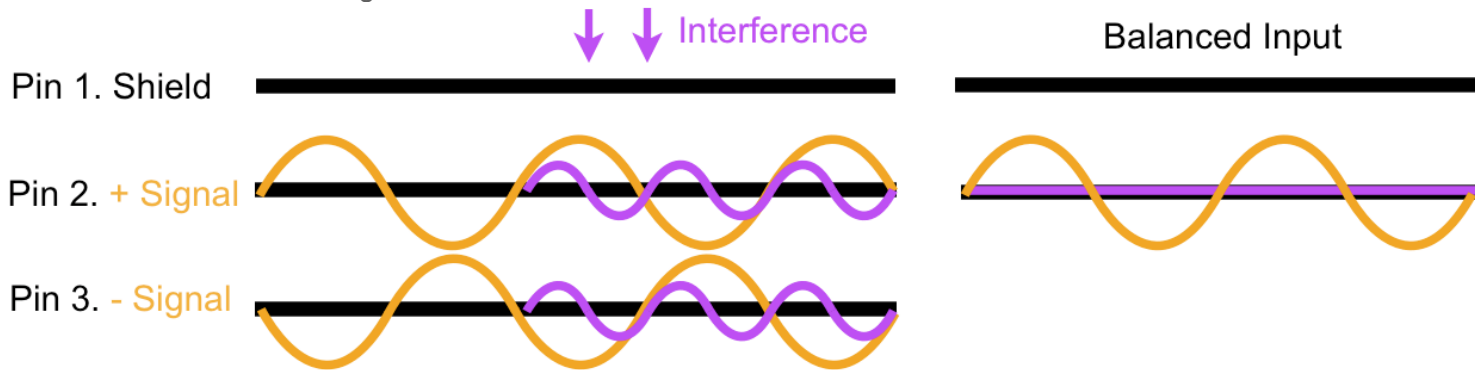


A balanced cable helps reduce noise interference from entering the cable which is useful in situations where you need to use long cable runs (over 5 metres). A balanced cable is designed with three internal wires - two wires are twisted together and are wrapped in a braid of the third wire that acts as a shield to protect the cable.

The two twisted wires carry the same signal with opposite polarities. One wire has a positive signal and the other has an inverted or negative signal. Twisting the wires means any noise or interference picked up by the cable will be the same on both wires. The balanced input takes any noise on the inverted wire and applies it to the signal on the first wire, thus cancelling out the noise.



For microphones a balanced cable is usually terminated with a 3-pin XLR connector.

The pin connections on the XLR are as follows:

- Pin 1 Shield
- Pin 2 Positive audio signal
- Pin 3 Negative or inverted audio signal

