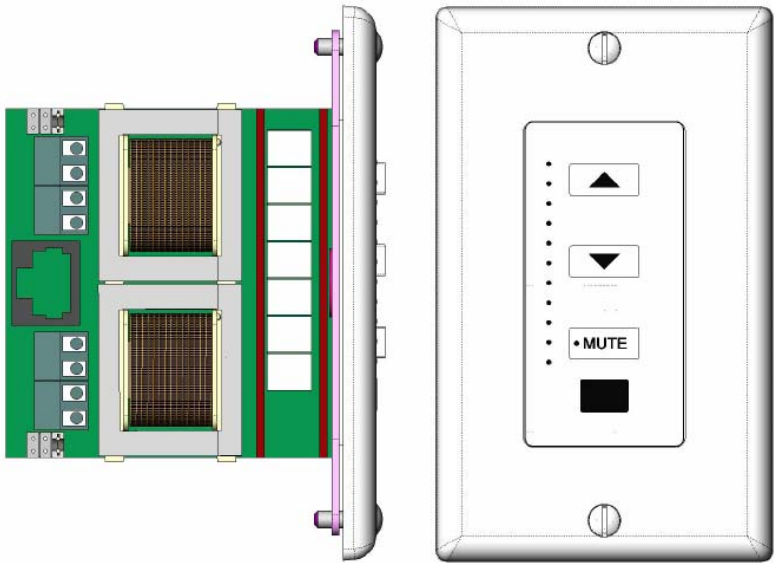


INSTALLATION INSTRUCTIONS

XVCE100IR

Volume Control, Electronic, 100W, IR



Installation Instructions

XVCE100IR Volume Control

The XVCE100IR is a volume control that provides the touch and feel of an electronic device. With a high-value appeal, no mechanical rotating or sliding parts are used in this high-power volume control design. The XVCE100IR is rated to 100 Watts and provides 12 steps of volume control. Also featured is a built-in IR eye and “mute” button. The XVCE100IR comes with mounting screws and a Decora[®] style insert that can be used with the popular Decora[®] faceplate.

Features and Benefits

- Power Handling: 100 W/channel RMS
- Frequency Response: 20Hz to 20kHz \pm 0.5 dB
- THD+N: < 1%
- Impedance Settings: 1X / 2X / 4X
- Minimum Speaker Load: 4 Ohms
- Override Current Draw: 0.75mA (logic only)
- Sense Current Draw: 25mA
- Maximum Current Draw: 40mA
- Operating Voltage: 12 Volts DC
- Sense Voltage: 9-12 Volts DC
- Override Voltage: 9-12 Volts DC
- Mounting: Minimum 18 cu. in. J-box or Mud Ring.

Note: Be sure to check fit before choosing J-boxes!

Installation, Notes, and Caution

You will need at the very least, a 1/8" slotted screwdriver, a 1/4" slotted screwdriver, wire cutters and wire strippers.

The recommended speaker wire to be used is 16-gauge stranded copper speaker wire. For runs longer than 100 feet, we recommend 14-gauge stranded copper speaker wire. Never use solid-core wire such as aluminum or Romex wire.

Most installations in the United States require a special fire rated wire (CL-2 or CL-3) for speaker wire installed within a wall. Consult your local building codes to find out what kind of wire is required.

Be sure to observe proper polarity when connecting a system. The positive terminals should always be connected to the positive wire. The negative terminals should always be connected to the negative wire. Failure to do so will result in poor phasing and possible system malfunctions.

Some areas allow the installation of the volume control to be placed in the same junction box as a high voltage connection (120VAC) and divided by a low-voltage partition. This is not recommended as the speaker wires may pick up interference from the high voltage (120VAC) power lines. Again, consult your local building codes to verify the proper way to install the product.

