OWNER'S MANUAL

VSL60-IR

Slide Volume Control with Built-In IR Receiver

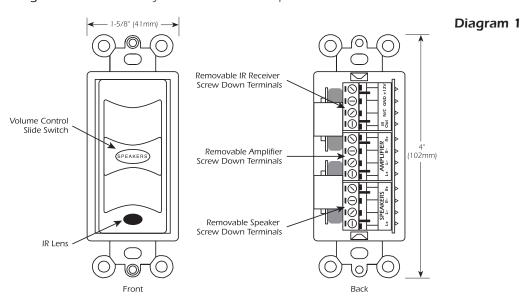
INTRODUCTION

The SpeakerCraft VSL60-IR is a 60 watt wall mounted stereo volume control, which connects between the speaker level output of an amplifier, receiver or speaker selector and a pair of speakers.

The VSL60-IR also features a built-in IR receiver, which can be integrated with SpeakerCraft's SmartPath IR System. Among its unique features is an exclusive Ambient Noise Suppression (ANS) system. The ANS acts to push down IRI, CFL, EMI, or ESI noise sources so that stronger signals from IR remotes have adequate margin for command of the controlled component.

NOTE: The built-in IR Receiver controls only the IR system components in the SmartPath system; it does not control the volume of the VSL60-IR itself.

Please refer to Diagram 1 to familiarize yourself with the components of the VSL60-IR.



VOLUME CONTROL PLACEMENT

When deciding where the volume control will be mounted into the wall, consider the various ways it will be used. The most important consideration will be to provide a direct, unobstructed, line of sight path between the user's remote in the listening area and the IR lens on the VSL60-IR. Other considerations would be the primary listening area and the ease of running the wire to your chosen location are the important things to keep in mind. The most common locations to mount volume controls are by the door as you walk into the room, next to existing wall fixtures, or in the area that you will be listening to music. If you do not understand any part of these instructions, please contact your SpeakerCraft dealer. Improper wiring could cause damage to your audio system.

Do not put the volume control into the same box as a 110V AC circuit. (i.e. light switch, electrical outlet, etc.). Speaker wires can act as an "antenna" for electrical noise. Locating speaker wires too close to a light switch or dimmer may cause a buzzing or popping sound to be heard through the speakers. If you must locate the VSL60-IR near electrical devices, use a separate electrical box.

Once a location has been chosen, you may install the volume control after you have first installed a standard single gang plaster ring, or a single gang electrical box (light switch type).

WIRING THE SPEAKERS AND AMPLIFIER/RECEIVER

NOTE: The sliding switch is shipped all the way down, in the "off" position. If you have changed this, return the slider to the "off" position before starting the installation.

CAUTION: Please make sure your amplifier or receiver is off before proceeding.

- 1. Connect the amplifier's or receiver's left speaker output to the left **Amplifier** terminals on the VSL60-IR. Please observe proper polarity of the connections (+ amplifier to + input on the VSL60-IR).
- 2. Repeat step 1 for the right amplifier/receiver connection.
- 3. Connect the wires from the left speaker to the left **Speaker** terminals on the VSL60-IR. Check proper polarity of wires for correct speaker phase (+ speaker to + output on the VSL60-IR).
- 4. Repeat step 3 for the right speaker connection.

CAUTION: If the input and output connections are reversed, the minimum setting on the volume control would present a short across the amplifier or receiver output terminals. This may seriously damage your amplifier or receiver. Please double check steps 1 through 4. This volume control cannot be connected in series with another volume control.

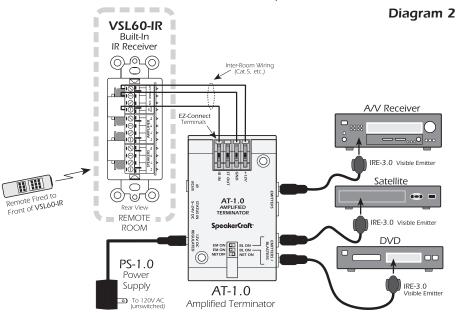
IR RECEIVER SYSTEM CONNECTIONS

The following are a few typical applications of the VSL60-IR in IR repeater systems.

