

## **AS-152** Flyable Two-Way Loudspeaker System



#### General

The AS-152 is a two-way passive trapezoid shaped loudspeaker system designed for flying operation. The low frequency spectrum is handled by a cast frame 15" radiator, while a 1" throat titanium diaphragm driver with a 60° x 110° vertical asymmetrical horn. To achieve low crossover insertion loss and high reliability, 14-gauge wire and mylar capacitors are used throughout with all components mechanically secured to a glass epoxy PC board. To ensure enclosure stability, 18 mm void free imported baltic birch plywood is used with all interconnecting surfaces extensively braced and glued.

The AS-152 is easily flyable via twelve fly points. 3 points on the top and bottom, 2 points on the back and sides. The flypoints on the back facilitate horn up or horn down rigging. The versatility of the AS-152 allows it to be flown vertically or horizontally. For permanent installations, 3/8" 16-thread drop-forged I-bolts are available from the factory. The AS-152 uses a 18-gauge perforated grill for speaker component protection. Standard finish is black textured paint, with white or unpainted as an option. Like all other OAP loudspeaker systems, the AS-152 comes with a five-year warranty.

#### **Applications**

The AS-152 should be used when a compact, high output full-range is needed for portable or installed sound. It can be a stand-alone system operated passively or in a bi-amp mode with frequency response down to 16 khz. The AS-152 can also be used as a "mid-hi" section of an extended range system when used with low-frequency speakers such as the OAP Audio LF-118 or TR-218. It can be stand mounted by using a 1.5" diameter tube speaker stand, or suspended horn up or horn down using the optional rigging hardware. The AS-152 can also be ordered with the handle and socket as an upgrade option.

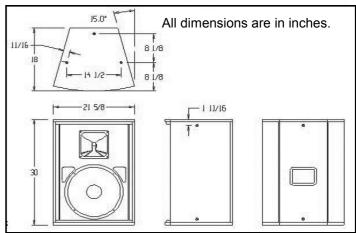
# AS-152xOVER and optional Connector Panels

The AS-152 is supplied with the AS-152XOVER input panel. This panel has parallel 1/4" jacks for input connectors. For all OAP 1/4" operations, the tip is positive and the sleeve is negative. For multi-pin cable use, the optional IP-4NS Neutrik Speakon connector panel is available. For the IP-4NS Neutrik Speakon, input panel: pin 1 - is LF negative; pin 1 + is LF-positive; pin 2- is HF negative; pin 2+ is HF positive. Terminal strip input panels are also available.

To change input panels, remove the phillips head screws. Lift the panel from the enclosure and disconnect the input panels by pushing the safety locks on both sides of the connector and pulling apart. To install the new panel, reverse the above procedure. Insure that there is a color continuity on both sides of the connector.

#### Weatherizing Option

For outdoor use, the AS-152 can be enhanced with OAP's weatherizing process. Weatherizing includes polyurethane coating on cabinet exterior, water repellent treatment of speaker cone, added moisture bug barrier to metal grill, hand fitted acrylic cover to input plate, and stainless steel fasteners used at strategic points. Call factory for further information.



#### **Flying Operation**

WARNING!!! Rigging and flying of the AS-152 should be done by persons familiar with standard rigging practices. Overhead rigging requires extensive experience including (but not limited to) calculating working load limits, hardware installation and periodic safety inspection of all hardware and cabinetry. If you lack these qualifications, do not attempt the installation yourself, but instead use a professional structure rigger. OAP Audio recommends that any installation of this product be done by a qualified professional. OAP Audio will accept no liability for any damage or injury caused as a direct or indirect result of improper handling, installation or use of this product.

#### Warranty

OAP Audio Engineered Sound 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.

#### ARCHITECTURAL SPECIFICATIONS

The loudspeaker shall be of the two-way type and trapezoid shape (15° taper). The loudspeaker shall incorporate a 15" low frequency driver, and a 1" compression driver mounted on a defined coverage horn. The system shall have a frequency range of 42 hz to 20 khz, a pressure sensitivity of 106.5 dB at 1 watt power capacity giving a maximum output capability of 132.5 dB measured at 1 meter and averaged between 125 hz and 16 khz. The cabinet shall be constructed of void-free 18 mm imported balitc birch plywood and stiffened internally. All exposed corners shall be rounded for damage resistance. 12 fly-points shall be fitted with 3/8" 28-thread inserts to be used with optional aircraft type rigging fittings. The top and bottom of the cabinet shall be 1.5" thick. The top and bottom shall be reinforced with steel plates and connected together with 1/4" threaded rod to facilitate the rigging of one enclosure to another. The system shall be the OAP AS-152. NOTE: As a research and development corporation, OAP Audio reserves the right to change specifications to improve performance.

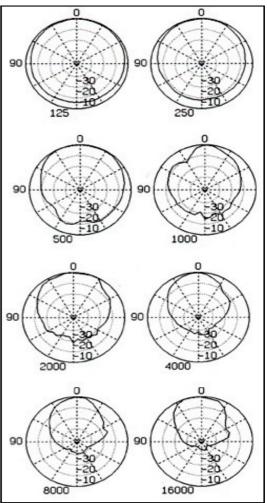
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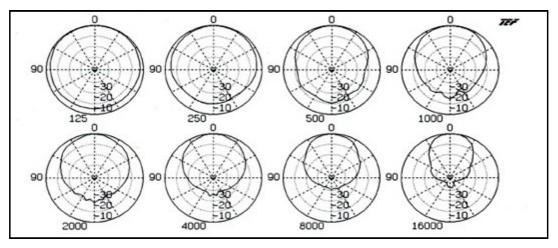
### **Specifications**

Low Freq. Driver	1-8 ohm, 15" with cloth surround paper cone,
	2 1/2" edgewound voice coil
High Freq. Driver	1-8 ohm 1' exit HF driver with 1.7" edgewound
	voice coil, polyamide field replaceable dia-
	phragm or 1-8 ohm 2" exit HF driver with 3"
	edgewound voice coil, titanium field replace-
	able diaphragm
High Freq. Horn	60° x 110° vertical asymmetrical horn (rotatable),
Impedance	8 ohm nominal
Sensitivity	106.5 db 1 watt @ 1 meter averaged between
	125 hz and 16 khz. 132.5 db maximum calcu-
	lated on a 1" 70 x 50 asymmetrical horn
Freq. Response	42 hz-20 khz (+/- 3 db) 34 hz-22 khz (+/- 6
	db)
Power Handling	400 watts program power (200 watts continu-
	ous)
Taper	15 degree angle
Size	21.625" W x 30" H x 18"D
Weight	76 lbs.
Trapezoid Taper	Front to back, 15° each side
Flypoints	12 flypoints, 3 each top and bottom, 2 each
	on back and sides
Input Connector	2-NL4 Neutrick Connector, Terminal Strip
	available
Color	Black texture is standard with white, and un-
	finished optional
Grill	18 gauge perforated steel

## **AS-152 Vertical Polar Plots**



## **AS-152 Horizontal Polar Plots**



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