This FOA virtual hands-on (VHO) tutorial on fiber optics is intended to help understand the process of terminating UTP cable on a modular jack with a 110 block termination. It is copyrighted by the FOA and may not be distributed without FOA permission.
The plug is the connector that goes on the end of the cable (right)

The jack is the receptacle that goes in the outlet, usually permanently mounded in or on the wall (left)
Pinout on Cat 5e/6 jacks will be marked on the back at the punchdowns with the correct color codes.

Pinout, as we saw earlier, does not follow standards due to internal twists.

Cat 3 jacks will follow standards as they have no internal twists, so the color codes for pin assignments will be in the package, not on the jack.

TIA 568 has two different color codes, TIA-568A and TIA-568-B, with the difference being the reversal of pairs 2 and 3 – DO NOT MIX these in one system as they result in wiring errors.
Place The Jack In Holder

- Many manufacturers offer holders to allow one to handle the jack easily when punching down the wires
- If so, place the jack in the holder
- Alternatively, you need a hard surface to rest the jack against while punching down the wires
Strip The Cable Jacket

- Using a jacket stripper, strip off about 2-3 inches of cable jacket.
- The stripper should be set to cut almost through the jacket but not so deep it cuts the insulation on the wires which can affect the performance of the cable.
Separate The Wires

- Using a sharp tool or screwdriver, separate the wires from each pair
- Leave about 1/2 inch (37 mm) outside the jacket twisted
Place Wires In Jack

- Lay the wires in the slots according to the termination type you will use (T568A or T568B)
- Follow the color code on the jack exactly
- Keep the twists as close to the jack as possible to minimize crosstalk!
Once the wires are in place, use the punchdown tool to make the connection and cut off the excess wire.

Some manufacturers make jacks that can be terminated without a punchdown. They use the plastic cap on the back to push the wires into the IDC contacts - usually with a pair of pliers to insure the full insertion. If you use this technique, remember to cut the wires to the proper length and still maintain your twists close to the jack.
Snap Cover On Jack

- Snap the plastic cover on the back of the jack and it's complete
Insert Jack In Outlet Or Panel

• Insert jack in outlet or panel
• Termination is complete

Insert Jack In Outlet Or Panel
You can now insert the completed jack into the work area outlet box or patch panel.
Termination is complete
FOA Guide - Virtual Hands-On

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