



AP SERIES Patio Speaker Manual

Thank you for giving OSD AUDIO the chance to earn your business! We are confident you will find that OSD offers an outstanding combination of performance and value in everything we make. To ensure you get the most out of your new patio speakers, please take a moment to read this manual before you get started.

Installing Speakers

These weather resistant patio speakers are manufactured to resist a variety of weather condition. The most ideal place to install these speakers is the undersides of most eaves and overhangs as they provide the best protection. Like all speakers, they sound the best when placed no more than seven feet apart from each other, and slightly higher than ear level. If the speakers are more than seven feet apart, toe them in toward the center of the listening area.

These speakers are not waterproof and cannot be submerged under water.

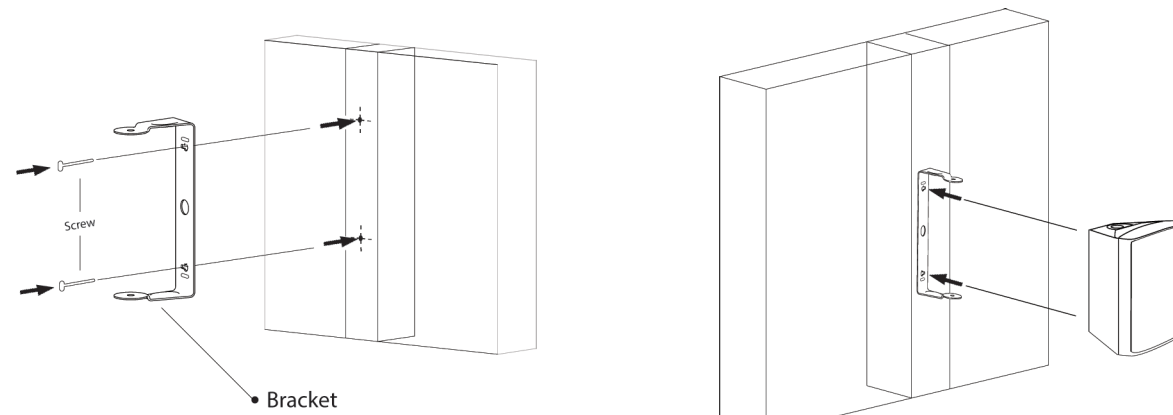
Placing Speakers

If your application requires the speaker to be mounted, please follow these directions. Using the hardware supplied, mount the bracket first. Attach the speakers to the brackets using the large plastic knobs supplied.

Never mount a speaker on a wall made of unreinforced drywall or plasterboard.

If you are unsure, consult a professional contractor. (See Diagram 1)

Diagram 1



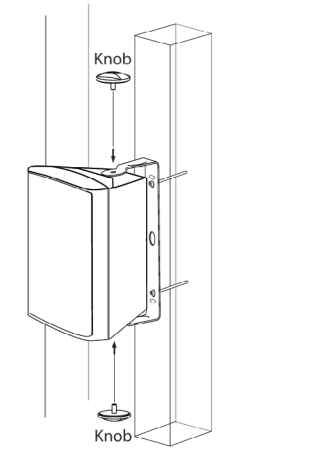
Painting the grilles

The metal grilles may also be painted. Use very thin paint (5:1). It will be easier to paint the grilles while it is off the speaker. Avoid plugging up the holes with excess paint. First remove the grille from the speaker using spray paint lightly go over the front of the grille and then go over the back of the grille. Two coats may be necessary for desired look. The binding post speaker terminals on the speakers will accommodate up to 12-gauge wire. When using 70V amplifier output, please select a power setting through the knob switch. When connecting the speakers, it is very important to observe the correct polarity. This means that the wire attached to the (+), red, or positive terminals on one component must be attached to the (+), red, or positive terminal on the corresponding component speaker output terminals. Similarly, the (-), Black, Negative or ground terminals must connect to the respective (-), Black, Negative, or ground terminals. This is easy to do by locating the color stripes that appears on most wire.

