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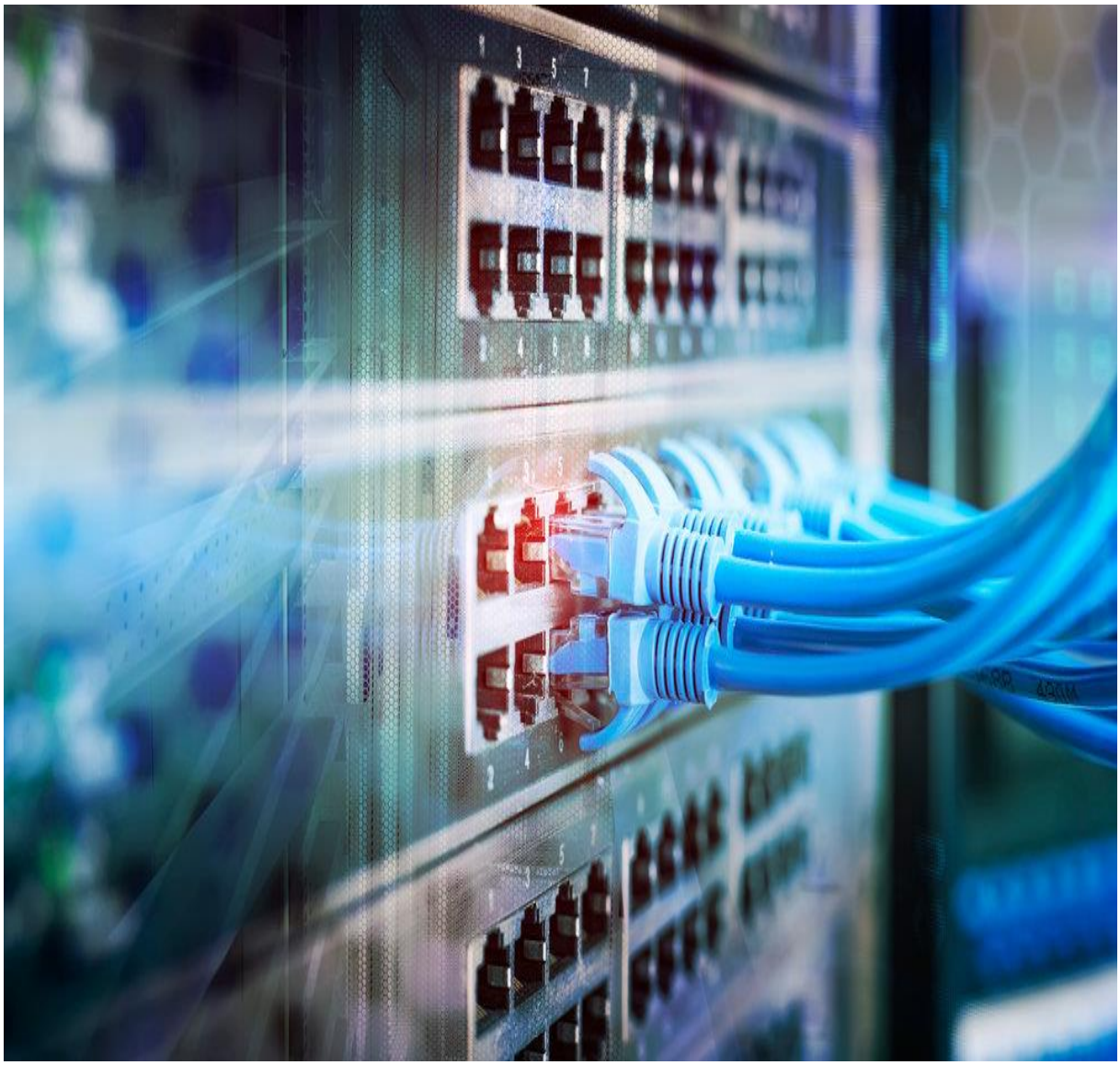

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Computer Systems Servicing
Quarter 3 – Module 9: Creating modular jack cable

First Edition, 2020

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COMPUTER SYSTEMS SERVICING

11

Quarter 3

Self-Learning Module 9

Creating Modular Jack Cable

Introductory Message

For the Facilitator:

Welcome to the **Computer Systems Servicing** Self-Learning Module on **Creating modular jack cable**!