Impedance Jumper Settings for Identical Impedance

How to use the impedance jumper setting chart:

- 1) Determine the minimum amplifier impedance (typically either 4- or 8-Ohm). This information can usually be found next to the speaker outputs located on the receiver or amplifier. If in doubt, consult the receiver and/or amplifier instruction manual.
- 2) Next, determine the impedance of a single speaker that will be used. Use the left-most column.
- 3) Move to the right of the chart and find the number of speaker pairs that you plan to connect to the volume control.
- 4) Finally, move up the column to the very top row. This row will provide the jumper setting solution. Change the jumper on the volume control to complete the impedance jumper setting procedure. (Factory setting is X4)

		Jumper Settings		
		x1	x2	x4
Speaker Impedance	8 Ohm	1 PAIR	2 PAIRS	4 PAIRS
	6 Ohm	-	1 PAIR	2 PAIRS
	4 Ohm	-	1 PAIR	2 PAIRS

CHART A: 8 Ohm Minimum Amplifier

		Jumper Settings		
		x1	x2	x4
Speaker Impedance	8 Ohm	1 PAIR	4 PAIRS	8 PAIRS
	6 Ohm	1 PAIR	2 PAIRS	4 PAIRS
	4 Ohm	1 PAIR	2 PAIRS	4 PAIRS

CHART B: 4 Ohm Minimum Amplifier

Basic Connection

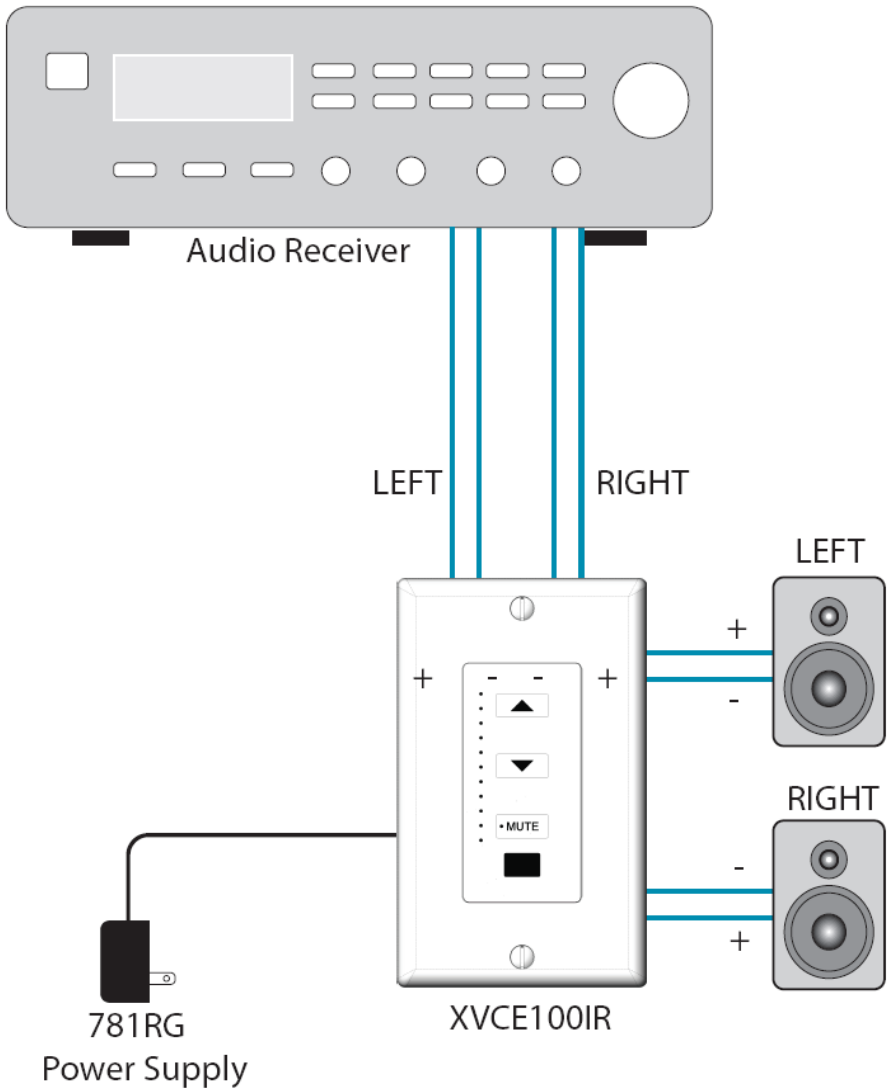


FIGURE 1

FIGURE 1 shows the most basic connection. A power supply must be connected to the XVCE100IR. The credit card remote (included) can still be used. However, no IR bus is established to control source components.

