

iBOX SERIES

INSTALLATION / OPERATION MANUAL



www.communitypro.com

EC STATEMENT OF CONFORMITY

This document confirms that the range of products of Community Professional Loudspeakers bearing the CE label meets all of the requirements in the EMC directive 89/336/EEC laid down by the Member States Council for adjustment of legal requirements. Furthermore, the products comply with the rules and regulations referring to the electromagnetic compatibility of devices from 30-August-1995.

The Community Professional Loudspeaker products bearing the CE label comply with the following harmonized or national standards:

DIN EN 55013:08-1991

DIN EN 55020:05-1995

DIN EN 55082-1:03-1993

The authorized declaration and compatibility certification resides with the manufacturer and can be viewed upon request. The responsible manufacturer is the company:

**Community Light & Sound
333 East Fifth Street
Chester, PA 19013
USA**

**TEL: 1-610 876-3400
FAX: 1-610 874-0190**

Chester, PA USA August 2007

A TRADITION OF EXCELLENCE AND INNOVATION

Since the founding of our company in 1968, Community has been a constant developer and innovator of loudspeaker technology. Many of our engineering achievements were undertaken to solve problems, when no prior solutions existed. Others resulted from simply seeing a better way to do things.

Over the years our technologies have been imitated, and our methods have become common practice throughout the professional sound industry. However, developments like carbon fiber diaphragm compression drivers still stand alone, and well ahead of the competition. Just a few of Community's unique accomplishments include the following:

- First successful fiberglass mid, high frequency, and large-format bass horns.
- First compression loaded mid-range horn for touring systems - the LMF.
- First suspension-less diaphragm HF driver - the VHF100.
- First mid-range, full-decade (200 Hz - 2 kHz) high-power compression driver - the M4.
- First carbon fiber diaphragm compression drivers - M4, EM280, EM282.
- First Ferrofluid-cooled professional woofers - the VBS Series.
- First product series with all drivers Ferrofluid-cooled.
- First air-cooled loudspeakers for touring systems - AirForce.
- First three-way cinema loudspeaker systems - Paramount Executive Studio Theatre, Warner Bros. screening theatre and dubbing rooms.
- First electro-acoustic system to equal the sound level of pneumatic warning sirens.
- First to provide loudspeaker coverage over an entire country - Denmark Emergency System.
- First comprehensive, calibrated data acquisition of sound reinforcement products.
- First integral signal-aligned three-way sound reinforcement systems - RS Series.
- First pro audio company with an Internet Web site.
- First all horn-loaded, high-fidelity, weather-resistant loudspeaker - R2 Series.

In line with our history of excellence and innovation, each Community product is manufactured in accordance with a complicated and exacting chain of procedures that ensure absolute quality.

With our unique designs, our sophisticated techniques, and our proprietary materials and transducers, we are committed to bringing only the finest audio products to the many thousands of professional sound engineers, performers, and end users who rely on them daily.



Community Professional Loudspeakers
333 East Fifth Street
Chester, PA 19013-4511 USA
TEL: 1-(610) 876-3400 FAX: 1-(610) 874-0190

© 2007 All Rights Reserved

EC Statement of Conformity	Page 2
Welcome to Community	Page 3
Important Safety Information	Page 6
Rigging and Electrical Safety	Page 6
Unpacking and Inspection	
Unpacking and Inspection	Page 7
Shipping Claims	Page 7
What's in the Box	Page 7
Quick Start	
iBOX Features	Pages 8 - 9
Electrical Installation and Safety	Page 10
Mechanical Installation and Safety	Page 10
For More Information	Page 11
Introduction	
Introduction to iBOX Loudspeakers	Page 12
iBOX Models	Pages 13 - 18
iBOX Optional Mounting Hardware	Pages 18 - 23
Installation	
Electrical Installation and Safety	Pages 24 - 30
Mechanical Installation and Safety	Pages 31 - 33
Painting iBOX Enclosures	Page 34
System Design Guidelines	Page 34
Field Service	Page 35
Choosing Loudspeakers	Page 35
Commissioning	Page 35
Warranty and Service	Pages 36 - 37
Specifications and Dimensions	
iHP1200	Pages 38 - 39
iHP1500	Pages 40 - 41
iHP3500	Pages 42 - 43
iLF218	Pages 44 - 45
i2W8	Pages 46 - 47
M12	Pages 46 - 47
Calculating Array Coverage Angles	Page 48

FIGURES

Figure 1: iBOX Features	Page 8
Figure 2: Cool-Coil Technology	Page 13
Figure 3: iHP3500 Sketch	Page 14
Figure 4: iHP1500 Sketch	Page 15
Figure 5: iHP1200 Sketch	Page 16
Figure 6: iLF218 Sketch	Page 17
Figure 7: M12 Sketch	Page 17
Figure 8: i2W8 Sketch	Page 18
Figure 9: iBOX Full-Range Input Panel	Page 24

TABLE OF FIGURES AND DRAWINGS

Figure 10: iBOX Subwoofer Input Panel.....	Page 25
Figure 11: NL4 Connection Detail	Page 25
Figure 12: i2W8 Input Panel	Page 26
Figure 13: M12 Input Panel.....	Page 26
Figure 14: Eyebolt Pull Angles	Page 32
Figure 15: i2W8 Yoke Mounting Detail.....	Page 33
Figure 14: Eyebolt Pull Angles	Page 32
Figure 21: Coverage Angles of an iBOX Array	Page 48

DIMENSIONAL DRAWINGS

Figure 15: iHP1200 Dimensions	Page 39
Figure 16: iHP1500 Dimensions	Page 41
Figure 17: iHP3500 Dimensions	Page 43
Figure 18: iLF218 Dimensions.....	Page 45
Figure 19: i2W8 Dimensions.....	Page 47
Figure 20: M12 Dimensions.....	Page 47

DETAILED SPECIFICATIONS

Table 10: iHP1200 Specifications	Page 38
Table 11: iHP1500 Specifications	Page 40
Table 12: iHP3500 Specifications	Page 42
Table 13: iLF218 Specifications.....	Page 44
Table 14: i2W8 Specifications.....	Page 46
Table 14: M12 Specifications.....	Page 46

TABLES

Table 1: iBOX Features	Page 9
Table 2: iBOX Connections.....	Page 10
Table 3: iHP3500 Basic Specifications.....	Page 14
Table 4: iHP1500 Basic Specifications.....	Page 15
Table 5: iHP1200 Basic Specifications.....	Page 16
Table 6: DSP Settings for iBOX Bi-amp Operation	Page 27
Table 7: Recommended High-Pass Filters	Page 28
Table 8: Recommended Cable Gauge	Page 29
Table 9: Recommended Amplifier Size	Page 30

NOTICE: Every effort has been made to insure that the information contained in this manual was complete and accurate at the time of printing. However, due to ongoing technical advances, changes or modifications may have occurred that are not covered in this manual.

IMPORTANT SAFETY INFORMATION

Always follow these safety precautions when using or installing iBOX loudspeakers and accessories:

- Read and keep these instructions.
- Heed all warnings.
- Follow all instructions, particularly those pertaining to rigging, mounting, hanging and electrical connections.
- Only use accessories that are specified and approved by the manufacturer.

The terms **IMPORTANT**, **WARNING**, and **DANGER**, as used in this manual, alert the reader to important safety considerations. If you have any questions or do not understand the meaning of these terms, do not proceed with installation. Contact your local dealer, distributor, or call Community directly for assistance.



IMPORTANT: describes an operating condition or user action that may expose the equipment or user to potential damage or danger.



WARNING: describes an operating condition or user action that will likely cause damage to the equipment or injury to the user or to others in the vicinity.



DANGER: describes an operating condition or user action that will immediately damage the equipment and/or be extremely dangerous or life threatening to the user or to others in the vicinity.

RIGGING AND ELECTRICAL SAFETY



DANGER: The loudspeakers described in this manual are designed and intended to be ‘flown’ or suspended using a variety of rigging hardware, means, and methods. Installation of loudspeakers should only be performed by trained and qualified personnel. It is strongly recommended that a licensed and certified professional structural engineer approve the mounting design. Severe injury and/or loss of life may occur if these products are improperly installed!



DANGER: iBOX rigging fittings are rated at a Working Load Limit of 150 lbs (68 kg) with a 15:1 safety margin. No single rigging fitting should ever be subjected to a load that is greater than 150 lbs. Failure to heed this warning could result in injury or death!



DANGER: All rigging fittings and OmniMount™ inserts must be fitted with optional mounting hardware or they must remain sealed with the flat-head Allen screws that come installed in the enclosure. The flat-head Allen screws pass through the Baltic birch plywood panels and fasten to internal steel rigging brackets, providing structural integrity. Without these Allen screws, the structural integrity of the plywood enclosure would rely solely on the adhesion of the glue joints, which over time could deteriorate. Therefore, **all fasteners must remain in place** so that the enclosure may be safely ‘flown’ or suspended overhead.



IMPORTANT: Refer to the sections on installation and connections later in this manual for additional information on rigging and electrical safety.

UNPACKING AND INSPECTION

R-Series loudspeakers are inherently rugged and are carefully packed in sturdy cartons. However, it's wise to thoroughly inspect each unit after it has been removed from the packaging, as damage could occur during shipping.

SHIPPING CLAIMS

Please note that once the shipment has left your dealer or the Community factory, the responsibility for damage is *always* borne by the freight company. If damage has occurred during shipping, you must file a claim directly with the freight company. It's very important to contact the freight company as soon as possible after receiving your shipment, as most freight companies have a short time limit within which they will investigate claims. Make sure to save the carton and the packing material, as most claims will be denied if these materials are not retained. Your Community dealer and the factory will try to help in any way they can, but *it is the responsibility of the party receiving the shipment to file the damage claim.*

It's always a good idea to retain the carton and packing materials indefinitely, if possible, in the event that the unit may need to be returned to your dealer or distributor for repair in the future.

WHAT'S IN THE BOX

Each shipping carton contains the following items:

Loudspeaker System (Qty 1)

Operation and Installation Manual (Qty 1)

Warranty Card (Qty 1)

Mounting Yoke

included with i2W8

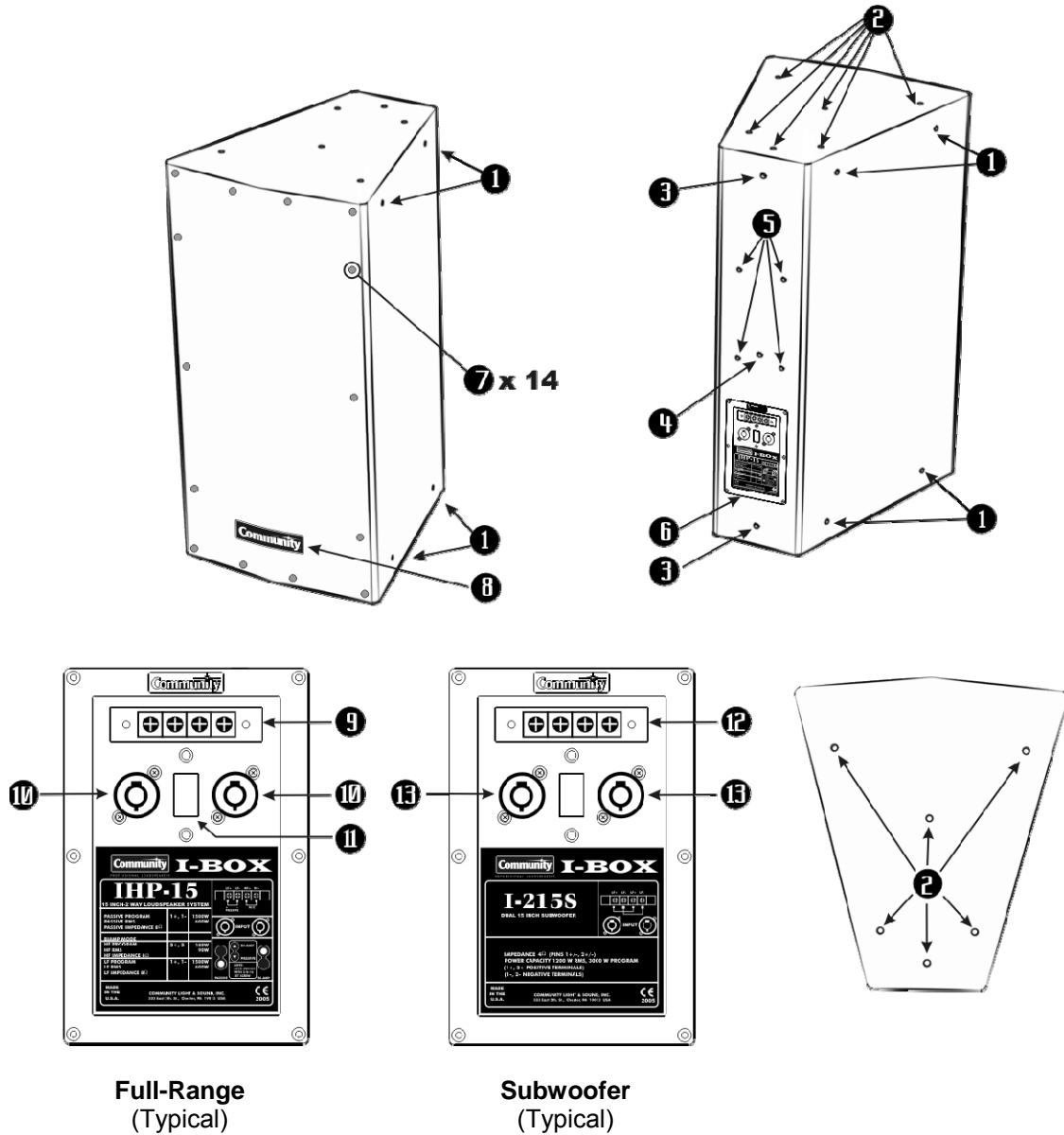
optional with other models

not available for iLF218 or M12

IBOX FEATURES

The diagrams on this page and the table on the following page identify basic iBOX features. As noted in the table, some features do not apply to all models.

FIGURE 1: iBOX FEATURES



Note: These drawings show the common physical features of the iBOX iHP1200, iHP1500 and iHP3500 Series. Note that the iHP1200 and the iHP1500 Series have the OmniMount™ bolt-pattern on the rear (item #5 above and in Table 1). The iHP3500 Series has an OmniMount bolt pattern on its bottom. See the Installation section for connection and usage information on models i2W8, M12 and iLF218.

QUICK START - FEATURES

TABLE 1: iBOX FEATURES
(refer to FIGURE 1)

MOUNTING/RIGGING POINTS		DESCRIPTION
1	SIDE RIGGING POINTS	8 total, 2 top and 2 bottom on each side.
2	TOP & BOTTOM RIGGING POINTS	12 total ¹ .
3	REAR PANEL RIGGING POINTS	2 total ¹ .
4	REAR PANEL PULL-BACK POINT	1 total ² .
5	REAR PANEL BRACKET MOUNT	4-bolt pattern for OmniMount™ brackets or similar (iHP3500 Series has OmniMount bolt pattern on bottom).
6	INPUT PANEL	For signal connections to the loudspeaker. Also contains Bi-amp / Single-amp switch.
7	GRILLE RETENTION SCREWS	14 - #6 (16 on 3500 Series)
8	NAMEPLATE	Community Logo.
9	BARRIER STRIP CONNECTOR	Wired in parallel with both NL4-compatible locking connectors.
10	NL4-COMPATIBLE LOCKING CONNECTORS	4 pole NL4MP jacks, wired in parallel. Accepts NL4FC connectors. Used for both PASSIVE and BI-AMPLIFIED modes. Use terminals 1 ± for PASSIVE mode or for BI-AMPLIFIED LF input. Use terminals 2 ± for BI-AMPLIFIED HF input (not used in PASSIVE mode).
11	PASSIVE / BI-AMP SWITCH	Used to select loudspeaker's operating mode. Down position is for PASSIVE mode (single amplifier) and up position is for BI-AMPLIFIED mode (separate LF and HF amplifiers). Set-screw avoids tampering.
12	BARRIER STRIP CONNECTOR	Wired in parallel with both NL4-compatible locking connectors.
13	NL4-COMPATIBLE LOCKING CONNECTORS	4 terminal NL4MP jacks. Accepts NL4FC in-line connectors. Use terminals 1 ±. Terminals 2 ± are paralleled with 1 ±. Also see Installation on Pages 24 - 26.

1) 150 lbs (68 kg) Working Load Limit / 15:1 safety factor

2) 60 lbs (27 kg) Working Load Limit / 15:1 safety factor

ELECTRICAL INSTALLATION AND SAFETY

Electrical Safety



DANGER: The output voltage and current capabilities of audio power amplifiers present a danger to installers especially in 70-volt and 100-volt distributed systems. To minimize the risk of electric shock from loudspeaker connecting cables, confirm that the power amplifiers are turned “off” before connecting loudspeaker cable to the loudspeaker or amplifier.

Electrical Connections and Cabling

The following table shows connections for iBOX loudspeakers. See the Installation section for more information including the recommended crossover settings for biamp mode and recommended high pass filters for each iBOX model. Note that the i2W8 is passive only and cannot be biamplified.

Table 2: iBOX Connections

	NL4 Connector				Barrier Strip			
	1+	1-	2+	2-	1 (left)	2	3	4 (right)
Passive Mode	+	-	Looped thru to 2nd NL4*		+	-	Looped thru to 2nd NL4*	
Bi-Amp Mode	LF +	LF -	HF +	HF -	LF +	LF -	HF +	HF -

* Also See Page 30 “Powering Each Woofer Separately”

MECHANICAL INSTALLATION AND SAFETY

Rigging and Safety

All iBOX models, except the M12, are designed to be suspended (flown) using a variety of rigging hardware, means, and methods.



WARNING: It is essential that all installation work involving the suspension of these loudspeaker products be performed by competent, knowledgeable persons who understand safe rigging practices. Severe injury and/or loss of life may occur if these products are improperly installed.

