

Technical Notes

SPA Amplifier Hook-Up

Input Connections

NOTE: The following instructions detail how to connect to the inputs of channels 1 and 2. The SPA4-60, a four-channel amplifier, has another two inputs, channels 3 and 4; the same techniques apply. Connect them as necessary.

1

Stereo: Connecting balanced, shielded audio cables

Connect the + and - conductors to their respective pins and the shield to the ground pin in the middle.

Balanced interconnections are by far the best way to avoid picking up noise, even over long cable runs.

2

Stereo: Connecting unbalanced, audio cables

Connect the center conductor to the + input terminal and the cable shield to the - one.

Add a short jumper between the - terminal and the ground terminal, in the middle. **NOTE:** If a ground loop occurs, it is OK to omit this jumper.

3

Parallel: Connecting a balanced, shielded audio cable

Connect the + and - conductors to their respective pins on one of the inputs and the shield to the ground pin in the middle. From one input to the other, attach short jumper wires from + to + and from - to -.

This is suitable for running two amp channels from one signal or for bridged mono operation.

4

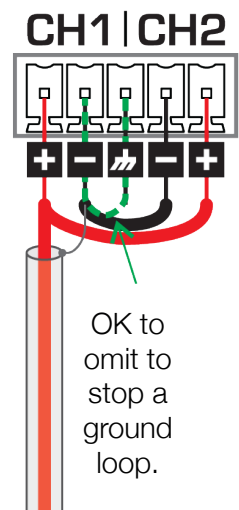
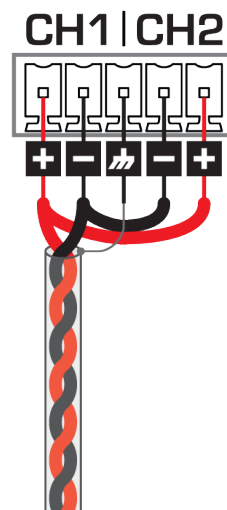
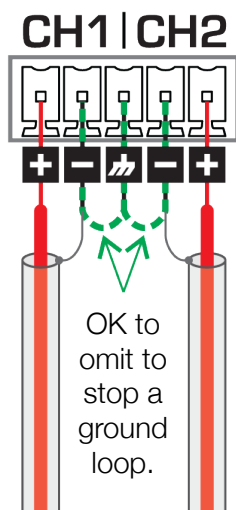
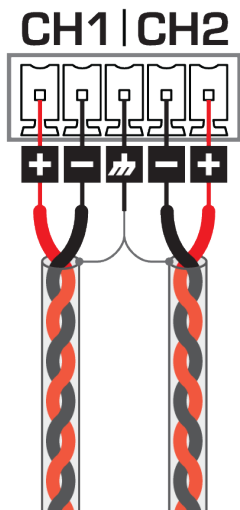
Parallel: Connecting an unbalanced, audio cables

On one input, connect the center conductor to the + input terminal and the cable shield to the - one.

Add a short jumper between the - terminal and the ground terminal, in the middle. **NOTE:** If a ground loop occurs, it is OK to omit this jumper.

From one input to the other, also attach short jumper wires from + to + and from - to -.

This is suitable for running two amp channels from one signal or for bridged mono operation.



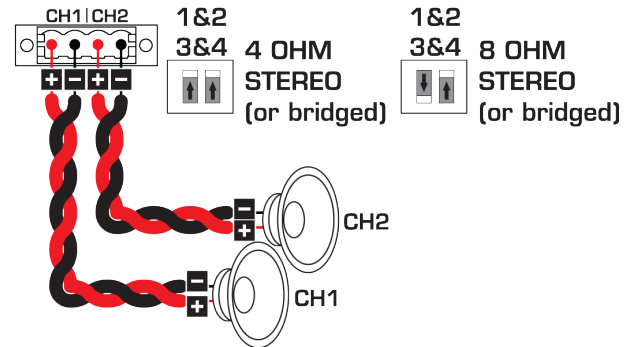
Output Connections

NOTE: The following instructions show how to hook up the outputs of the SPA2-60 (two channels) and SPA4-60 (four channels) amplifiers. Channels 3 and 4 of the SPA4-60 function in the same way as channels 1 and 2.

1 Stereo or Parallel Output

Connect + and - terminals to the corresponding terminals of the loudspeaker or loudspeakers.

Set the pair of configuration switches to 8 ohm stereo for 8-ohm loads, or 4 ohm stereo for 4-ohm loads.

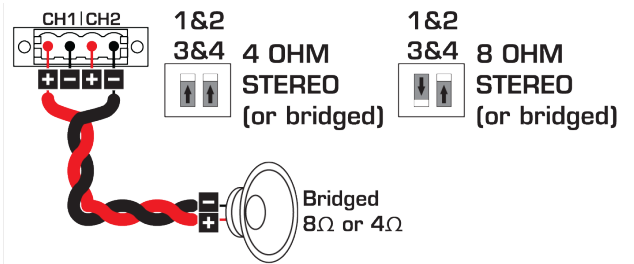


2 Bridged Output

With the SPA amplifiers, the channels are configured so that the channels of each pair operate in opposite polarity. Therefore, to bridge a channel pair, put the same signal into both channels—use parallel input configuration 3 or 4, depending on the type of input signal wiring. Connect the loudspeaker cabling across channel 1 + and channel 2 -, as shown.

Set the pair of configuration switches to 8 ohm stereo for an 8-ohm load, or 4 ohm stereo for a 4-ohm load.

Be careful to not allow either wire in each loudspeaker cable to short to ground.



3 70V or 100V Output

To drive a 70V or 100V distributed line, connect input to channel 1 or 3 and connect the outputs on the channel pair as you would for bridged mono, but set the pair of configuration switches for 70V or 100V operation as shown. Note that this configuration also engages an 80 Hz high-pass filter that attenuates bass frequencies, to reduce the risk of saturating the loudspeaker transformers.

Be careful to not allow either wire in the loudspeaker cable to short to ground.

