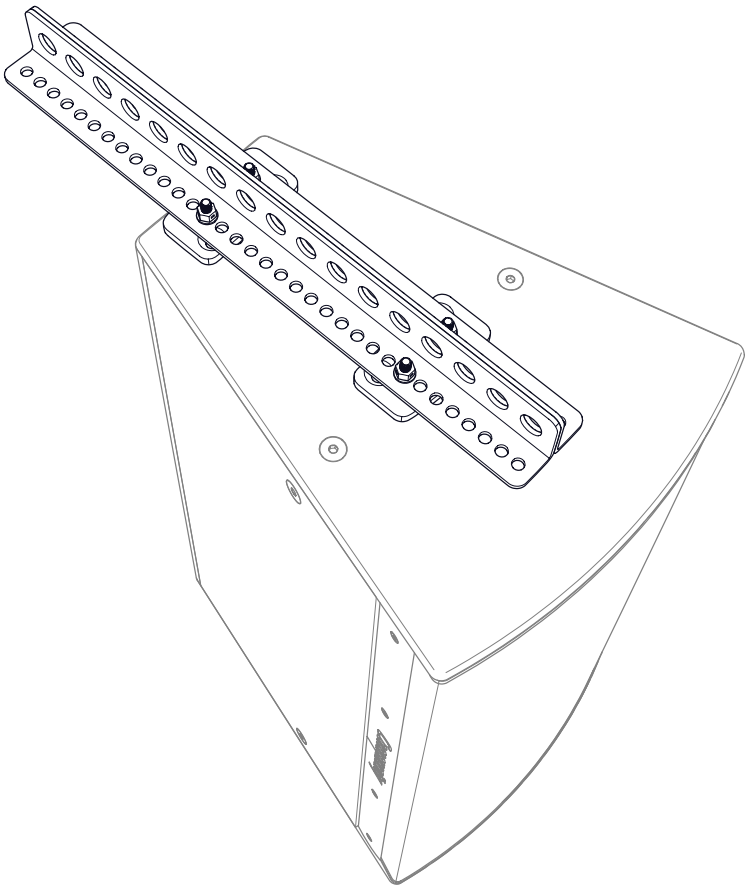
Community
I SERIES

BalancePoint™ Flyware

For Point Source and
Subwoofer loudspeakers
models IP8, IP6, IS8, and IS6

BFR22V



22" BalancePoint™ Vertical Fly Rails

Biamp
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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.

IMPORTANT SAFETY INSTRUCTIONS

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

- Read these instructions prior to assembly.
- Keep these instructions 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.
- 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,light fixtures, 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 qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, 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.

These installation instructions are for use by qualified personnel only. To reduce the risk of fire or electric shock do not perform any servicing other than that contained in the operating instructions unless you are qualified to do so.

UNPACKING / INSPECTION

Community I SERIES loudspeakers 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.

CAUTION: Installation of I SERIES 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. Severe injury and/or loss of life may occur if this product is improperly installed.

RIGGING SAFETY / IMPORTANT NOTES

There are three primary 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. Biamp 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.

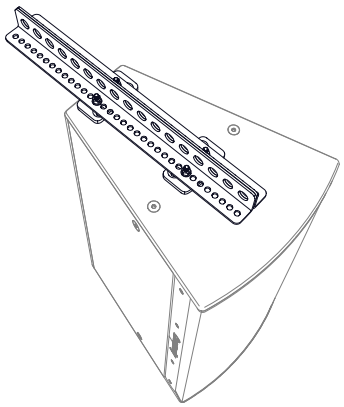
IMPORTANT: I SERIES loudspeakers are designed and intended to be mounted to differing building surfaces using a variety of rigging hardware, means and methods. Installation of loudspeakers should only be performed by trained and qualified personnel. All electrical connections must conform to applicable city, county, state, and national (NEC) electrical codes.

DANGER: All rigging fittings must be fully tightened and secured. Any missing fasteners or parts will compromise the structural integrity of the enclosure and constitute a safety hazard. Over-tightening (crushing the wood) should be avoided as well. Do not suspend the loudspeaker unless all fasteners are securely in place!

IMPORTANT: The flat head bolts that come installed in each enclosure must remain in place or be replaced by a threaded fastener from an array bracket. The bolts attach to internal metal brackets that are critical to the structural integrity and rated Safe Working Load (SWL) of each point and each array assembly. Failure to include a fastener in every location could lead to serious injury, or even death.

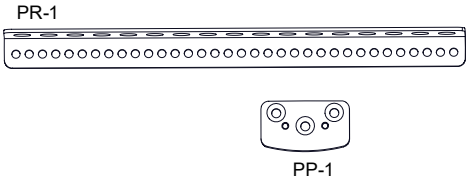
DANGER: I SERIES rigging fittings are rated at a Working Load Limit (WLL) of 150 lbs (68 kg) with a 10:1 safety margin. No single rigging fitting should ever be subjected to a load that is greater than this stated limit. Failure to heed this warning could result in injury or death!

