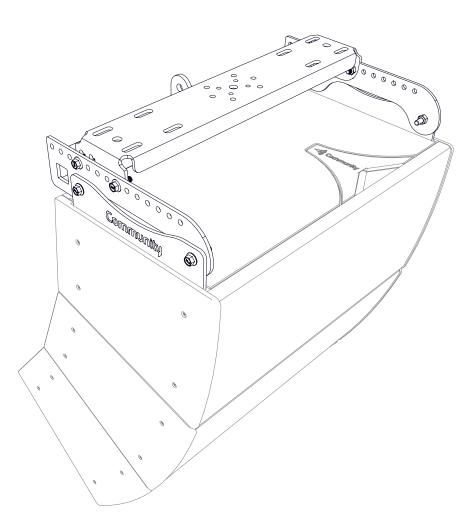
biamp.

COMMUNITY

IV6-LAU

for <u>Indoor</u> IV6 Modular Vertical Arrays



IV6 Light Array Frame Adapter U-Bracket (shown with the IV6-LAF-PBB and loudspeakers)

The IV6 Rigging Frames, Accessories and Safety Guide (a complete set of instructions including all of the IV6 indoor rigging frames, accessories and information) is available on the Biamp website <<u>here</u>>

IMPORTANT: The Instructions, and illustrations in this manual are to be used with <u>INDOOR</u> IV6 cabinets/models only. The IV6-WR loudspeakers differ in width and mounting points and will <u>NOT</u> fit this array frame. Contact Biamp's <u>Loudspeaker</u> <u>Support Group</u> for information regarding mounting options for WR (outdoor) IV6 loudspeakers.



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IMPORTANT SAFETY INSTRUCTIONS

Always follow these basic safety precautions when using or installing I SERIES loudspeakers and accessories:

- · Read these instructions prior to assembly, and keep for reference.
- · Heed all warnings.
- · Follow all instructions, particularly those pertaining to rigging, mounting, hanging and electrical connections.
- Do not use this apparatus near water (indoor models only).
- · Clean only with dry cloth.
- · Do not block any ventilation openings. Install in accordance with the manufacturer's instruction.
- · Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- Only use attachments and accessories that are specified and approved by the manufacturer.

Refer all servicing to gualified service personnel. Servicing is required when the apparatus has been damaged in any way, does not operate normally, or has been dropped.

The terms caution, warning, and danger may be used in this manual to 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 Biamp directly for assistance. These terms are defined as:



CAUTION: 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

IMPORTANT: IV6 loudspeakers are designed and intended to be mounted to differing indoor building surfaces 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 plan. Severe injury and/or loss of life, and property damage may occur if these products are improperly installed.



DANGER: All rigging fittings must be fully tightened and secured. Any missing fasteners will compromise the structural integrity of the enclosure and constitute a safety hazard. Do not suspend any loudspeakers unless all fasteners are securely in place!



DANGER: It is possible to experience severe electrical shock from a power amplifier. Always make sure that all power amplifiers are in the "OFF" position and unplugged from an AC Mains supply before performing electrical work.

CAUTION: Installation of I SERIES loudspeakers should only be performed by trained and gualified personnel. It is strongly recommended that a licensed and certified professional structural engineer approve the mounting. Severe injury and/or loss of life may occur if this product is improperly installed.

UNPACKING / INSPECTION

Community I SERIES rigging accessories are engineered and manufactured to be rugged and they are carefully packed in sturdy cartons. However, it is recommended to thoroughly inspect each unit after it has been removed from the packaging, as damage could occur during shipping.

Please note that once the shipment has left your dealer or the Biamp 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 Biamp 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 is always a good idea to retain the carton and packing materials, if possible, in the event that the unit may need to be returned to your dealer or distributor for repair in the future.

> WARNING: I SERIES rigging fittings are rated at Working Load Limits (WLL) with a 10:1 safety

margin. All mounting provisions on the IV6 cabinets meet or exceed the 10:1 safety margin to support the cabinet when used with the specified mounting brackets. either from Biamp or designated 3rd party vendors.

Disregarding and/or exceeding the safe working load limits could result in injury or death!

