



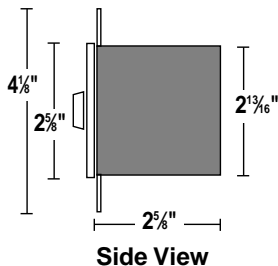
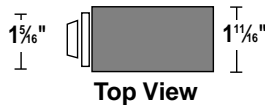
"SWITCHED" WHISPERTOUCH® 8-OHM STEREO VOLUME CONTROLS

DWS-8



DWS-8 Series

Shown with Decora-style subplate (Supplied)



IMPEDANCE JUMPER SETTINGS

REQUIRED AMPLIFIER OUTPUT IMPEDANCE	MAX. QTY. 8-OHM LOUDSPEAKER PAIRS JUMPER SETTING				MAX. QTY. 4-OHM LOUDSPEAKER PAIRS JUMPER SETTING			
	@1X	@2X	@4X	@8X	@1X	@2X	@4X	@8X
8-Ohm	1	2	4	8	0	1	2	4
4-Ohm	2	4	8	16	1	2	4	8
2-Ohm	4	8	16	32	2	4	8	16
1-Ohm	8	16	32	64	4	8	16	32

FEATURES

- Two-Color LED and Pushbutton Switch Provide Visual Indication and Convenient Access to the Active Sound System
- Pushbutton Switch Shuts Off with the System and Remains Off Until Reselected
- Provides Precision Level Control in 3dB Increments (Lowest 6 Steps)
- 50-Watt, 8-Ohm Rating Achieves Clear, Stereo Music Reproduction
- Impedance-Matching Capability of 2X, 4X & 8X Provides System Design Flexibility
- 1x Setting Allows Use As A Standard 8Ω Non-Impedance Matching Volume Control
- Low-Profile Styling is Offered with Decora-Style or Standard Plate in Ivory or White

APPLICATION

Top-of-the-line, 8-ohm WhisperTouch DWS Series offers superior styling, fine-tune level control, and an on/off switch for local audio access control. They are the perfect choice for residential/custom installation and professional applications of all kinds including: homes, medical, legal, and dental offices, studios, and high-profile businesses that expect clear music reproduction and precise level control.

GENERAL DESCRIPTION

WhisperTouch 8-ohm, switched volume controls provide for clear, distortion-free stereo music reproduction when one or multiple loudspeaker pairs are powered by a single amplifier. Model DWS-8 is an 8-ohm device with a smart on/off switch, LED status indicator, and a volume-control knob mounted to a decora-style wall plate.

Frequency response is 20Hz - 20kHz (-3dB, +0). Attenuation is accomplished in ten steps plus positive off. The first six steps are 3dB for fine tune control at low listening levels, the next three steps are 6dB, followed by one 9dB step and finally one 28dB step before "off".

The "switched" WhisperTouch series features an electronic on/off pushbutton switch that provides access to the active audio system without going to the main equipment location. It also turns itself off when the system shuts down, and remains off until re-selected, thereby avoiding the problem of mass audio distribution at previous system settings. The "switched" WhisperTouch volume controls also feature a two-color LED that provides remote visual indication of system availability. It appears "red" when the audio system is on, changing to "green" when the volume control is activated.

Volume adjustments are made easily with the unique WhisperTouch low-profile knob. Pleasant to the touch, this small knob measures 15/16" Dia. and projects a mere 1/2" for unobtrusive yet functional operation. The control operates smoothly with fine detents and make-before-break contacts for gradual and uninterrupted transition of volume levels. High-quality units feature terminal block connectors for easy hook-up and require a 12 VDC power supply (order separately). Recommended models include PS-M12 which will power up to 3 units, or PS12-10 which will power up to 12 units. Assemblies measure 2 3/4" deep and mount into a 20 cu.in. E.O. Box such as Carlon Model B120A or equivalent. Specify plate color: suffix (-I) for ivory or (-W) for white.

ARCHITECT AND ENGINEER SPECIFICATIONS

Attenuator for stereo, 8-ohm application shall be Atlas Sound WhisperTouch Model _____. Attenuation shall be accomplished in ten steps with a positive off position. The first six steps shall be 3dB, the next three steps shall be 6dB, followed by one 9dB step and one 28dB step for a total attenuation of 73dB. Insertion loss shall be no greater than .5dB. Unit shall mount to a standard 20 cu. in. E.O. box. The wall plate shall be decora-style, finished in _____ (ivory or white) with a matching low-profile knob. 12 VDC power supply is required; specify Model _____. (PS12-10: powers up to 12 units, or PS-M12: powers up to 3 units).

