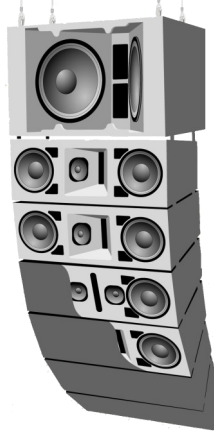
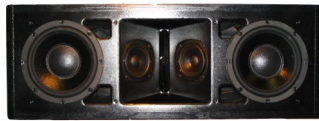
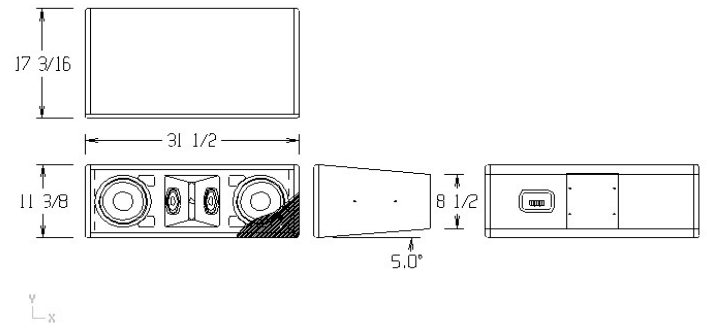


# VS8-Series VS8-90 Vertical Stack Loudspeaker



VS8-90 All dimensions are in inches



## General

The VS8-90 is a flyable and arrayable two-way loudspeaker system (has the capability to be reconfigured in the field to a three-way system). The OAP VS8-90 utilizes a 1" extended high frequency driver mounted to a 90 degree OAP CNC machined wooden horn creating extremely natural sounding high frequency reproduction. Additionally, the VS8-90 incorporates high performance mid and low frequency components: (2) 4 1/2" midrange devices and (2) 8" woofers for low frequency reproduction. A passive internal crossover transfers the required frequencies from the dual 4 1/2" speakers to the 1" horn and driver. The VS8-90 is a bi-amp system. The VS8-90 has a power handling capability of 325 watts program power; a system impedance of 16 ohms; a system sensitivity measured at 97 dB at 1w/1m; and an overall frequency response of 45hz to 20khz. The VS8-90 is designed to perform equally well as a stand alone loudspeaker using an OAP specific external mounting bracket or arrayed with other VS8-Series products (i.e. VS8-60; VS8-120; or VS8-215). When integrated with other VS8-Series cabinets the VS8-90 is attached via the use of OAP specific 2 degree adjustable external front and rear steel flying brackets (2 rear and 2 front brackets are required to fly each unit). The adjustable mounting brackets are all hidden when the side decorative panels are installed. The unit comes with a removable cloth covered grill. The 3/4" birch veneer plywood cabinet with it's structurally integrated internal steel bracketry is available in black; white; or unfinished with multiple colored cloths available for the grill. The handsomely styled VS8-Series with it's flexible and *safety first* arrayable flying features; finitely adjustable pattern control; astonishing full range tonal reproducing capability; and excellent *high* output efficiency make it ideally suited for use in Houses of Worship, Auditoriums, Clubs, Sporting Venues, and Concert Halls. (note: a vertical stack of up to 16 VS8-Series units can be safely accommodated).

## FACTORY WIRED

The VS8-Series full range cabinets are set as 2-way bi-amp cabinets from the factory. The LF is passed from the input plate [Red (+)/Black (-)] wires straight to the speakers which is wired in series for a 16 ohm load. The MF/HF is connected to a passive crossover via the [White (+)/ Blue (-)] wires then the signal is split from the crossover to the respective components. This is also a 16 ohm load.

**ARCHITECTURAL SPECIFICATIONS:** The VS8-90 shall be of the two-way type and trapezoidal shape (10 degree taper). The VS8-90 shall incorporate dual 8" low frequency transducers; dual 4 1/2" mid range transducers; and a 1" compression driver coupled to an OAP specific CNC machined wooden horn with a 90 degree horizontal dispersion. The system shall have a frequency range of 45hz to 20khz, a sensitivity of 97 dB at 1w / 1m. The VS8-90 system shall be constructed of 3/4" birch veneer plywood and stiffened internally. Integrated internal steel flying brackets shall also be incorporated for

flying safety. All exposed edges of the cabinet shall be rounded for damage resistance. Five flying points shall be incorporated on each side of the cabinet. The loudspeaker shall be the OAP Audio model VS8-90.