A Basic System

Diagram 2 shows a basic installation, where components in an equipment area are controlled through a VSL60-IR from a remote room.

- 1. Pull 3 conductors of the inter-room wiring and connect them to the Removable IR Receiver Screw Down Terminals on the VSL60-IR as shown
- 2. Mount the VSL60-IR into the wall J-Box using the two screws provided
- 3. Connect the inter-room wiring from the VSL60-IR to the EZ-Connect Terminals on the SpeakerCraft AT-1.0 Amplified Terminator
- 4. Install and plug the Emitters into the AT-1.0 as shown
- 5. Set the DIP switches on the AT-1.0 to EM ON and NET ON or OFF
- 6. Plug in the Power Supply
- 7. The remote control, fired at the VSL60-IR, should now control the components



A Multi-Room System

Diagram 3 is an example of the VSL60-IR functioning in a multi-room system with other SpeakerCraft IR receivers in various rooms, plus a local IRC-3.0. These control the various components in the main room or equipment area.

- 1. Pull 4-conductor wire from each room (home runs) to the AT-1.0 Terminator near the controlled components. Note: Use 24 gauge unshielded solid or stranded copper wire up to 1200' (Cat. 5e ok), 22 gauge up to 2000', 20 gauge up to 3000' and 18 gauge up to 5300'. Total lengths include all wire runs from each room added together, not just the longest single run. If using shielded wire, these lengths would be reduced by approximately 30%. Also, to achieve operation with long lengths, the lower DIP switch on the AT-1.0 **must** be set to the NET ON position.
- 2. Connect IR receivers in each room to the 4-conductor home runs as shown, using the 4-conductor terminal strip supplied, as needed. Note that the VSL60-IR only requires 3-conductors.
- 3. Connect the home run wires to the correct terminals on the AT-1.0 EZ-Connect terminals.

 Note: You may use the SpeakerCraft CB Connecting Block (not illustrated, stock # ASM20200) to help connect the many paralleled home run wires to the AT-1.0 EZ-Connect Terminals.
- 4. Install and plug the various emitters into the AT-1.0, as shown.
- 5. Set the DIP switches to EM ON (or BL ON if using Blasters behind closet doors) and NET ON.
- 6. Plug the local IRC-3.0 IR Receiver into the IR RCVR jack.
- 7. Plug in the PS-1.0 12V DC Power Supply.
- 8. A remote control, fired at the IR receivers, should now control the components.

NOTE: Refer to the SpeakerCraft AT-1.0 Instructions for Power Supply considerations.

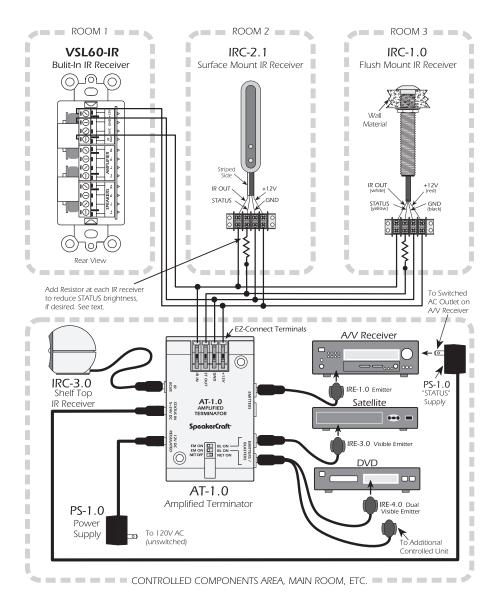


Diagram 3

STATUS Brightness

Diagram 3 also shows how an external resistor can be added to reduce the brightness of the Status LED's on SpeakerCraft IR Receivers to any desired level. Note that the VSL60-IR does not support Brightness.

In this example, a PS-1.0 12V DC Power Supply is used as the voltage source to indicate the ON/OFF status of an A/V Receiver.

Choose a resistor value that achieves the brightness you desire (about 2.2k to 12k, 1/8 W). Connect it in series with the STATUS lead on each IR receiver desired, as shown.