MODEL SERIES*	POWER RATING	IMP.	INSERTION LOSS	FREQUENCY RESPONSE	STEPS	TYPE	PLATE STYLE	REQUIRES (ORDER SEPARATELY)	WEIGHT
DWS-8	50 Watts	8 Ohm	.5dB	20Hz - 20kHz (-3dB, +0)	6 @ 3dB 3 @ 6dB 1 @ 9dB 1 @ 28dB 72dB Total	Stereo Switched	Decora** 1 1/8" x 2 5/8"	12-18 Gauge Wire & 20 cu. in. E.O. Box (by others***) PS-M12 (200 mA) Powers up to 3 Units or PS12-10 (1 Amp) Powers up to 12 Units	1 lb (.45 Kg)

(11 Steps Total, plus "off")

* Suffix model with color: ivory (-I), white (-W)
***Carlon Model B120A or equivalent recommended.

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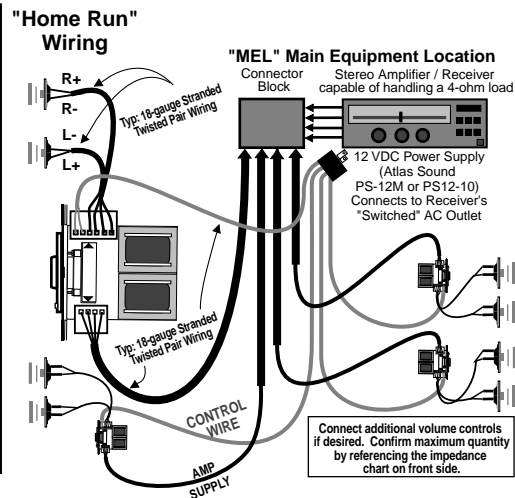
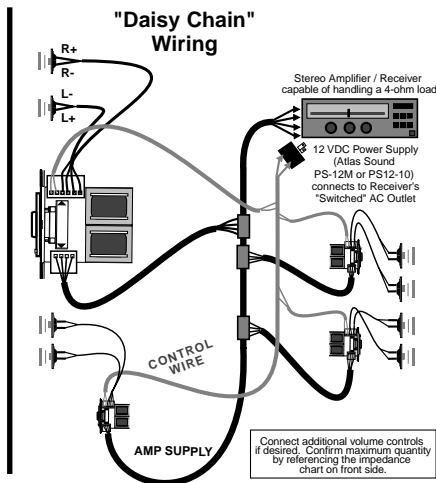


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INSTALLATION INSTRUCTIONS FOR WHISPERTOUCH MODELS DWS-8

These diagrams illustrate a system with 8-ohm loudspeakers and an amplifier capable of handling a 4-ohm load.

Each WhisperTouch volume control jumper is at the 2X setting (refer to the impedance chart on front side). The wiring depicts how volume controls can be daisy chained or wired in home run fashion from each volume control to the amplifier.



Mounting Location:

Volume controls should be placed in accessible wall locations that are close to entryways, exits, light switches, or telephones. They may also be ganged with other low voltage* controls such as keypads or infrared repeaters.

***Note:** WhisperTouch should not be mounted into the same electrical box used for a 110-volt device—even if the box says it is partitioned for this purpose. Speaker wires may pick up electrical noise which will be transmitted as a buzzing or popping sound to the loudspeakers.

Mounting Requirements:

Switched WhisperTouch units are slightly taller, wider, and deeper than most volume controls and requires a 20 cu in. E.O. box with a minimum inside depth of 2.75" and a minimum inside height of 2.985". Recommended boxes for new construction include: Carlon PVC switch box #B-120A, and RACO PVC outlet box. For retrofit applications, CADDY drywall trim ring #MPLS may be used.

Calculating the proper Impedance settings for the system:

WhisperTouch is an impedance-matching stereo volume control that allows multiple loudspeaker pairs and volume controls to be connected, in parallel, without the additional cost of a separate impedance-matching device. For flexibility in system design, WhisperTouch has three impedance matching capabilities: 2X, 4X and 8X, as well as a 1X non-impedance matching setting that allows the unit to be used as a standard 8 Ohm volume control

To determine which setting should be used (1X, 2X, 4X and 8X) you will need to know the number of loudspeaker pairs, the loudspeaker impedance, and the load capability (output impedance) of the amplifier. Most amplifiers will handle a load down to four or two ohms with some going as low as 1 ohm.

Using the chart on page one; cross reference the number of loudspeaker pairs to the amplifier impedance. Notice that the 4X jumper setting will allow twice as many loudspeaker pairs.