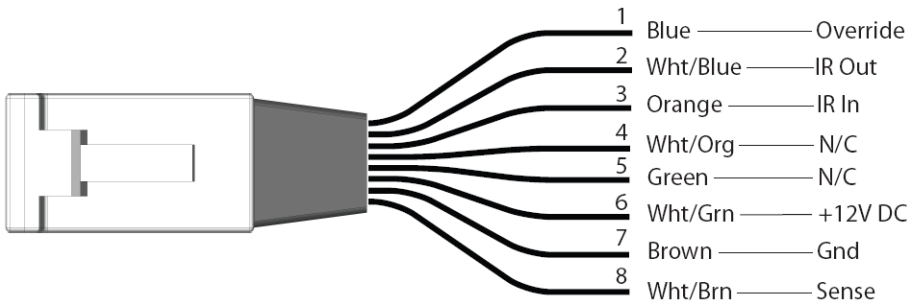
The 781RG Power Supply should be connected to the XVCE100IR Volume Control as follows.

XVCE100IR RJ45	781RG POWER SUPPLY
PIN 6 (White/Green)	+12VDC
PIN 8 (Brown)	GROUND

Installation Tip – Setting the Volume

- 1) Set your receiver and/or amplifier to the lowest possible volume setting.
- 2) Turn the XVCE100IR volume control to maximum volume (press up arrow).
- 3) Turn up the receiver and/or amplifier volume setting until you reach the maximum listening level desired.
- 4) Finally, lower the XVCE100IR volume control level (press down arrow). Volume setting is now complete.

