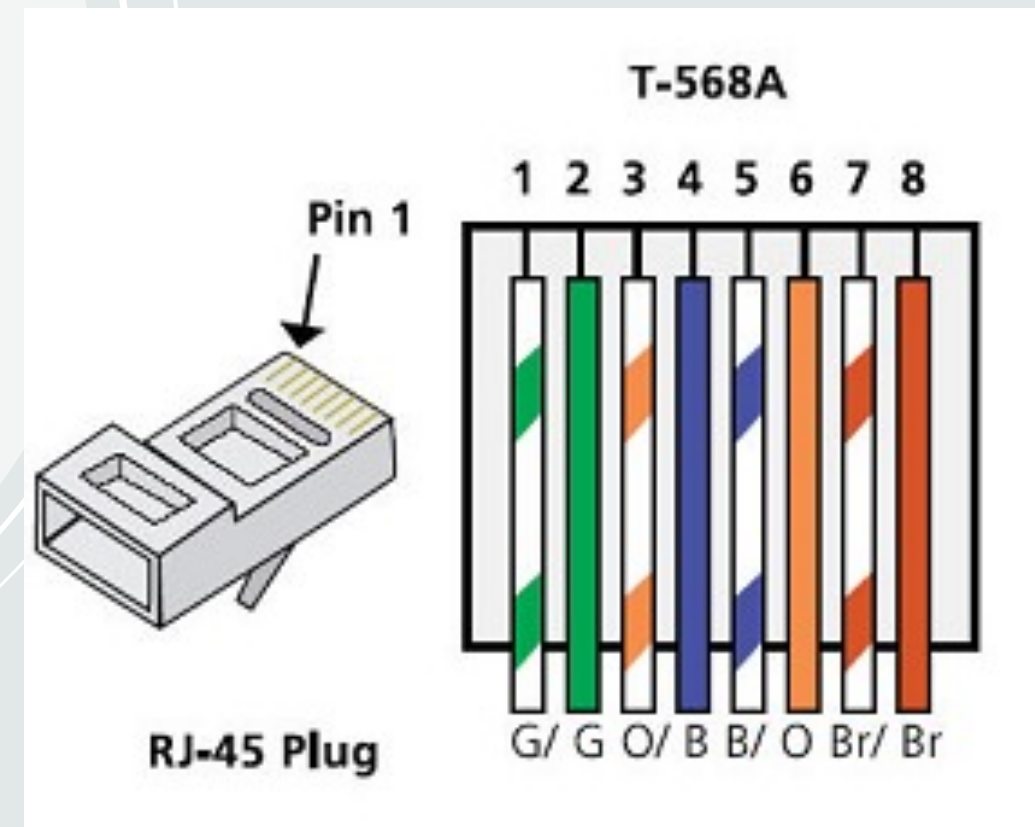
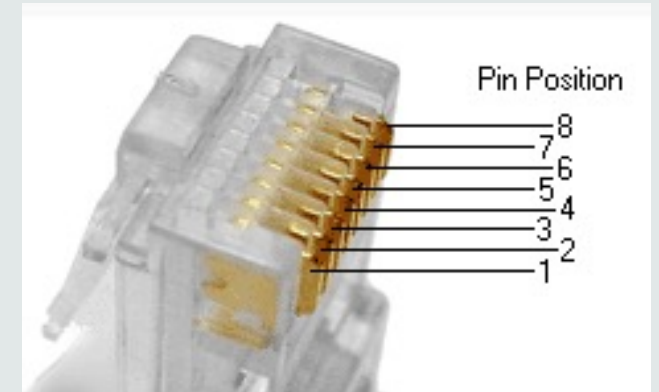
Part 3: Test an Ethernet Crossover Cable

Ethernet is a networking technology that allows computers and other devices in the same network to communicate with each other.

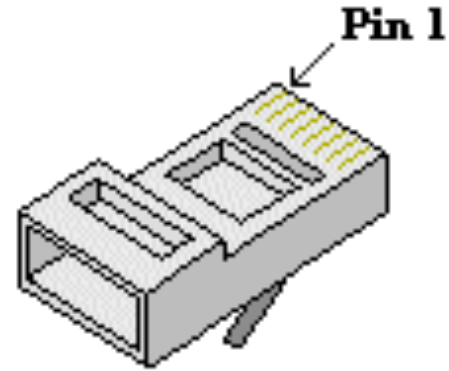
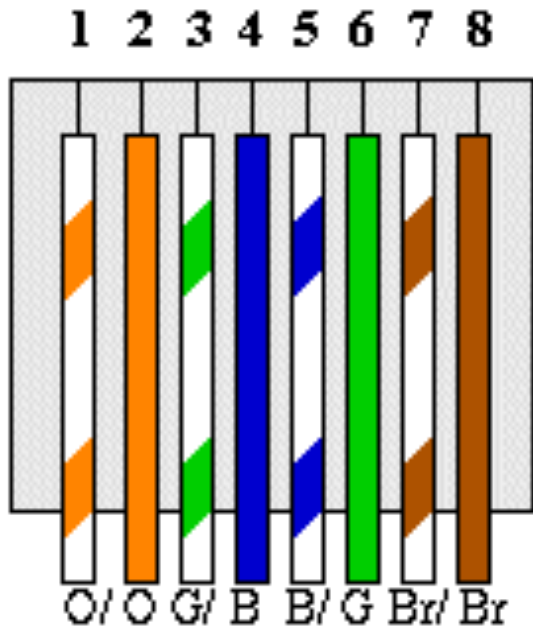
Ethernet is a networking technology that includes the protocol, port, cable, and computer chip needed to plug a desktop or laptop into a local area network (LAN) for speedy data transmission via coaxial or fiber optic cables.