As described in the Accessories section of this manual, Community offers a variety of mounting hardware including eyebolts, mounting yokes, seat tracks and various fly kits. The i2W8 comes with an included mounting yoke. Mounting hardware is optional for other models. Detailed installation instructions for each mounting accessory is included with that item.

QUICK START - INSTALLATION



WARNING: All rigging fittings and OmniMount™ inserts must be fitted with either optional mounting hardware or they must remain sealed with the flat-head Allen screws that come installed in the enclosure. The flat-head Allen screws pass through the Baltic birch plywood panels and fasten to internal steel rigging brackets, thereby providing structural integrity. **All rigging fittings must have fasteners in place** so that the enclosure may be safely ‘flown’ or suspended overhead.



DANGER: iBOX rigging fittings are rated at a Working Load Limit of 150 lbs (68 kg) with a 15:1 safety margin. No single rigging fitting should ever be subjected to a load that is greater than 150 lbs. i2W8 rigging fittings are designed to suspend a single i2w8 only. Failure to heed these limits could result in injury or death!

FOR MORE INFORMATION

For more information on installing and operating your iBOX loudspeaker, please refer to the “Installation” section of this manual or go to Community’s web site at www.communitypro.com.

For applications support, service or warranty information, refer to Community’s web site or contact Community at 800-523-4934 or 610-876-3400.

INTRODUCTION

Thank you for selecting Community iBOX Premium Installation Loudspeakers. The iBOX Series offers a wide range of pattern control and array options from three primary sizes of enclosures. In each size format, the full-range and sub-bass enclosures are identically dimensioned, making for attractive, easy to assemble arrays. A total of 22 models in the series are available. iBOX loudspeakers are flexible, easy to install and most importantly, they provide unparalleled sound quality.

This manual is intended to help you install and use iBOX loudspeakers safely and effectively. It provides useful information to help you obtain the best performance, sound quality, and reliability from your iBOX system. We've provided a series of Quick-Start diagrams to enable you to operate your speakers immediately if required; however, we recommend that you read this manual to help insure that your iBOX installation meets the highest possible standards.

iBOX Features and Technology

iBOX Series loudspeakers offer numerous features and advances in technology that provide unprecedented sonic quality and installation flexibility. Some of these include:

- Selectable crossover modes: bi-amp or passive. Internal crossovers are high-order sophisticated designs for reduced off-axis lobing and consistent coverage through the crossover region.
- Uniform Voicing Filters enhance sound quality and minimize sonic variations among the different models when used in passive mode.
- Large format, 1.4 inch-throat high frequency compression drivers provide high power with lower distortion and smoother response than typical two inch throat drivers.
- Mathematically correct, large-format, hand-laid fiberglass mid- and high-frequency horns. A wide selection of dispersion patterns is available and most horns can be rotated 90 degrees if needed.
- 13-ply Baltic birch enclosures sealed with Tuf-Coat™ finish.
- Protective steel grilles covered with rugged powdercoat finish.
- Community offers a wide range of factory designed mounting and rigging accessories for use with the 23 load rated M-10 rigging points and 4 M8 OmniMount™ inserts on iHP1200, iHP1500 and iHP3500 Series enclosures. The i2W8 comes with a standard yoke mounting bracket.
- Dual NL4-compatible locking connectors plus barrier strip connector for ease of wiring.
- Community's patented Cool-Coil™ cone driver technology minimizes power compression and ensures long-term reliability of subwoofers.
- All models are available in black, white and unfinished versions except the M12, i2W8 and iLF-218 (black or white only).

COOL-COIL™ Technology

iBOX Series subwoofers use Community's patented Cool-Coil™ heat evacuation technology. Cool-Coil uses an airflow director to remove heat from the voice coil, improving the performance and reliability of the cone drivers.

MODELS

High voice coil temperatures have undesirable effects on performance. Thermal expansion can result in warpage and misalignment of components. A voice coil whose diameter has increased due to thermal expansion will often no longer be round, and has a greater possibility of rubbing against the magnetic structure.

Any amount of cooling that can be applied to a woofer will be beneficial. One very commonly used cooling method is venting of the pole piece of the magnet structure. The motion of the cone assembly will pump air in and out of the cavity under the dust cap. This air passing through the pole vent helps to cool the magnet structure. Community has improved on this common cooling method by introducing an airflow director (US patent 6,390,231) into the air path. Figure 2 shows a conventional woofer with a vented pole piece (left), and a Community Cool-Coil woofer. The voice coil former in the Cool-Coil motor is aluminum, and is taller than normal. This extended aluminum former becomes a cooling fin for the voice coil, and the airflow director causes the air to pass in close proximity to the former. By directing the air to flow over the hot aluminum former, more heat is removed from the voice coil than simply allowing the pumped air to take its natural path in and out of the cavity. This results in woofers that can handle higher power with greater reliability than conventional woofers.

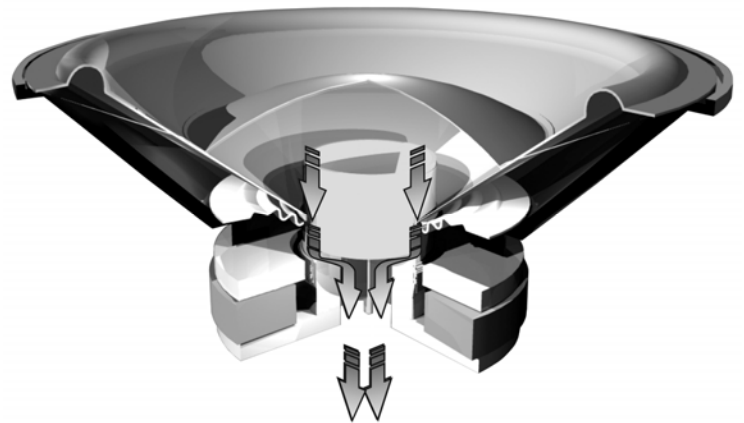
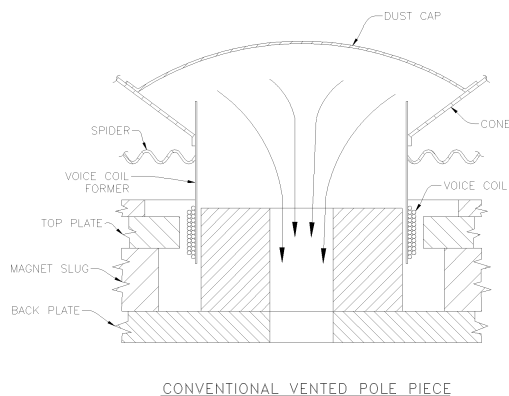


Figure 2: Conventional (left) vs. Community's Cool-Coil Woofer

IBOX MODELS

The iBOX Series of loudspeakers are designed for top-of-the-line installation work. Their premium components are housed in rugged, acoustically inert trapezoidal enclosures. iBOX systems are characterized by high-power and low distortion, with exceptional musicality and speech intelligibility.

iBOX models come in three basic form factors, or sizes. Within each form factor there's one full-range enclosure and two subwoofer models that are dimensioned identically to the full-range enclosure; this makes clusters and arrays easy to assemble and exceptionally attractive when installed. A high-power rectangular subwoofer (intended for use on the floor), a multi-layer glass composite stage monitor, and a small but highly versatile system that can be used as an under-balcony speaker or stage monitor system round out the iBOX line. All models are available in black and white. Most are also available in unfinished versions.

Each full-range enclosure can be ordered with a variety of horn coverage patterns. Most horns can be field-rotated 90 degrees, allowing the enclosure to be used in either a vertical or horizontal orientation (see following tables). iBOX loudspeakers array very well when used in multiples; the wide range of available coverage patterns support tight-pack and splayed arrays, as well as exploded cluster and distributed system designs. A variety of mounting yokes, arraying kits, and other installation hardware is available from the factory as standard items.

All full-range iBOX models may be single-amped using the internal passive crossover, or bi-amped using an external crossover. In either the single-amped or the bi-amped mode, the mid-to-high crossover in three-way iBOX models is always passive. Here are brief descriptions of the available models.

LARGE FORM-FACTOR: iHP3500 Series

The iHP3500 Series are high performance three-way systems, based on a third enclosure dimension which is slightly larger than the 1500 Series. The **iHP3564** (60x40) and **iHP3594** (90x40) are large format, full-range systems. The driver complement in both consists of a 15-inch (380mm) high power low frequency driver, an 8-inch (205mm) horn loaded cone mid-range driver and a 1.4-inch (36mm) exit / 2.87" (72.2 mm) edgewound voice coil large format HF compression driver. High order crossovers optimize system performance and the large format horn flares deliver well controlled dispersion. Vocal quality and musical impact are enhanced by the carefully engineered horn loaded cone midrange. The well controlled off-axis response enhances system performance when combined with other iBOX full-range and subwoofer elements in clusters and arrays. The horns in the iHP3564 and iHP3594 are not rotatable. However, these models can be special-ordered in horizontal versions with rectangular cabinets at no extra cost.

The **i118S** and **i215LVS** are high power subwoofers, designed to complement the iHP3500 Series full-range cabinets with matching exterior dimensions to allow combinations in arrays and clusters that are acoustically and aesthetically designed to work together. A small footprint also makes these subwoofers an ideal choice for unobtrusive ground-stacking where space is limited. The i118S uses a single 18-inch (460mm) high power driver while the i215LVS consists of dual 15-inch (380mm) high power low frequency drivers. The 15 and 18-inch drivers utilize Community's patented Cool-Coil™ technology to minimize power-compression and ensure long-term reliability. They are used in front loaded, ported, critically-tuned configurations.

Figure 3: iHP3500 Series

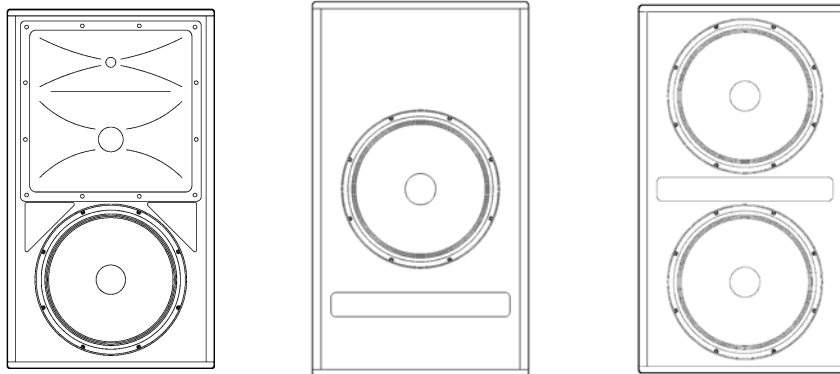


Table 3: LARGE FORM-FACTOR: iHP3500 Series

Model	Type	Angle of Coverage	Transducers
iHP3564	Three-Way, Full-Range	60° x 40° or special-order horizontal version	LF 1 x 15" MF 1 x 8" HF 1 x 1.4"
iHP3594	Three-Way, Full-Range	90° x 40° or special-order horizontal version	LF 1 x 15" MF 1 x 8" HF 1 x 1.4"
i118S	Subwoofer	180° x 360°	1 x 18"
i215LVS	Subwoofer	180° x 360°	2 x 15"

MODELS

MEDIUM FORM-FACTOR: iHP1500 Series

The iHP1500 series loudspeakers are premium quality, large format, full-range loudspeaker systems offering six rotatable HF horn options from models **iHP1544** (40x40), **iHP1564** (60x40), **iHP1566** (60x60), **iHP1594** (90x40), **iHP1596** (90x60) and **iHP1599** (90x90). These are combined with a high-power 15-inch mid/bass LF driver in a slightly larger enclosure than the 1200 Series, which extends the LF response to 45 Hz. The driver complement consists of a 15" (380mm) high power low frequency driver and a 1.4" (36mm) exit / 2.87" (72.2 mm) edgewound voice coil compression driver. The large format rotatable horn flares deliver well controlled dispersion, and utilize high order crossovers to optimize system performance. The well controlled off-axis response enhances system performance when combined with other iBOX Mid/Hi and subwoofer elements.

As with the 1200 Series, two same-dimension subwoofers are available to provide greater LF power and extension for larger systems. The **i115S** (single 15-inch Cool-Coil™ LF Driver) and **i215S** (dual 15-inch Cool-Coil™ LF Drivers) subwoofers share the same cabinet profile and have been designed for integration with the iHP1500 Series full-range cabinets for aesthetically pleasing clusters and arrays.

Figure 4: iHP1500 Series

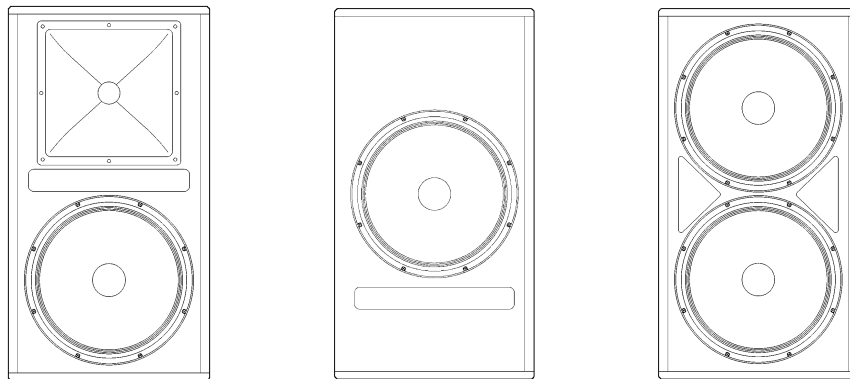


Table 4: MEDIUM FORM-FACTOR: iHP1500 Series

Model	Type	Angle of Coverage	Transducers
iHP1544	Two-Way, Full-Range	40° x 40°	LF 1 x 15" HF 1 x 1.4"
iHP1564	Two-Way, Full-Range	60° x 40° field rotatable	LF 1 x 15" HF 1 x 1.4"
iHP1566	Two-Way, Full-Range	60° x 60°	LF 1 x 15" HF 1 x 1.4"
iHP1594	Two-Way, Full-Range	90° x 40° field rotatable	LF 1 x 15" HF 1 x 1.4"
iHP1596	Two-Way, Full-Range	90° x 60° field rotatable	LF 1 x 15" HF 1 x 1.4"
iHP1599	Two-Way, Full-Range	90° x 90°	LF 1 x 15" HF 1 x 1.4"
i115S	Subwoofer	180° x 360°	1 x 15"
i215S	Subwoofer	180° x 360°	2 x 15"

SMALL FORM-FACTOR: iHP1200 Series

The iHP1200 Series combines a high-power 12-inch LF mid/bass driver with a 1.4" (36mm) exit / 2.87" (72.2mm) edgewound voice coil large format high frequency compression driver on rotatable, large format horns. Offering precise uniform coverage and arrayability are 6 models: **iHP1244** (40x40), **iHP1264** (60x40), **iHP1266** (60x60), **iHP1294** (90x40), **iHP1296** (90x60) and **iHP1299** (90x90). Each of the full-range cabinets can be used in biamp or passive mode and operates from 60 Hz to 18 kHz with power handling of 600W continuous.

For systems requiring greater LF extension Community provides the **i112S** (single 12-inch Cool-Coil™ LF Driver) and **i212S** (dual 12-inch Cool-Coil™ LF Drivers) subwoofers in the same size enclosures, allowing aesthetically pleasing clusters with any cabinet combination.

Figure 5: iHP1200 Series

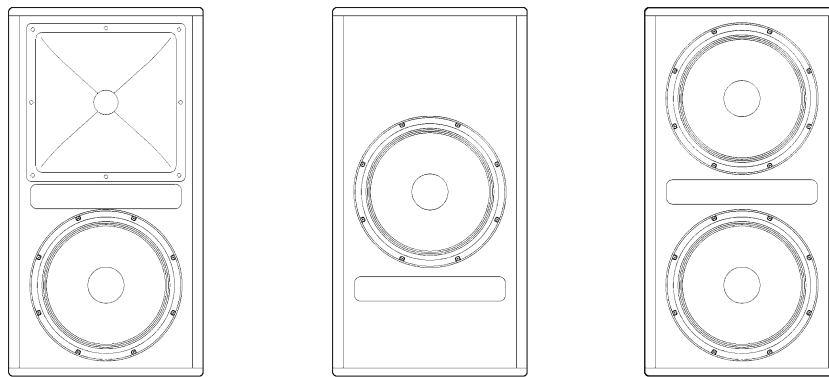


Table 5: SMALL FORM-FACTOR: iHP1200 Series

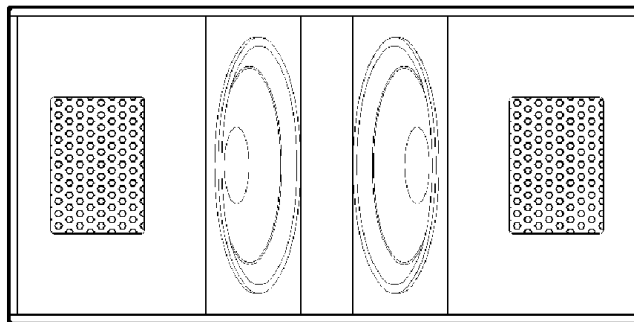
Model	Type	Angle of Coverage	Transducers
iHP1244	Two-Way, Full-Range	40° x 40°	LF 1 x 12" HF 1 x 1.4"
iHP1264	Two-Way, Full-Range	60° x 40° field rotatable	LF 1 x 12" HF 1 x 1.4"
iHP1266	Two-Way, Full-Range	60° x 60°	LF 1 x 12" HF 1 x 1.4"
iHP1294	Two-Way, Full-Range	90° x 40° field rotatable	LF 1 x 12" HF 1 x 1.4"
iHP1296	Two-Way, Full-Range	90° x 60° field rotatable	LF 1 x 12" HF 1 x 1.4"
iHP1299	Two-Way, Full-Range	90° x 90°	LF 1 x 12" HF 1 x 1.4"
i112S	Subwoofer	180° x 360°	1 x 12"
i212S	Subwoofer	180° x 360°	2 x 12"

MODELS

RECTANGULAR SUBWOOFER: iLF218

The iLF218 is an efficient, dual 18-inch subwoofer that can be used with any full-range iBOX loudspeaker system. It has exceptional punch, high output, and low distortion. The iLF218 uses a unique combination of techniques to keep voice coil temperatures low to avoid power compression that causes reduced output at higher volume levels. Active-Air cooling utilizes the bass ports to move outside air over the motor structures of each driver. Additionally, cone movement drives air through the vented magnet polepiece to cool the motor structures. Balanced Cone Loading (BCL) improves the linearity of the system by balancing the front and rear air loads. All of these features combine to reduce operating temperatures and avoid diminishing output at higher volumes. The enclosure has rigid internal bracing reducing sound energy losses from enclosure vibration. The iLF218 subwoofer is available in both black and white Tuf-Coat™ finishes. It features a pair of high-power 18" drivers and has a dispersion of 180° x 360°.

