

Connecting to Music & Paging Systems

Each Qt™ control module features at least 1 fixed terminal block input to connect background music players and paging controllers. The Qt 100™ and Qt 200™ feature 1 auxiliary input while the Qt 600 features 2 inputs. This document will provide guidance for making the proper connections and isolating problems with the set-up.

The input connection is via a 3-pin terminal connector, balanced or unbalanced input with 40K Ohm input impedance line level input (6V max).

To Connect to a Music or Paging Source to Input A or B

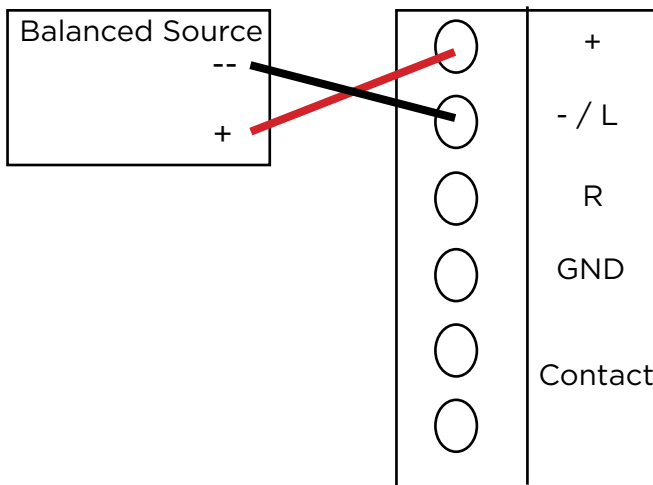
1. Be sure to power off the control module by unplugging the power cord from the wall outlet. Below are the connection points for the Qt 600.

2. Balanced Audio Input:

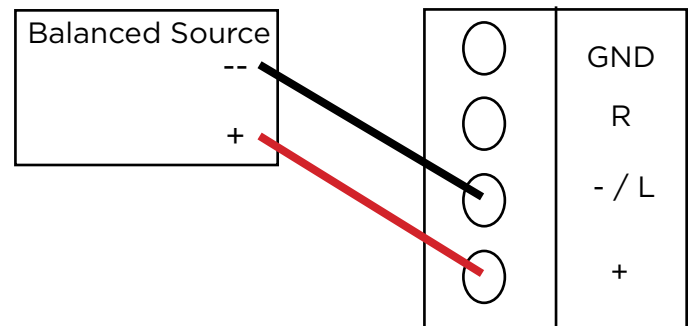
(Typically of paging controllers.)

Connect the corresponding signal wires to the “+” and “-” ports on the control module’s input. Connect the cable’s shield to “GND” on the control module’s input.

Qt 100



Qt 200 / Qt 600

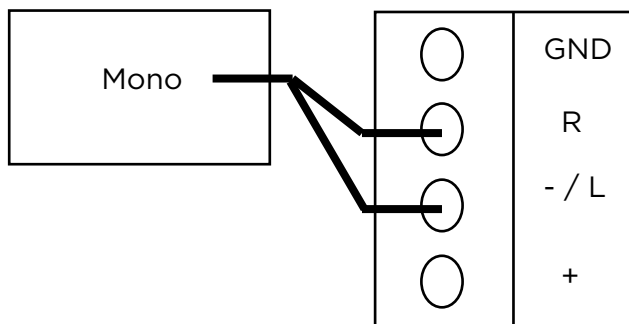


3. Unbalanced Audio Input: (Typical of music systems.)

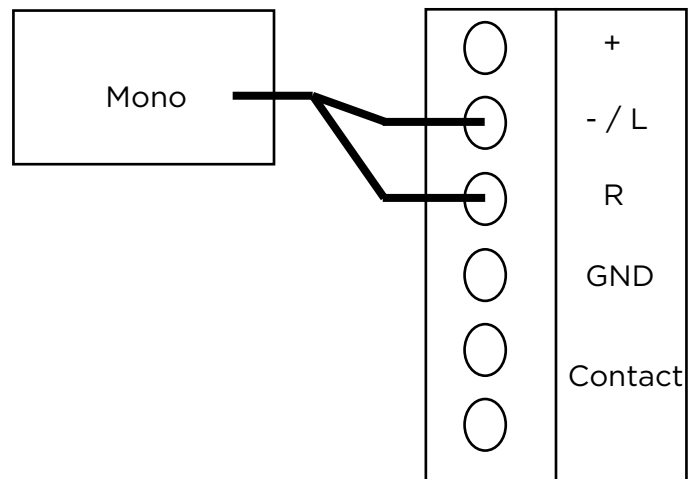
A. Mono Signals:

Connect signal wire to both the “L” and “R” ports on the module’s input.
Connect the ground wire to “GND.”