Mounting

To install the bracket on the speaker. Screw the bracket knobs into the cabinet. Point the speaker toward the listening area. Once the direction of the speaker has been determined tighten the bracket knobs securely. (See Diagram 2)

Diagram 2

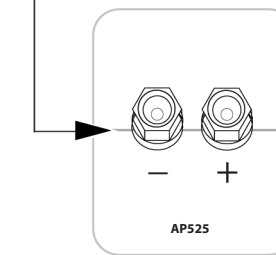


WIRING

Connect the speaker cable to the speaker cable terminals, matching the proper polarity with your amplifier, + to + (red) and - to - (black). Make sure to connect the right channel to the right speaker and the left channel to the left speaker. Either channel may be attached to either terminals set, however, be sure that polarity (+ and -) is correct on each channel or the performance of the speaker will be seriously affected as one channel will cancel out the other.

L/R Pair Speaker

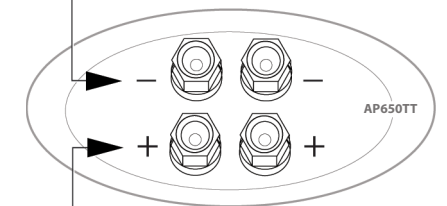
(Red = Positive / Black = Negative)



AP850 / AP840 / AP670 / AP650 /
AP650T (70) / AP650TT /
AP640 / AP640T (70V)
AP525 / AP520T (70V)
AP490 / AP450

Single - Stereo

Connect Left channel set



Connect Right channel set

AP650TT

70 Volts consideration (Applicable to only 70V tap speakers)

The 70V transformer offers you the ability to daisy chain multiple number of speakers in series. In doing so, you would simply connect 1 pair of outputs to each speaker and daisy chain to subsequent speaker/s. If you don't intend to daisy chain the speakers, set the default setting to 8 ohms. (See Diagram 3)

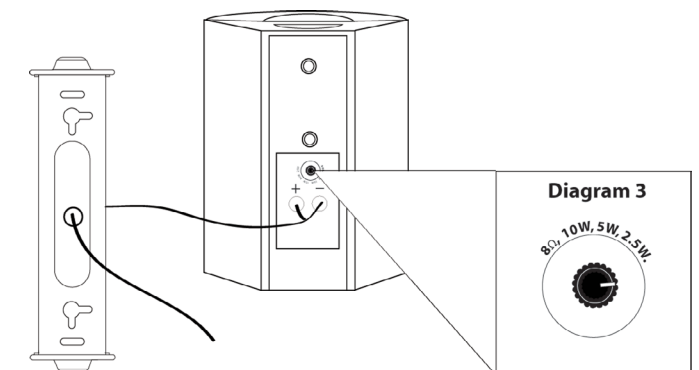


Diagram 3

8Ω, 10W, 5W, 2.5W

Specifications

Patio Speakers	AP850	AP840	AP670	AP650
Speaker Type:	8" Ultra Patio Speaker	8" High Performance	6 ½" Ultra Patio Speaker	6 ½" Ultra Patio Speaker
Tweeter:	2" Silk Dome	1" Silk Dome	1" Silk Dome	1" Silk Dome
Woofer:	8" Polypropylene	8" Polypropylene	6 ½" Waterproof Paper Cone	6 ½" Polypropylene
Impedance:	8 Ω	8 Ω	8 Ω	8 Ω
Sensitivity:	90dB	90dB	90dB	90dB
70V Tap: (optional)	40W,30W,25W,20W	N/A	N/A	N/A
Bass port:	Yes	Yes	Yes	Yes
Frequency Response:	37Hz-22kHz	30Hz-22kHz	44Hz-22kHz	37Hz-22kHz
Power Handling:	200 Watts	200 Watts	120 Watts	150 Watts
Dimensions: (H x W x D)	15" ¾ x 11" x 10"	14 ¾ x 11" x 9 ¼"	14 ½" x 8 ¼" x 7 ¾"	11 ½" x 8 ½" x 7 ½"
Unit of Measure:	Pair	Pair	Pair	Pair

