



The Leader in Architectural Audio™

PN.33-1324 7.00  
Patent Pending

# INSTALLATION INSTRUCTIONS

## AVC100R / AVC100SL / AVCDWP2 AVC AUDIO DISTRIBUTION SYSTEM

### INTRODUCTION

Thank you for purchasing an Amplified Volume Control (AVC) product from Sonance. When properly installed in a system, these products will provide you with years of entertainment pleasure. To obtain the full potential of your new purchase, please read all instructions before starting the installation. If you do not have the necessary skills to install a unit yourself, please contact your authorized Sonance dealer for installation options. The AVC100R, AVC100SL and AVCDWP2 are UL Listed and meet CE requirements EN 60065, EN 55013, EN 50082.

### AVC PRODUCTS

The AVC system is a new, modular approach to amplifying and distributing audio for residential and commercial applications. Depending on installation requirements, your AVC system will be made up of the following products, as shown in Figure 1:

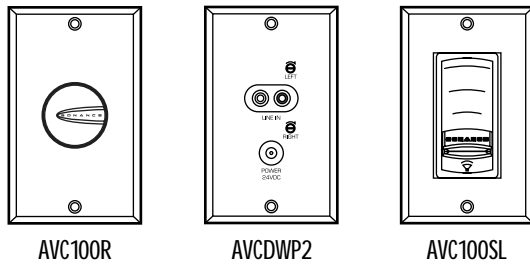


Figure 1 - AVC system products



**WARNING:** TO PREVENT THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

**CAUTION:** RISK OF ELECTRIC SHOCK - DO NOT OPEN

### AVC100R

The AVC100R is a rotary-knob Amplified Volume Control. It provides the equivalent of 30 watts of amplification at the head end of conventional audio system run over 100 feet of wire. The knob action continuously varies the volume of the internal amplifier from zero to maximum volume. The unit provides 4-conductor quick-disconnect terminals for input, a looping output, and connection to local speakers. The AVC100R fits into a standard single-gang plaster ring.

### AVCDWP2

The DWP2 is a Driver Wall Plate for audio distribution of a connected stereo source and routing of AVC power from a connected recommended power supply. The unit fits into a standard single-gang plaster ring. Three parallel four conductor outputs with quick disconnect terminals are provided. One DWP2 may be used with up to 100 AVC100R/SLs via standard 16/4 or 14/4 wire. The DWP2 also provides installer-adjustable gain controls for setting the maximum system volume level (see the detail in Figure 2 on the next page).

### AVC100SL

The AVC100SL is a slider-controlled Amplified Volume Control. It is identical in operation and specifications to the AVC100R, except a continuously-variable slider is provided in place of a rotary knob.

### Recommended Power Supply

Any UL Listed regulated switching power supply, input rated 90-240Vac, output rated 24Vdc, 2.5A with 2.1mm mini-plug and marked "Class 2" (see specifications on page 4).

### AVC SYSTEM INTERCONNECTION

The AVC system can be connected in any of the following ways:

- Daisy-chain (series) wiring
- Home-run (parallel) wiring
- Any combination of daisy-chain and home-run wiring

Study the examples in Figures 2 through 3 (on the next two pages) to learn how to interconnect systems using these wiring schemes.

*NOTE: Do not connect a signal power cable to the "SPEAKER" output connector on any AVC100R/SL. Doing so may damage the unit.*

### System Expansion

There is virtually no limit on how many AVC100R/SLs are interconnected in a system, as long as the following conditions are met:

1. One (1) recommended power supply +24 Vdc powers up to six (6) AVC100R/SLs. If additional AVC100R/SLs are required in the installation, connect one (1) recommended power supply for each additional group of six (6) AVC100R/SLs (see detail in Figure 2 on page 2).
2. One (1) AVCDWP2 Driver Wall Plate can drive a system of up to 100 AVC100R/SLs. Beyond that, you will need to divide the system so it is driven from two or more AVCDWP2s.

### Adjusting System Levels

The AVCDWP2 Driver Wall Plate includes two trim pots for individual adjustment of the system's left and right audio channels (see detail in Figure 2 on page 2). At the factory, both trim pots have been set for +10 dB gain on all three sets of outputs. However, the trim pots provide an adjustment range from OFF (full CCW) to +19 dB (full CW).

### Mono Operation

Each AVC100R or AVC100SL is preset at the factory for stereo operation. However, this can be easily changed to mono operation by moving an internal jumper (see detail in Figure 3 on page 3). In this mode, the blended mono signals are routed to both left and right outputs.

### Fuse Replacement

Each AVC100R/SL or AVCDWP2 is protected by an internal fuse (see detail in Figure 3 on page 3). For safety concerns, only replace a fuse with the same type and rating.