**WARNING!!!! RIGGING AND FLYING OF THE VS8-SERIES SHOULD BE DONE BY PERSONS FAMILIAR WITH STANDARD RIGGING PRACTICES. IF YOU ARE NOT FAMILIAR WITH THESE PRACTICES PLEASE CONSULT THE FACTORY, YOUR DEALER, THE LOCAL STAGE HANDS UNION OR A RIGGING SUPPLY COMPANY IN YOUR AREA. NOTE: As a research and development corporation, OAP Audio reserves the right to change specifications to improve performance.**

## VS8-90 Specifications

Impedance	16 ohm Low Freq. & 16 ohm Mid/High Freq. Section (Passive)
Sensitivity	97 dB 1w/1m (avg. between 125hz-16hz)
Freq. Response	55hz-12khz (+/-3db) 45hz-20khz (+/-6db)
Power Handling	325 watts program LF (175 watts cont.) 150 watts program HF (80 watts cont.)
Size	31.5" W x 17.1875"d x 11.375"H
Weight	70 lbs./31.75 kg.
Taper	5 degree
Mounting	VS8-Series Hardware (2 rear and 2 front brackets are required to fly each unit)
Finish	Black, White, or unfinished
Low Freq. Device	2/8 ohm, 8" with Rubber Surround (wired series), treated cone, 2" voice coil and 30 oz. magnet.
Mid Freq. Device	2/8 ohm, 4 1/2" with Rubber Surround (wired series), treated cone, 1" voice coil and 20 oz. magnet.
High Freq. Device	1" Compression Driver 16 ohm, with Extended High Freq. Mylar Diaphragm mounted to an OAP CNC machined wooden horn 90-degree horizontal dispersion, 10-degree vertical nominal (vertical dispersion is array dependant).
Input	6 position terminal block (See Factory Wired text)
Crossover	Active 2-way operation between LF and Mid/High Freq. Section (passive crossover between Mid and HF driver @ 2.5kHz.) Recommended crossover point 400Hz to 600Hz.
Grill Cloth	Black, White, Wheat, Pumice available

Rev. H (11/13)

## VS8-Series Mounting Brackets:

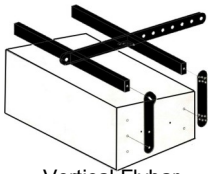
VS8-2° Adjustable Flying Brackets (Pairs)



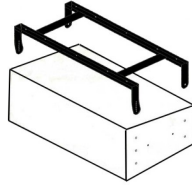
Front Bracket



Rear Bracket



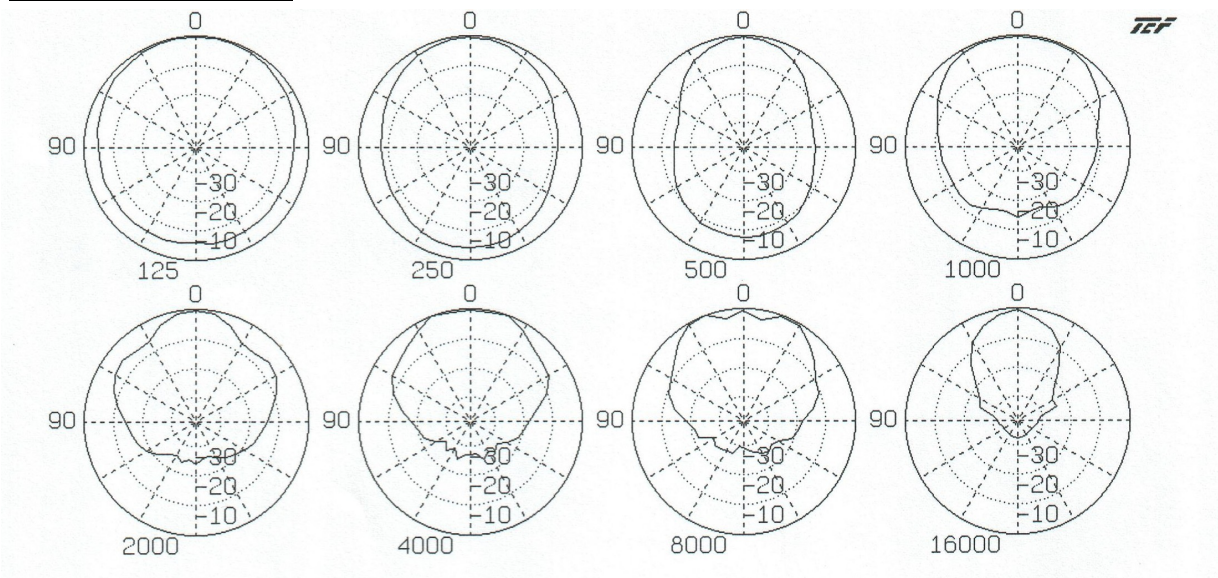
Vertical Flybar



Ceiling Bracket

**WARRANTY:** OAP Audio VS8-Series loudspeaker systems are guaranteed against failure due to workmanship and materials for a period of five (5) years from date of purchase and is limited to original purchaser. If such failure does occur, unit will be replaced or repaired (at the discretion of OAP Audio) without charge for labor and materials. Unit must be delivered to OAP Audio or one of our authorized service facilities prepaid. In warranty items will be returned prepaid. Items not covered by warranty includes finish or appearance items, or failure due to operation under other than specified conditions. This warranty also does not include any incidental or consequential damages. Repair by other than OAP Audio or an authorized service facility will void this guarantee.

## VS8-90 Polar Plots



## VS8-90 Frequency Response



Rev. H (11/13)