

## Clearing up the RJ conundrum – or at least trying to!

When it comes to talking about RJ 'Registered Jack' connectors, sometimes known as 'modular phone jack and plug', one can get somewhat confused over what is exactly what given the commonplace terms and names used are often not part of the 'Registered Jack' nomenclature.

Registered Jack designations are intended to describe the signals and wiring used for voice and data applications at the interface you are presented with. As such the 'Jack' or socket you are presented with on a device or wall panel may have an RJ designation, but, at least 'on paper', the plug you are presenting to it will not! So that RJ45 jack plug you have bought and terminated onto a Cat5e cable is not a RJ45? Well not really, it's actually an 8P8C connector, but given everyone knows it as a RJ45 it would be futile to insist everyone and his dog use the 8P8C name at this stage in the preceding's.

What follows in this document hopefully will clarify and aid in trying to track down the appropriate connector dependent on application. At least with the most common variants stocked by Canford, and maybe one or two others for savage amusement!



**Name:** 4P4C  
**AKA:** RJ9, RJ10 & RJ22  
**Size:** 7.6mm Wide x 6.6mm High, (looking on the front face)  
**Common use:** Telephone handset and headset cables

**Notes:** Apparently RJ9, RJ10 and RJ22 are not mentioned in the 'Registered Jack' scheme. Somehow the humble 4P4C plug has gathered three possible unofficial aliases in its lifetime. 4 Positions, 4 Contacts present.



**Name:** 6P2C  
**AKA:** RJ11  
**Size:** 9.65mm Wide x 6.6mm High, (looking on the front face)  
**Common use:** ADSL, Telephones, modem cables.

**Notes:** 6 Positions, 2 Contacts present. Designed to carry one signal pair/one telephone feed.



**Name:** 6P4C  
**AKA:** RJ12, sometimes used as and called RJ11.  
**Size:** 9.65mm Wide x 6.6mm High, (looking on the front face)  
**Common use:** Connection for phones used on a system that has extensions for example.

**Notes:** 6 Positions, 4 Contacts present. 6P4C connectors are often used for RJ11 applications where the additional two contacts are used for additional device specific purposes or they are not connected.

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**Name:** 8P8C  
**AKA:** RJ45  
**Size:** 11.68mm Wide x 7.24mm High, (looking on the front face)  
**Common use:** Data Network connections commonly terminated onto Cat5e and Cat6 type cables.  
**Notes:** 8 Positions, 8 Contacts present. The RJ specification for RJ45, (RJ45S to be specific), outlines a wiring scheme which differs from the usual ANSI/TIA-568 T568A and T568B and Ethernet that we would normally associate with this connector today.

- 46-601 RJ10 PLUG 4P4CF
- 46-603 RJ12 PLUG 6P6CF
- 46-604 RJ45 PLUG 8P8CF
- 46-605 RJ45 PLUG 8P8CR
- 46-606 RJ45 PLUG 8P8CS
- 46-607 RJ45 PLUG 8P8C Cat 6, unshielded
- 46-608 RJ45 PLUG 8P8CS Cat 6 / 6A, shielded
- 46-609 RJ45 PLUG 8P8CSXL Cat 6/6A shielded, for large cables max 8mm O.D. and 1.5mm conductor insulation