This Self-Learning Module was collaboratively designed, developed and reviewed by educators from the Schools Division Office of Pasig City headed by its Officer-in-Charge Schools Division Superintendent, Ma. Evalou Concepcion A. Agustin, in partnership with the City Government of Pasig through its mayor, Honorable Victor Ma. Regis N. Sotto. The writers utilized the standards set by the K to 12 Curriculum using the Most Essential Learning Competencies (MELC) in developing this instructional resource.

This learning material hopes to engage the learners in guided and independent learning activities at their own pace and time. Further, this also aims to help learners acquire the needed 21st century skills especially the 5 Cs, namely: Communication, Collaboration, Creativity, Critical Thinking, and Character while taking into consideration their needs and circumstances.

In addition to the material in the main text, you will also see this box in the body of the module:

Notes to the Teacher

This contains helpful tips or strategies that will help you in guiding the learners.

As a facilitator you are expected to orient the learners on how to use this module. You also need to keep track of the learners' progress while allowing them to manage their own learning. Moreover, you are expected to encourage and assist the learners as they do the tasks included in the module.

For the Learner:

Welcome to the **Computer Systems Servicing** Self-Learning Module on **Creating modular jack cable!**

This module was designed to provide you with fun and meaningful opportunities for guided and independent learning at your own pace and time. You will be enabled to process the contents of the learning material while being an active learner.

This module has the following parts and corresponding icons:

Expectations - This points to the set of knowledge and skills that you will learn after completing the module.

Pre-test - This measures your prior knowledge about the lesson at hand.

Recap - This part of the module provides a review of concepts and skills that you already know about a previous lesson.

Lesson - This section discusses the topic in the module.

Activities - This is a set of activities that you need to perform.

Wrap-Up - This section summarizes the concepts and application of the lesson.

Valuing - This part integrates a desirable moral value in the lesson.

Post-test - This measure how much you have learned from the entire module.

EXPECTATIONS

After completing this lesson, you should be able to:

1. identify the steps in creating modular jack cable.
2. perform the steps in creating modular jack cable.
3. appreciate the importance of creating modular jack cable.

PRE-TEST

Direction: Read each statement below carefully. Write **T** if the statement is TRUE. Write **F** if the statement is FALSE.

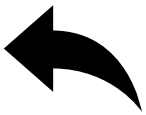
_____1. Modular jack cable is used for telephone systems, data networks, and low-speed serial connections.

_____2. There are 6 wires to secure inside the modular jack.

_____3. Punch down tool is use to secure each wire to the slot of modular jack.

_____4. The modular jack consists of “A” and “B” configurations.

_____5. LAN tester is use to check the connectivity of modular jack cable.



RECAP

Direction: Read each statement carefully about creating crossover cable. Write the letter of the correct answer.

____1. What material is use in creating crossover cable?

a. Modular jack c. Wire
b. RJ45 d. RJ11

____2. How many twisted pair of wires in a UTP cable?

a. 2 c. 4
b. 3 d. 5

____3. What tool is use to attach the UTP cable and Rj45?

a. Punch down tool c. Crimping tool

b. Wire stripper d. LAN tester

____4. How many colors of wire are inside the UTP cable?

a. 4 c. 7

b. 5 d. 8

____5. What tool is use to ensure the connection of all the wires in both ends of the cable?

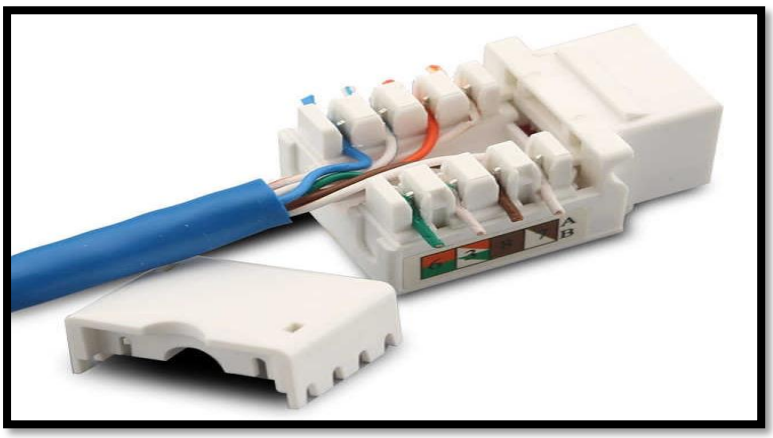
a. Crimping tool c. Punch down tool

b. LAN tester d. Wire stripper

LESSON

Modular jack cable

used for telephone systems, data networks, and low-speed serial connections.