Part 1 : Analyze Ethernet Cabling Standards and Pinouts

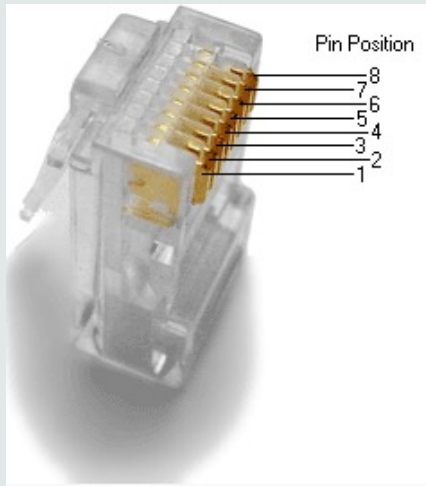
The Telecommunications Industry Association/Electronic Industries Association (TIA/EIA) 568-A standards



T-568B



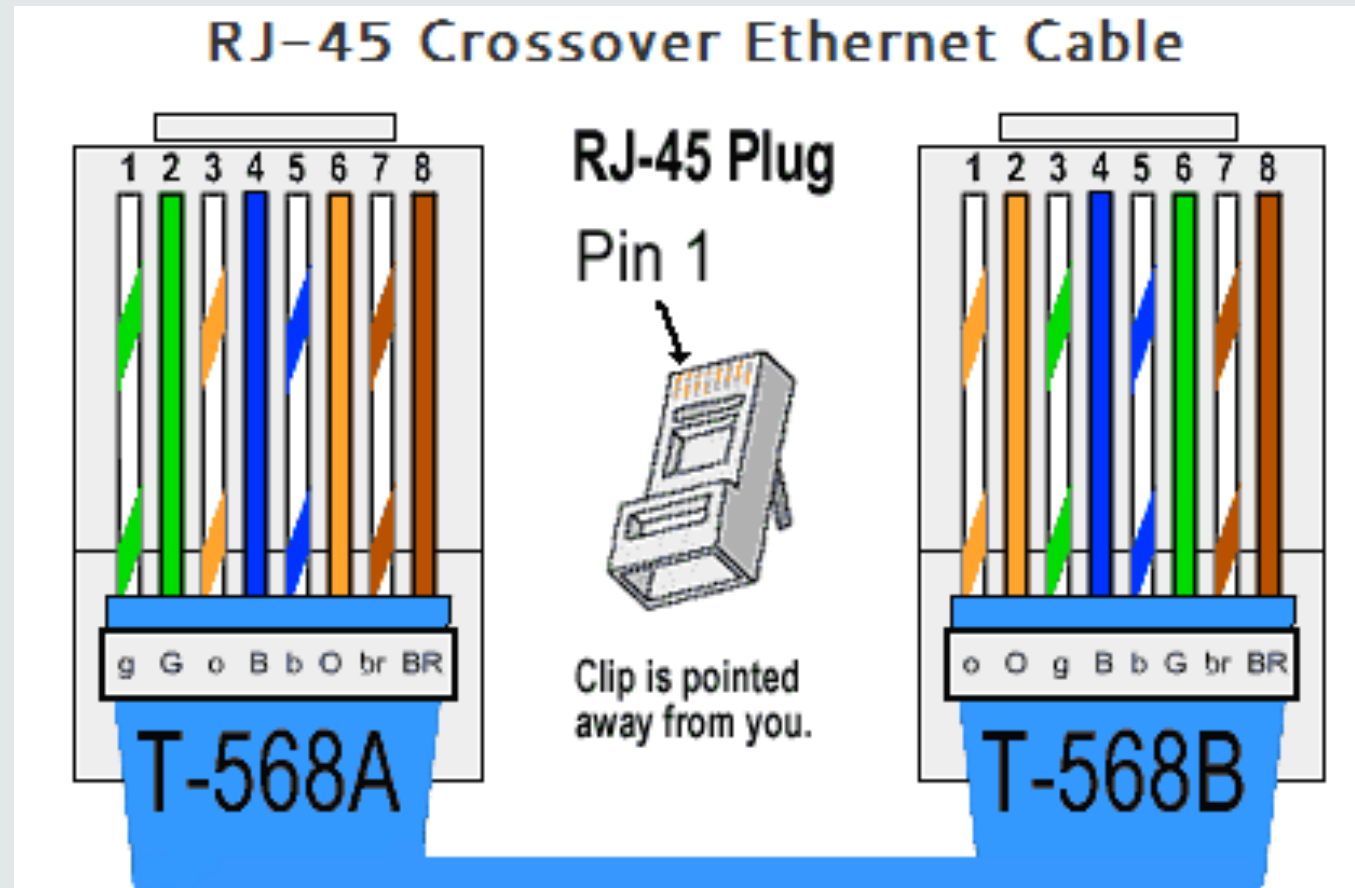
RJ-45 Plug



Part 1 : Analyze Ethernet Cabling Standards and Pinouts

The Telecommunications Industry Association/Electronic Industries Association (TIA/EIA) 568-B standards

Part 2: Build an Ethernet Crossover Cable



Part 3: Test an Ethernet Crossover Cable

Step 1. Test the cable.

Step 2. Connect two PCs together via NICs using your Ethernet crossover cable.

Topology:



Addressing Table:

Device	Interface	IP Address	Subnet Mask	Default Gateway
PC-A	NIC	192.168.10.1	255.255.255.0	N/A
PC-B	NIC	192.168.10.2	255.255.255.0	N/A

Report

- **Take pictures for part 3**

- **Reflection**

1. Which part of making cables did you find the most difficult?

2. Why do you have to learn how to make a cable if you can easily buy pre-made cables?

Thank you!