BFR22V - 22" BalancePoint™ Vertical Fly Rails Installation



APPLICATION: Suspend and aim a single full-range loudspeaker (shown) or subwoofer from ceilings, walls, trusses, etc in portrait (vertical) orientation.

Parts:



PR-1: 22" BalancePoint™ Fly Rails (*2*)

PP-1: Universal Fly Rail Plates (*2*)

Hardware:

Qty	Code	Description
12	HW8	8mm Flat Washers
8	HN8	M8 Locknuts
4	HF8-3	8 x 30 mm Flat Hd Bolts
4	HH8-2	8 x 25 mm Hex Hd Bolts
2	HF1-3	10 x 35 mm Flat Hd Bolts

Some 8mm hardware listed above may be included in plate preassemblies.

Kit Weight: 9.0 lb (4.1 kg)

1

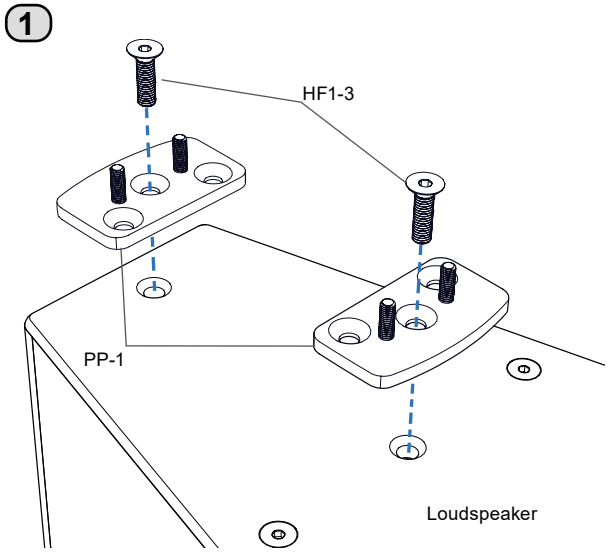


Figure 1. Attach PP-1 to enclosure

2

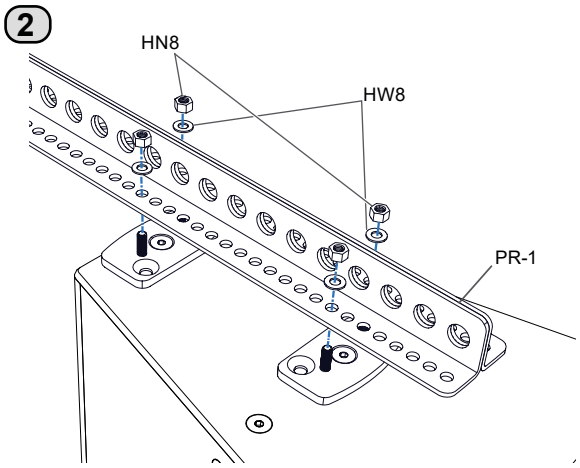


Figure 2. Attach rails to PP-1

3

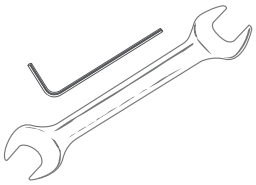


Figure 3. Fully tighten all connections

ADVANCED CONFIGURATIONS

The Fly Rails can be connected to Isometric Array frames, U-Brackets and Vertical Yokes. Connect the rails using 8mm hardware included in this kit. Fully tighten hardware before suspending the assembly.

The assembly should hang level and multiple lift points should be utilized. Lift points at the COG of each frame, yoke or u-bracket assembly or subwoofer cabinet.

4

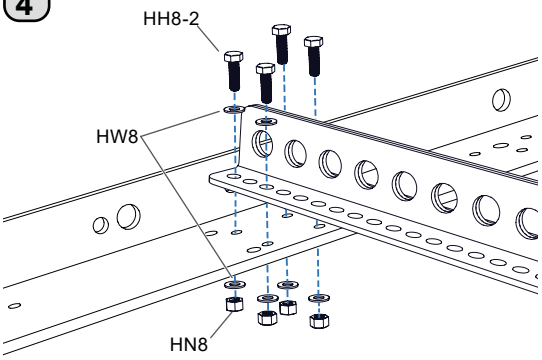
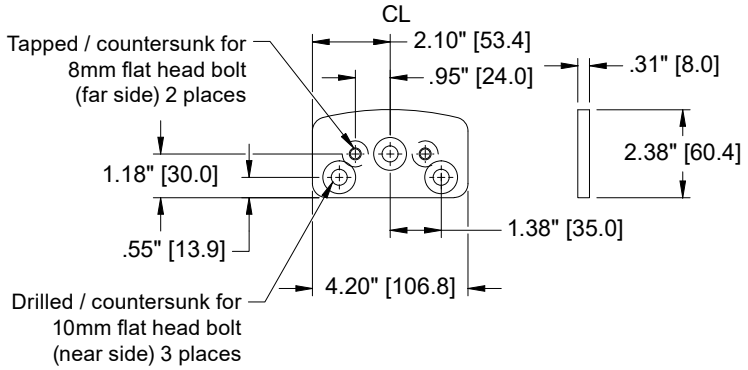