MOUNTING THE VSL60-IR

Once the VSL60-IR has been wired, it is ready to be mounted into the wall. Use the screws provided to hold the components in place.

VOLUME CONTROL SPECIFICATIONS

Power Rating: 60 Watts

Steps: 12 (make before break)

Frequency Response: 20Hz - 20kHz
 Total Attenuation: 42dB maximum

Removable Screw Down Terminals

Includes Decora* Style Insert Plate

Conventional J-Box mounting with the screws provided

■ Dimensions: H 4" (102mm) x W 1%" (41mm) x D 3%" (78mm)

IR RECEIVER SPECIFICATIONS

- Exclusive Ambient Noise Suppressor (ANS) system
- Requires Power Supply, Terminator Block, and Emitters
- IR Lens rejects visible light interference
- Crosshatch Shield (internal) inhibits EMI/ESI Interference
- Power: 12V DC @ 6 mA supplied from connected Terminator
- Carrier Frequency Acceptance Range: 28 90 kHz
- Control Range: Up to 35 feet, depending on remote strength and ambient noise conditions
- Control Angle: ±50° off axis

SpeakerCraft offers a variety of accessories to make your installation of this and other SpeakerCraft products easy, economical, and professional. Contact your authorized SpeakerCraft Dealer for more information.

Should you have any questions regarding this, or any other SpeakerCraft product, please call our toll-free service hotline at 1-800-448-0976. We are available to assist you every weekday, except holidays, between the hours of 7:00 a.m. and 5:00 p.m. PST.

LIMITED 5-YEAR WARRANTY

SpeakerCraft Inc. warrants to the original retail purchaser only that this SpeakerCraft product will be free from defects in materials and workmanship for a period of five years, provided the speaker was purchased from a SpeakerCraft Authorized Dealer.

Defective products must be shipped, together with proof of purchase, prepaid insured to the SpeakerCraft Authorized Dealer from whom they were purchased, or to the SpeakerCraft factory at the address listed on this installation instruction manual. Freight collect shipments will be refused. It is preferable to ship this product in the original shipping container to lessen the chance of transit damage. In any case, the risk or loss or damage in transit is to be borne by the purchaser. If, upon examination at the Factory or SpeakerCraft Authorized Dealer, it is determined that the unit was defective in materials or workmanship at any time during this warranty period, SpeakerCraft or the SpeakerCraft Authorized Dealer will, at its option, replace this product at no additional charge, except as set forth below. If this model is no longer available and cannot be repaired effectively, SpeakerCraft at its sole option, may replace the unit with a current model of equal or greater value. In some cases where a new model is substituted, a modification to the mounting surface may be required. If mounting surface modification is required, SpeakerCraft assumes no responsibility or liability for such modification. All replaced parts and product become the property of SpeakerCraft Inc. Products replaced or repaired under this warranty will be returned to the original retail purchaser, within a reasonable time, freight prepaid.

This warranty does not include service or parts to repair damage caused by accident, disaster, misuse, abuse, negligence, inadequate packing or shipping procedures, commercial use, voltage inputs in excess of the rated maximum of the unit, or service, repair or modification of the product which has not been authorized or approved by SpeakerCraft. This warranty also excludes normal cosmetic deterioration caused by environmental conditions. This warranty will be void if the serial number on the product has been removed, tampered with or defaced.

This warranty is in lieu of all other expressed warranties. If the product is defective in materials or workmanship as warranted above, the purchaser's sole remedy shall be repair or replacement as provided above. In no event will SpeakerCraft be liable for any incidental or consequential damages arising out of the use or inability to use the product, even if SpeakerCraft Inc. or a SpeakerCraft Inc. Authorized Dealer has been advised of the possibility of such damages, or for any claim by any other party. Some states do not allow the exclusion or limitation of consequential damages, so the above limitation and exclusion may not apply.

All implied warranties on the product are limited to the duration of this expressed warranty. Some states do not allow limitation on the length of an implied Warranty. If the original retail purchaser resides in such a state, this limitation does not apply.



^{*} Decora is a registered trademark of The Leviton Manufacturing Co., Inc.