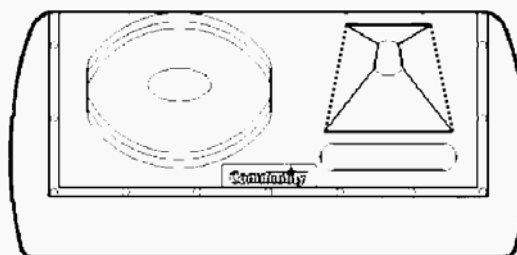
Figure 6: iLF218



STAGE MONITOR: M12

The elegantly-styled M12 stage monitor system is a compact, no compromise solution that exceeds the demands of high performance monitoring. At a mere 10½ inches high and 21½ inches wide, the M12 offers clean sightlines for audiences and cameras, as well as superb performance for any entertainment venue. Operable between 55 Hz and 18 kHz, the two-way, ported system utilizes a 12-inch woofer and a two-inch, wideband compression driver coupled with a proprietary asymmetrical horn providing full-range output close-up or at a distance. The pattern for this unique horn is 90° vertical at the top and 40° at the bottom. The overall vertical pattern is 70°. The curva-linear multilayer glass composite enclosure is protected by Community's abrasion resistant, non-reflective, Tuf-Coat™ finish. The base plate of the M12 safely hides away dual NL4 compatible locking connectors and specially molded cable channels and clips which allow the user to route the cables out of the back, either side of the monitor, or directly on top of a stage box for invisible cabling. These cable exits also serve as lifting points and allow easy positioning of the monitor, with the rear point having a durable rubber carry handle. *The M12 is offered in right-hand and left-hand mirror versions, and comes as standard in a biamp/passive switchable format.* Available in elegant black and white finishes, the M12 is the new benchmark of on-stage monitor aesthetics and performance.

Figure 7: M12

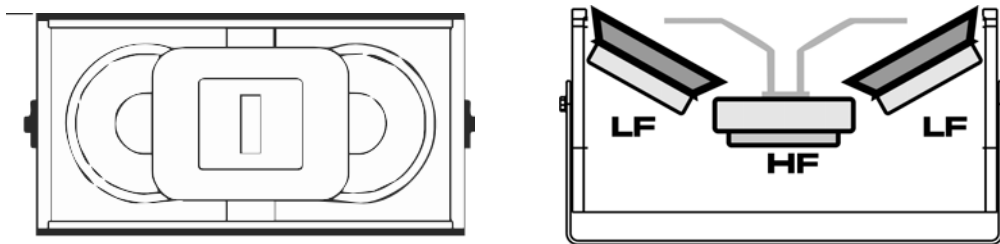


UNDER-BALCONY / STAGE MONITOR: i2W8

The Community i2W8 loudspeaker is a two-way, full-range loudspeaker system designed to provide high quality music and voice reproduction in applications requiring smooth, ultra-wide, horizontal coverage. It provides an uncompromised musical system in a compact, attractive package. Engineered for use in underbalcony, downfill and distributed installations, the loudspeaker enclosure and faceplate are constructed of 13-ply Baltic birch; LF cones are of low mass, high stiffness carbon fiber; and the HF driver has a diaphragm of titanium. All drivers are Ferrofluid-cooled. The LF drivers and centrally placed ultra-wide 120° HF pattern control horn have been engineered to provide superior uniform pattern over the widest possible bandwidth. The unique “Super-V” configuration of the LF drivers provides exceptional uniform midrange pattern that would be impossible to create with a conventional flat wooden baffle plate.

The multipurpose i2W8 is available in either a black or white painted finish, with an included matching steel mounting yoke for ease of installation. It can also be ordered with or without a factory-installed 200W autoformer for 70V/100V applications (model i2W8T). Its six-sided, low profile enclosure and ultra-wide coverage pattern make the i2W8 ideal for use as a monitor, stage lip or side fill as well. For stage-monitor use, the i2W8 includes a kit of four feet that can be mounted, in pre-drilled holes, on either of two panels.

Figure 8: i2W8



Front View (left) and X-Ray Top View with Yoke (right)

OPTIONAL MOUNTING HARDWARE

iBOX loudspeakers are designed with common dimensions and 30° trapezoidal enclosures for easily assembled arrays. Community offers a wide selection of versatile mounting options for iBOX loudspeakers centered around metric M10 hardware. iBOX mounting hardware is available in white or black. Detailed installation instructions for each mounting bracket are included with the bracket itself. Note that the M12 Monitor is not suspendable.



DANGER: All rigging fittings and OmniMount™ inserts must be fitted with either optional mounting hardware or they must remain sealed with the flat-head Allen screws that come installed in the enclosure. Therefore, **all rigging fittings must have fasteners in place** so that the enclosure may be safely ‘flown’ or suspended overhead.



WARNING: i2W8 rigging fittings have a Working Load Limit of 100 lbs (45.5 kg) with a 15:1 safety margin. No single rigging fitting should ever be subjected to a load that is greater than 100 lbs. The i2W8’s rigging fittings are not rated for suspending a 2nd loudspeaker. Do not suspend another loudspeaker below the i2W8 using the i2W8’s rigging fittings.

ACCESSORIES

Eye Bolt Kit: M10EYBLTKIT

iBOX models in the iHP1200, iHP1500 and iHP3500 families, as well as the iLF218 subwoofer, can be suspended with properly rated, forged steel, shoulder eyebolts. Community offers such eyebolts in a kit of four as model M10EYBLTKIT. See Page 32 for more information on eyebolts.

Yoke Brackets: IB-Y12, IB-Y15, IB-Y35

The i2W8 is shipped with a yoke bracket. The M12 is not designed for suspension.

Optional Yoke brackets are available for the iHP1200, iHP1500 and iHP3500 Series iBOX loudspeakers. They are designated as follows:

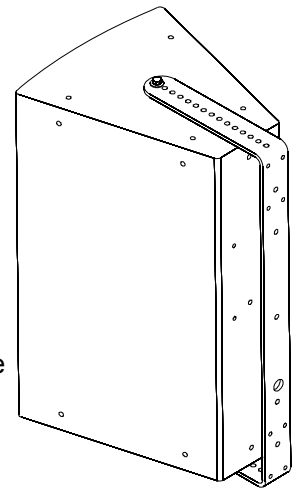
- IB-Y12 - for iHP1200 Series Enclosures
- IB-Y15 - for iHP1500 Series Enclosures
- IB-Y35 - for iHP3500 Series Enclosures

The IB-Y12/Y15/Y35 yoke brackets are designed to mount the loudspeaker in either a vertical or horizontal orientation, for precise acoustic focusing.

The yoke bracket is fitted with a series of mounting holes, allowing the installer to vary the distance from the enclosure to the mounting surface in order to suit the requirements of the installation.

Each model of yoke bracket is engineered to provide a high margin of safety when supporting the iBOX loudspeaker that it's designed for. Yokes are manufactured of steel and covered with a durable powder-coat finish. They're available in either black or white to match the color of the enclosure.

All yoke brackets are provided with the hardware required to attach them to the loudspeaker enclosure. Community does not supply hardware to attach the yoke bracket to the building structure or other mounting surface. Such hardware must be supplied by the installer and should be sized and rated for the weight load of the loudspeaker, keeping in mind that additional torque load may occur when focusing the loudspeaker within the yoke assembly. The installer is solely responsible for determining if the mounting surface is capable of safely supporting the weight load of the loudspeaker, and for selecting appropriate hardware to install it.



Vertical Yoke Brackets: IB-VY12, IB-VY15, IB-VY35

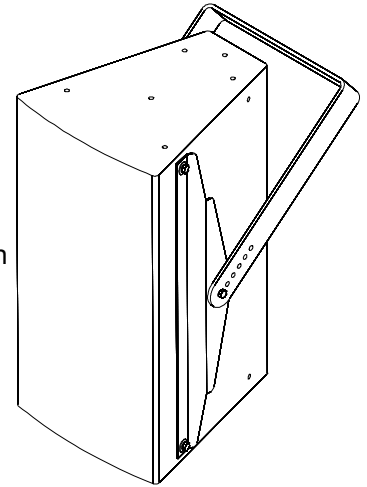
Vertical yoke brackets are available for the iHP1200, iHP1500 and iHP3500 Series iBOX loudspeakers. They are designated as follows:

- IB-VY12 - for iHP1200 Series Enclosures
- IB-VY15 - for iHP1500 Series Enclosures
- IB-VY35 - for iHP3500 Series Enclosures

The IB-VY12/VY15/VY35 vertical yoke bracket is designed to mount the loudspeaker in a vertical orientation, providing two axes of motion; horizontal rotation and vertical tilt (called *pan* and *tilt*) for precise acoustic focusing. The yoke bracket is fitted with a series of mounting holes, allowing the installer to vary the distance from the enclosure to the mounting surface in order to suit the requirements of the installation.

Each model of yoke bracket is engineered to provide a high margin of safety, when supporting the iBOX loudspeaker it's designed for. Yokes are manufactured of steel and covered with a durable powder-coat finish. They're available in either black or white to match the color of the enclosure.

All yoke brackets are provided with the hardware required to attach them to the loudspeaker enclosure. Community does not supply hardware to attach the yoke bracket to the building structure or other mounting surface. Such hardware must be supplied by the installer and should be sized and rated for the weight load of the loudspeaker, keeping in mind that additional torque load may occur when focusing the loudspeaker within the yoke assembly. The installer is solely responsible for determining if the mounting surface is capable of safely supporting the weight load of the loudspeaker, and for selecting appropriate hardware to install it.



Vertical Fly Kit: IB-VFK*

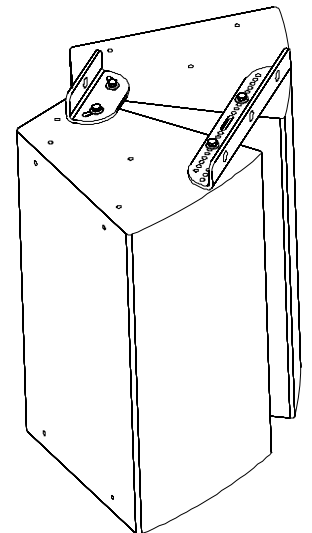
An adjustable Vertical Fly Kit is available that fits the iHP1200, iHP1500 and iHP3500 Series iBOX loudspeakers. Designated the **IB-VFK**, it is intended for use only with identically dimensioned enclosures; it does not permit mixing form-factors.

The kit consists of two angle brackets and a flat steel plate, slotted to align with the iBOX rigging fittings on the tops and bottoms of the enclosures. It allows two iBOX enclosures to be flown with adjustments from tight-pack to a 45 degree splay between cabinet edges.

Three, four, or more iBOX enclosures may be flown by purchasing additional Vertical Fly Kits; two kits will fly three enclosures, three kits will fly four enclosures, and so on. The splay angles for each iBOX model are conveniently labeled on the planar angle bracket, as an aid in setting the desired horizontal coverage pattern. Note that when hanging four or more iHP1200 Series loudspeakers, the 0° and 5° splay angles cannot be used, due to interference from the Planar Angle Bars.

All parts in the kit are engineered to provide a high margin of safety when used with iBOX loudspeakers. The brackets are manufactured of steel and covered with a durable powder-coat finish. Each kit comes complete with four eyebolts intended for use as safety points. Kits are available in either black or white to match the color of the enclosures. Please note, however, that the eyebolts provided with the White Vertical Fly Kits are finished in black.

No hardware is provided to attach suspension cables to the Vertical Fly Kit. Such hardware must be supplied by the installer, and should be rated for the weight load of the enclosures. The installer is solely responsible for determining if all rigging components that are used to suspend the enclosures are adequately sized and rated, and if the structure they are suspended from is capable of safely supporting the aggregate weight load.



*See Page 48 for an explanation of array coverage angles using these brackets.

ACCESSORIES

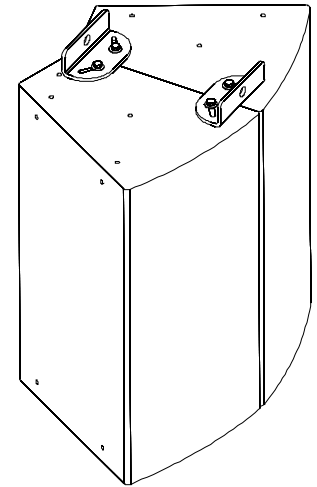
Tight Pack Kit: IB-TPK*

A Tight Pack Kit is available that fits the iHP1200, iHP1500 and iHP3500 Series iBOX loudspeakers. Designated the **IB-TPK**, it is intended for use only with identically dimensioned enclosures; it does not permit mixing form-factors.

The kit consists of two angle brackets and a flat steel plate, slotted to align with the iBOX rigging fittings on the tops and bottoms of the enclosures. It allows two iBOX enclosures to be flown in a tight-pack configuration or with as much as 10° of splay between them. Three, four, or more iBOX enclosures may be flown by purchasing additional Tight Pack Kits; two kits will fly three enclosures, three kits will fly four enclosures, and so on.

All parts in the kit are engineered to provide a high margin of safety when used with iBOX loudspeakers. The brackets are manufactured of steel and covered with a durable powder-coat finish. Each kit comes complete with four eyebolts intended for use as safety points. Kits are available in either black or white to match the color of the enclosures. Please note, however, that the eyebolts provided with the White Tight Pack Kits are finished in black.

No hardware is provided to attach suspension cables to the Tight Pack Kit. Such hardware must be supplied by the installer, and should be rated for the weight load of the enclosures. The installer is solely responsible for determining if all rigging components that are used to suspend the enclosures are adequately sized and rated, and if the structure they are suspended from is capable of safely supporting the aggregate weight load.

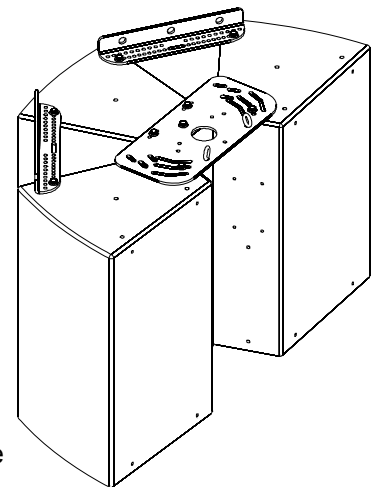


Universal Planar Kit: IB-UPK*

An adjustable Universal Planar Kit is available for flying arrays and clusters of three loudspeakers. Designated the **IB-UPK**, the kit fits the iHP1200, iHP1500 and iHP3500 Series iBOX loudspeakers and permits the mixing of form-factors; it can support arrays made up of same size or different size iBOX enclosures.

One popular use of the Planar Kit is to support a subwoofer in the center position flanked by two full-range enclosures. This useful configuration permits fine tuning of the horizontal coverage angle, while keeping the subwoofer in mechanical alignment with the full-range enclosures.

The kit consists of two Universal Planar Angles and one flat steel plate, slotted to align with the iBOX rigging fittings on the tops of the enclosures. It allows three same-sized iBOX enclosures to be flown with horizontal splay adjustments from tight-pack to a 45° angle between cabinet edges, and three different sized iBOX enclosures to be adjusted from tight pack to a 15° splay angle between cabinet edges.



WARNING: Do not use the Universal Planar Kit with more than three enclosures.

All parts in the kit are engineered to provide a high margin of safety when used with iBOX loudspeakers. The brackets are manufactured of steel and covered with a durable powder-coat finish. Each kit comes complete with four eyebolts intended for use as primary suspension points and/or as safety points. Kits are available in either black or white to match the color of the enclosures. Note, however, that the eyebolts provided with the White Vertical Flying Kits are finished in black.

No hardware is provided to attach suspension cables to the Universal Planar Kit. Such hardware must be supplied by the installer, and should be rated for the combined weight load of the enclosures. The installer is solely responsible for determining if all rigging components that are used to suspend the enclosures are adequately sized and rated, and if the structure they are suspended from is capable of safely supporting the aggregate weight load.

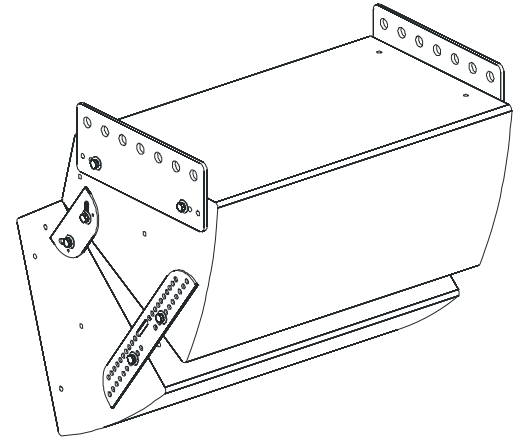
*See Page 48 for an explanation of array coverage angles using these brackets.

Horizontal Fly Kit: IB-HFK*

A Horizontal Fly Kit is available that fits the iHP1200, iHP1500 and iHP3500 Series iBOX loudspeakers. Designated the **IB-HFK**, it provides in-line horizontal suspension of one or more iBOX loudspeakers. It is intended for use only with identically dimensioned enclosures; it does not permit mixing form-factors.