Example: If you have 8 pairs of 8-ohm loudspeakers and an amplifier capable of handling a 4 ohm load you must set WhisperTouch at the 4X setting for the amplifier to drive all 8 pairs of speakers at full volume. Note that the 2X setting allows only 4 pairs of 8-ohm loudspeakers to operate on a 4 ohm load. If however, you could select an amplifier with a 2 ohm output impedance, the same 8 loudspeakers could operate on a 2 ohm load (at the 2X setting) or 16 loudspeaker pairs (at the 4X setting). Whenever possible, the lowest jumper setting for a given amplifier should be selected.

Changing Impedance Jumpers:

Once the proper impedance setting is determined, locate the impedance jumpers (black plastic modules) on the back side of the circuit board. One jumper is for the right channel, the other for the left. Next, locate the 1X, 2X, 4X and 8X settings on the circuit board for each channel. If the settings are correct, continue to the next step. If the settings need to change, simply slide the jumper modules off and reinstall them on to the correct two pins.

Limitations:

WhisperTouch limits the degree of impedance matching to eight times so that music quality and overall performance is not sacrificed. We do not recommend that any quality, multi-room music system be connected to a device which provides 16X impedance matching as it may limit the amplifier's power and system performance.

Prewiring and Installation:

A. Mount the outlet box or plaster ring in the wall (see mounting requirements). Each room's wiring can be individually run back to the amplifier (home run) or connected from one room to the other (daisy chain). The daisy chain wiring method connects one set of speakers with volume control in parallel to the next, using connection block or crimp connectors in between. This method has the advantage of requiring less wiring for the system rough-in, but allows for little or no system upgrading for future applications.

With either method, be sure to mark the cable connected to the amplifier as [INPUT] and write down the color codes you have designated for the left channel, right channel, positive, and negative leads and the (+) and (-) power supply leads.

B. If using the "Home Run" wiring method, each room's speaker/volume control wiring should be individually run back to the Main Equipment Location "MEL" in a "home-run" fashion. Run a total of six conductors of speaker cable from the amplifier location to each room's volume control box. Four conductors are speaker outputs and the two additional conductors connect to the 12VDC power supply. Power Supply conductors may be as small as 22 gauge.

Note: Many building and fire codes require cable to be CL-2, CL-3, or FT4 rated. Check with your local building inspector before prewiring.

C. Next, run a two-conductor speaker cable from the outlet box to the corresponding left and right speakers. Mark each cable [LEFT] and [RIGHT] and determine the polarity of each channel (positive and negative).

D. Cut the cable accordingly, allowing enough cable to hang outside the outlet box, to properly connect the

volume control. Tuck the cable back into the outlet box to prevent damage during drywall installation.

E. If desired, the terminal block may be removed from the volume control to more easily accommodate wiring. Strip 1/4" of insulation off each conductor and insert the wires into the terminal block. Tighten the terminal block screws firmly and re-install the terminal block onto the pins.

F. The WhisperTouch DWS-8 Series electronic control requires a 12VDC power supply plugged into the "SWITCHED" outlet of the stereo system receiver, preamplifier, or integrated amplifier. The power supply rating is determined by the quantity of DWS-8 units connected to the system. The formula is as follows:

Qty of DWS-8 x 100mA = power supply mA rating.

EXAMPLE: A system with nine DWS-8 controls would require a 900 mA (approximately 1 amp) supply such as PS12-10.

G. Tuck the excess cable from inside the outlet box back out into the wall or fold wires carefully while inserting the volume control into the outlet box. Position the volume control so that the front bracket lines up with the mounting holes on the box. In some cases, WhisperTouch may be a tight fit requiring it to be inserted on the right side of the outlet box and then slid left into the center position.

Note: In retrofit applications, metal extension plates and non-recommended outlet boxes may require field modification to accept the units' higher and deeper profile.

H. Secure unit with supplied screws. We recommend loosening the screws 1/4 turn to allow 1/4" movement side-to-side and front-to-back. This will allow the face plate to fit flush when the cover plate is installed.

I. Mount the cover plate and tighten the screws.

Testing and operating the on/off feature:

A. Turn on the receiver that powers WhisperTouch.

B. The red indicator light on the WhisperTouch should turn on, but music will not be playing.

C. Press the On/Off button once. The green indicator light will turn on and music will begin playing.

D. Adjust the volume.

E. Press the On/Off button again to turn off the music in that room.

*References to WhisperTouch® on this this install sheet apply only to model DWS-8

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