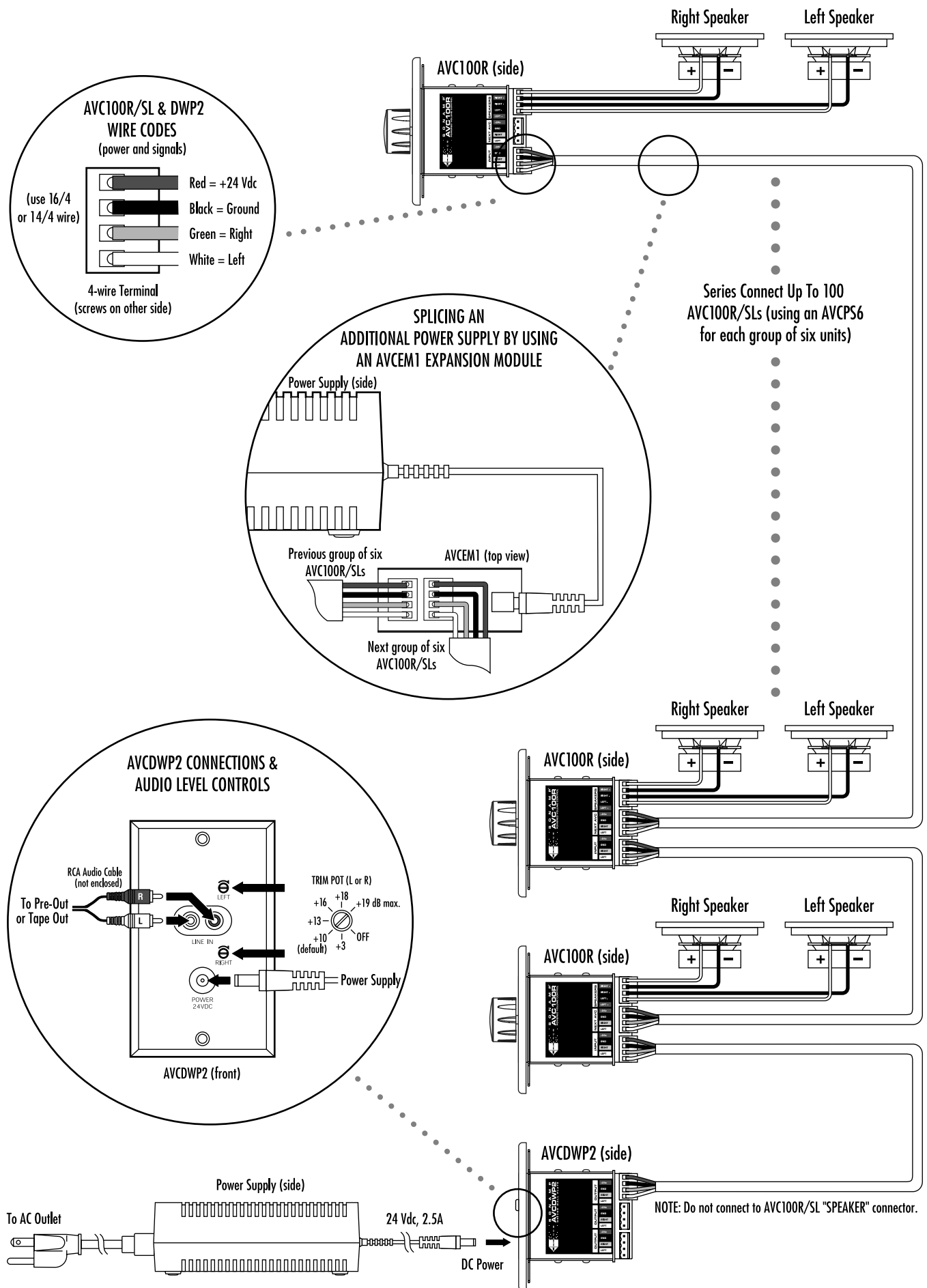


Figure 2 – Example of an AVC system with daisy-chain (series) wiring



## SPECIFICATIONS

### AVC100R/AVC100SL

DESCRIPTION:	Local, full-bandwidth, 2-channel distribution amplifier with rotary (AVC100R) or slider (AVC100SL) volume control; fits standard single-gang plaster ring.
POWER OUTPUT:	Continuously-variable from 0 to 7.5 watts (rms) per channel into a nominal 8-ohm load.
FREQUENCY RESPONSE:	20 Hz ~ 20 kHz
INPUT CONNECTIONS:	(4) Quick-Disconnects; Left, Right, GND, +24 Vdc.
LOOP CONNECTIONS:	(4) Quick-Disconnects; Left, Right, GND, +24 Vdc.
SPEAKER CONNECTIONS:	(4) Quick-Disconnects; Left +, Left -, Right +, and Right -. Load is 4 ohms per channel, minimum.
STEREO/MONO MODES:	Selectable via internal jumper.
FUSE:	Internal; type AGC, 1 A, 250 V.
DIMENSIONS:	4-3/32" H x 1-5/8" W x 4-1/4" D (overall) 2-3/4" H x 1-5/8" W x 3-3/8" D (in-wall)

