

Symetrix Tip Sheet

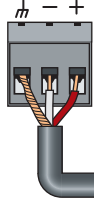
Symetrix Cable Wiring Guide

Balanced Connections

Any of these connectors can appear on either side of a balanced connection.

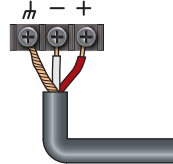
NOTE: In the case of an XLR connector, the Female attaches to an output, while the Male attaches to an input.

Euroblock [balanced]

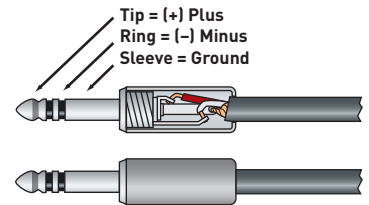


NOTE: Detachable Euroblock and Terminal Strip connectors are designed for use with bare wire. Do not tin stranded wires before inserting them into the connectors.

Terminal Strip [balanced]



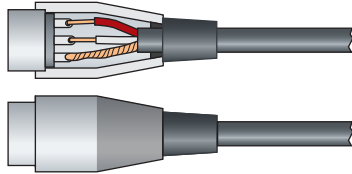
TRS 1/4" Plug [balanced]



XLR Female Plug [balanced]



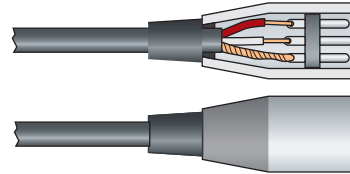
Pin 2 = (+) Plus
Pin 3 = (-) Minus
Pin 1 = Ground



XLR Male Plug [balanced]



Pin 2 = (+) Plus
Pin 3 = (-) Minus
Pin 1 = Ground

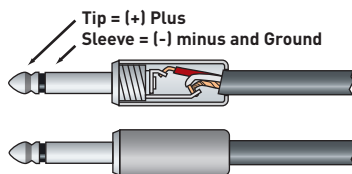


Special Case: Female XLR connectors will ALWAYS be used coming from the OUTPUT of a device. Male connectors plug into the INPUT of a device.

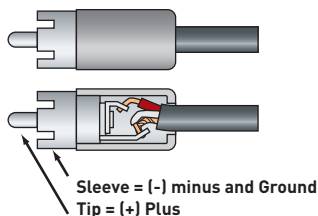
Unbalanced Connections

The RCA connector and the 1/4" TS connector are unbalanced connectors, wired with a single strand shielded wire and can be placed on either end of an unbalanced connection

TS 1/4" Plug [unbalanced]



RCA Plug [unbalanced]



! IMPORTANT NOTICE !

The wiring diagrams on these pages are included **for information purposes only**.

Symetrix can not anticipate every connector type on non-Symetrix products. **It is the user's responsibility to determine what connection is needed.**

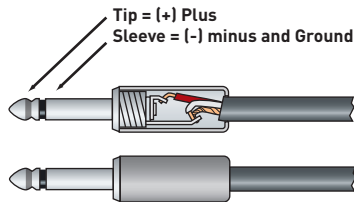
In addition, **Symetrix accepts no responsibility for injury or damage caused by user created wiring.**

Unbalanced Connections: Unbalanced out to balanced in

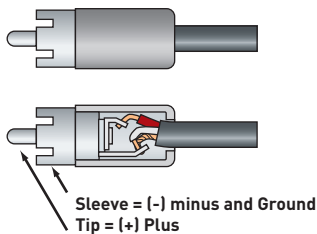
The RCA connector and the 1/4" TS connector are unbalanced connectors. However, the wiring differs depending on if they are sending to, or receiving from a balanced connector.

In this example, the unbalanced connector is sending signal to a balanced connector. When wiring this connection, use a shielded twisted pair cable. The balanced side wires the same as a standard, balanced connection. On the unbalanced side, you wire the white (minus) wire together with the ground. This provides some common mode rejection at the balanced input.

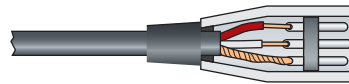
TS 1/4" Plug [unbalanced out to balanced in]



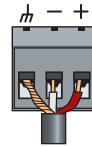
RCA Plug [unbalanced out to balanced in]



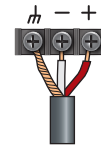
XLR Male Plug [balanced]



Euroblock [balanced]



Terminal Strip [balanced]



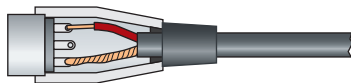
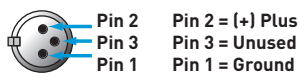
TRS 1/4" Plug [balanced]



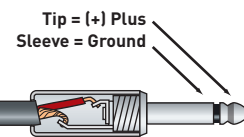
Unbalanced Connections: Balanced out to unbalanced in

When your output requires a balanced connector, but you are sending signal to an unbalanced input, the rules change. Use a single strand shielded wire. Wire only to the plus and ground terminals of what would be typically be the balanced connector.

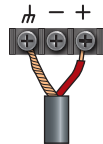
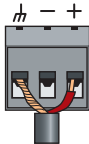
XLR Female Plug [unbalanced]



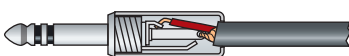
TS 1/4" Plug [balanced out to unbalanced in]



Euroblock [unbalanced] Terminal Strip [unbalanced]



TRS 1/4" Plug [balanced]



Tip = (+) Plus
Ring = unused
Sleeve = Ground

RCA Plug [balanced out to unbalanced in]

