



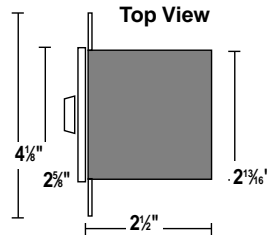
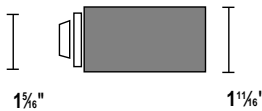
# "ORIGINAL" WHISPERTOUCH® 8-OHM STEREO VOLUME CONTROLS

DWT-8



**DWT-8 Series**

Shown with Decora-style subplate (Supplied)



**Side View**

## FEATURES

- Provides Precision Level Control in 3dB Increments (Lowest 6 Steps)
- 50-Watt Rating Achieves Clear, Stereo Music Reproduction in 8-Ohm Applications
- Impedance-Matching Capability of 2X, 4X & 8X Provides Flexibility in System Design
- Low Profile Styling is a Favorite for Architects and Designers
- 1x Setting Allows Use As A Standard 8Ω Non-Impedance Matching Volume Control
- Decora-Style Plate Available in White or Ivory

## APPLICATION

Superior styling of WhisperTouch controls combined with their fine-tune level capability make them ideal for residential/custom installation and professional applications of all kinds including: private homes, medical and legal offices, dental groups, studios, and high-profile businesses that demand clear music reproduction and precise level control.

## GENERAL DESCRIPTION

WhisperTouch volume controls provide for clear, distortion-free stereo music reproduction when one or multiple loudspeaker pairs are powered by a single amplifier. Model DWT-8 is an 8 ohm device with 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 low-profile knob is pleasant to the touch and adjusts easily. It measures 1 5/16" 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 un-interrupted transition when changing volume settings. High quality units require 12 to 18-gauge wire and terminate with convenient plug-in connectors. Assemblies measure 2 3/8" deep and mount into a standard 20 cu.in. E.O. Box (by others). 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.

### 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

MODEL SERIES*	POWER RATING	IMP.	INSERTION LOSS	FREQUENCY RESPONSE	STEPS	TYPE	PLATE STYLE	REQUIRES (ORDER SEPARATELY)	WEIGHT
DWT-8	50 Watts	8 Ohm	.5dB	20 Hz - 20 kHz (-3dB, +0)	6 @ 3dB 3 @ 6dB 1 @ 9dB 1 @ 28dB (11 Steps Total, plus "off")	Stereo	Decora** 1 5/16" x 2 3/8"	12-18 Gauge Wire & 20 cu. in. E.O. Box (by others***)	1 lb (.45 Kg)

\* suffix model with color: ivory(-I), white (-W).

\*\*\*E.O. Box by others. Carlton Model B120A or equivalent recommended for all 8-ohm models.

\*\* Decora® is a registered Trademark of Leviton Corporation.

*Specifications subject to change without notice*



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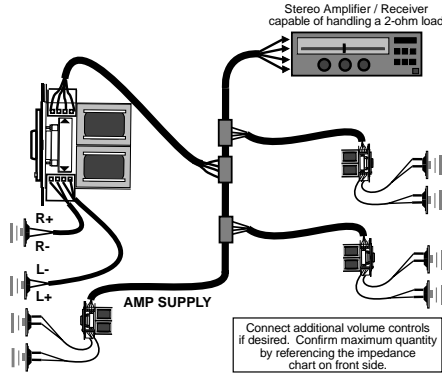
**INSTALLATION  
INSTRUCTIONS  
FOR WHISPERTOUCH  
MODELS DWT-8**

These diagrams show examples of a system that uses 8-ohm loudspeakers and an amplifier capable of handling a 2-ohm load.

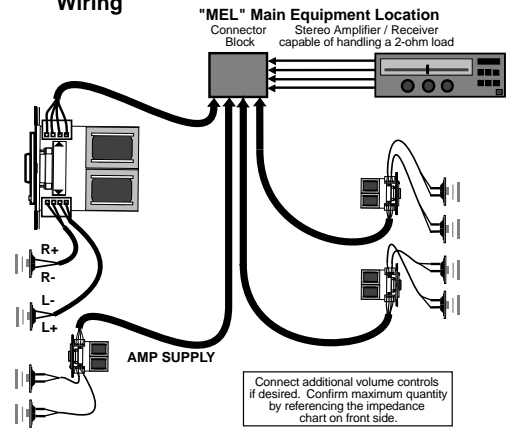
Set each WhisperTouch volume control impedance jumper according to the chart on the front of this sheet.

The wiring depicts how volume controls can be daisy chained or wired in home run fashion from each volume control to the amplifier.

**"Daisy Chain"  
Wiring**



**"Home Run"  
Wiring**



**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.

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 four conductors of speaker cable from the amplifier location to each room's volume control box.

**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. 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.

G. 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.

H. Mount the cover plate and tighten the screws.

**REFERENCES TO WHISPERTOUCH ON THIS THIS INSTALL SHEET APPLY ONLY TO MODEL DWT-8**

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