The kit consists of two Lifting Brackets for the top enclosure, plus two Universal Planar Spacer Brackets and two Fly Kit Spacer Brackets. The top Lifting Brackets are provided with a series of shackle holes, allowing the installer to adjust the angle of tilt of the array.

The Universal Planar Spacer Brackets and Fly Kit Spacer Brackets are slotted to align with the iBOX rigging fittings on the sides of the enclosures. They allow two iBOX enclosures to be flown in a tight-pack configuration or, with as much as 45° of splay between cabinet edges. Three iBOX enclosures may be flown by purchasing an additional Horizontal Fly Kit.



WARNING: Do not use the Horizontal Fly Kit with more than three enclosures.

All parts in the kit are engineered to provide a high margin of safety when used with iBOX loudspeakers. The brackets are manufactured of steel and covered with a durable powder-coat finish. Each kit comes complete with two eyebolts that may be used on the lower loudspeaker as pull-back points, if a steep angle of downward tilt is required. Kits are available in either black or white to match the color of the enclosures. Please note, however, that the eyebolts provided with the White Horizontal Fly Kits are finished in black.

No hardware is provided to attach suspension cables to the Horizontal Fly Kit. Such hardware must be supplied by the installer and should be sized and rated to safely handle the combined weight load of the enclosures. The installer is solely responsible for determining if all rigging components that are used to suspend the enclosures are adequately sized and rated, and if the structure they are suspended from is capable of safely supporting the aggregate weight load.

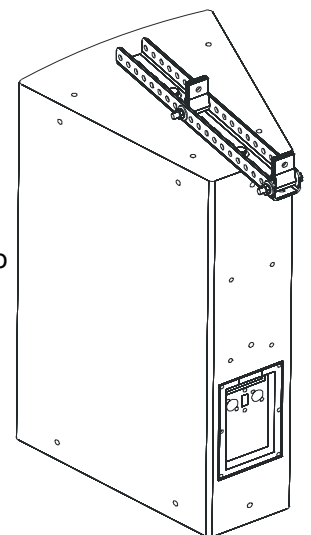
Vari-Angle Kit: IB-VAK

A Vari-Angle Kit is available that fits the iHP1200, iHP1500 and iHP3500 Series iBOX loudspeakers. Designated the **IB-VAK**, the kit consists of a rigid support channel that attaches to the top or bottom rigging fittings of any iBOX, and moveable hanging tabs that permit the enclosure to be flown at varying angles of downward tilt.

The support channel may also be attached to a standard yoke assembly (purchased separately), which is then attached to the enclosure. This arrangement allows the loudspeaker to be adjusted in two axes; the yoke assembly provides a range of horizontal adjustment, relative to the suspension points, while the vertical angle may be adjusted by selecting the location of the hanging tabs. Note: Use the IB-Y12 yoke for iHP1200 Series enclosures, the IB-Y15 yoke for iHP1500 Series enclosures, and the IB-Y35 yoke for the iHP3500 Series enclosures.

All parts in the Vari-Angle Kit are engineered to provide a high margin of safety when used with iBOX loudspeakers. The brackets are manufactured of steel and covered with a durable powder-coat finish. Kits are available in either black or white to match the color of the enclosures.

No hardware is provided to attach suspension cables to the Vari-Angle Kit. Such hardware must be supplied by the installer and should be sized and rated for the weight load of the enclosure(s). The installer is solely responsible for determining if all rigging components that are used to suspend the enclosure(s) are adequately sized and rated, and if the structure they are suspended from is capable of safely supporting the aggregate weight load. If multiple enclosures are suspended one above the other, it is the installer's responsibility to insure that the combined weight load does not exceed the Working Load Limit of any one rigging



*See Page 48 for an explanation of array coverage angles using these brackets.

ACCESSORIES

fitting. This is particularly important if the enclosures are steeply angled upward or downward, as most or all of the weight may be supported by the front or rear points only.

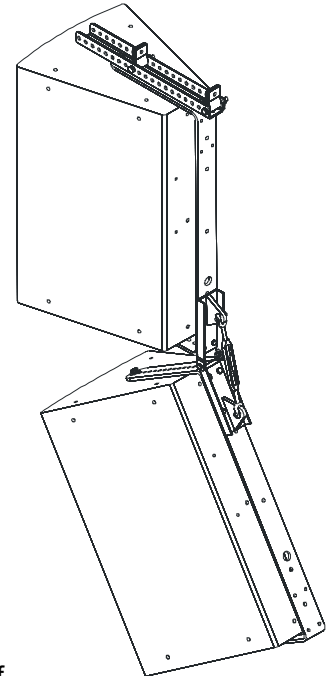
Vari-Tilt Mounting Bracket Kit: IB-VTK*

A Vari-Tilt Mounting Bracket Kit is available that fits the iHP1200, iHP1500 and iHP3500 Series iBOX loudspeakers. Designated the **IB-VTK**, the kit consists of the Vari-Angle Hanging Tab (described above), a turnbuckle, and a pair of turnbuckle brackets. The kit is designed to fly two same-size or dissimilar size enclosures, one over the other, allowing independent horizontal and vertical focusing of each enclosure (pan and tilt).

The Vari-Tilt Kit is designed to be used with Community's standard yoke brackets, which must be purchased separately. Use the IB-Y12 yoke for iHP1200 Series enclosures, the IB-Y15 yoke for iHP1500 Series enclosures, and the IB-Y35 yoke for the iHP3500 Series enclosures.

All parts in the kit are engineered to provide a high margin of safety for suspending iBOX loudspeakers. The brackets are manufactured of steel and covered with a durable powder-coat finish. Kits are available in either black or white to match the color of the enclosures; note however that the turnbuckle provided with the White Vari-Tilt Kits is finished in black.

No hardware is provided to attach suspension cables to the Vari-Tilt Mounting Bracket Kit. Such hardware must be supplied by the installer, and should be rated for the combined weight load of the enclosures. The installer is solely responsible for determining if all rigging components that are used to suspend the enclosures are adequately sized and rated, and if the structure they are suspended from is capable of safely supporting the aggregate weight load.



Seat Track Kit: STKIT

A Seat Track Kit is available that fits the iHP1200, iHP1500 and iHP3500 Series iBOX loudspeakers. Designated the **STKIT**, the kit provides a safe and convenient means of suspending a single enclosure. By purchasing multiple kits, one enclosure may be safely suspended over another.

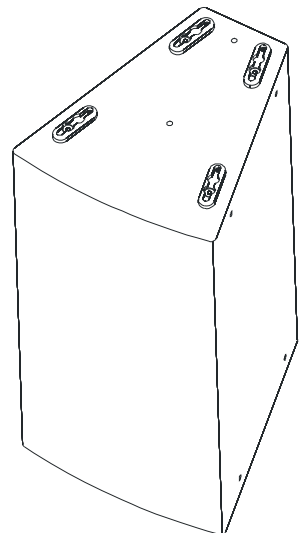


WARNING: Both M10 Metric and 3/8-16 Unified Course (UNC) threaded fasteners are included with each STKIT. *For safe rigging, you must use the M10 fasteners for the iBOX Series of loudspeakers.* The 3/8-16 fasteners are included for other Community loudspeaker models. For clarity, each type of fastener is packaged in a separate, labeled bag.

All parts in the kit are engineered to provide a high margin of safety. Each Seat Track Channel is load rated at 350 lbs with a 15:1 Safety Factor. The channels are manufactured of milled aluminum and are anodized black.

No hardware is provided to attach to the fittings in the Seat Track Kit. Such hardware must be supplied by the installer, and should be rated for the weight load of the enclosure(s). If multiple enclosures are suspended one above the other, it is the installer's responsibility to insure that the combined weight load does not exceed the Working Load Limit on any one rigging fitting. This is particularly important if the enclosures are angled sharply downward, as most or all of the weight may be supported by the rear points only.

Hardware fittings that mate with the Seat Track Channel are available from numerous professional rigging suppliers. The installer is solely responsible for determining if all rigging components that are used to suspend the enclosure(s) are adequately sized and rated, and if the structure they are suspended from is capable of safely supporting the aggregate weight load of the enclosure(s).



*See Page 48 for an explanation of array coverage angles using these brackets.

ELECTRICAL INSTALLATION AND SAFETY

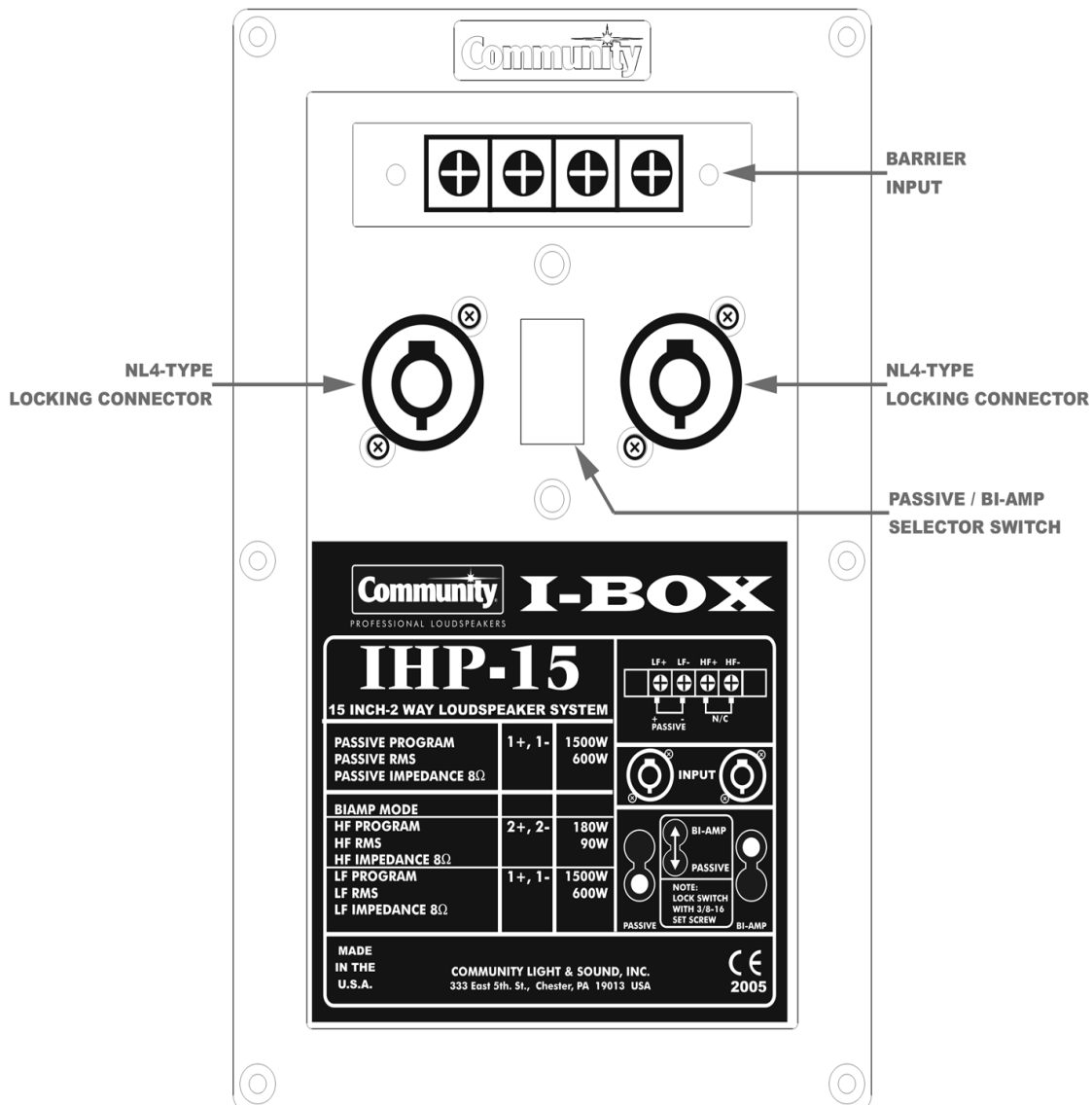


DANGER: The output voltage and current of audio power amplifiers are a shock hazard. To minimize the risk of electric shock from loudspeaker connecting cables, confirm that the power amplifiers are turned “off” before connecting loudspeaker cable to the loudspeaker or amplifier. Always follow local electrical codes and proper electrical safety procedures.

Connections*

With the exception of the iM12 Stage Monitor, all iBOX Series loudspeakers (including the iLF218) come with two methods of connecting the amplifier(s) to the loudspeaker. One is a pair of industry standard NL-4 type locking connectors wired in parallel, and the other is a barrier strip, also wired in parallel with the NL-4 type connectors. The barrier strip is equipped with a plastic safety cover to avoid electric shock hazard. The following figures show the input panel used on full-range and subwoofer iBOX loudspeakers.

Figure 9: iBOX Full-Range Input Panel*



INSTALLATION

Figure 10: iBOX Subwoofer Input Panel*

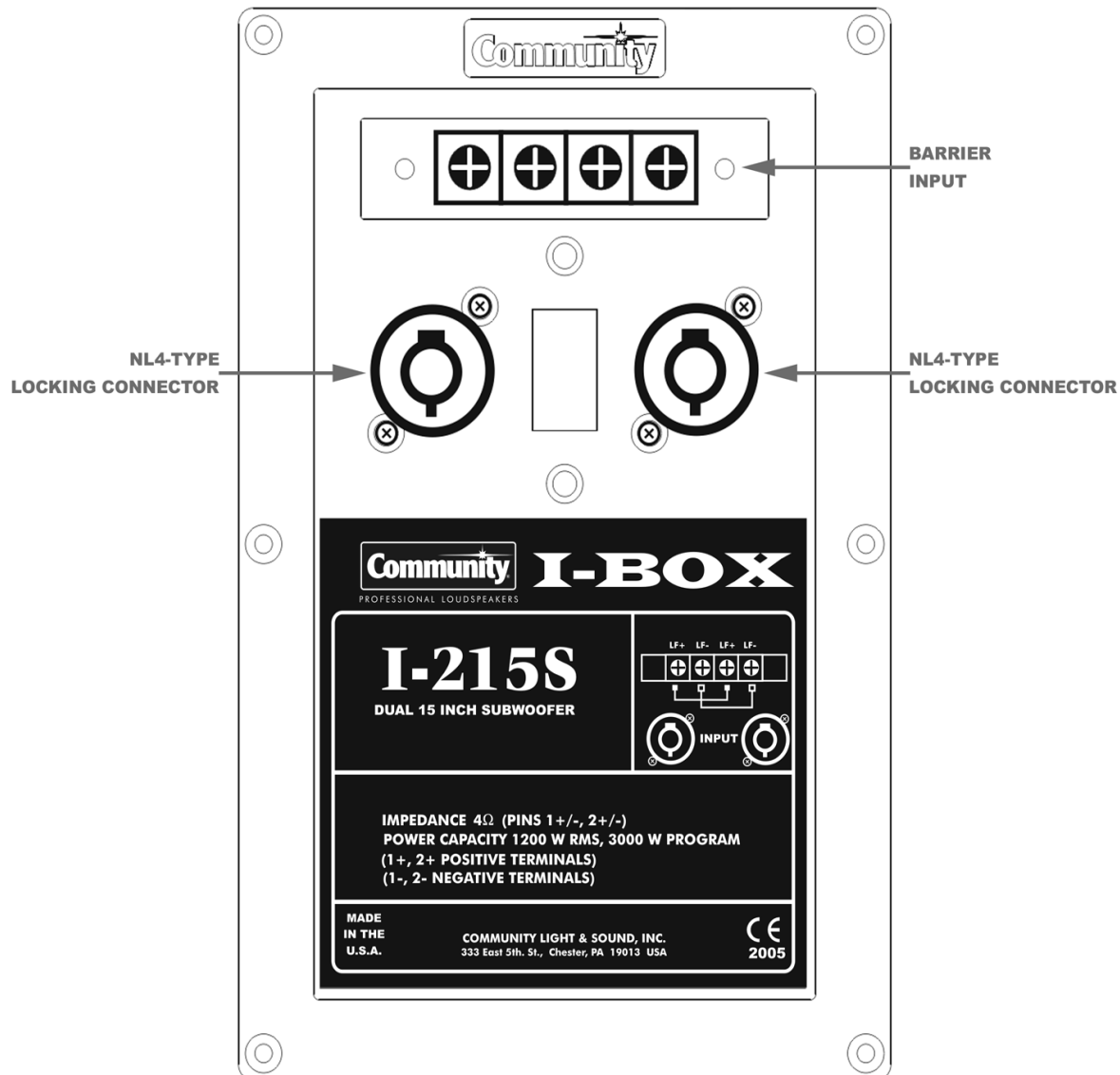
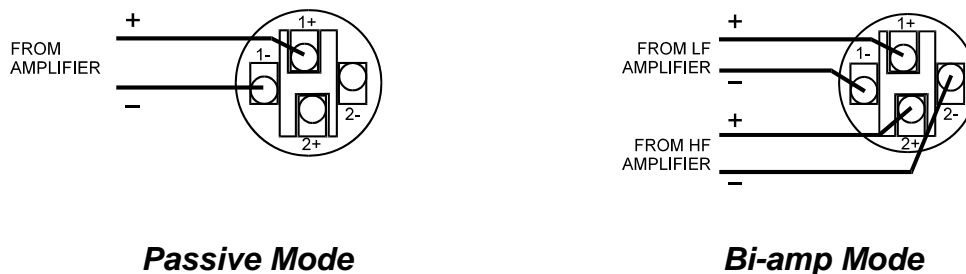


Figure 11: NL4 Connection Detail in Passive and Bi-Amp Modes*



*Also see Page 30 "Powering Each Woofer Separately"

Polarity and Pin Designations

Refer to the following figures and tables for connection information. Positive voltage applied to the + wire produces positive acoustic pressure at the mouth of the loudspeaker.

