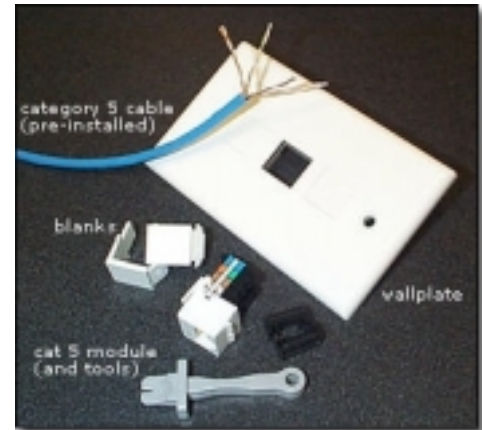


Welcome to the RJ-45 module installation guide

The purpose of this guide is to help you install an RJ-45 drop into any office or home where Ethernet cable has been run through the walls. Please note that this guide does not cover running category 5 (CAT 5) cable from a hub/switch/router to a user PC. Instead, this guide covers how to take a pre-run CAT 5 cable and install a module that will allow users to connect to the network via an RJ-45 connection.

Things you will need before you begin:

- A Phillips or flathead screwdriver
- One RJ-45 modular jack for every drop installed
- A module wallplate
- Wallplate blanks
- Pre-run CAT 5 cable
- A CAT 5 toner



Step one: Remove the CAT 5 casing

Our first step in installing a module is to prepare the existing CAT 5 cable for insertion into a new module. Most CAT 5 cable consists of four twisted-pair wires contained within a plastic casing. To insert the twisted-pair wires into the module, the CAT 5 external casing must first be removed. I suggest using an RJ-45/11 crimping tool to remove the casing about two inches from the end. Doing so will expose the twisted-pair wires. Be careful not to accidentally cut the insulation of the copper wires inside.

Step two: Prepare the RJ-45 module

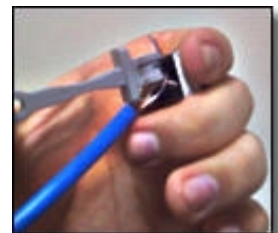
As you can see in the image on the right, the RJ-45 module is color-coded for easier installation. You are given two color codes to choose from: Type-A or Type-B. According to the manufacturer of the module, most residences should use the Type-A, while commercial applications should make use of the Type-B configuration. Pick the color code that best suits your needs and continue on to step three.



Step three: Wiring the RJ-45 module

Although it's difficult to see in this image, each of the twisted pairs has been untwisted and placed individually in its respective color-coded slot. It is important that you do not strip the color-coated insulation off the copper wiring.

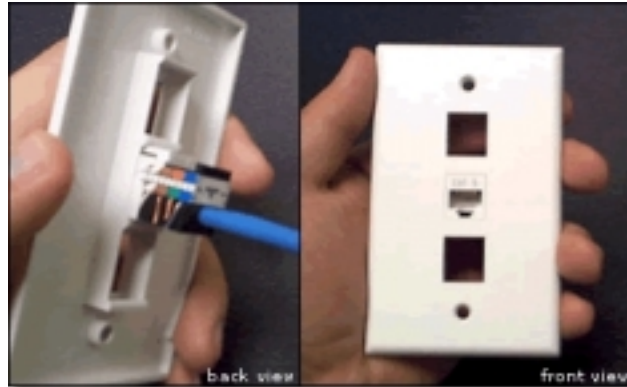
To place the wires in their respective slots, first put the wire in place with your fingers and then use the installation tool (the gray item in the image) to punch the wire down firmly into place. When all the wires have correctly been put into their respective slots, you can then place the protective plastic caps over top of the jack terminations and push them firmly into place.



Editor's Note: It is suggested that you install the twisted-pair cable from the inside of the RJ-45 module. Doing so will allow the cable to rest in the center of the module, which can be held firmly in place once the plastic caps are put in place.

Step four: Insert the module into the wallplate

Once all of the wires have been punched into place and the plastic caps have been installed over the wires, you can then place the module into the module wallplate, as seen in the images below.



Once the module has been snapped into place, you can then put in the blanks to fill the remaining holes in the wallplate, as seen below



Step five: Testing the connection

Once you have finished putting in the wallplate blanks, you can then mount the plate into the plastic box embedded in the wall. Once the plate is in place, you need to test your handiwork to see if a signal can be received. By using a toner, a device to test signal strength, you can determine if your drop is good or if it needs to be replaced.

A toner works by placing a power source at one end of a line with a receiver at the other end of the line. If a good signal is received from the power source, then you know your network drop is ready to roll. But if you don't receive a signal, or if you receive a poor signal, odds are you have to replace the CAT 5 cable in the drop.

Step six: Connect your equipment

If everything goes well and testing the drop results in a good signal, then you're ready to go. You can connect a workstation on one end of the line and connect the other end to a hub, switch, and/or router to give the machine on the other end network connectivity.