TOOLS NEEDED FOR ASSEMBLY:

- Metric socket and ratchet set
- Metric wrench set

SYSTEM DESIGN

All system designers incorporating IV6 arrays are encouraged to use EASE® Focus 3 (EF3) from AFMG to model the array(s). A link to the latest version is available on our website. Download the latest IV6 GLL file to utilize our customized VenuePolar[™] module. Our exclusive VenuePolar module makes building the array, optimizing the coverage, and determining the loads and load safety factor easy. Once built, the system report option creates a convenient PDF printout documenting the array components, the optimization/attenuation settings for the loudspeakers and simplifies ordering.

The custom Rigging Safety Calculator (RiSC) (located in the VenuePolar module "Loads" tab) automatically populates and updates in real-time as an array is built and aimed. Refer to the "IV6 System Design and Installation Manual" for instructions and explanations about system design with our custom VenuePolar module in EASE® Focus 3 and array assembly.

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ACCEPTABLE MOUNTING POINT LOADING

Use the "Loads" tab to ensure the rigging's Safe Working Load (SWL) and required Safety Factor are not exceeded. Additional RiSC information is available in the "IV6 Rigging Frames, Accessories and Safety Guide". The system should be modeled in EF3 prior to ordering, and the system design report generated should also be utilized when installing / assembling the array. The software and system information is available on the website (search for IV6). Use the QR code in the upper right corner of this page for a link to the IV6 downloads page.

For sub-behind applications use the "IV6 Sub Behind Hang Point Calculator" to ensure proper deployment of the IV6-SB-AF bracket. It is available from the IV6 "Accessories" section on the website.

INSTALLATION AND ASSEMBLY TIPS

- Test all cabinets before hanging
- Arrange cabinets in the order that they will hang, and loosely attach appropriate splay brackets to the top of each cabinet
- Preset attenuation settings per the EASE® Focus 3 model on each cabinet
- Orient cabinets so the horns align along the length of the array this also aligns the input panels for easy wiring
- Leave splay bracket connections slightly loose until all cabinet connections are made, then tighten evenly

IMPORTANT: The hex head Grade 10.9 rigging bolts that are used to secure the splay brackets must also fill any unused holes (at the bottom of a flown array or at the top and bottom of a ground stack) to seal the enclosure from air leaks. If those threaded holes are not sealed, air leaks will occur in the enclosure that will compromise the low-frequency performance with distortion, reduced output, and premature driver failure.



bia.mp/IV6_pubs

Safety Cable

The safety cable and associated hardware are not included. Consult all applicable codes for your application. Confer with a structural engineer for the appropriate cable/hardware for the load, application and locale. If required, the safety cable must be secured to a suitable load-bearing point separate from the array mounting point, with as little slack as possible, so as not to develop undue kinetic force if the primary array mount were to fail.

Light Array Frame (IV6-LAF-PBB)

When required, a secondary safety cable can be attached to an unused hole(s) on the LAF.

GlidePoint[™] Array Frame (IV6-GP-AF)

A secondary safety cable mounting point is available from <u>PolarFocus</u>. Part number: RLP-X2-1800

Sub Behind Array Frame (IV6-SB-AF)

Contact PolarFocus, for a quote for a custom secondary attachment point(s) required for your particular application.