Table 2: iBOX Connections (except i2W8 and i2W8T)

	NL4 Connector				Barrier Strip			
	1+	1-	2+	2-	1 (left)	2	3	4 (right)
Passive Mode	+	-	Looped thru to 2nd NL4*		+	-	Looped thru to 2nd NL4*	
Bi-Amp Mode	LF +	LF -	HF +	HF -	LF +	LF -	HF +	HF -

* Also See Page 30 “Powering Each Woofer Separately”

Figure 12: i2W8 and i2W8T Connections



Figure 13: M12 Connections



INSTALLATION

Operating in Passive or Biamp Mode

All iBOX models except the i2W8 and iLF218 may be operated in either the **passive** mode or the **bi-amped** mode, selected by a switch located on the input panel. This selector switch comes equipped with a set screw to eliminate the possibility of an inadvertent change of switch position. The set screw must be removed in order to alter the position of the switch. Table X shows Community's recommended DSP settings for iBOX loudspeakers used in bi-amp mode. Note that three-way models use the internal mid-high passive crossover in bi-amp mode.

Table 6: DSP Settings for iBOX Biamp Operation

Model	Low Frequency							High Frequency			
	HPF Freq	Slope dB	Filter*	LPF Freq	Slope dB	Filter*	Delay us	HPF Freq	Slope dB	Filter*	Gain
1244	60	24	LR	1360	24	LR	313	1600	24	LR	-9
1264	60	24	LR	1360	24	LR	229	1600	24	LR	-6
1266	60	24	LR	1360	24	LR	354	1400	24	LR	-6
1294	60	24	LR	1360	24	LR	458	1600	24	LR	-5
1296	60	24	LR	1360	24	LR	458	1560	24	LR	-4
1299	60	24	LR	1320	24	LR	188	1720	24	LR	-4
1544	60	24	LR	1320	24	LR	229	1720	24	LR	-4
1564	60	24	LR	1360	24	LR	313	1720	24	LR	-5
1566	60	24	LR	1360	24	LR	313	1720	24	LR	-5
1594	60	24	LR	1280	24	LR	354	1400	24	LR	-4
1596	60	24	LR	1360	24	LR	313	1760	24	LR	-4
1599	60	24	LR	1320	24	LR	104	1720	24	LR	-4
Model	Low Frequency							Mid-High			
	HPF Freq	Slope dB	Filter*	LPF Freq	Slope dB	Filter*	Delay us	HPF Freq	Slope dB	Filter*	Gain
3564	50	24	LR	510	24	BU	0	650	12	BU	-2
3594	50	24	LR	450	24	BU	0	600	24	BU	0

*LR = Linkwitz-Riley, BU = Butterworth

Recommended High-Pass Filters

When operating in either the passive or the bi-amplified mode, we strongly recommend the use of an external, active high-pass filter to protect the cone drivers from excessive low frequency excursion. High-pass filters will help protect the loudspeaker against damage from over excursion and will reduce low frequency wind noise, turntable rumble, stage vibration, and other noises that result in a poorly defined and 'muddy' bass response. Additionally, a high-pass filter will avoid using amplifier power that's wasted from attempting to reproduce frequencies below the loudspeaker's intended operating range. Table 7 on Page 28 shows the recommended filter settings for each iBOX model.

Table 7: Recommended High-Pass Filter Settings

Model	High-Pass Filter
iHP1200 Series Full-Range:	60 Hz, 24dB/octave
iHP1500 Series Full-Range:	60 Hz, 24dB/octave
iHP3500 Series Full-Range:	50 Hz, 24dB/octave
i2W8 and i2W8T	65 Hz, 24dB/octave
M12 Stage Monitor:	60 Hz, 24dB/octave
i-112S Subwoofer:	30 Hz, 24dB/octave
i-115S Subwoofer:	30 Hz, 24dB/octave
i-118S Subwoofer:	30 Hz, 24dB/octave
i-212S Subwoofer:	35 Hz, 24dB/octave
i-215LVS Subwoofer:	35 Hz, 24dB/octave
i-215S Subwoofer:	35 Hz, 24dB/octave
iLF218 Subwoofer:	25 Hz, 24dB/octave

Impedance

iBOX full-range and single-woofer loudspeakers are rated at 8-ohms nominal impedance. Dual-woofer models are rated at 4-ohms nominal impedance except the i2W8 which is 8-ohms. The i2W8T impedance depends on 70V or 100V tap selected.

Recommended Amplifier Power

See Table 9 on Page 30 for recommended amplifier power for each specific model. Using an amplifier of less power than recommended will not allow maximum performance of the system and can damage the loudspeaker if the amplifier is driven into clipping. Correspondingly, using an amplifier of more power than recommended can result in overdriving the loudspeaker with the potential for damaging the drivers and/or the protection circuitry.

Use of Limiters

Community recommends use of a limiter to help prevent loudspeaker damage due to sudden transients (dropped microphones, etc.) and to prevent amplifier clipping. When used for this purpose, connect the limiter as the last item in the signal chain before the power amplifier (at the input to the power amplifier). Set the limiter's "threshold" high enough so that no limiting occurs until the signal is in danger of clipping. Set the limiter's "compression ratio" to a high enough ratio to prevent clipping. For professional audio equipment, a typical threshold setting would be +10 dBu and a typical compression ratio setting would be 10:1 or higher.

Connecting Multiple Loudspeakers to a Single Amplifier

The best way to connect multiple loudspeakers to a single power amplifier is to design a 70-volt or 100-volt distributed system. However, it is acceptable to connect as many as four 8-ohm loudspeakers in parallel and connect this combination to a single amplifier channel provided that amplifier is rated for the resulting 2-ohm impedance load.

INSTALLATION

Cable Type and Gauge

Community recommends stranded, twisted-pair loudspeaker cable. Insulation should be rated for 600 volts or higher. For outdoor installations, choose a cable designed for the application. For permanently installed systems, a slick, vinyl-type insulation is easier to pull through conduit. For portable applications, a rubberized type insulation is more flexible.

To minimize power losses and optimize amplifier damping factor, keep the total cable resistance under 0.2 ohm. For lengths over 100 feet the wire gauges needed to meet this requirement are usually not practical to use for both physical and cost reasons. Therefore #10 AWG is recommended as the most practical gauge for those situations. The run length for both conductors has been figured into the total resistance. Remember that a lower gauge number means a larger wire size.

Table 8: Recommended Cable Gauge

Run Length	Minimum Gauge (AWG)	Total Resistance
10 ft. (3m)	#16 (1.31 sq mm)	0.08 ohm
25 ft. (8m)	#14 (2.08 sq mm)	0.13 ohm
50 ft. (15m)	#12 (3.31 sq mm)	0.16 ohm
75 ft. (25m)	#10 (5.26 sq mm)	0.15 ohm
100 ft. (30m)	#10 (5.26 sq mm)	0.20 ohm
200 ft. (60m)	#10 (5.26 sq mm)	0.40 ohm
300 ft. (90m)	#10 (5.26 sq mm)	0.60 ohm
400 ft. (120m)	#10 (5.26 sq mm)	0.80 ohm
500 ft. (150m)	#10 (5.26 sq mm)	1.00 ohm

Recommended Amplifier Size

The following table shows the recommended power amplifier size, in watts, for each iBOX model.

Table 9: Recommended Amplifier Size

Model	Recommended Power
iHP1200 Series iHP1500 Series iHP3500 Series	Full Range (Passive Mode): 600 to 1500 watts at 8Ω
iHP1200 Series iHP1500 Series iHP3500 Series	Bi-amp Low Frequency: 600 to 1500 watts at 8Ω Bi-amp High Frequency: 90 to 180 watts at 8Ω Bi-amp iHP3500 MF/HF: 210 to 300 watts at 8Ω*
i112S Subwoofer i115S Subwoofer i118S Subwoofer	1200 to 1800 watts at 8Ω
i212S Subwoofer i215S Subwoofer i215LVS Subwoofer iLF218 Subwoofer	Subwoofer: 2500 to 3500 watts at 4Ω
i2W8	500 to 750 watts at 8Ω
i2W8T	Up to 200 watts via 70V/100V autoformer
M12 Monitor	Passive: 600 to 900 watts at 8Ω
M12 Monitor	Bi-amp LF: 600 to 900 watts at 8Ω Bi-amp HF: 130 to 190 watts at 8Ω

* iBOX three-way models use the internal mid-high passive crossover in bi-amp mode.

iBOX Subwoofer - Powering Each Woofer Separately on Dual-Woofer Models

Depending on the amplifier used, the best way to get maximum power to an iBOX dual-subwoofer model may be to power each woofer separately from a single amplifier channel.




To do this, remove the connector panel and cut the red and black jumper wires on the PC board. Then replace the connector panel. Normally, the NL4 1± terminals are paralleled with the 2± terminals. Now, one woofer is connected to the NL4 1± terminals and the other woofer is connected to the NL4 2± terminals.

For best results, the two amplifier channels should feed exactly the same power to each woofer and the woofers must have the same polarity. Some amplifiers feature a “parallel” mode that makes this easy. In this mode, you connect the source to one channel and the amplifier feeds exactly the same power to both outputs.

If you cut the jumpers on a single-woofer model, the NL4 1± terminals continue to power the woofer. The 2± terminals are looped through to the 2± terminals on the other NL4 but are no longer connected to the woofer.

INSTALLATION

RIGGING / SUSPENSION AND SAFETY



-  **TERMINOLOGY:** The terms “rigging”, “flying” and “suspension” are often used interchangeably in describing methods of installing loudspeaker systems at elevated positions.
-  **DANGER:** The loudspeakers described in this manual are designed and intended to be suspended using a variety of rigging hardware, means, and methods. It is essential that all installation work involving the suspension of these loudspeaker products be performed by competent, knowledgeable persons who understand safe rigging practices. Severe injury and/or loss of life may occur if these products are improperly suspended.
-  **DANGER:** All rigging fittings and OmniMount™ inserts must remain sealed with the included flat-head allen screws or they must be fitted with properly rated optional mounting hardware. Any missing fasteners will compromise the structural integrity of the enclosure and constitute a safety hazard. Do not suspend this loudspeaker unless all fasteners are securely in place!
-  **COMMUNITY RIGGING HARDWARE WARRANTY:** Community warrants that its loudspeaker systems and its optional mounting and rigging hardware have been carefully designed and tested. Community loudspeakers may be safely suspended when each loudspeaker model is suspended with Community-manufactured optional mounting and rigging brackets specifically designed for use with that particular model of loudspeaker. This warranty applies only for use under normal environmental conditions, and when all loudspeakers, component parts, brackets and hardware are assembled and installed in strict accordance with Community’s installation guidelines contained herein. Beyond this, Community assumes no further or extended responsibility or liability, in any way or by any means whatsoever. It is the responsibility of the installer to insure that safe installation practices are followed, and that such practices are in accordance with any and all local, state, federal, or other, codes, conditions, and regulations that may apply to, or govern the practice of, rigging, mounting, and construction work in the relevant geographic territory. Any modifications made to any parts or materials manufactured or supplied by Community shall immediately void all pledges of warranty or surety, related in any way to the safe use of those parts and materials.
-  **WARNING - NON-COMMUNITY RIGGING HARDWARE:** Non-Community hardware used for rigging an iBOX loudspeaker must be certified by the supplier for this use and must be properly rated for safety.

Important Notes on Rigging Loudspeakers

There are three areas of responsibility for rigging loudspeakers. The first is the building structure. Always consult with the building architect or structural engineer to assure the ability of the structure to support the loudspeaker system. The second area of responsibility is the loudspeaker itself. Community certifies its loudspeaker systems and rigging accessories for suspension when they are properly installed according to our published guidelines. The third area of responsibility is everything between the loudspeaker and the building structure and the actual process of installation. The installing contractor assumes this responsibility. Loudspeaker rigging should be performed only by certified rigging professionals using certified rigging hardware chosen for the specific application. Prior to installation, the contractor should present a rigging plan, with drawing and detailed parts list, to a licensed structural engineer (P.E.) or architect for written approval.

Acceptable Mounting Point Loading and Working Load Limit

The mounting points should always be used so that either shear force is applied perpendicular to the direction of and in tight proximity to the mounting hole or tension force is applied perpendicular to the enclosure surface.

-  **WARNING:** iBOX rigging fittings are rated at a Working Load Limit of 150 lbs (68 kg) with a 15:1 safety margin (design factor). No single rigging fitting should ever be subjected to a load that is greater than 150 lbs. Failure to heed this warning could result in injury or death! See Page 33 for i2W8 working load limit.
-  **DANGER:** Use the mounting points only as described above. Do not use them in such a way as to apply sideways leverage to them. Failure to follow this instruction could result in immediate failure of the mounting points resulting in damage to the loudspeaker and serious injury or death to personnel.

Suspending Loudspeakers with Community Brackets

iBOX loudspeakers can be rigged using a variety of accessories available from Community. We encourage the use of these rigging accessories because they are properly load rated and designed specifically for use with iBOX loudspeakers. Descriptions of these accessories can be found on Pages 18 through 23.

OmniMount Bracket Suspension

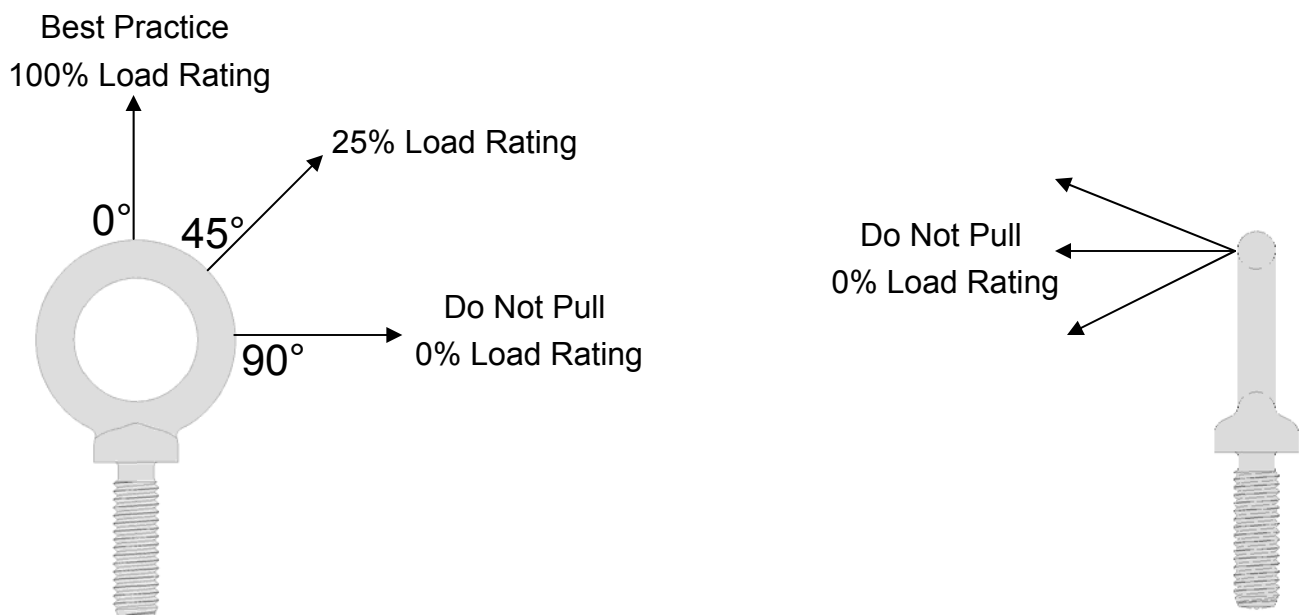
iBOX iHP-1200 and iHP-1500 Series include a four-hole M8 bolt pattern on their rear panels for an OmniMount 120 bracket or equivalent bracket. iBOX iHP-3500 models have a four-hole M8 bolt pattern on their bottom panels for an OmniMount 240 bracket or equivalent bracket. Consult OmniMount for help in selecting the right bracket. Make sure the bracket is rated for at least the weight of the iBOX loudspeaker and follow the OmniMount installation instructions carefully. Fasten the OmniMount bracket securely to the building structure with properly rated fasteners.

When suspending an iBOX loudspeaker with an OmniMount or equivalent bracket, add an additional safety cable that is not attached to the OmniMount bracket. This safety cable may be attached to the loudspeaker with a properly rated eyebolt (such as the Community M10EYBLTKIT).

Eyebolt Suspension

Properly rated, M10, forged, shoulder eyebolts may be used to suspend iBOX loudspeakers. Such eyebolts are available from Community as part number M10EYBLTKIT (kit of four M10 eyebolts). The eyebolts must be screwed in so that the shoulder firmly contacts the surface of the enclosure. In all cases the direction of pull on the eyebolt and mounting point should be in tension not to exceed a maximum of 45° from the vertical axis of the mounting point hole. While a single mounting point pulled at a 0° angle can support the weight of the loudspeaker with a greater than 5:1 design factor, a safety cable that can independently support the loudspeaker must also be used. Other mounting points can be used as pull-back points to fix the aiming angle. See the following figure for proper eyebolt usage. Never pull an eyebolt sideways or at 90° to a vertical pull angle.

Figure 14: Shoulder Eyebolt Ratings at Different Pull Angles



INSTALLATION

Suspending Multiple Loudspeakers with Eyebolts

It is acceptable to suspend an iBOX loudspeaker directly below another iBOX loudspeaker using properly rated eyebolts and aircraft cable (2-box vertical hang). Eyebolts installed in the rear panel may be used to pull the bottom loudspeaker backwards to the needed aiming angle.



WARNING: When installing loudspeakers in this manner, do not exceed the load rating of the eyebolts. See Figure 14 for eyebolt de-rating when pulled at other than a 0° angle.



