

Audio Connectors

There are a variety of different audio connectors available. The most common types are *3-pin XLR*, *RCA*, and *6.5mm jacks* (also known as $\frac{1}{4}$ " jacks).

3-pin XLR

3-pin XLR connectors are mainly used for balanced audio signals. Using a balanced signal reduces the risk of inference.

- Pin 1 is the earth (or shield)
- Pin 2 is the +ve (or 'hot')
- Pin 3 is the -ve (or 'cold').

There are a number of different XLR's - 3-pin, 4-pin, 5-pin etc



$\frac{1}{4}$ " Jack (6.5mm Jack)

There are two types of 6.5mm Jacks: *Mono* and *stereo*. The mono jack has a tip and a sleeve, the stereo jack has ring, a tip and a sleeve.

- On the mono jack the tip is the +ve, and the sleeve is the -ve or shield.
- On a stereo jack being used for a balanced signal, the tip is the +ve, the ring is the -ve, and the sleeve is the shield.
- On a stereo jack being used for a stereo signal (left and right), the tip is the left, the ring is the right, and the sleeve is the shield.

Jacks also come in various sizes - 6.5mm ($\frac{1}{4}$ "), 3.5mm, 2.5mm. The wiring for all of them is the same.



RCA

RCAs are used a lot for home stereos, videos, DVDs etc.

The RCA can carry either audio or video. It is wired the same way as a mono jack: The center pin is the +ve, and the outer ring is the -ve or shield.

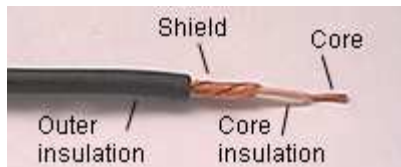


Audio Cables

There are two main types of audio cable we will look at: *Single core / shielded* (unbalanced) and *One pair / shielded* (balanced).

Single Core / Shielded Cable

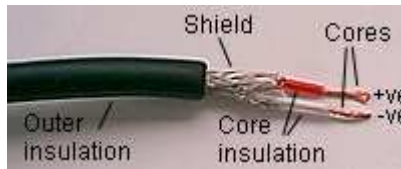
In a single core / shielded cable, the single core is used for the +ve, or 'hot', and the shield is used for the -ve, or 'cold'. This type of cable is used for unbalanced audio signals.



Single core / shielded cable

One Pair / Shielded Cable

A one pair / shielded cable has one core as the +ve, and the other core is -ve. The shield is earthed. This type of cable is used for [balanced audio signals](#).



One