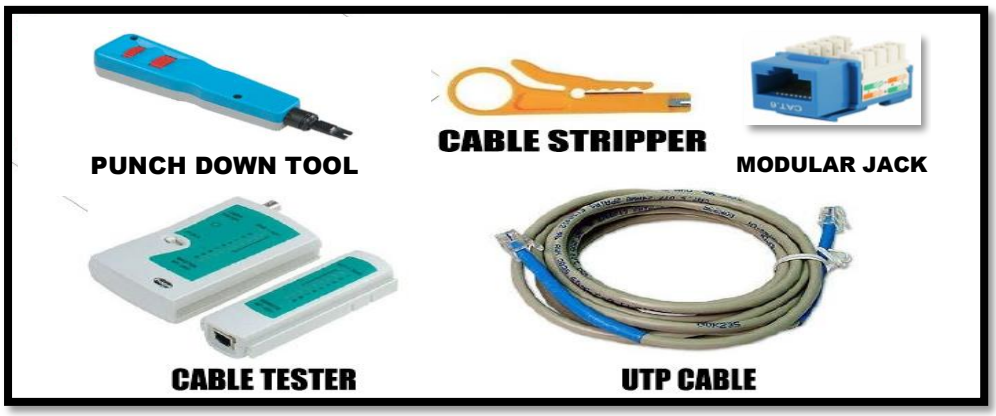


https://www.aliexpress.com/i/32863966695.html

https://www.walmart.ca/en/ip/Cat6-Punch-Down-Keystone-Jack-Blue

Steps in Creating Modular Jack Cable

1. Prepare the tools and materials.

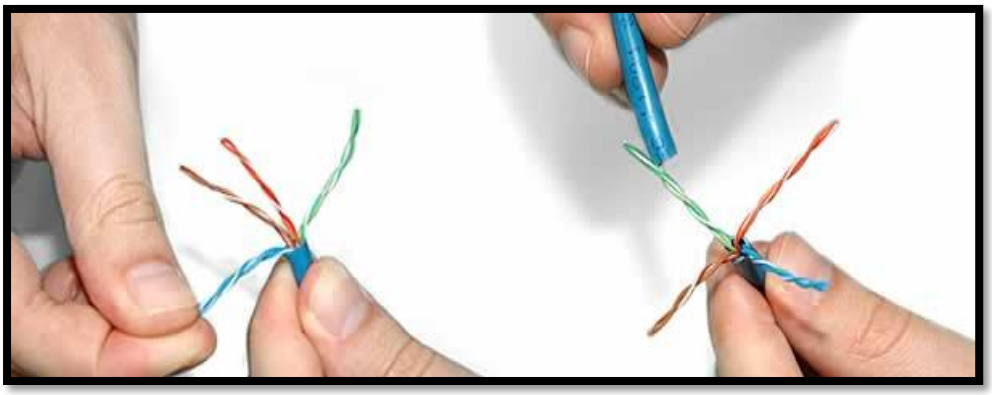


https://www.slideshare.net/senchun80/crimping-and-testing

2. Strip approximately 1.5 inches of jacket from the twisted-pair cable.

https://cdn.cableorganizer.com/old-images/learning-center/how-to/terminate-rj45/step2-photo.jpg

3. Separate the twisted wire pairs from each other; then untwist each pair. Straighten wire ends out as much as possible.



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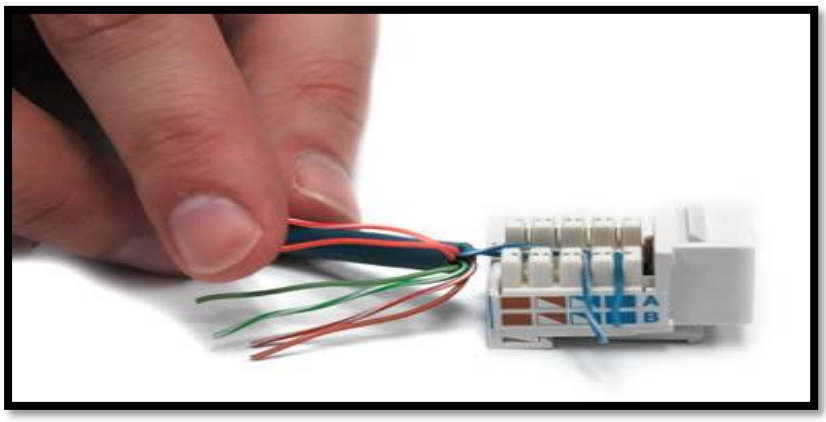
4. Remove the jack's protective cap, then choose between “A” and “B” configurations.



