

## Room Placement & Mounting

Volume controls need to be easily accessible and convenient for the homeowner to use. A room's entryway near the light switch is a good place to install a volume control.

The VC-5A is designed to be mounted in-wall. This can be done using any standard electrical box or P-ring. For best appearance mount the VC-5A the same height as the home's in-wall lighting switches.

## Selectable Impedance Protection

The VC-5S is two volume controls in one. Make your choice with the VC-5S jumper settings.

Choose between a 4x impedance protected multi-room volume control that functions exactly the same as the VC-5A and a no impedance protection volume control that can typically drive up to two rooms with an inexpensive, low power amplifier.

Impedance protected volume controls generally require higher power amplifiers to reach the same volume levels as non-impedance protected volume controls.

The VC-5S allows you to start out with 1-2 rooms of audio and later, if desired, add more rooms with only a change in jumper positions, you will not out grow the VC-5S nor compromise on audio quality.

## Wiring Recommendations

Use good quality 16-12 AWG stranded copper speaker wire. Short runs (< 50 ft) can be 16 AWG and long runs (>100 ft) should be 12 AWG. For most runs under 100 feet 14 AWG is a very good choice that will keep losses low and help maintain good audio quality.

When putting audio wiring inside walls some area building codes specify the use of a fire rated wire such as CL-2 or CL-3. Check the local building code before installing in-wall wiring.

Never install low voltage devices, such as volume controls, inside electrical boxes containing 115-Vac wiring. Run audio wiring at least 1 foot away from 115-Vac lines and telephone lines, this can reduce noise interference. Most low voltage devices can be installed close together with no adverse effects.

Multiple volume controls can be installed using either home run wiring or daisy chain wiring. Home run wiring is generally preferred because it is more reliable, easier to troubleshoot, and easier to modify during system upgrades.

## 50 Watt Stereo Volume Control with Selectable Impedance Protection

Amplifier Minimum Load	8 Ohm Speakers	4 Ohm Speakers
8 Ohms	4 Pair	2 Pair
4 Ohms	8 Pair	4 Pair
2 Ohms	16 Pair	8 Pair
1 Ohms	32 Pair	16 Pair

Table 1. Maximum number of Speaker pairs allowed with jumpers set to **Automatic Impedance Protection** mode.

Amplifier Minimum Load	8 Ohm Speakers	4 Ohm Speakers
8 Ohms	1 Pair	0 Pair
4 Ohms	2 Pair	1 Pair
2 Ohms	4 Pair	2 Pair
1 Ohms	8 Pair	4 Pair

Table 2. Maximum number of Speakers Allowed with jumpers set to **No Impedance Protection** mode.