Qt 100

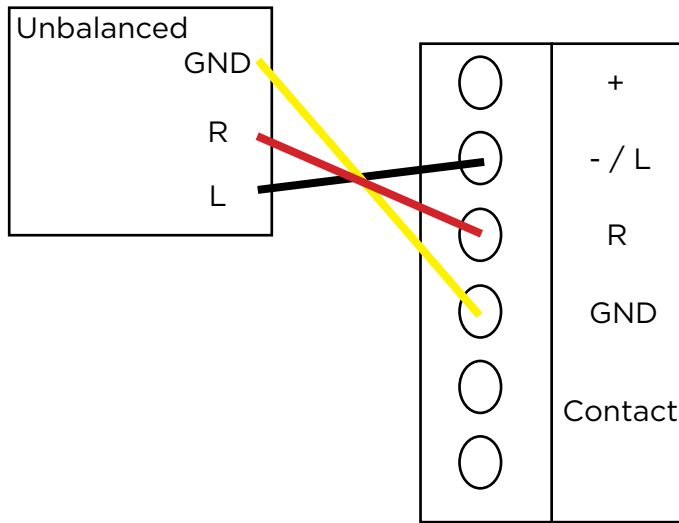


Qt 200 / Qt 600

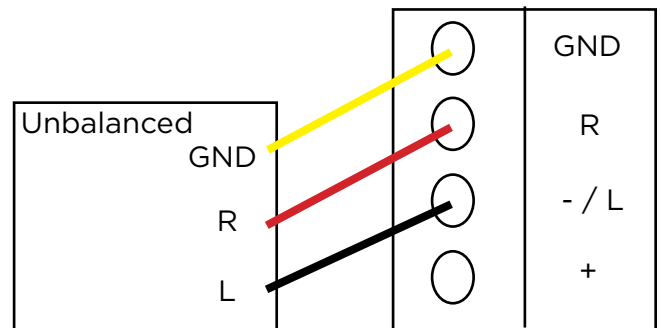


B. Stereo Signals:

Connect the corresponding signal wires to the "L" and "R." Connect the ground wire to "GND."
Qt 100



Qt 200 / Qt 600



Trouble Shooting

If no sound is distributed from the connected paging controller or music player or if the volume is too low, complete the following steps:

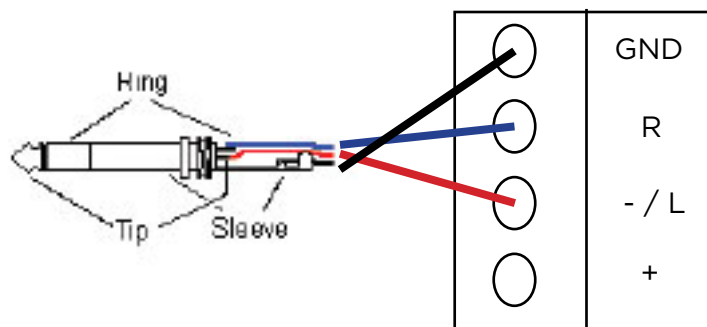
Step 1: Check the volume setting

Each Qt control module is preconfigured to mute any auxiliary input upon shipment. The volume level of each input is controlled by zone. Set the volume level of each input to 30 for each zone to test if the sound is being transmitted.

Step 2: Check the wires and auxiliary devices

If the volume is turned up on each zone and if the volume is still too low, you will need to isolate the problem to the cable or auxiliary device. First, check to ensure the volume on the audio source (ie. volume on an iPod) is turned to its midpoint. Then, check to ensure the cable, if used on a music device, was prepared correctly. The correct method for creating a cable is as follows:

- Take a 1/8" stereo cable or RCA cable that connects to the music source and strip back the main insulation 1/2" to expose the bare wire, including the red and white insulated wires.
- Separate the insulated conductors from the exposed outer strands. This is the ground
- The signal "-" corresponds to the right channel and the signal "+" corresponds to the left channel. The left and right signals correspond to the "L" and "R" ports on the control module.



Important Note on Paging Signal

It is important to pay attention to the control module's audio input requirements when implementing paging with your sound masking system. All Qt control modules require a dry, line-level signal from the paging source. The specification for a Nominal U.S. pro audio line level signal is: +4 dBu, 1.228 (Vrms), 1.737 (Vpk). However Qt control modules can handle signals that are from ½ to 2 times U.S. pro audio line levels. "Dry" emphasizes that the module's paging inputs are not telephone interfaces and must never see dial tone, ringing voltage, battery current, etc. This means that a typical FXO/FXS output is NOT directly compatible and requires use of a third party paging controller.