

## Making Custom-Length Computer Patch Cords



### Shopping List:

#### Hand Tools & Connectors:

- Cat5/Cat5e stripper, **70003** or **70029**
- RJ45 crimper, **70005**
- RJ45 modular plugs, **70032**

#### Other Items You May Need:

##### Cable:

- Cat5 or Cat5e twisted pair cable

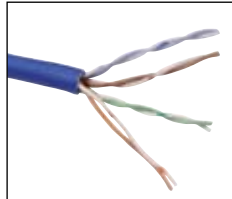
##### Accessories:

- RJ45 wall jacks
- Wall plates
- Metal or plastic box

1. The first step is to remove approximately 2 inches of the outer jacket from the Cat5e or Cat5 twisted pair cable (See **Figure A**). Once you take the outer insulation off, you will see that there are 4 pairs of individual conductor wires twisted together, hence the name "twisted pair".

You will not strip the insulation off of these conductors; in fact, you need to be careful to not nick them.

**Figure A**



**Figure B**



2. If using PN 70029, squeeze handles together to open tool. Insert cable into the round cable stripper which is the cavity directly below the black thumb screw. (See **Figure B**)

Place index finger in tool handle and rotate the around the cable in a clockwise direction approximately 2-4 times following the directional arrow on the tool. The number of rotations will vary with the cable you use. (See **Figure C**)

**Figure C**



3. Remove cable from the tool and slip the outer jacket off with your fingers. Check the exposed inner conductors to ensure there are no nicks.
4. If the inner insulation is damaged, adjust the blade depth by rotating the black knob toward the (-) position. (See Figure D) If the blade is not cutting deeply enough, rotate the blade in the (+) direction. Repeat until the blade cutting depth is properly set.

Figure D



5. Once the cable is stripped, you will now need to make the cable/connector assembly. The twisted pairs are color-coded. Untwist the pairs (See Figure E) and re-arrange the wires in pairs based on the color. The chart below illustrates the proper wiring for residential standards.

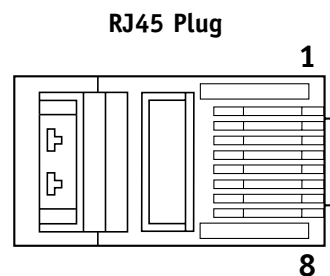
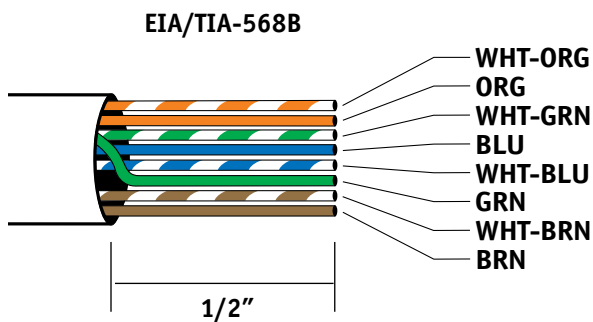
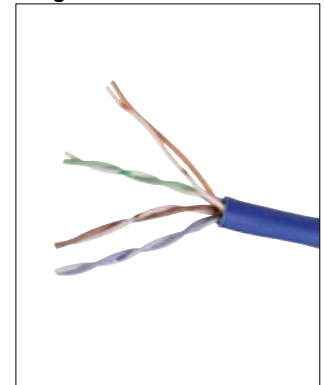


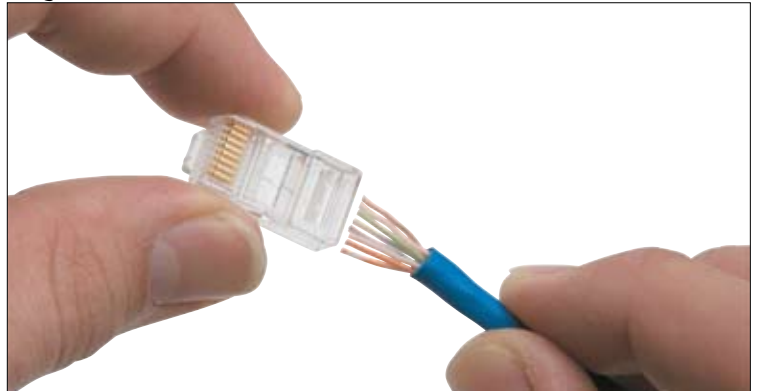
Figure E



6. When the wires are arranged for the proper pin-out, trim to 1/2" and slide the wires into the connector. Make sure the wire ends are butting against the front edge of the connector. See Figure F.

**Tip:** It is easier to insert the wires if you have the locking tab on the bottom and it ensures that you wire both ends the same, which is a critical step.

Figure F



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7. Install the cable/connector assembly into the crimp tool. It needs to go into the cavity marked 8P. Close the tool handles to crimp the connector onto the cable. (See Figure G) The crimping action will force the pins of the connector into the wires and will engage the strain relief on the cable.

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Figure G



8. Open the tool handle and remove the crimped connector.

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You have  
completed  
the job!