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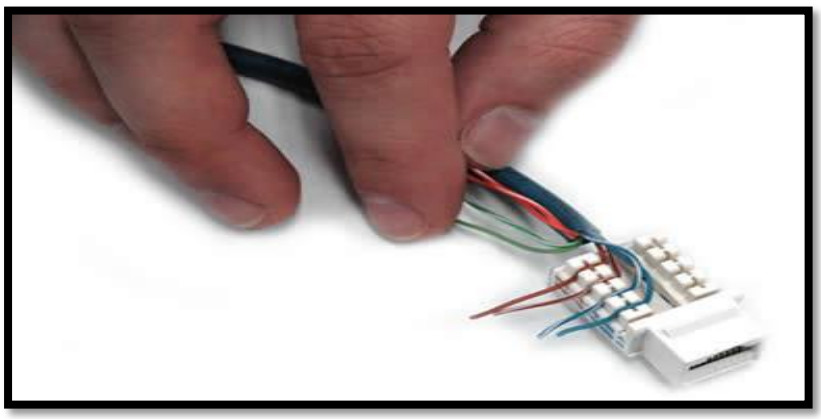
5. Place all 8 wires into the center of the jack, divert the wires into their correct slots.



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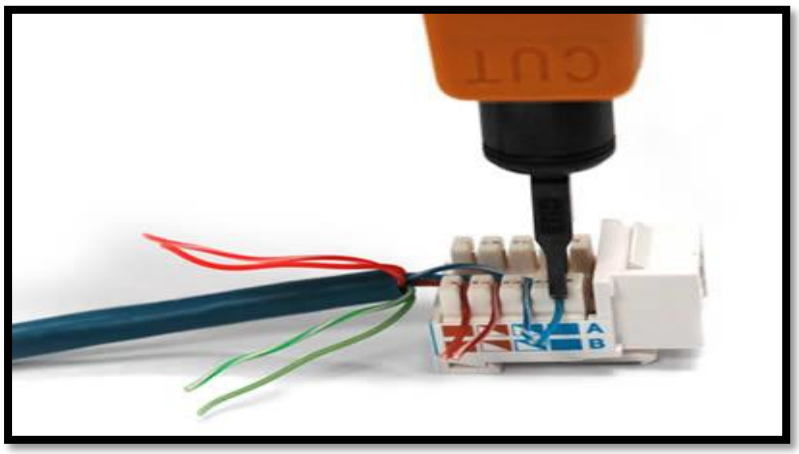
6. Use the punch down tool to secure each wire to every slot of the jack.

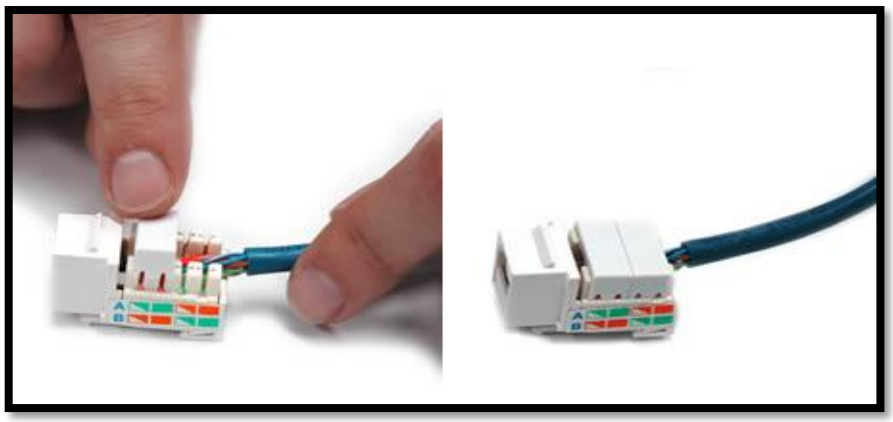


https://cdn.cableorganizer.com/old-images/learning-center/how-to/wire-keystone-jack/step6.jpg