RJ45 Connections



IR System Connection

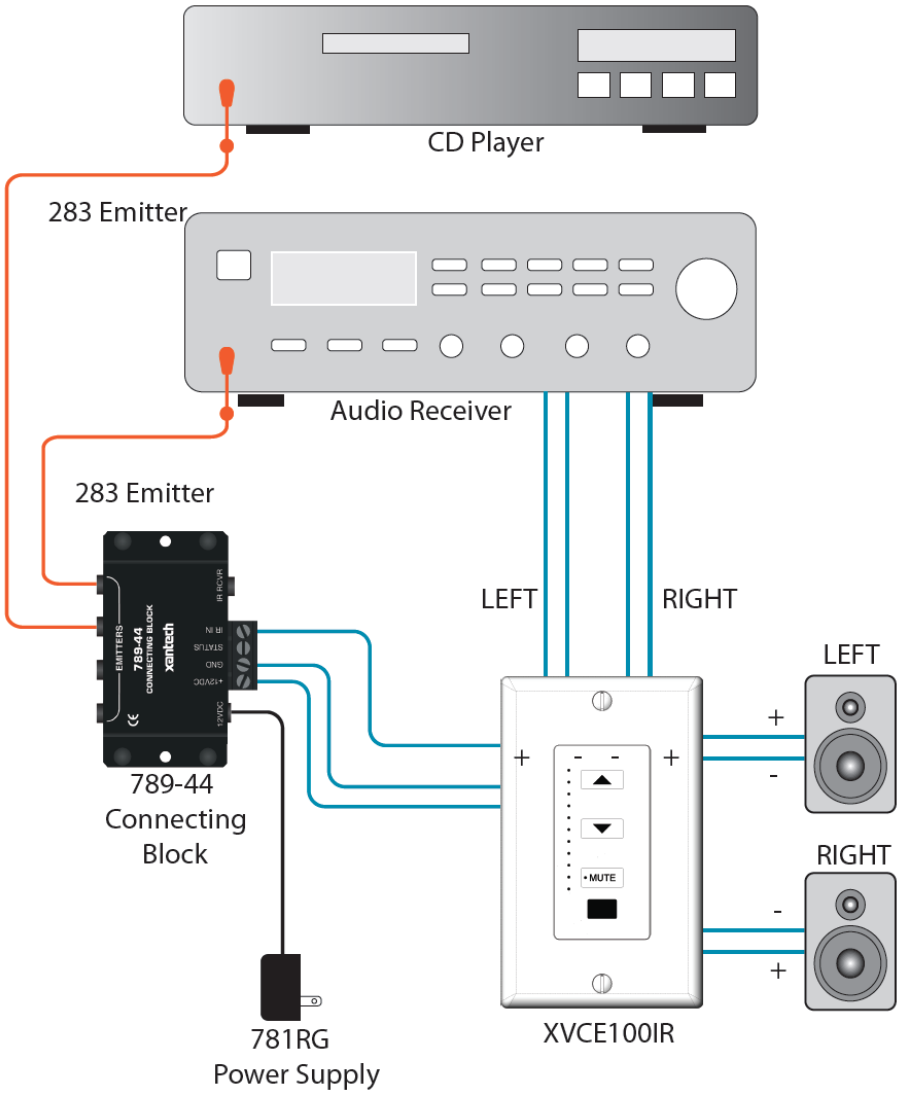
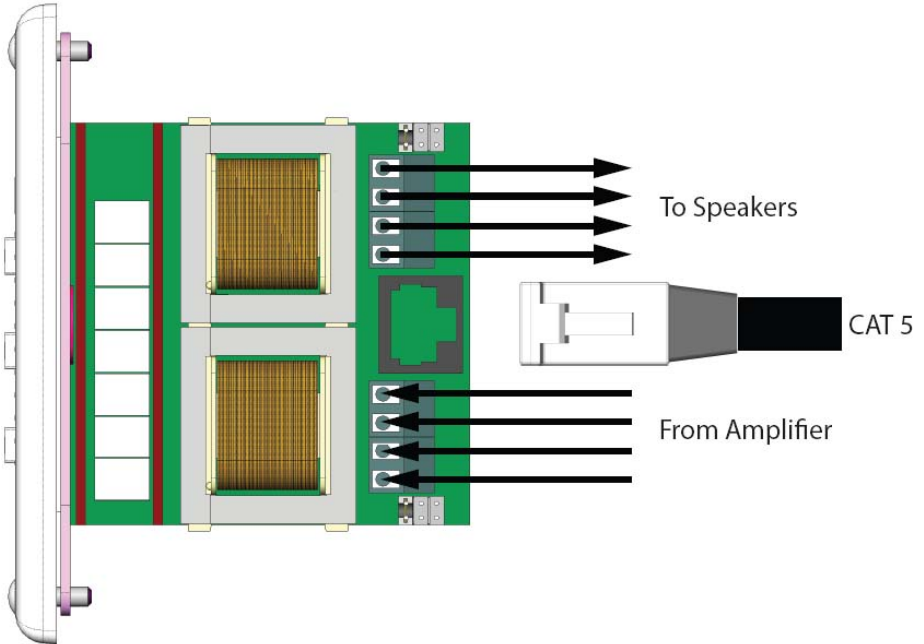


FIGURE 2

FIGURE 2 shows a more advanced connection. In this application, an IR bus is established. Now almost any remote control can be directed at the XVCE100IR to control the source components.

XVCE100IR RJ45	789-44 Connecting Block
PIN 6 (White/Green)	+12VDC
PIN 8 (Brown)	GROUND
PIN 3 (Orange)	IR
PIN 2 (White/Blue)	IR

Speaker Connections



Other Connections

Override: Allows Page/Doorbell signals to override the volume setting in the XVCE100IR. A HIGH signal will place the XVCE100IR into a preset volume level. To preset the volume level, find the desirable volume level with the up and down buttons. Press and hold the MUTE button. While holding down the MUTE button, press and hold the VOLUME UP button. When the POWER SENSE LED starts to blink, the override level is set.

Sense: When no voltage is found on the sense line, the XVCE100IR will be in MUTE condition upon power up. Pressing any button will take the XVCE100IR out of MUTE condition.



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Installation Instructions, XVCE100IR

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