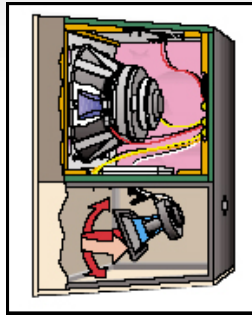
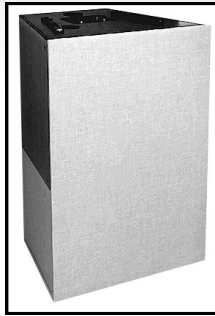
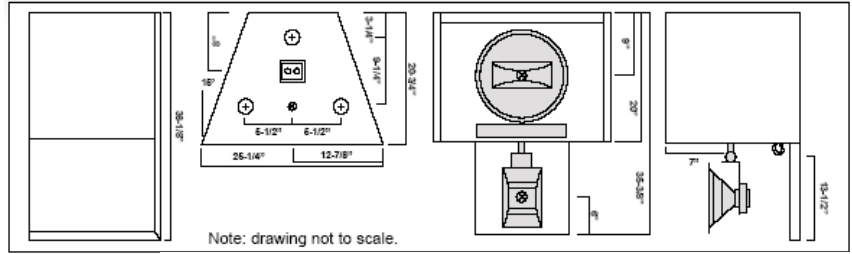


# C-Series Flyable Two-Way Loudspeaker System



## C-2



### General

The C-Series 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 an additional horn, 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. In addition, 25 mm X 25 mm hardwood bracing runs the length of the joints of the enclosure and is glued and cross-nailed. Because of the added weight, the C-2 has three pieces of 1/4" threaded rod that ties together the top and 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-2 Application

The C-2 is an active (bi-Amp) device using a 15" woofer with a 60°x 30° 2" exit horn and coaxially mounted driver. This coax supplies low frequencies as well as far field high frequency reproduction. The near field high frequencies are handled by the swivel mounted 60°x 40° 2" exit horn and driver. In normal configuration, the two drivers are wired in parallel with an L-Pad for individual attenuation of each driver. The C-2 may also be wired with a separate input for each component (1 woofer, 2 drivers, no L-Pads) for "3-way" bi-Amp operation. At an added cost option, the C-2 may be ordered with a crossover for operation as a 2-way passive device..

The C-2 should be used for larger spaces where the efficiency and power handling of the 600 watt woofer and 120 watt large format compression drivers are needed. The C-2 is also applicable for critical applications where the highest quality entertainment sound reinforcement is needed, while still having the convenience of multiple coverage horns, safe flying hardware as well as décor matching. Like all C-Series models, the C-2 can be used with subwoofers such as the OAP LF-118, or TR-218 if additional low frequency output is required.

### Flying Hardware Option

**WARNING!!!! RIGGING AND FLYING OF THE C-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.** The C-Series is easily flyable via three rigging points on the top of the enclosure. The C-Series has two 1/4" 28-thread inserts installed at each of the three points for use with the 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-thread machine screws. The model FHP and FHT as well as the screws also are available separately. The tie-down simply slides, locks into the plate and is held in place by a 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 available 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 enclosure. You must use at least two FHK to safely suspend the C-Series. You can substitute 1/4" X 28-thread drop forged I-bolts, model FIB, in lieu of FHK's. Both items are available through your OAP Audio dealer.

### 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 an additional horn mounted to the bottom of the enclosure on a swivel mount and is capable of 360° horizontal and 120° vertical adjustment. This horn shall have a dispersion of 60°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 polarized 5-way binding post. A hinged grill frame will facilitate easy adjustment of the swivel mounted horn and L-Pads as well as access to all components for service. The loudspeaker shall be the OAP Audio C-Series model C-2. NOTE: As a research and development corporation OAP Audio reserves the right to change specifications to improve performance.

### Decor Matching

Before the C-Series, décor matching was virtually impossible unless done on the installation site. The C-Series offers the installer a choice of colors for side panels and grill cloth. Side panel options are Golden Oak, Princeton Pecan, and Windsor Mahogany in addition to White and Black paint finishes. Grill cloth options include White, Black, Wheat, and Pumice. Because the C-Series is constructed of birch plywood, the enclosures can be supplied with a smooth sanded finish for staining or painting. Call the factory for a sample of available finishes.

### 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 or materials. Unit must be delivered to OAP Audio or one of its 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 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.

### C-2 Specifications

Impedance	L.F. - 8 ohms, H.F. -4 ohms. With optional crossover-8 ohms
Frequency Response	+3dB/-6dB 52Hz to 18KHz, +/-3dB 52Hz to 8KHz
Power Handling	L.F. -600 watt program H.F. -220 watt program, each Passive-500 watts
Sensitivity	102.32dB 1watt @ 1 meter averaged between 125Hz and 8KHz 127.42dB full power @ 1 meter and averaged between 125Hz and 8KHz
Dimensions	25.25"W X 36.125"H X 20.75"D
Weight	104 lbs.
Low Frequency Device	15" coax, w/ 4" voice coil, 96 oz. magnet, 8 ohms
High Frequency Drivers	2" exit, 3.00" titanium diaphragms, 8 ohms each
Flypoints	3 on Top, 1 Rear Pullback Point
Side Panel Finishes	White, Black, Golden Oak, Princeton Pecan, Windsor Mahogany, or Unfinished
Grill Cloth	Black, White, Wheat, and Pumice
Inputs	5-way Binding Posts