

HOW TO TERMINATE RJ45

Here's quick guide on how to prepare and terminate CAT5/6/7 cables into an RJ45 connector.

I will be using the 568B method for a straight cable to connect a PC to a router for example. This is a standard pin-out for connecting most pieces of equipment, if you need to make cross over cables then more info can be found here:

http://www.zytrax.com/tech/layer_1/cables/tech_lan.htm

Here's a nice picture of the pin-outs that are commonly used, I'll be using the bottom one:



TBH it doesn't matter what order they colours go as long as they're the same at both ends, just easier to do this method if you have to re-terminate in the future.

First of all you'll need some basic tools:

- Crimp tool.
- Cable stripper.
- Small screwdriver.



All I'm using is standard CAT5e 4 twisted pair shielded cable, there are many makes out there but to keep things simple:

- Indoors use LSOH.
- Outdoors must be outdoor rated.
- If running near other services especially AC supplies then get some shielded stuff.

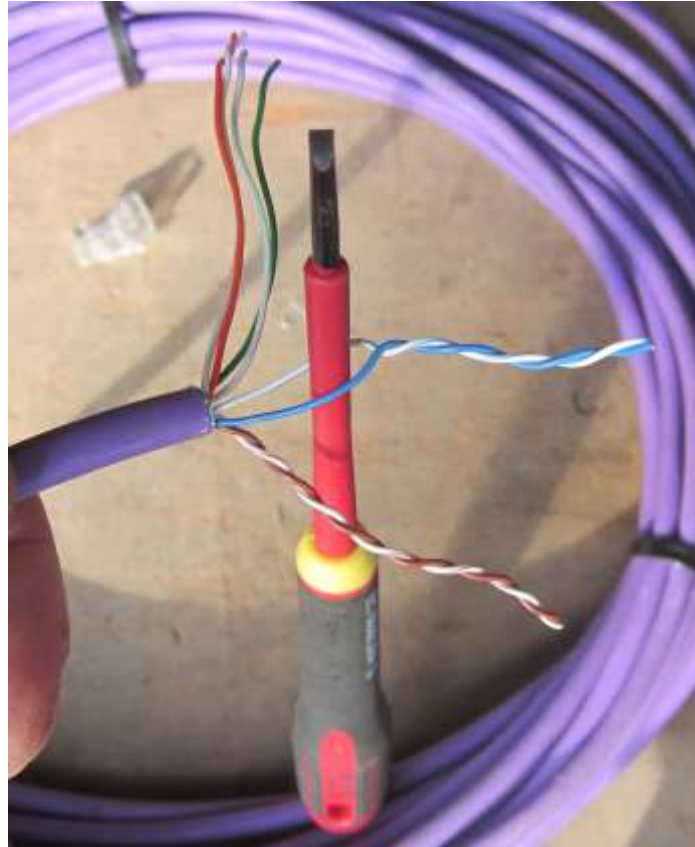
First of all fit the boot, forget this and start again!!!



Then strip back roughly 50mm of sheath and remove any shielding etc:



Now you need to untwist the pairs, just untwist slightly near the sheath and use a screwdriver to separate them, this is also a good method of testing to see if you have nicked any cables when stripping as they cable will break, better to discover it at this stage:

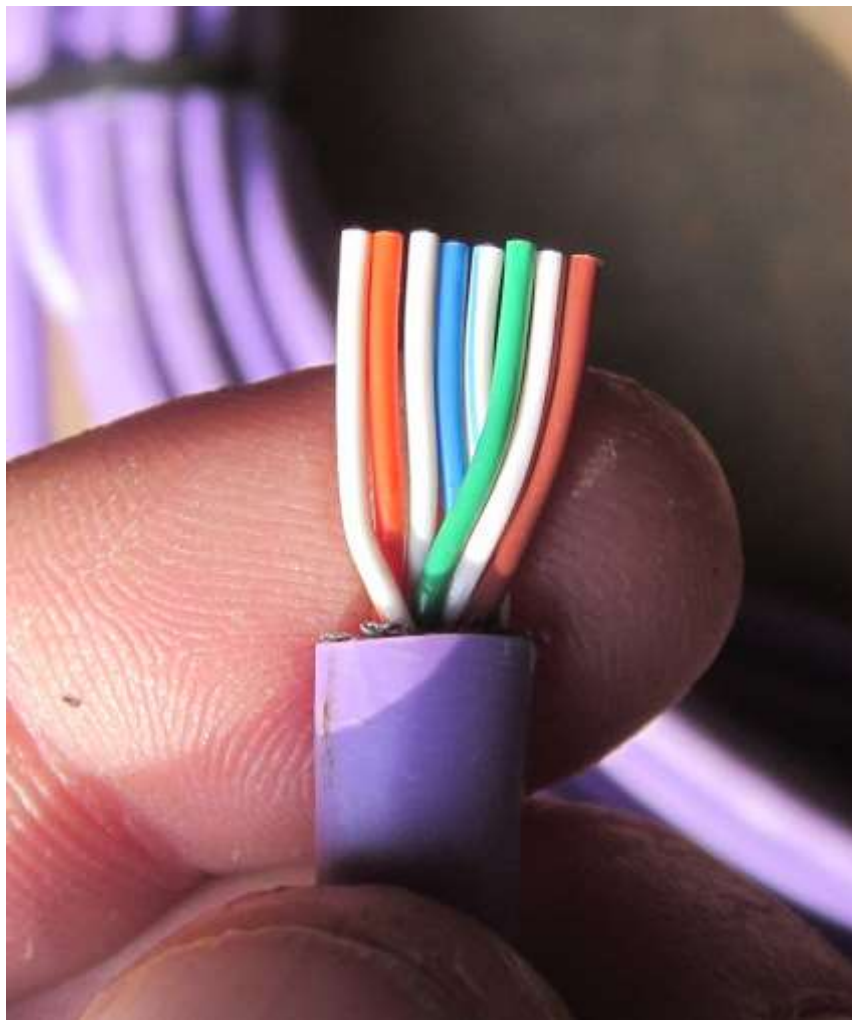


Now to flatten the cable a little to make things easier, just run the cable between your screwdriver and your thumb:



Now to sort the colours out. Once you've ordered them as the first diagram you can then run the cable between your thumb and screwdriver to help settle them nice and flat, also pinching where the sheath is terminated and twisting up and down a couple of times will help.

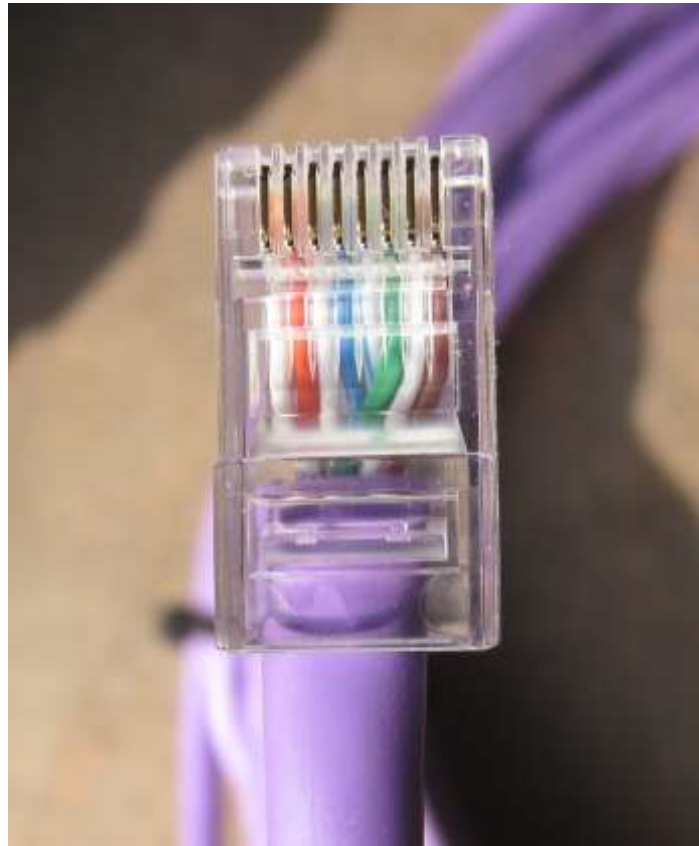
Now you can cut the pairs to length, I tend to cut roughly 12mm from the sheath, good quality cable will tend to maintain it's shape and make life easy unlike some of the cheap Chinese crap we see on popular auction sites!!! Most crimp tools have an integral cable cutter to keep things nice and straight.



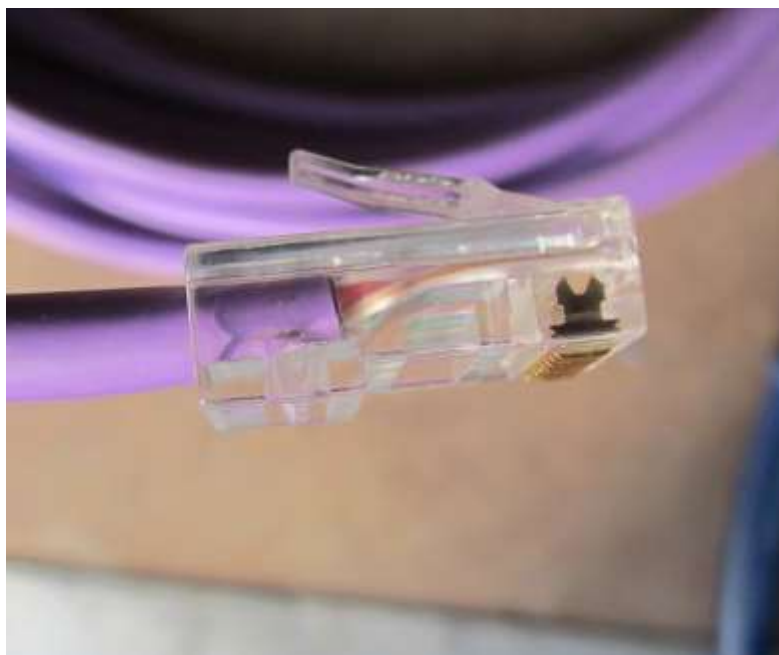
Confirm the boot is fitted!!!

Slide in the RJ45 with the locking tag facing away from you, this is the standard method and allows you to see if all the cables have

gone into their slots in the correct order, also have a look from the end to see if all the ends are visible and fully home:



Ensure the sheath has fully entered the connector so the cable grip will hold it when crimped otherwise the whole lot will pull out at some point:



Crimp it, the crimper will push in all eight brass pins and also the cable gripper.

Last of all slide the boot over:



Repeat at the other end using the same pin-out.

Repeat god knows how many times until you dream of it in your sleep!!!