

Operation

1. Make sure the amplifier or receiver power is OFF and set the volume to minimum.
2. Set the VCS-2S volume to maximum (fully clockwise).
3. If you are using a Niles speaker selection system, locate the ON/OFF button which corresponds to the speaker pair you wish to play. Set it to the ON position.
4. Turn on the amplifier or receiver and select a source, such as the tuner or CD player.
5. Slowly turn up the amplifier or receiver volume and set it to a comfortable (not maximum) listening level. Be careful not to overdrive or "clip" your amplifier. If the sound becomes muddy or distorted, you have reached the limit of your amplifier's volume capability and should quickly reduce the volume to avoid damaging your speakers.
6. Adjust the volume of the speakers to the desired listening level using the VCS-2S. If all the speaker pairs in your system are equipped with Niles volume controls, you can leave the amplifier or receiver volume set at one position and use the Niles controls exclusively.
7. You can turn off the speakers by turning the knob on the VCS-2S fully counter-clockwise, or by pressing the ON/OFF button on your speaker selector.

Specifications

Audio Power Handling

60 Watts/channel peak music power

Mounting

In-wall, fits into most 18 cu. inch single-gang P-ring or electrical boxes at least 2-9/16" deep

Wiring Requirements

Individual runs of 2-conductor speaker wire, 14-22 gauge

Unit Dimensions

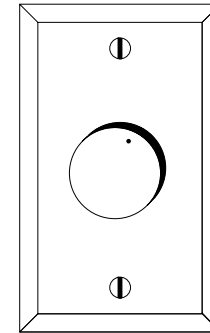
2-3/4" wide x 4-1/2" high

Depth Behind Plate

2-7/8"



www.nilesaudio.com



VCS-2S

PREMIUM STEREO VOLUME CONTROL

Introduction

The VCS-2S is a wall-mount, standard-style volume control. It connects between the speaker-level output of an amplifier, speaker selector, etc. and a pair of speakers.

The VCS-2S adjusts the volume of speakers connected to it by attenuating the amplifier signal. Niles volume controls use auto-formers instead of L-pads for the volume controlling element. This assures minimal internal power dissipation with virtually no power wasted as heat.

Features and Benefits

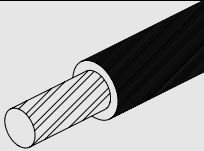
- The VCS-2S uses a 12-position control, which is superior to 10-position designs. You get a broader range of adjustment—there are ten steps of attenuation instead of eight. Steps 11-6 attenuate -3 dB per step; steps 5-2 are -6 dB per step. Step 12 is "full-on" and step 1 is "full-off"
- Greater dynamic range—you get 42 dB of total attenuation instead of the typical 20 or 30 dB.
- POP-FREE switching between all steps.
- 100% tested, electronically and acoustically, for frequency response, distortion and power handling. Printed circuit board construction uses no hand wiring, assuring high reliability. Frequency response: 20 Hz to 20 KHz \pm 1.2 dB.
- Isolated left and right channel grounds make it safe for use with any amplifier.
- May be used with 4, 6, or 8 Ohm speaker systems.
- Power handling: 60 watts/channel peak music power.
- Available colors: White, Bone, Almond, or Black.
- Ten year parts and labor warranty.
- Proudly made in the USA.



TOOLS REQUIRED

- 1/8" Standard Slotted Screwdriver
- 1/4" Standard Slotted Screwdriver
- Wire Stripper

"TECH TIP"



Wire size is expressed by its AWG (American Wire Gauge) number. The lower the AWG number, the larger the wire, i.e., 12 AWG wire is physically larger than 14 AWG.

Installation Considerations

P-Rings and Electrical Boxes

The mounting depth of the VCS-2S is 2-9/16". When installed, the unit extends 2-1/16" behind the sheetrock wall (assuming 1/2" sheetrock). For installation, you must choose between a standard light switch plaster ring (p-ring) or a standard 18 cu. in. (or larger) electrical box. Suitable p-rings and electrical boxes are available from your Niles dealer or local electrical supply company. Using the p-ring is best because it gives you unobstructed access to the full depth of the wall. In some instances, the use of a p-ring may be inappropriate, such as in a retrofit (existing) installation, or when building codes require that wall devices be enclosed in electrical boxes. Contact your local building code and inspection department if unsure.