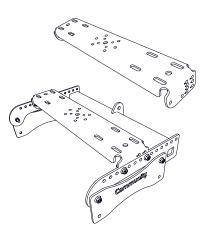
LIGHT ARRAY FRAME ADAPTER U-BRACKET

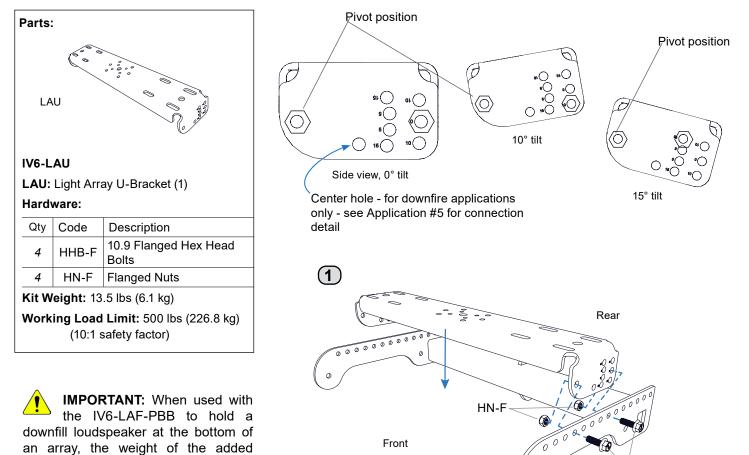
The IV6-LAU **must** be used with the IV6-LAF-PBB Array Frame. It is designed to support a variety of ancillary array mounting configurations and as a tool to integrate IV6 arrays with I SERIES BalancePoint[™] Flyware and other 3rd party mounting systems.

Before assembly: The IV6-LAU U-Bracket must be used with the IV6-LAF-PBB to integrate with an IV6 array. Determine tilt angle and approximate center of balance of the array for placement on the light array frame.

1. Attach the U-Bracket to the IV6-LAF as shown (LAU-1). Insert bolts in the "pivot" position first (see below) and then secure desired angle with the other bolt. There is a slightly different connection for downfill applications - see LAU Application #5.

Note: In close surface mount applications, it is easier to mount the U-Bracket to the surface before adding the IV6-LAF-PBB frame and loudspeakers.





elements must be considered when calculating the SWL of the array. WARNING: For safety reasons, for the applications listed on the next page, the center of mass of the array <u>must</u> be located directly beneath the IV6-LAF-PBB Frame. If the center of mass is located behind the array frame, it may result in an unsafe rigging

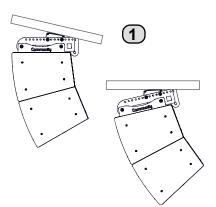
LAU-1. Attach the U-bracket to the frame at the desired angle, centered around the specified pin point# from EASE® Focus 3

condition.

HHB-F

IV6-LAU APPLICATIONS

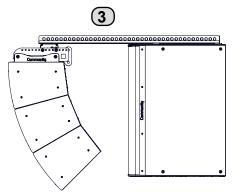
1. Under-balcony mount for a two to three element IV6 array. The LAU provides a very low profile mechanism for rigidly mounting a small array to a solid overhead surface. The built-in 0° , 5° , 10° , and 15° aiming options allow adjustments to the overall array aiming angle.



2. Suspend an array of up to three (3) IV6-1122 elements from one or more load-rated eyebolt(s) or other similar sized load-rated lifting hardware. For this application, the IV6-LAU must be bolted to the IV6-LAF in the 0° position.

 $(\mathbf{2})$

 $(\mathbf{4})$



3. Suspend I SERIES 600 or I SERIES 800 subwoofers behind an array of up to three (3) IV6-1122 elements using the BalancePoint[™] Flyware SBR54 (54" long Sub Behind Fly Rails). For this application, the IV6-LAU must be bolted to the IV6-LAF in the 0° position.

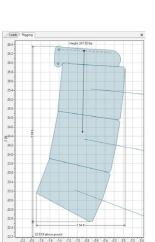
4. Suspend an array of up to three (3) IV6-1122 elements using the BalancePoint[™] Flyware IAF55 (55" wide Isometric Array Frame). The IAF55 allows flying a central IV6-1122 array with additional I SERIES fill speakers to the left and right. The IAF55 may also be combined with the SBR54. For this application, the IV6-LAU must be bolted to the IV6-LAF-PBB in the 0° position.

I SERIES BalancePoint[™] Flyware instructions are available by following this link to the Biamp website: <u><here></u> and finding BalancePoint[™] Flyware.

IMPORTANT: No more than three (3) cabinets should be mounted to the IV6-LAF-PBB when using the IV6-LAU as the upper mounting point.

WARNING: For safety reasons, the center of mass of the array MUST be located directly beneath the IV6-LAF-PBB Array Frame. If the center of mass is located behind the array frame, it may result in an unsafe rigging condition. To verify center of mass is directly beneath the Array Frame, build the intended array (using the IV6-LAF-PBB Array Frame) in EASE® Focus 3 (EF3) and verify the center of mass position meets this condition as displayed the "Rigging" pane. (See image at right from EF3).

