Creating a Terminator

Materials Needed:
- Ethernet Cable
- 120 ohm resistor (1/4, 1/8, 1/16 watt)
- Solder and Soldering Iron, Heat-shrink tubing (3” x ¼” dia.)
- Wire cutters and strippers

Step 1: Select an Ethernet cable. Cut off the end. Leave 6 to 8 inches of wire.

Step 2: Identify pins 1 and 2 by holding the Flat side of the plug towards you. Pins 1 and 2 are the left most pins. Note the wire color to these two pins. In this example, they are both orange.

Step 3: Strip the coating off, exposing about 5” of wires. Leave the wire associated with Pin-1. Cut the wire associated with Pin-2 an inch shorter. Cut any other wire .75” shorter than the pin-2 wire. Cut each of the remaining wires .25” shorter than the previous wire. This is a simple way to ensure that the wires do not accidentally short on one another.
Step 4: On the wires associated with pins 1 and 2, carefully strip the coating, exposing .25” of bare wire at the end of each wire. Bend the wire associated with pin 1 as shown in the diagram.

Step 5: Carefully solder a 120 ohm resistor, at each end, between the bare ends of the wires from pins 1 and 2. Take care to leave and ample gap between the soldering operations and the closest clipped wire.

Step 6: Cut a section of heat shrink tubing long enough to overlap both the original casing and end of the assembly by ¼” on each end. Slide the tubing on as shown and apply heat.