Name:
Date:
Collaborator(s):

Ch 2 UTP Cabling

Objective

To learn the following:

- how to make RJ-45 straight-through cables
- how to make RJ-45 crossover cables
- how to terminate an RJ-45 jack and patch panel
- identify the ANSI/TIA/EIA-568-B standard wiring
- identify working vs non-working wiring

Required Tasks

1. Review the steps for terminating twisted pair cable presented in Chapter 2.
2. Watch “UTP-patch-cross-assembly-test” video on Canvas.
3. Watch “RJ45-jack-patch-test” video on Canvas.
4. Watch “How to Cable a Computer Jack, RJ45, Cat.5E” video on Canvas.
5. Watch “How to Punch down a Network Ethernet Patch panel” video on canvas.
6. Watch “How to make a Cat5e Network/Ethernet Cable” video on canvas.

Using the Purdue Online Writing Lab (OWL) guidelines, prepare a memo answering the following questions: Will a UTP cable that is wired as follows work? Will it meet the ANSI/TIA/EIA-568-B standard?

1-------3
2-------6
3-------1
4-------4
5-------8
6-------2
7-------7
8-------5

- The memo can be to the instructor or a pretend boss.
- Justify your answers in RX/TX pin connection terms. Explain your answer in detail and provide additional suggestions, advantages, disadvantages, speed, limitations or device limitations, other options (if any). Assume your audience does not have much of a technical background.

NOTE: Although a typical memo would not have formal citations, all memos in this class will use APA or MLA Citation.

Name:
Date:
Collaborator(s):

Optional Tasks

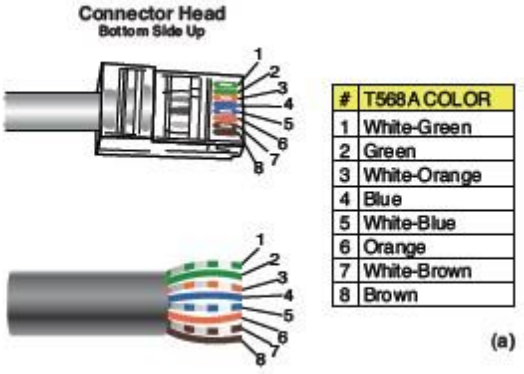
These steps are strongly encouraged, but not graded (due to equipment needed).

Equipment Required

1. Twisted Pair Cable
2. RJ-45 Plugs
3. UTP Cable termination kit
4. Fluke Cable Meter

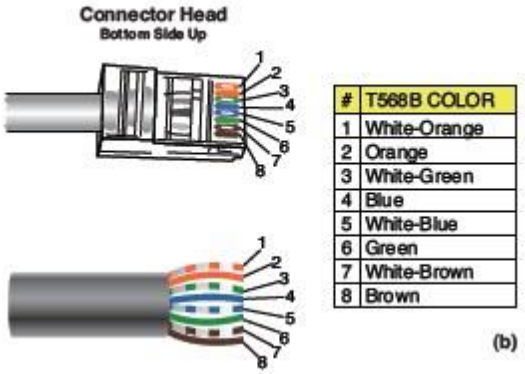
Procedure

1. Make one straight-through cable ~ 3 ft. (terminate both ends). A or B standard, your choice. Test it, troubleshoot it, and analyze the results.



#	T568A COLOR
1	White-Green
2	Green
3	White-Orange
4	Blue
5	White-Blue
6	Orange
7	White-Brown
8	Brown

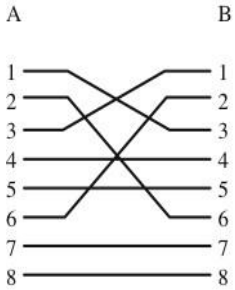
(a)



#	T568B COLOR
1	White-Orange
2	Orange
3	White-Green
4	Blue
5	White-Blue
6	Green
7	White-Brown
8	Brown

(b)

2. Make one crossover cable ~3 ft. (terminate both ends). Test it, troubleshoot it, and analyze the results.



3. Cable a Computer Jack (punch down wires). Test it, troubleshoot it, and analyze the results.