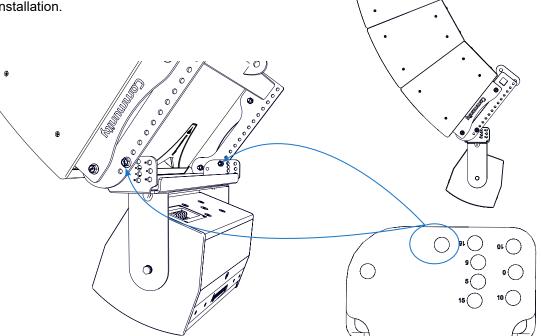
VERY IMPORTANT: The IV6-LAU can only be used with IV6-LAF-PBB pin positions 3-9 due to the frame structure. Always have rigging safety conditions verified by a certified engineer before installation. Failure to do so can lead to severe injury or even death!



IV6-LAU APPLICATIONS (CONTINUED)

5. Attach an I SERIES COMPACT (IC6) loudspeaker to the bottom of an IV6 array for downfill applications. Attach the IV6-LAU to the IV6-LAF-PBB frame as close as possible beneath the center of mass of the array. Connect the IC6 yoke to the IV6-LAU securely. Hardware to connect the IC6 yoke to the IV6-LAU must be supplied by the installer.

Note: Adding any elements (IV6-LAF-PBB, IV6-LAU and a loudspeaker) at the bottom of an array will change the overall weight and potentially the COG, thus changing the array hang point. Always have rigging safety conditions verified by a certified engineer before installation.

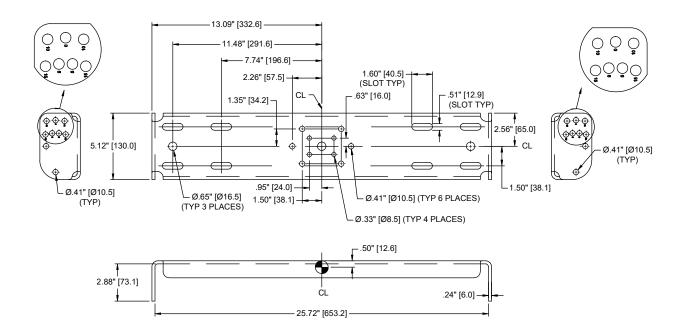


(5)

For "downfill" applications only, connect the IV6-LAU U-bracket using the center hole (circled) One Grade 10.9 hex head bolt/hex nut connection per side Allow the IV6-LAU to rotate into a self-leveled position before tightening the bolts

TECHNICAL DRAWING

IV6-LAU



WEIGHTS

LOUDSPEAKERS (includes 1 pair splay brackets)	Indoor [lbs (kg)]	Outdoor / WR [lbs (kg)]
IV6-1122/05	77.3 (35.1)	62.5 (28.3)
IV6-1122/15	73.5 (33.3)	59.1 (26.8)
IV6-118S	132.9 (60.3)	99.3 (45.0)
ACCESSORIES (available from Biamp)	Weight Indoor [lbs (kg)]	Working Load Limit [lbs (kg)]
IV6-GP-AF	76 lbs (34.5kg)	1300 lbs (589.7 kg)
IV6-LAF-PBB	23 lbs (10.4kg)	850 lbs (385.6 kg)
IV6-SB-AF	108.0 (49.0)	2000 lbs (907.2 kg)
IV6-LAU	13.5 lbs (6.1 kg)	500 lbs (226.8 kg)
PY1-EN750-1550	6 lbs (2.7 kg)	1550 lbs (703.1 kg)

Caution: 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.

CONTACT US

Email: support@biamp.com or CommunitySupport@biamp.com or CommunitySupport@biamp.com

Web: support.biamp.com

Warranty: biamp.com/legal/warranty-information

Note: Every effort has been made to insure that the information contained in this manual was complete and accurate when printed. However, due to ongoing technical advances, changes or modifications may have occurred that are not covered in this manual. The latest version is available at on the Biamp website <<u>here</u>>



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