

## VC60SIR

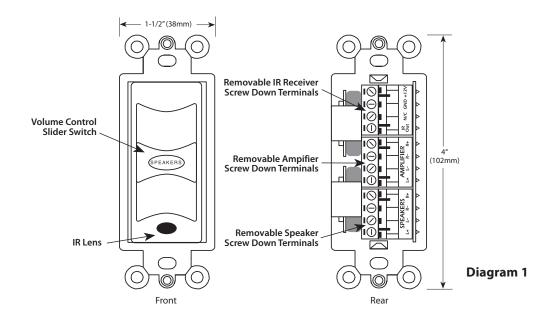
# Slider Volume Control with Built-In IR Receiver

#### INTRODUCTION

The VC60SIR is a 60 watt flush-mount slider volume control with IR Receiver, which connects between a pair of speakers and the speaker level output of an amplifier, receiver or speaker selector. It offers real convenience for the homeowner, since adjustments can be made the moment the listener enters the room. The built-in IR Receiver provides total access to the audio control system. The IR Receiver picks up a command signal from the operators hand-held remote control unit and sends it to the IR Hub, which attaches to the audio equipment.

**NOTE:** The built-in IR Receiver controls only the IR system components in the Infrared system; it does not control the volume of the VC60SIR itself.

Please refer to **Diagram 1** to familiarize yourself with the components of the VC60SIR.



#### **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 VC60SIR. 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 Proficient 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 VC60SIR near electrical devices, use a separate electrical box.

Once the location has been determined, install a standard single gang plaster ring, or a single gang electrical box (light switch type) before installing the VC60SIR.

### 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.

- Connect the amplifier's or receiver's left speaker output to the left Amplifier terminals on the VC60SIR. Please observe proper polarity of the connections (+ amplifier to + input on the VC60SIR).
- 2. Repeat step 1 for the right amplifier/receiver connection.
- Connect the wires from the left speaker to the left Speaker terminals on the VC60SIR. Check proper polarity of wires for correct speaker phase (+ speaker to + output on the VC60SIR).
- 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 - 4. This volume control cannot be connected in series with another volume control.

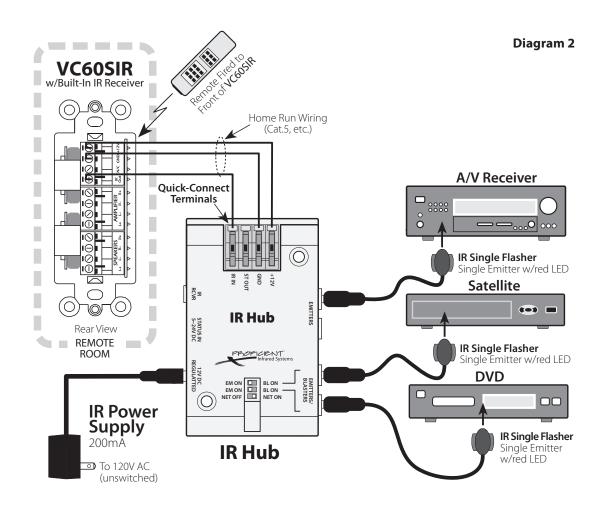
#### IR RECEIVER SYSTEM CONNECTIONS

The following are a few typical applications of the VC60SIR in IR repeater systems:

#### **A Basic System**

**Diagram 2** shows a basic installation, where components in an equipment area are controlled through a VC60SIR from a remote room.

- Pull 4-conductor home run wiring and connect them to the Removable IR Receiver Screw Down Terminals on the VC60SIR as shown.
- 2. Mount the VC60SIR into the wall J-Box using the two screws provided.
- 3. Connect the home run wiring from the VC60SIR to the Quick-Connect Terminals on the Proficient IR Hub.
- 4. Install and plug the Emitters into the IR Hub as shown
- 5. Set the DIP switches on the IR Hub to EM ON and NET ON or OFF.
- 6. Plug in the Power Supply.
- 7. The remote control, fired at the VC60SIR, should now control the components.



#### A Multi-Room System

**Diagram 3** is an example of the VC60SIR functioning in a multi-room system with other Proficient IR receivers in various rooms, plus a local IR Shelf Top Receiver. These control the various components in the main room or equipment area.