7. Check the quality of each wire slot using LAN tester.

https://electricianu.com/electrician-tools/terminating-testing-network-cables-cat-3-cat5-cat6

8. Snap the jack's cover back on, over the wires.



https://cdn.cableorganizer.com/old-images/learning-center/how-to/wire-keystone-jack/step8.jpg

9. Firmly insert the jack assembly into the faceplate from the back.

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10. Screw the completed jack and faceplate assembly into the wall.

https://cdn.cableorganizer.com/old-images/learning-center/how-to/wire-keystone-jack/step10.jpg

ACTIVITIES

Direction: Arrange the following sequence of steps in creating modular jack cable. Write numbers 1-10 on the blank line.

_____ Strip approximately 1.5 inches of jacket from the twisted-pair cable.

_____ Remove the jack's protective cap, then choose between “A” and “B” configurations.

_____ Use the punch down tool to secure each wire to every slot of the jack.

_____ Snap the jack's cover back on, over the wires.

_____ Screw the completed jack and faceplate assembly into the wall.

_____ Prepare the tools and materials.

_____ Separate the twisted wire pairs from each other, then untwist each pair.

_____ Place all 8 wires into the center of the jack, divert the wires into their correct slots.

_____ Check the quality of each wire slot using LAN tester.

_____ Firmly insert the jack assembly into the faceplate from the back.

Performance Checklist

Check the following if you've met the criteria:

CRITERIA: Did you…?	YES	NO
1. Prepare the tools and materials?		
2. Strip approximately 1.5 inches of jacket from the twisted-pair cable?		
3. Separate the twisted wire pairs from each other, then untwist each pair?		
4. Remove the jack's protective cap, then choose between “A” and “B” configurations?		
5. Place all 8 wires into the center of the jack, divert the wires into their correct slots?		
6. Use the punch down tool to secure each wire to every slot of the jack?		
7. Check the quality of each wire slot using LAN tester?		
8. Snap the jack's cover back on, over the wires?		
9. Firmly insert the jack assembly into the faceplate from the back?		
10. Screw the completed jack and faceplate assembly into the wall?		

WRAP-UP

Modular jack cable is flexible and can install them into a wall plate quite easily. Can also install different modular jacks into one faceplate having multiple ports. As these wall plates are available in different finishes the colors like white or black and customize them according to the interiors of home or offices.

VALUING

Direction: Read and answer the following questions carefully in two to three sentences each number.

1. What are the importance of creating modular jack cable?

_____
_____
_____

2. Cite a situation in which you can apply the knowledge of creating modular jack cable.

_____
_____
_____

POST-TEST

Direction: Fill-in the blanks of steps in creating modular jack cable. Write the answer on the blank space.

Protective	Cover	Faceplate	Materials	Twisted
Punch Down	Strip	Slots	Insert	Tester

1. Prepare the tools and _____.
2. _____ approximately 1.5 inches of jacket from the twisted-pair cable.
3. Separate the _____ wire pairs from each other, then untwist each pair.
4. Remove the jack's _____ cap, then choose between "A" and "B" configurations.
5. Place all 8 wires into the center of the jack, divert the wires into their correct _____.
6. Use the _____ tool to secure each wire to every slot of the jack.
7. Check the quality of each wire slot using LAN _____.
8. Snap the jack's _____ back on, over the wires.
9. Firmly _____ the jack assembly into the faceplate from the back.
10. Screw the completed jack and _____ assembly into the wall.

KEY TO CORRECTION

Pre-Test:	Recap:
1. T	1. B
2. F	2. C
3. T	3. C
4. T	4. D
5. T	5. B
Pre-Test:	Recap:
1. 2	1. Materials
2. 4	2. Strip
3. 6	3. Twisted
4. 8	4. Protective
5. 10	5. Slots
6. 1	6. Punch down
7. 3	7. Tester
8. 5	8. Cover
9. 7	9. Insert
10. 9	10. Faceplate

References

https://www.cableorganizer.com/learning-center/how-to/how-to-wire-keystone-jack.htm

https://en.wikipedia.org/wiki/Computer_network