### AVCDWP2

DESCRIPTION:	Stereo driver amplifier connects to hi-fi stereo source and up to 100 AVC100R/SLs; fits standard single-gang plaster ring.
INPUT CONNECTIONS:	(2) color-coded, stereo RCA jacks; 50 k $\Omega$ input impedance.
OUTPUT CONNECTIONS:	(3) sets of (4) Quick-Disconnects: Left, Right, GND, and +24 Vdc.
FREQUENCY RESPONSE:	20 Hz ~ 20 kHz
POWER CONNECTIONS:	Female, 2.1 mm, mini-plug connects to recommended power supply.
GAIN CONTROL:	(2) L/R trim pots provide +19 dB adjustment range.
FUSE:	Internal; type AGC, 0.5 A, 250 V.
DIMENSIONS:	4-3/32" H x 1-5/8" W x 3-5/8" D (overall) 2-3/4" H x 1-5/8" W x 3-3/8" D (in-wall)

### Minimum Recommended Power Supply Specifications

Description:	+24 Vdc, 2.5 A, voltage-regulated switching power supply with short-circuit protection; for use with up to six (6) AVC100R/SLs.
CURRENT DRAW:	1.5 A maximum at 50 watt rating
AC CONNECTIONS:	110 Vac male IEC plug with supplied power cable connects to standard 110 Vac outlet. Multi-voltage input auto-switches from 110~240 Vac (50 ~ 60 Hz) for use in Europe or Australia.
DC CONNECTIONS:	6' attached cable with male, 2.1 mm, mini-plug for connection to AVCDWP2.
Marked:	UL Listed "Class 2"

## TECHNICAL ASSISTANCE

If you any have questions about the operation or installation of your Sonance AVC system products, please call our Technical Assistance Department on any business day at:

(800) 582-0772 or (949) 492-7777; between 9 A.M. and 5 P.M., PST

## OBTAINING SERVICE

If your product should need repair or service, contact your authorized Sonance dealer for help.

## WARRANTY COVERAGE (USA ONLY)

Sonance offers you a one (1) year limited warranty on each of your AVC products. You must observe the following conditions in order to receive this protection:

1. Retain your bill of sale or legible facsimile (photocopy). If your unit(s) should ever require service, the bill of sale shall act as your proof of ownership and give the effective date of your warranty.
2. Read the below warranty thoroughly. Sonance offers you certain rights outlined in your warranty and requires specific conditions to be met. You may also have other rights which vary from state to state.

### One-Year Limited Warranty

Sonance warrants to the original purchaser for the period of one (1) year; each AVC unit to be free from defects in material and workmanship provided each unit is operated in accordance with the printed instructions included with the unit. One (1) year begins on the date of purchase shown on the bill of sale (receipt).

For this warranty to be effective, the bill of sale must also show from whom each unit was purchased and the purchase price. In the event proof of purchase cannot be established as stated in the previous sentence(s), warranty shall commence on the date each unit was shipped from the factory, provided the serial number on each unit has not been altered or in any way tampered with. This warranty shall apply exclusively to the original purchaser and shall not apply to purchasers who purchased units solely for industrial or commercial purposes.

During the warranty period, Sonance agrees to repair or, at its discretion, replace at no charge components that prove to be defective, provided a unit is returned in accordance with the shipping instructions found within the product installation instructions/owner's manual. This warranty does not apply if a unit has been damaged by accident or misuse, or as a result of service or modification by unauthorized personnel.

This warranty is limited to Sonance product(s) registered herein and specifically excludes any damage to loudspeakers and other allied or associated equipment which may result for any reason from use with this product.

The warranty set forth above is in lieu of all other warranties, express or implied, of merchantability, fitness for a particular purpose or otherwise. In no event shall Sonance be liable for incidental or consequential damages or have any liability with respect to defects other than as specifically set forth above.

Declaration of Conformity



We, Sonance  
212 Avenida Fabricante  
San Clemente, CA 92672  
U.S.A.

declare in own responsibility, that the products described in this owner's manual is in compliance with technical standards:

EN 60065 : 1994  
EN 55013 : 1990  
EN 50082 : 1992