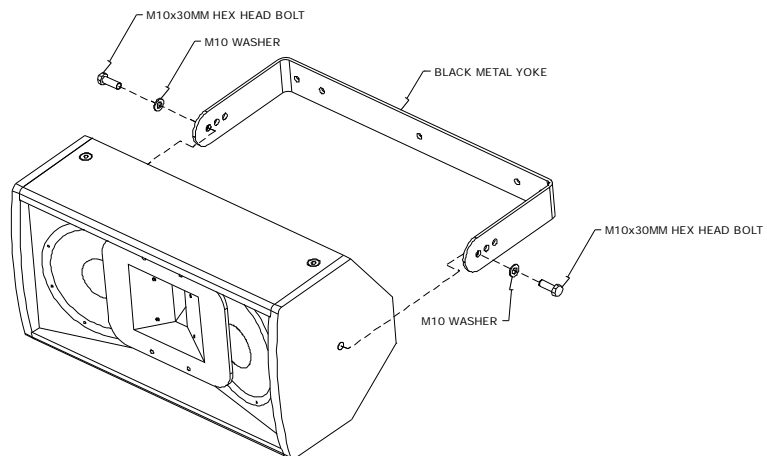
WARNING: Do not suspend a third loudspeaker below the first two loudspeakers in this manner.

A better way to suspend multiple loudspeakers below each other (vertical hang) is to use the Community Vari-Tilt mounting bracket, model IB-VTK. Up to four iBOX loudspeakers may be suspended in a vertical hang using two IB-VTK brackets. See Page 23 for further details on this bracket.

i2W8 Mounting Yoke

The i2W8 includes a mounting yoke, shipped with the loudspeaker. Fasten the yoke securely to the building structure with properly rated fasteners. Then, as shown in Figure 15, fasten the loudspeaker to the yoke using the fasteners supplied by Community. Note there are three mounting locations on the yoke for the loudspeaker. This allows the loudspeaker to be snugged up to the building structure at different aiming angles.

Figure 15: i2W8 Showing Yoke Mounting Detail



Using the i2W8 as a Front-Fill Loudspeaker and i2W8 Working Load Limit

The i2W8's wide horizontal pattern and compact size make it an ideal front-fill loudspeaker for use by itself or under another iBOX loudspeaker. The i2W8 has two M10 rigging fittings on the top to allow it to be suspended below another loudspeaker. Another two M10 fittings on the rear panel can be used as pull-back points for aiming the i2W8. Use properly rated M10 eyebolts such as those supplied in Community's M10EYBLTKIT kit.



WARNING: i2W8 rigging fittings have a Working Load Limit of 100 lbs (45.5 kg) with a 15:1 safety margin. No single rigging fitting should ever be subjected to a load that is greater than 100 lbs. The i2W8's rigging fittings are not rated for suspending a 2nd loudspeaker. Do not suspend another loudspeaker below the i2W8 using the i2W8's rigging fittings.

Using the i2W8 as a Stage Monitor

The i2W8 is designed for use as an attractive and discrete stage monitor. In one orientation, it's a short-throw stage monitor for downstage vocalists. Flip it over and it's a long-throw stage monitor for choirs or general

stage fill. Community ships the i2W8 with a kit of four feet that can be installed in pre-drilled holes on the appropriate panel to protect the finish. The i2W8 comes in white or black to complement the stage appearance.

PAINTING iBOX ENCLOSURES

The M12, i2W8 and iLF218 are available only in black and white. Other iBOX loudspeakers are available in “natural” (unpainted) versions. If you want to paint (or stain and varnish) the enclosures, order the natural version if available. Then, follow normal procedures for selecting and applying the coatings on wood.

The M12, i2W8, and iLF218 are only available in black and white. Black and white versions are coated with Community’s “Tuf-Coat” a two-component polyurea finish with an aliphatic top coat. Most paints are compatible with this type of top coat. Community recommends that you consult your paint supplier for a compatible coating and start with a primer coat. Wash the enclosure with a mild detergent before painting.

iBOX grilles are powder-coated steel. To paint the grille, carefully remove the foam backing and use paint that is compatible with powder coating. Do not paint the foam. Reapply the foam by using a fine mist of spray adhesive on the grille and the foam. Be careful not to clog the pores in the foam. Black woofers and horns may be visible through the foam so you may choose to paint the entire baffle board black.

SYSTEM DESIGN GUIDELINES

iBOX Throw Distance and Sound Levels

iBOX loudspeakers are designed for use indoors and the acoustics of an indoor environment complicate the answer to the question “how far can it throw?” However, there are two simple guidelines that will help you choose the right iBOX model for short-throw, medium-throw and long-throw applications.

Guideline 1: What is a “Long-Throw Loudspeaker?”

“Short-throw”, “medium-throw” and “long-throw” refer to listeners located near the cluster (front of the room), in the center of the room, or near the back of the room respectively. Short-throw, medium-throw and long-throw loudspeakers, then, are designed to reach those categories of listeners. To do so, a short-throw loudspeaker is designed with a wide horizontal coverage angle (90° or wider). A long-throw loudspeaker is designed with a narrow horizontal coverage angles (usually 40°). And, a medium-throw loudspeaker is designed with a horizontal coverage angle between these two (usually 60°). iBOX loudspeakers come in a variety of coverage angles to fit these applications.

Guideline 2: The 3:1 Rule

Here’s how to use this rule. Measure the distance from the cluster to the farthest listeners. Then, measure the distance from the cluster to the nearest listeners. The ratio of these distances should be no greater than 3:1. In rooms with low reverberation times and applications where feedback is not a major issue, it may be possible to stretch this rule to a 4:1 ratio.

Following this rule achieves two goals. First, even a long-throw loudspeaker, like the iBOX iHP-1544 may have trouble reaching listeners who are located more than three times the distance to the nearest listeners. That’s because the intelligibility may be degraded by room reverberation at that distance. Second, following this rule helps reduce feedback (howling) problems in the system.

When the room is unusually long and a central cluster would violate the 3:1 rule, there are two common solutions. First, you may install a second cluster, part way towards the back of the room, and delay this cluster so that listeners don’t notice any echo. Second, you may change the system design from a central cluster to a distributed system where every listener is approximately the same distance from a loudspeaker.

SYSTEM OPTIMIZATION

FIELD SERVICE

Any driver service required is done from the front of the enclosure by removing the screws around the edge of the grille. Crossovers and connections may be accessed by removing the connector plate. For warranty repair, contact Community directly or ask us for the location of your nearest Authorized Service Center.

CHOOSING THE RIGHT LOUDSPEAKERS AND ELECTRONICS

Choose iBOX models with high enough maximum SPL to provide the needed SPL at the farthest listener with an appropriate headroom. Typical headroom factors are at least 6 dB for voice paging, at least 10 dB for voice reinforcement and at least 20 dB for music reinforcement.

Choose iBOX models with the right frequency response for the application. Subwoofers will improve the sound quality of a music reinforcement system but may reduce intelligibility in a voice-only system in a reverberant space.

Choose iBOX models with the right coverage patterns to cover the audience evenly. Point the loudspeakers at the listeners and away from walls and ceilings or other obstructions.

Ideally, put all loudspeakers in a central location (central cluster design) or use a distributed system design. Minimize overlap when loudspeakers are separated by more than approximately 40 feet.

Choose power amplifiers large enough to achieve the needed SPL in the venue with enough headroom to avoid clipping. Use a limiter and high-pass filter to protect the loudspeakers. Follow proper wiring design and adjust gains and levels to achieve the best signal to noise ratio.

COMMISSIONING THE SYSTEM

Commissioning is the process of optimizing the performance of the system after it has been installed. There are several steps in commissioning including verifying the proper operation of each system component and adjusting system gains and levels.

The last step in system commissioning is known as system equalization or “voicing”. Equalization is the process of adjusting the frequency response of the system to optimize voice intelligibility or musical sound quality (or both). Note that iBOX loudspeakers are factory voiced to optimize their speech intelligibility and musical sound quality. For this reason, many designers find they can minimize overall system equalization and still achieve excellent voice intelligibility and musical sound quality.

When equalizing an iBOX loudspeaker system the following points should be kept in mind to achieve the best results and to avoid damaging the drivers.

1. Use only small amounts of equalization. In particular do not boost frequencies by more than about 3 dB. When cutting frequencies more than 3 dB of attenuation is acceptable. Bear in mind that extreme frequency cuts will usually result in less than optimum performance.

2. Do not attempt to boost any frequencies below 100 Hz with a graphic equalizer. Note that with the recommended high-pass filter, moderate amounts of boost from a simple bass control are acceptable.

For More Information and Applications Assistance

For more information on installing and operating your iBOX loudspeaker, please refer to Community's web site at www.communitypro.com. For applications support, service or warranty information, refer to Community's web site or contact Community at 610-876-3400 or toll-free 800-523-4934.

**TRANSFERABLE WARRANTY "(LIMITED)"
VALID IN THE USA ONLY**

Community loudspeaker systems are warranted in the USA to be free from manufacturing defects in materials and workmanship for a period of five years, as determined by one of the following two methods, whichever is longer:

Starting from the date of retail purchase, as noted on the sales receipt from an authorized Community dealer,

OR

Starting from the date of manufacture, determined by the serial number, if the sales receipt is not available.

This warranty applies to the product; therefore, the remainder of the warranty period will be automatically transferred to any subsequent owner.

This warranty applies only to failure of a Community loudspeaker caused by defects in materials and workmanship during the stated warranty period. It does not apply to a unit that has been subjected to abuse, accident, modification, improper handling/installation, or repairs made without factory authorization or by anyone other than authorized Community Field Service Stations. This warranty is void if the serial number has been defaced, altered or removed.

Products covered by this warranty will be repaired or replaced at the option of Community, without charge for materials or labor, provided all the terms of this warranty have been met.

OBTAINING WARRANTY SERVICE

Warranty service may be obtained from the factory, or from an authorized Field Service Station.

To obtain factory or field warranty service for products purchased in the United States, return the product for inspection to the address below, freight prepaid, in the original packaging. If the original packaging is not available, call or write Community Warranty Service to obtain proper packaging materials or hand carry the product to the nearest Field Service Station.

Factory Service Center:

Community Warranty Service
333 East Fifth Street
Chester, PA 19013-4511 USA

Field Service Station:

WARRANTY AND SERVICE



Call (610) 876-3400 for the nearest Authorized Field Service Station

For factory service, please call (610) 876-3400 for a Return Authorization (R/A) number before shipping. The following information must be included in the package:

Owner's complete name, daytime phone number, return street address and return authorization number.

The serial number of the product being returned and a copy of the retail sales receipt, if possible.

A complete description of the problem(s) experienced, including a brief description of how the equipment is being used and with what brand, model and output power of amplifier.

Upon receipt, the service center will determine if the problem is covered under warranty. If covered under this warranty, the product will be repaired or replaced, at Community's option, and returned to the owner freight prepaid. If the problem is not covered under this warranty, the owner will be notified of the problem with an estimate of the repair costs.

Consequential and Incidental Damages: Community shall not be liable for any consequential or incidental damages including, without limitation, injury to persons, property, or loss of use. Some states do not allow the exclusion or limitations of consequential or incidental damages, so the above limitations and exclusions may not apply.

This Community warranty is not extended by the length of time which an owner is deprived of the use of the product. Repairs and replacement parts provided under the terms of this warranty shall carry only the remaining portion of the warranty.

Community reserves the right to change the design of any product from time to time, without notice and with no obligation to make corresponding changes in products previously manufactured.

While this warranty gives specific legal rights, there may also be other rights that vary from state to state. No action to enforce this warranty shall be permitted ninety days after expiration of the warranty period.

WARRANTY INFORMATION AND SERVICE FOR COUNTRIES OTHER THAN THE USA

To obtain specific warranty information and available service locations for countries other than the United States of America, contact the authorized Community Distributor for your specific country or region.

Table 10: iHP-1200 Series Specifications*

Model	iHP-1244	iHP-1264	iHP-1266	iHP-1294	iHP-1296	iHP-1299	i-112S	i-212S
Type	Two-Way, Full-Range						Subwoofer	
Frequency Response	80Hz - 18kHz ±4dB	80Hz - 18kHz ±4dB	80Hz - 18kHz ±4dB	80Hz - 18kHz ±4dB	80Hz - 18kHz ±4dB	80Hz - 18kHz ±4dB	38Hz - 100Hz ±3dB	45Hz - 100Hz ±3dB
Maximum Input Passive	600W	600W	600W	600W	600W	600W	600W	1200W
Maximum Input Biamp	LF 600W HF 90W	LF 600W HF 90W	LF 600W HF 90W	LF 600W HF 90W	LF 600W HF 90W	LF 600W HF 90W	N/A	N/A
Recommended Amplifier	1200W to 1800W @ 8Ω	1200W to 1800W @ 8Ω	1200W to 1800W @ 8Ω	1200W to 1800W @ 8Ω	1200W to 1800W @ 8Ω	1200W to 1800W @ 8Ω	1200W to 1800W @ 8Ω	2500W to 3500W @ 4Ω
Sensitivity 1W/1m	100 dB SPL	99 dB SPL	99 dB SPL	99 dB SPL	98 dB SPL	98 dB SPL	92 dB SPL	96 dB SPL
Maximum Output @1m	128 dB SPL	127 dB SPL	127 dB SPL	127 dB SPL	126 dB SPL	126 dB SPL	120 dB SPL	127 dB SPL
Nominal Impedance	8Ω	8Ω	8Ω	8Ω	8Ω	8Ω	8Ω	4Ω
Minimum Impedance	7.1Ω	7.0Ω	7.1Ω	6.9Ω	7.1Ω	5.3Ω	7.6Ω	3.6Ω
Nominal -6dB Beamwidth	40° H 40° V	60° H 40° V	60° H 60° V	90° H 40° V	90° H 60° V	90° H 90° V	360° H 180° V	360° H 180° V
Crossover Frequency	1.5kHz	1.5kHz	1.5kHz	1.5kHz	1.5kHz	1.1kHz	N/A	N/A
Recommended HP Filter	60Hz 24dB/Oct	60Hz 24dB/Oct	60Hz 24dB/Oct	60Hz 24dB/Oct	60Hz 24dB/Oct	60Hz 24dB/Oct	30Hz 24dB/Oct	35Hz 24dB/Oct
Drivers	LF 1 x 12" HF 1 x 1.4"	LF 1 x 12" HF 1 x 1.4"	LF 1 x 12" HF 1 x 1.4"	LF 1 x 12" HF 1 x 1.4"	LF 1 x 12" HF 1 x 1.4"	LF 1 x 12" HF 1 x 1.4"	1 x 12"	2 x 12"
Input Connectors	2 x NL4 + Barrier Strip	2 x NL4 + Barrier Strip	2 x NL4 + Barrier Strip	2 x NL4 + Barrier Strip	2 x NL4 + Barrier Strip	2 x NL4 + Barrier Strip	2 x NL4 + Barrier Strip	2 x NL4 + Barrier Strip
Enclosure	13-Ply Baltic Birch	13-Ply Baltic Birch	13-Ply Baltic Birch	13-Ply Baltic Birch	13-Ply Baltic Birch	13-Ply Baltic Birch	13-Ply Baltic Birch	13-Ply Baltic Birch
Enclosure Angles	Trapazoid 15° Sides	Trapazoid 15° Sides	Trapazoid 15° Sides	Trapazoid 15° Sides	Trapazoid 15° Sides	Trapazoid 15° Sides	Trapazoid 15° Sides	Trapazoid 15° Sides
Mounting / Rigging	23 x M10 and 4 x M8 (Omnimount)	23 x M10 and 4 x M8 (Omnimount)	23 x M10 and 4 x M8 (Omnimount)	23 x M10 and 4 x M8 (Omnimount)	23 x M10 and 4 x M8 (Omnimount)	23 x M10 and 4 x M8 (Omnimount)	23 x M10 and 4 x M8 (Omnimount)	23 x M10 and 4 x M8 (Omnimount)
Grille	Perforated Steel Foam Backed	Perforated Steel Foam Backed	Perforated Steel Foam Backed	Perforated Steel Foam Backed	Perforated Steel Foam Backed	Perforated Steel Foam Backed	Perforated Steel Foam Backed	Perforated Steel Foam Backed
Optional Accessories	Community offers a wide variety of rigging / suspension accessories. See Pages 18 - 23 for details.							
Dimensions H, W, D in / mm	30.42 / 773 16.00 / 407 18.26 / 464	30.42 / 773 16.00 / 407 18.26 / 464	30.42 / 773 16.00 / 407 18.26 / 464	30.42 / 773 16.00 / 407 18.26 / 464	30.42 / 773 16.00 / 407 18.26 / 464	30.42 / 773 16.00 / 407 18.26 / 464	30.42 / 773 16.00 / 407 18.26 / 464	30.42 / 773 16.00 / 407 18.26 / 464
Weight	85 lb 38.6 kg	85 lb 38.6 kg	85 lb 38.6 kg	85 lb 38.6 kg	85 lb 38.6 kg	85 lb 38.6 kg	75 lb 34.1 kg	106 lb 48.1 kg
Shipping Weight	98 lb 44.5 kg	98 lb 44.5 kg	98 lb 44.5 kg	98 lb 44.5 kg	98 lb 44.5 kg	98 lb 44.5 kg	86 lb 39.1 kg	112 lb 43.5 kg

* Community strives to improve its products on a continual basis. Specifications may therefore be subject to change without notice.