Type of Speaker Wire

For most applications, we recommend you use 16 or 18 gauge, stranded copper speaker wire for the VCS-2S connections. For wiring runs longer than 80 feet, 14 gauge wire is recommended. Using speaker wire larger than 14 gauge for the VCS-2S connections is not recommended—the wire may not fit into the connectors. Never use solid-core, aluminum, or "Romex" type wire with the VCS-2S. When running speaker wires inside walls, most states and municipalities in the U.S. specify that you must use a special type of speaker wire. Usually, the requirement is that the wire has a specific "CL" fire rating, such as "CL-2" or "CL-3." Consult your Niles dealer, building contractor, or local building and inspection department if unsure about which type of wire is best for your application.

VCS-2S Mounting Location

Convenient mounting locations for the VCS-2S are near entryways or exits, near a desk, at your bedside, close to a telephone, or near other wall controls.

DO NOT INSTALL THE VCS-2S INTO ELECTRICAL BOXES WITH 110 VOLT DEVICES

Some states or municipalities allow devices such as the VCS-2S to be installed into the same electrical box as 110 volt devices, provided a "low-voltage partition" is used between the devices. We do not recommend this. Speaker wires can act as an "antenna" for electrical noise. Locating speaker wires too close to a light switch or dimmer may cause a "popping" or "buzzing" sound to be heard through the speakers. If you must locate the VCS-2S near electrical devices, install it in a separate metal electrical box, ground the box to the electrical system ground, and route the speaker wires several feet away from the electrical wiring.

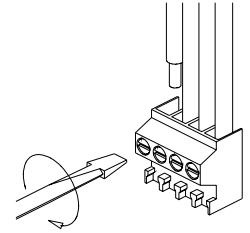
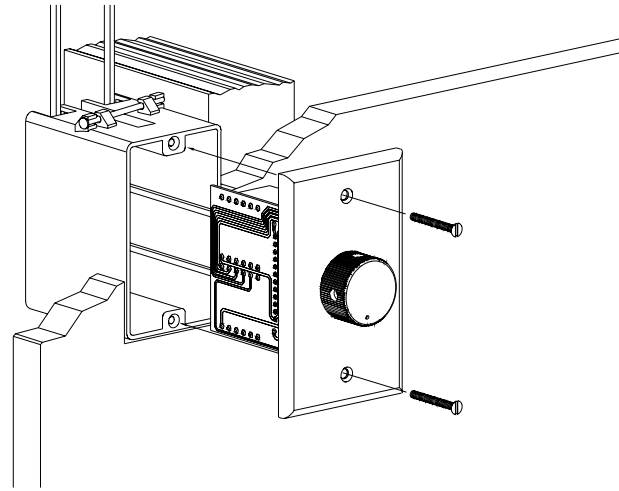


Figure 3
Wiring the connectors

Installation

If you are installing the VCS-2S into an existing wall, take time to consider any possible obstructions which may be hidden inside the wall, such as wood and metal studs; electrical, telephone or other types of wiring; plumbing; conduit; old wall safes; etc.

1. Install the electrical box or p-ring in the usual manner.
2. Run all the necessary wiring to the VCS-2S. Label the wires for future reference.
3. Make the connections to the VCS-2S. Locate the connectors for the VCS-2S (remove them if they are plugged in). Next, strip 1/4" of insulation from the end of each wire. Tightly twist the end of each wire until there are no frayed ends. Insert each wire into the appropriate hole on the removable connector blocks; secure the wiring to the connectors by tightening the small connector screws. Be certain that proper phasing is observed—connect the positive terminals on the VCS-2S to the positive terminals on the amplifier and speakers; the negative terminals on the VCS-2S to the negative terminals on the amplifier and speakers. (See **Figures 3 and 4**).
4. Plug the connectors into the VCS-2S as shown. (See **Figure 5**).

The inputs of the VCS-2S are the connector pins labeled "AMPLIFIER." The outputs are the connector pins labeled "SPEAKERS." Be sure not to reverse these connections or the VCS-2S will not function properly.

5. Secure the VCS-2S to the electrical box or p-ring. Insert the 1-1/4" long device screws into the round-shaped screw holes on the top and bottom of the VCS-2S front plate. Position the VCS-2S so that the screws are aligned with the threaded holes in the electrical box or p-ring. Tighten the screws using a standard slotted screwdriver.

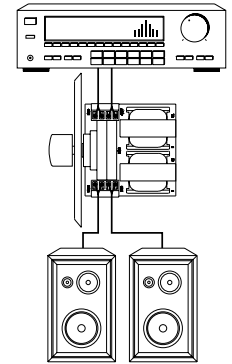


Figure 4
Wiring Diagram

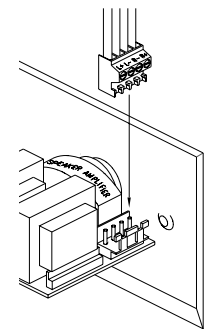


Figure 5
Installing the block