Patio Speakers	AP650T (70V)	AP650TT	AP640	AP640T (70V)
Speaker Type:	6 ½" Ultra Patio Speaker	6 ½" Single Stero Patio Speaker	6 ½" High Performance	6 ½" High Performance
Tweeter:	1" Silk Dome	1" Silk Dome x 2	1" Silk Dome	1" Silk Dome
Woofer:	6 ½" Polypropylene	6 ½" Waterproof Paper Cone	6 ½" Polypropylene	6 ½" Polypropylene
Impedance:	8 Ω	8 Ω x 2 (stereo) 16 Ω (mono)	8 Ω	8 Ω
Sensitivity:	89dB	90dB	89dB	89dB
70V Tap: (optional)	2.5W,5W,10W,15W	N/A	4W, 8W, 16W, 30W	4W, 8W, 16W, 30W
Frequency Response:	Yes	44Hz-22kHz	38Hz-20kHz	38Hz-20kHz
Power Handling:	37Hz-22kHz	120 Watts	150 Watts	150 Watts
Dimensions: (H x W x D)	175 Watts	14" x 8" x 8"	11" ½ x 8 9/16" x 7 7/16"	11" ½ x 8 9/16" x 7 7/16"
Unit of Measure:	11 ½" x 8 ½" x 7 ½"	Each	Pair	Pair

Patio Speakers	AP525	AP520T (70V)	AP490	AP450
Speaker Type:	5 ¼" High Performance	5 ¼" High Performance	4" Ultra Patio Speaker	4" Ultra Patio Speaker
Tweeter:	Patio Speaker	Ultra Patio Speaker		
Woofer:	1" Silk Dome	¾" Silk Dome	1" Silk Dome	½" Mylar Dome
Impedance:	5 ¼" Polypropylene	5 ¼" Polypropylene	4" Polypropylene	4" Polypropylene
Sensitivity:	8 Ω x 2 (stereo) 16 Ω (mono)	8 Ω	8 Ω	8 Ω
70V Tap: (optional)	90dB	88dB	88dB	90dB
Frequency Response:	2.5W,5W,10W,15W, 20W	4W, 8W, 16W, 30W	N/A	N/A
Power Handling:	45Hz-22kHz	50Hz-22kHz	60Hz-22kHz	58Hz-22kHz
Dimensions: (H x W x D)	120 Watts	120 Watts	100 Watts	100 Watts
Unit of Measure:	9 ¼" x 7 ¾" x 6 5/16"	9" ¼ x 11 ¾" x 6 5/16"	9 ½" x 5 5/16" x 5 1/8"	7 ¾" x 5 ¼" x 4 ¼"

Warranty & Repair

All OSD AUDIO speaker products have (1) year Limited Warranty against defects in materials and workmanship. Proof of purchase must accompany all claims. During the warranty period OSD AUDIO will replace any defective part and correct any defect in workmanship without charge for either parts or labor.

OSD AUDIO may replace returned speakers with a product of equal value and performance. In such case, some modifications to the mounting may be necessary and are not OSD AUDIO's responsibility.

For this warranty to apply, the unit must be installed and used according to its written instructions. If necessary, repairs must be performed by OSD AUDIO. The unit must be returned to OSD AUDIO at the owner's expense and with prior written permission. Accidental damage and shipping damage are not considered defects, nor is damage resulting from abuse or from servicing performed by an agency or person not specifically authorized in writing by OSD AUDIO.

OSD AUDIO sells products only through authorized dealers and distributors to ensure that customers obtain proper support and service. Any OSD AUDIO product purchased from an unauthorized dealer or other source, including retailers, mail over dealers and online sellers will not be honored or serviced under existing OSD AUDIO warranty policy. Any sale of product by an unauthorized source or other manner not authorized by OSD AUDIO shall void the warranty on the applicable product.

Damage to or destruction of components due to application of excessive power voids the warranty on those parts. In these cases, repairs will be made on the basis of the retail value of the parts and labor. To return for repairs, you must email customer service at RMA@OSDAUDIO.com for a Returned Merchandise Authorization (RMA) number # then the unit must be shipped to OSD AUDIO at the owner's expense, along with a note explaining the nature of service required. Be sure to pack the speaker(s) in a corrugated container with at least 3 inches of resilient material to protect the unit from damage in transit.

This Warranty Does Not Cover:
 Damage caused by abuse, accident, misuse, negligence, or improper operation (installation) • Any products that have been altered or modified • Any product whose identifying number of decal, serial #, etc. has been altered, defaced or removed • Normal wear and maintenance.