DIMENSIONS

Figure 16: iHP-1200 Series Dimensions

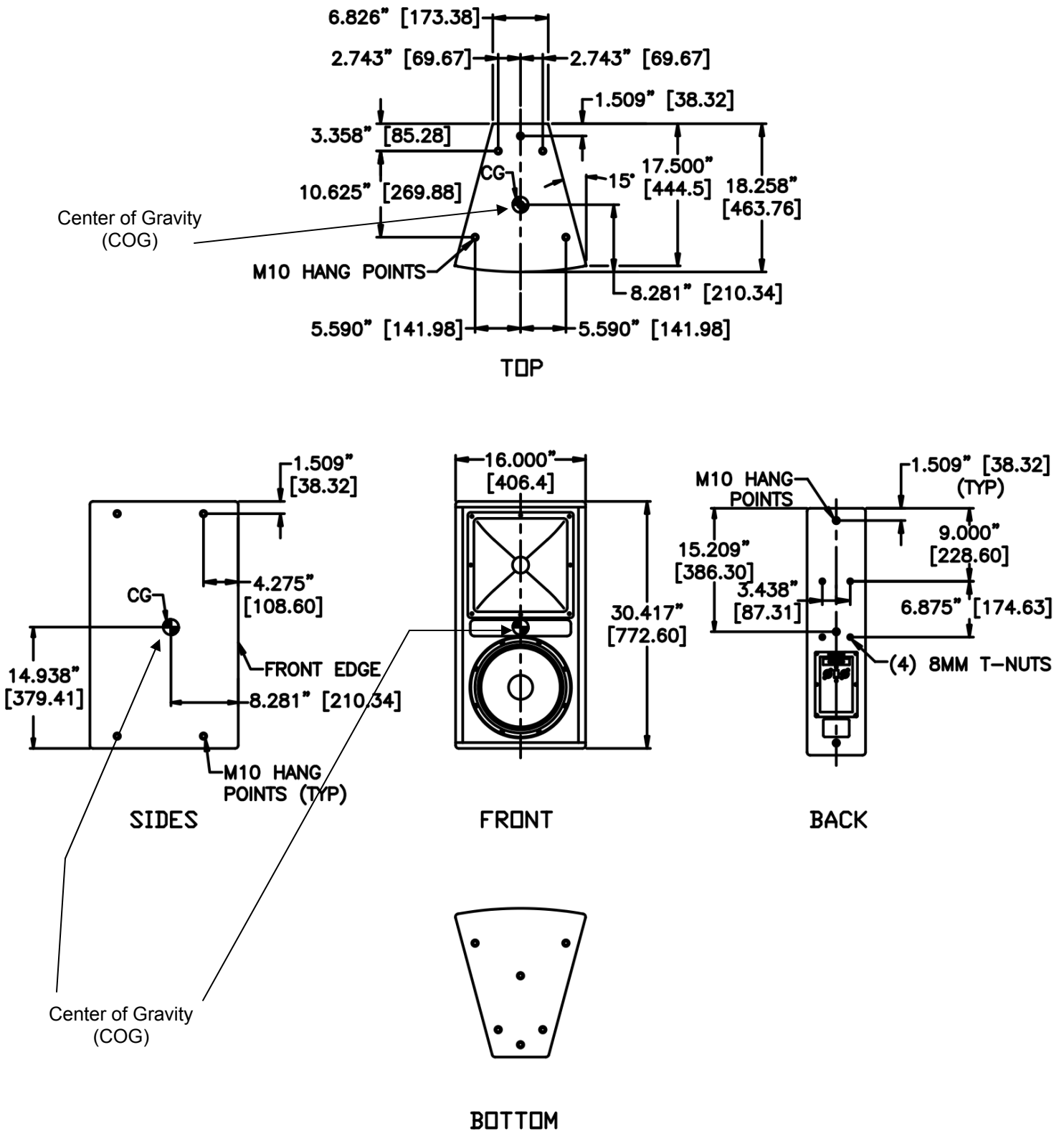


Table 11: iHP-1500 Series Specifications*

Model	iHP-1544	iHP-1564	iHP-1566	iHP-1594	iHP-1596	iHP-1599	i-115S	i-215S
Type	Two-Way, Full-Range						Subwoofer	
Frequency Response	60Hz - 18kHz ±4dB	60Hz - 18kHz ±4dB	60Hz - 18kHz ±4dB	60Hz - 18kHz ±4dB	60Hz - 18kHz ±4dB	60Hz - 18kHz ±4dB	45Hz - 100Hz ±3dB	55Hz - 100Hz ±3dB
Maximum Input Passive	600W	600W	600W	600W	600W	600W	600W	1200W
Maximum Input Biamp	LF 600W HF 90W	LF 600W HF 90W	LF 600W HF 90W	LF 600W HF 90W	LF 600W HF 90W	LF 600W HF 90W	N/A	N/A
Recommended Amplifier	1200W to 1800W @ 8Ω	1200W to 1800W @ 8Ω	1200W to 1800W @ 8Ω	1200W to 1800W @ 8Ω	1200W to 1800W @ 8Ω	1200W to 1800W @ 8Ω	1200W to 1800W @ 8Ω	2500W to 3500W @ 4Ω
Sensitivity 1W/1m	101 dB SPL	100dB SPL	100 dB SPL	99 dB SPL	100 dB SPL	101 dB SPL	97 dB SPL	100 dB SPL
Maximum Output @1m	129 dB SPL	128 dB SPL	128 dB SPL	127 dB SPL	128 dB SPL	129 dB SPL	125 dB SPL	131 dB SPL
Nominal Impedance	8Ω	8Ω	8Ω	8Ω	8Ω	8Ω	8Ω	4Ω
Minimum Impedance	7Ω	7.2Ω	5.1Ω	7.2Ω	7.2Ω	5.7Ω	5.8Ω	3.2Ω
Nominal -6dB Beamwidth	40° H 40° V	60° H 40° V	60° H 60° V	90° H 40° V	90° H 60° V	90° H 90° V	360° H 180° V	360° H 180° V
Crossover Frequency	1.5kHz	1.5kHz	1.5kHz	1.5kHz	1.5kHz	1.0kHz	N/A	N/A
Recommended HP Filter	60Hz 24dB/Oct	60Hz 24dB/Oct	60Hz 24dB/Oct	60Hz 24dB/Oct	60Hz 24dB/Oct	60Hz 24dB/Oct	30Hz 24dB/Oct	35Hz 24dB/Oct
Drivers	LF 1 x 15" HF 1 x 1.4"	LF 1 x 15" HF 1 x 1.4"	LF 1 x 15" HF 1 x 1.4"	LF 1 x 15" HF 1 x 1.4"	LF 1 x 15" HF 1 x 1.4"	LF 1 x 15" HF 1 x 1.4"	1 x 15"	2 x 15"
Input Connectors	2 x NL4 + Barrier Strip	2 x NL4 + Barrier Strip	2 x NL4 + Barrier Strip	2 x NL4 + Barrier Strip	2 x NL4 + Barrier Strip	2 x NL4 + Barrier Strip	2 x NL4 + Barrier Strip	2 x NL4 + Barrier Strip
Enclosure	13-Ply Baltic Birch	13-Ply Baltic Birch	13-Ply Baltic Birch	13-Ply Baltic Birch	13-Ply Baltic Birch	13-Ply Baltic Birch	13-Ply Baltic Birch	13-Ply Baltic Birch
Enclosure Angles	Trapazoid 15° Sides	Trapazoid 15° Sides	Trapazoid 15° Sides	Trapazoid 15° Sides	Trapazoid 15° Sides	Trapazoid 15° Sides	Trapazoid 15° Sides	Trapazoid 15° Sides
Mounting / Rigging	23 x M10 and 4 x M8 (Omnimount)	23 x M10 and 4 x M8 (Omnimount)	23 x M10 and 4 x M8 (Omnimount)	23 x M10 and 4 x M8 (Omnimount)	23 x M10 and 4 x M8 (Omnimount)	23 x M10 and 4 x M8 (Omnimount)	23 x M10 and 4 x M8 (Omnimount)	23 x M10 and 4 x M8 (Omnimount)
Grille	Perforated Steel Foam Backed	Perforated Steel Foam Backed	Perforated Steel Foam Backed	Perforated Steel Foam Backed	Perforated Steel Foam Backed	Perforated Steel Foam Backed	Perforated Steel Foam Backed	Perforated Steel Foam Backed
Optional Accessories	Community offers a wide variety of rigging / suspension accessories. See Pages 18 - 23 for details.							
Dimensions H, W, D in / mm	33.79 / 858 18.26 / 464 19.86 / 505	33.79 / 858 18.26 / 464 19.86 / 505	33.79 / 858 18.26 / 464 19.86 / 505	33.79 / 858 18.26 / 464 19.86 / 505	33.79 / 858 18.26 / 464 19.86 / 505	33.79 / 858 18.26 / 464 19.86 / 505	33.79 / 858 18.26 / 464 19.86 / 505	33.79 / 858 18.26 / 464 19.86 / 505
Weight	96 lb 43.5 kg	96 lb 43.5 kg	96 lb 43.5 kg	96 lb 43.5 kg	96 lb 43.5 kg	96 lb 43.5 kg	97 lb 44.9 kg	119 lb 54.0 kg
Shipping Weight	112 lb 50.8 kg	112 lb 50.8 kg	112 lb 50.8 kg	112 lb 50.8 kg	112 lb 50.8 kg	112 lb 50.8 kg	103 lb 46.7 kg	125 lb 56.7 kg

* Community strives to improve its products on a continual basis. Specifications may therefore be subject to change without notice.

DIMENSIONS

Figure 16: iHP-1500 Series Dimensions

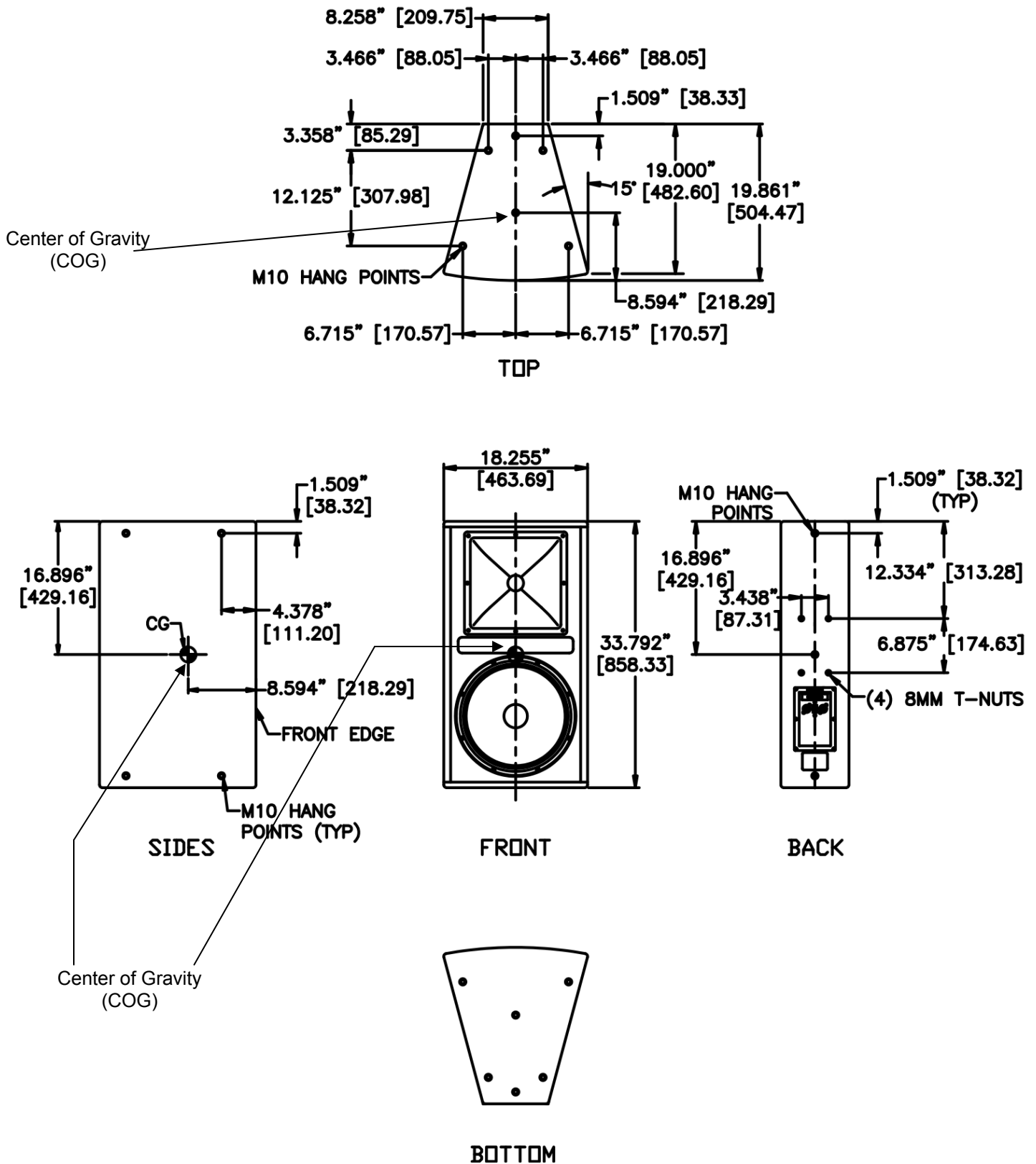


Table 12: iHP-3500 Series Specifications*

Model	iHP-3564	iHP-3594	i-118S	i-215LVS
Type	Three-Way, Full-Range		Subwoofer	
Frequency Response	80Hz - 16kHz ±4dB	80Hz - 16kHz ±4dB	42Hz - 100Hz ±3dB	48Hz - 100Hz ±3dB
Maximum Input Passive	600W	600W	600W	1200W
Maximum Input Biamp	LF 600W MF/HF 100W	LF 600W MF/HF 100W	N/A	N/A
Recommended Amplifier	1250W to 1800W @ 8Ω	1250W to 1800W @ 8Ω	1250W to 1800W @ 8Ω	2500W to 3500W @ 4Ω
Sensitivity 1W/1m	98dB SPL	99 dB SPL	97 dB SPL	99 dB SPL
Maximum Output @1m	126 dB SPL	127 dB SPL	125 dB SPL	130 dB SPL
Nominal Impedance	8Ω	8Ω	8Ω	4Ω
Minimum Impedance	6.3Ω	4.6Ω	7.1Ω	4.2Ω
Nominal -6dB Beamwidth	60° H 40° V	90° H 40° V	360° H 180° V	360° H 180° V
Crossover Frequency	500 Hz 2 kHz	500 Hz 2 kHz	N/A	N/A
Recommended HP Filter	50Hz 24dB/Oct	50Hz 24dB/Oct	30Hz 24dB/Oct	35Hz 24dB/Oct
Drivers	LF 1 x 15" MF 1 x 8" HF 1 x 1.4"	LF 1 x 15" MF 1 x 8" HF 1 x 1.4"	1 x 18"	2 x 15"
Input Connectors	2 x NL4 + Barrier Strip	2 x NL4 + Barrier Strip	2 x NL4 + Barrier Strip	2 x NL4 + Barrier Strip
Enclosure	13-Ply Baltic Birch	13-Ply Baltic Birch	13-Ply Baltic Birch	13-Ply Baltic Birch
Enclosure Angles	Trapazoid 15° Sides	Trapazoid 15° Sides	Trapazoid 15° Sides	Trapazoid 15° Sides
Mounting / Rigging	23 x M10 and 4 x M8 (Omnimount)	23 x M10 and 4 x M8 (Omnimount)	23 x M10 and 4 x M8 (Omnimount)	23 x M10 and 4 x M8 (Omnimount)
Grille	Perforated Steel Foam Backed	Perforated Steel Foam Backed	Perforated Steel Foam Backed	Perforated Steel Foam Backed
Optional Accessories	Community offers a wide variety of rigging / suspension accessories. See Pages 19 - 23 for details.			
Dimensions H, W, D in / mm	36.42 / 925 21.00 / 533 21.99 / 559	36.42 / 925 21.00 / 533 21.99 / 559	36.42 / 925 21.00 / 533 21.99 / 559	36.42 / 925 21.00 / 533 21.99 / 559
Weight	123 lb 55.8 kg	123 lb 55.8 kg	99 lb 44.9 kg	128 lb 58.1 kg
Shipping Weight	136 lb 61.7 kg	136 lb 61.7 kg	118 lb 53.5 kg	139 lb 63.1 kg

* Community strives to improve its products on a continual basis. Specifications may therefore be subject to change without notice.

DIMENSIONS

Figure 17: iHP-3500 Series Dimensions

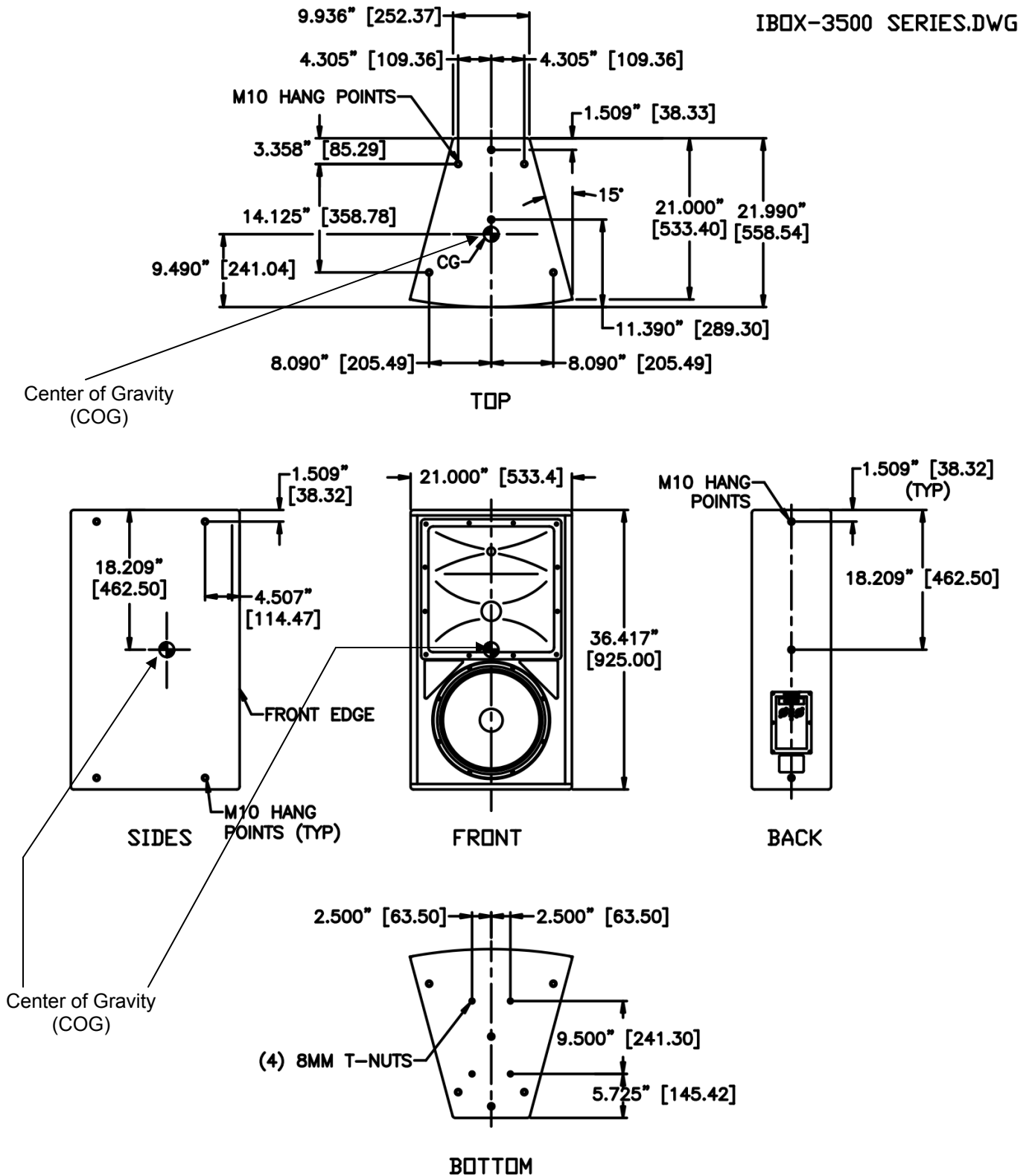


Table 13: iLF-218 Specifications*

Model	iLF-218
Type	Subwoofer
Frequency Response	40Hz - 125Hz ±3dB
Maximum Input Passive	800W
Maximum Input Biamp	N/A
Recommended Amplifier	1670W to 2400W @ 4Ω
Sensitivity 1W/1m	99 dB SPL
Maximum Output @1m	128 dB SPL
Nominal Impedance	4Ω
Minimum Impedance	3.3Ω
Nominal -6dB Beamwidth	360° H 180° V
Crossover Frequency	N/A
Recommended HP Filter	25Hz 24dB/Oct
Drivers	2 x 18"
Input Connectors	2 x NL4 + Barrier Strip
Enclosure	13-Ply Baltic Birch
Enclosure Angles	Rectangular Enclosure
Mounting / Rigging	16 x M10
Grille	Perforated Steel Foam Backed
Optional Accessories	M10EYBLTKIT
Dimensions H, W, D in / mm	22.00 / 569 45.00 / 1141 28.00 / 757
Weight	215 lb 97.5 kg
Shipping Weight	229 lb 103.8 kg

* Community strives to improve its products on a continual basis. Specifications may therefore be subject to change without notice.