1. Pull 4-conductor home run wiring from each room to the IR Hub near the controlled components.

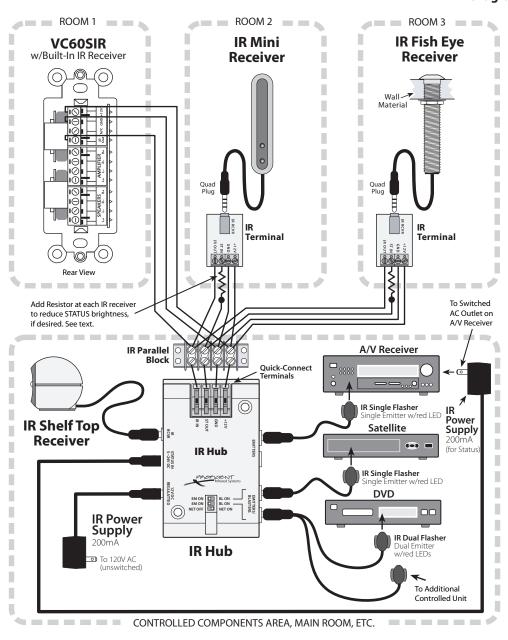
**Note:** Use 24 gauge unshielded solid or stranded copper wire up to 1200' (Cat. 5e ok), 22 gauge up to 2000', 20 gauge up to 3000' and 18 gauge up to 5300'. Total lengths include all wire runs from each room added together, not just the longest single run. If using shielded wire, these lengths would be reduced by approximately 30%. Also, to achieve operation with long lengths, the lower DIP switch on the IR Hub *must* be set to the NET ON position.

 Connect IR receivers in each room to the 4-conductor home runs as shown, using the 4-conductor terminal strip supplied, as needed. Note: the VC60SIR only requires 3-conductors.

- 3. Connect the home run wires to the correct Quick-Connect Terminals on the IR Hub.
- 4. Install and plug the various emitters into the IR Hub, 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 IR Shelf Top Receiver into the IR RCVR jack.
- 7. Plug in the IR Power Supply-200mA.
- 8. A remote control, fired at the IR receivers, should now control the components.

**NOTE:** Refer to the Proficient IR Hub manual 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 Proficient IR Receivers to any desired level. **Note:** the VC60SIR does not support Brightness.

In this example, an IR Power Supply–200mA 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 VC60SIR**

Once the VC60SIR 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 Per Channel:
  - 60 Watts Continuous Power
  - 120 Watts Music Power
- Steps: 12 make before break contacts
- Frequency Response: 20Hz 20kHz
- Total Attenuation: 42dB maximum
- Removable Screw Down Terminals
- Includes Decorator Style Insert Plate
- · Conventional J-Box mounting with the screws provided
- Dimensions: H 4" (102mm) x W 15/8" (41mm) x D 31/16" (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

#### LIMITED FIVE-YEAR WARRANTY

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

Defective products must be shipped, prepaid and insured, together with proof of purchase, to the Proficient Audio Systems Authorized Dealer from whom they were purchased, or to Proficient Audio Systems 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 of loss or damage in transit is to be borne by the purchaser.

If, upon examination at the Factory or Proficient Audio Systems Authorized Dealer, it is determined that the unit was defective in materials or workmanship at any time during this warranty period, Proficient Audio Systems or the Proficient Audio Systems Authorized Dealer will, at its option, repair or replace this product at no additional charge, except as set forth below. If this model is no longer available and can not be repaired effectively, Proficient Audio Systems, 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, Proficient Audio Systems assumes no responsibility or liability for such modification. All replaced parts and product become the property of Proficient Audio Systems. 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 Proficient Audio Systems. 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 Proficient Audio Systems be liable for any incidental or consequential damages arising out of the use or inability to use the product, even if Proficient Audio Systems. or a Proficient Audio Systems 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.

For technical inquiries please call 800.448.0876 or email us at techsupport@proficientaudio.com. We are available to assist you every weekday, except holidays, between the hours of 7:00 a.m. and 5:00 p.m. PST.