C-Series Flyable Two-Way Loudspeaker System







General

The C-3.0 is a unique solution to the problems encountered when installing a compact, attractive cluster while still providing intelligible sound coverage. Because of the seating arrangements of most churches and auditoriums, more than one horn is necessary to cover near and far field seating on the same plane. With balcony seating, coverage is even more difficult. When seating layout dictates multiple horns, the C-Series solves installation and adjustment problems by incorporating a low-frequency transducer with a coax mounted constant dispersion horn for far-field coverage. Near-field coverage is handled by 2 additional horns, both swivel mounted and capable of 120° of vertical adjustment and a full 360° of horizontal adjustment.

Construction

For structural integrity, 3/4" birch plywood is used. Construction of the cabinet consist of dado joints throughout, with 3/4" x 1" hardwood bracing glued and cross nailed in the length of every joint. In addition to the 3/16" thick steel plates that are securely fastened to the fly-points, threaded rod is used to interconnect the top and inside bottom of the enclosure.

All of these features are incorporated into a one-box flyable speaker system. Because of the trapezoid shape and top mounted fly-points, multiple C-Series systems can be flown together in applications where wider coverage angles or higher spl are required.

C-3 Application

The C-3.0 is a 2-way passive device using a 15" woofer with a 60° x 30°, 1" exit horn and a coaxially mounted driver. This coax supplies low frequencies as well as far field high frequency reproduction. The near field high frequencies are handled by two swivel mounted 90° x 40°, 1" exit horn and driver. Each horn and driver has its own L-pad for individual attenuation.

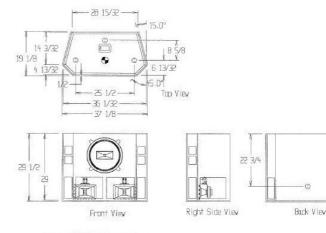
As an option, the C-3.0 may be bi-amped. Standard configuration has the three drivers wired parallel with an L-pad for each driver. The C-3.0 may also be wired with separate input for each component (1 woofer, 3 drivers, no L-pads) for "4-way" bi-amp operation.

The C-3.0 may be used with subwoofers such as the OAP LF-118 or TR-218 if additional low frequency is required.

Flying Hardware Option

WARNING !!!! RIGGING AND FLYING OF THE C-SERIES SHOULD BE DONE BY PERSONS FAMILIAR WITH STANDARDS RIGGING PRAC-TICES. 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. The C-Series is easily flyable via three rigging points on top of the enclosure. The C-Series has two 1/4"-28 threaded inserts installed at each of the three points for use with optional flying hardware. A flying hardware kit, model FHK is available and includes one flying hardware plate model FHP, one flying hardware tie-down model FHT and two 1/4"-28 threaded machine screws. The model FHP and FHT as well as the screws are sold separately. The tie-down simply slides, locks into the plate and is held in place by spring load. The tie-down has a round ring with an inside dimension of 1.12" which can be used with most standard rigging hardware. An additional point that is not reinforced is located on the back of the enclosure for installing an FHK when a more radical rake is needed. The point on the back of the enclosure should never be used without at least two rigging points in place on the top of the enclosures. You must use at least two FHK's to safely suspend the C-Series. You can substitute a 1/4"-28 drop forged I-bolts, model FIB, in lieu of the FHK's. Both items are available through your OAP dealer.

C-3.0



7 4/B

Architectural Specifications

The loudspeaker shall be of the two-way type. The sides of the enclosure shall have a 15° taper forming a trapezoid shape to facilitate tight arrays of multiple enclosures. A coax transducer with a 60° x 30° constant dispersion horn will be used. The loudspeaker shall have two additional horns mounted to the bottom of the enclosure on a swivel mount and is capable of 360° horizontal and 120° vertical adjustment. These horns shall have a dispersion of 90° x 40° and be of the constant dispersion type. Input connection to the system shall be located on the top of the enclosure and via terminal strip. All sides and front have removable panels (via mechanical fasteners) and are covered with grill cloth. A removable grill cloth covered bottom panel will facilitate easy adjustment of the swivel mounted horns and L-pads as well as access to the bottom horns for easy service. The loudspeaker shall be the OAP Audio C-Series model C-3.0

NOTE: As a research and development corporation, OAP Audio reserves the right to change specifications to improve performance.

Decor Matching

Before the C-Series, decor matching was virtually impossible unless done on the installation site. The C-3.0 offers the installer a choice of colors for the grill cloth. Grill cloth options include White, Black, Wheat and Agate. Call the factory

for a sample of available grill cloths.

Warranty

OAP Audio C-Series loudspeakers 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 of materials. Unit must be delivered to OAP Audio or one of it's authorized

service facilities prepaid. In warranty items will be returned prepaid. Items not covered by warranty includes finish or appearance items, burned coils or failure

due to operation under than specified conditions. This warranty also does not include any incidental or consequential damages. Repair by other than OAP Audio or an authorized facility will void this guarantee.

Rev. H (08/13)

C-Series Flyable Two-Way Loudspeaker System







C-3.0 Specifications

Impedance **Frequency Response**

Power Handling Sensitivity

Dimensions Weight Low Frequency Device

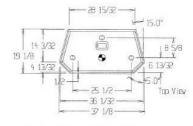
High Frequency Drivers

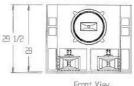
Passive Crossover Flypoints Cabinet Top & Rear Finishes White, Black or Unfinished **Grill Cloth Panels** sides Inputs

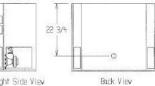
8 ohm nominal, passive operation +/- 3dB 64hz to 12khz, +3db/-6dB 55hz to 16khz 350 watts program power 99.4dB 1 watt @ 1 meter averaged between 125 hz and 8khz 37.125" W x 29.5" H x 19.125" D 115 lb.. w/o shipping box 15" coax w/ 3" voice coil, 96 oz. magnet, 8 ohm, 400 watt program power 1" exit, 1.75" titanium diaphragm, 16 ohm, 80 watt program power, each Full section L/C type at 1350hz 3 on top, 1 rear pullback point Black, White, Wheat and Pumice (Front, and bottom) 2, 4 or 8 position terminal strip

Rev. H (08/13)

C-3.0







Front View







310 Peachtree Industrial Blvd., Buford, Georgia 30518 770-945-1033 Fax: 770-945-1843 http://oapaudio.com E-mail: info@oapaudio.com