DIMENSIONS

Figure 18: iLF-218 Dimensions

ILF218.DWG

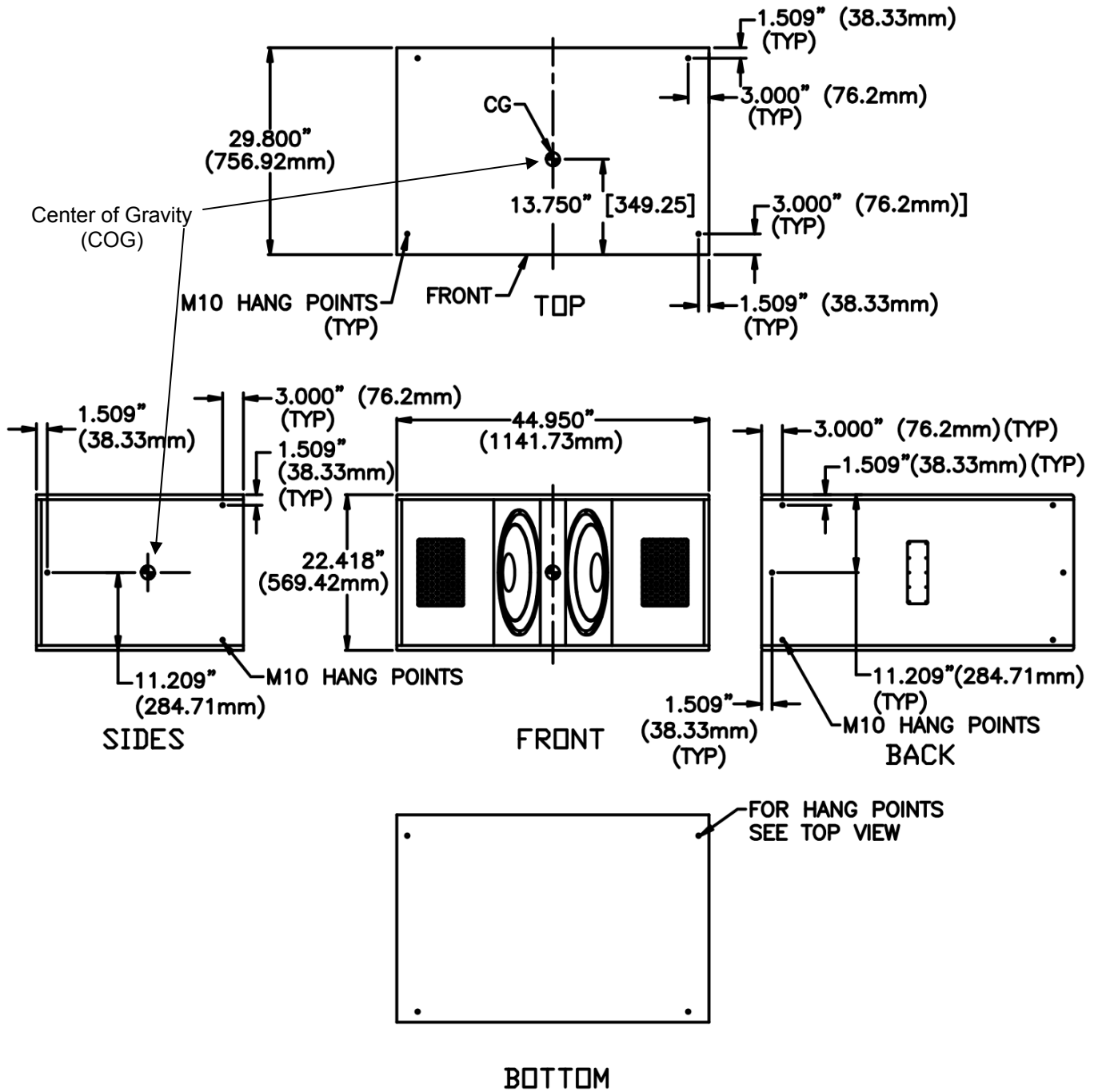


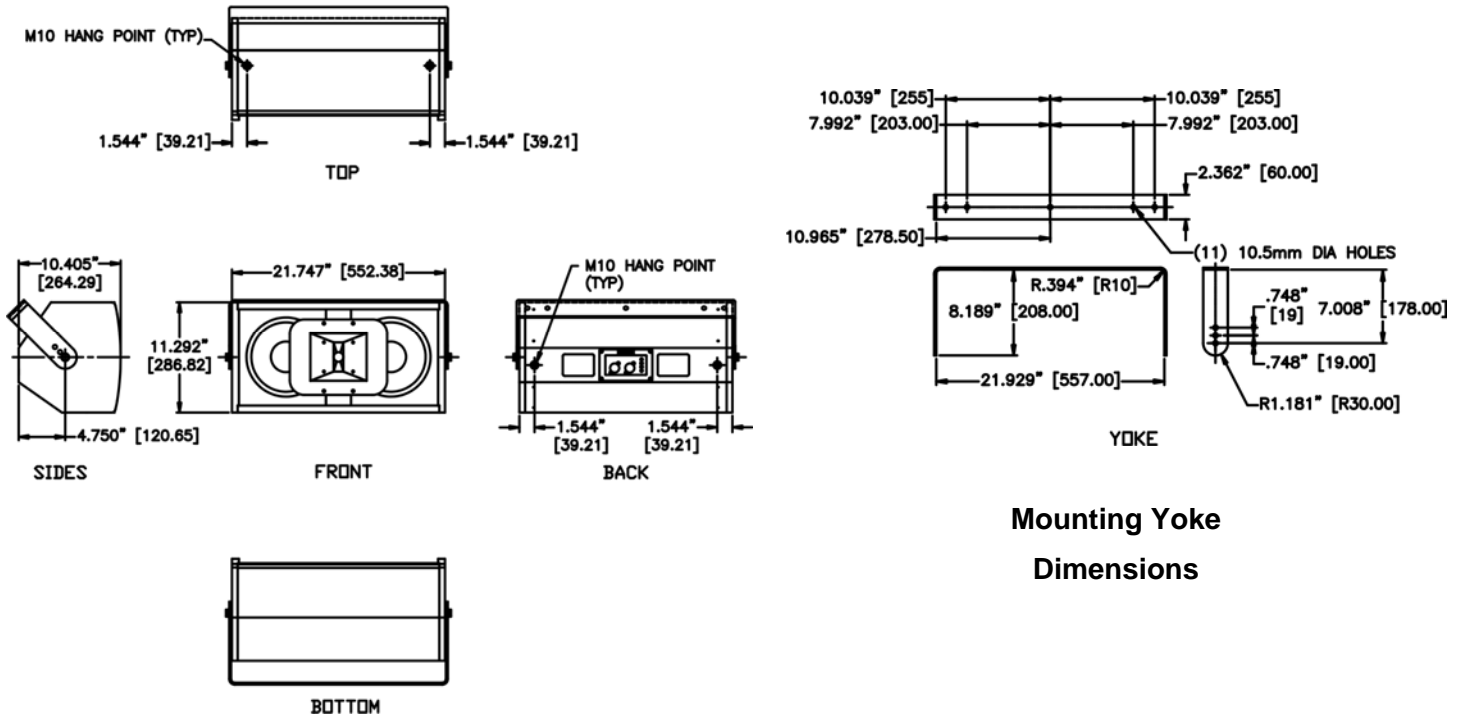
Table 14: i2W8 and M12 Specifications*

Model	i2W8	M12
Type	Two-Way Full-Range	Two-Way Monitor
Frequency Response	95Hz - 15 kHz ±3dB	80Hz - 15 kHz ±3dB
Maximum Input Passive	250W	300W
Maximum Input Biamp	N/A	LF 300W HF 80W
Recommended Amplifier	500W to 720W @ 8Ω	630W to 900W @ 8Ω
Sensitivity 1W/1m	97 dB SPL	99 dB SPL
Maximum Output @1m	121 dB SPL	124 dB SPL
Nominal Impedance	8Ω	8Ω
Minimum Impedance	4.5Ω	7.6Ω
Nominal -6dB Beamwidth	120° H 60° V	90° H Top 40° H Bottom 70° V
Crossover Frequency	1.2 kHz	1.5 kHz
Recommended HP Filter	65 Hz 24dB/Oct	55 Hz 24dB/Oct
Drivers	2 x 8" 1 x 1"	1 x 12" 1 x 2"
Input Connectors	2 x NL4 + Barrier Strip	2 x NL4
Enclosure	13-Ply Baltic Birch	Molded Fiberglass
Mounting / Rigging	6 x M10	None
Grille	Perforated Steel Foam Backed	Perforated Steel Foam Backed
Supplied Accessories	Mounting Yoke	None
Dimensions H, W, D in / mm	11.30 / 287 21.75 / 552 10.40 / 264	10.5 / 266.7 21.5 / 546.1 20.75 / 527.1
Weight	42 lb 19 kg	56 lb 25.4 kg
Weight w/Bracket	47 lb 21 kg	No Bracket
Shipping Weight	51 lb 23 kg	65 lb 29.5 kg

* Community strives to improve its products on a continual basis. Specifications may therefore be subject to change without notice.

DIMENSIONS

Figure 19: i2W8 Dimensions

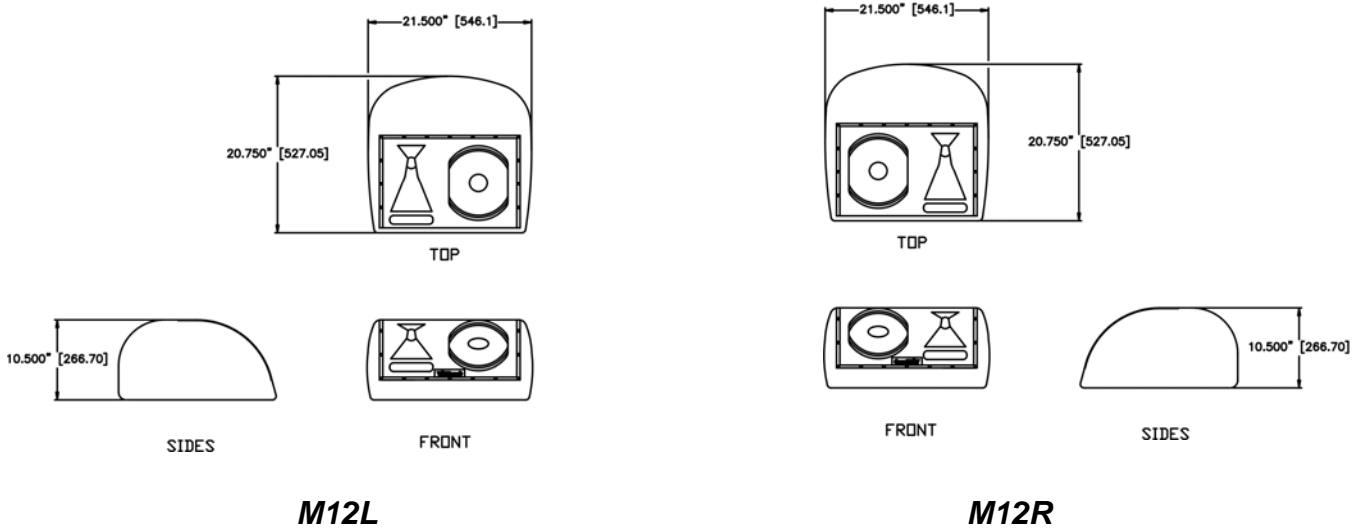


**Mounting Yoke
Dimensions**

Figure 20: M12 Dimensions*

M12L

M12R



*Note: M12L and M12R have the same dimensions. Both models are shown for clarity.

CALCULATING ARRAY COVERAGE ANGLES

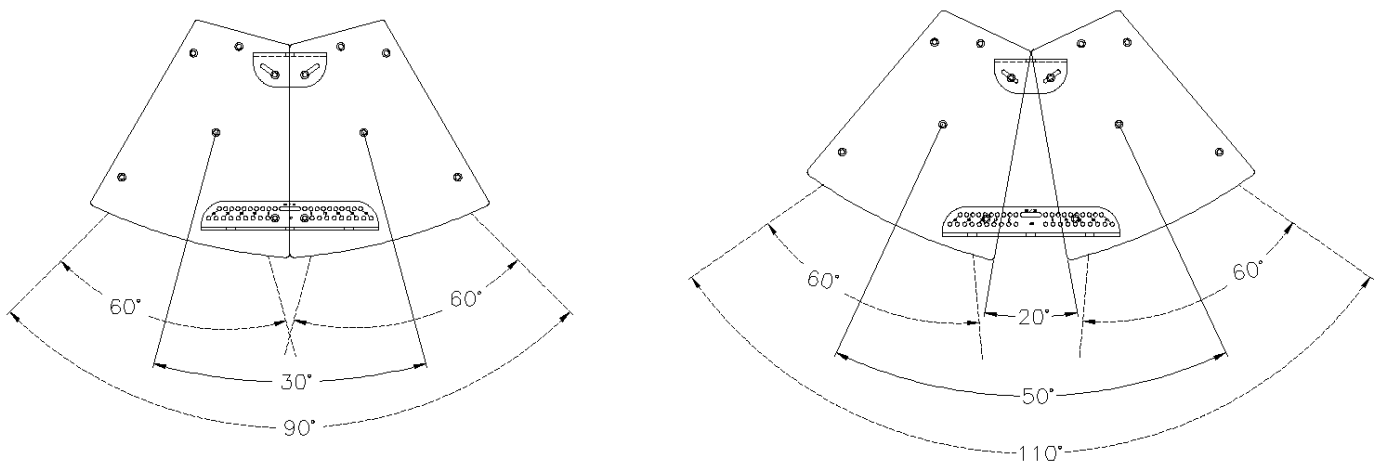
All iBOX Series loudspeakers are designed as trapezoidal-shaped enclosures with 15° side angles. When two iBOX loudspeakers are placed side-by-side in a tight-pack array, the **included angle** of the two loudspeakers is 30° (see left drawing of Figure 21). If the loudspeakers are splayed outwards by 20°, the included angle is 50° (see right drawing of Figure 21).

To calculate the total horizontal coverage of an array like this, add 1/2 of the horizontal coverage of each loudspeaker to the included angle. Thus, for a pair of 60° loudspeakers in a tight-pack array (left drawing), the total horizontal coverage would be 30° plus 30° plus 30° or 90°. If the loudspeakers are splayed outwards by 20°, creating an included angle of 50°, the total horizontal coverage would be 30° plus 30° plus 50° or 110°.

The area of overlap can be calculated by taking the combined rated coverage of the two loudspeakers and subtracting the total horizontal coverage of the array as calculated above. As an example, for a pair of 60° loudspeakers, the combined rated coverage would be 120°. For the tight-pack array, with a total horizontal coverage of 90°, the area of overlap is 120° minus 90° or 30°. For the second array, with its 110° total horizontal coverage, the area of overlap is 120° minus 110° or 10°. As a rule of thumb, a small area of overlap (10° to 15°) is beneficial for most arrays. However, a larger area of overlap may create undesirable comb filtering or hot spots in the coverage.

The method described above may be extended to an array of three or more loudspeakers by starting with two adjacent loudspeakers and ignoring the other loudspeakers in the array. Calculate the coverage for this pair of loudspeakers as described above. Then, treat the pair as a single loudspeaker and perform the calculations again for the next loudspeaker in the array.

Figure 21: Coverage Angles of an iBOX Array



Community Professional Loudspeakers
333 East Fifth Street
Chester, PA 19013-4511 USA
TEL: 1-(610) 876-3400 FAX: 1-(610) 874-0190
www.communitypro.com

© 2007 All Rights Reserved