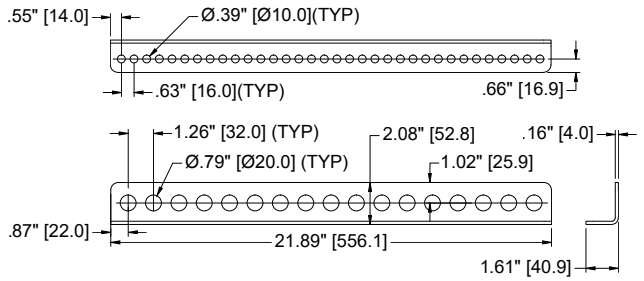
Figure 4. Typical connection of rails to the IAF40 *(shown)* or IAF55 isometric array frame

TECHNICAL DRAWINGS

Universal Mounting Plate [PP-1]



22" BalancePoint™ Fly Rails [PR-1]



LOUDSPEAKER WEIGHTS

Full-RANGE	*600 Level [lbs (kg)]*	*800 Level [lbs (kg)]*	*SUBWOOFER*	*600 Level [lbs (kg)]*	*800 Level [lbs (kg)]*
IP6/8-1122	65.0 (29.5)	55.0 (24.9)	IP6/8-112	64.0 (29.0)	58.0 (26.3)
IP6/8-1152	79.0 (35.8)	68.0 (30.8)	IP6/8-115	78.0 (35.4)	72.0 (32.7)
IP8-1153	-	105.0 (47.6)	IP6/8-118	97.0 (44.0)	98.0 (44.5)
			IP6/8-212	101.0 (45.8)	89.0 (40.4)
			IP6/8-215	126.0 (57.2)	14.0 (51.7)
			IP6/8-218	170.0 (77.1)	172.0 (78.0)

HELPFUL INSTALLATION TIPS

- Assemble the horizontal arrays on the ground (or lifting surface) and then lift the entire assembly into place. Large vertical arrays should be assembled top down - lifting each component and attaching it in order. Smaller vertical arrays can be assembled on the ground and then flown.
- Many brackets and plates come preassembled with the 8mm flat head hardware installed. Some of the corner brackets have differing bolt patterns and we preinstall them in the most common configuration for that kit. Refer to the diagrams on install pages to confirm that the bolts are in the correct position for your cabinet size.
- Assemble the array with the differing models (horn/coverage patterns) in the correct configuration.
- If the cabinets are horizontal, keep the input panels all on the same side for wiring ease, whenever possible.
- To determine the approximate splay or array angles prior to installation, use simulation software such as EASE®. Document those values, and set the angles on the hinges and splay brackets as they are attached to the cabinets.
- When attaching corner brackets, thread both bolts in finger tight first, then continue to tighten equally with hex wrenches (helps avoid misalignment issues).
- Fully tighten the connections as each assembly is finished without crushing the wood fibers.
- The U-Brackets, Vertical Yokes and Isometric Frames have hole patterns compatible with third party manufacturers' adapter plates for 1-1/2" NPT rigid pole mounting systems (such as Chief CMA105 UL listed Ceiling mounting systems, with a SWL rating of 500 lbs [226.7 kg]). See manufacturer's website for details.
- Contact our Loudspeaker Support Group for additional guidance by email: support@biamp.com.

GENERAL ASSEMBLY INFORMATION

The BalancePoint™ Flyware kits for the I SERIES loudspeakers are modular and can be combined in a number of ways. The most common configuration of each kit is shown along with instructions for assembly.

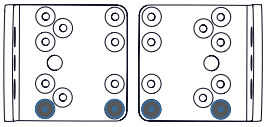
Hardware and Parts: There is a key at the beginning of each instruction that shows the parts, their quantity and abbreviation. We also use a shortened code for the hardware that offers an easy reference to the type, diameter and approximate length.

ex: HW6 = Hardware Washer 6mm;
HF1-2 = Hardware, Flat head bolt, 10 x 25mm

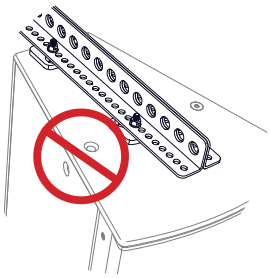
Several parts have underside countersunk holes that are threaded for 8mm flat head bolts. They should be fully seated (at or below the surface of the piece) before attaching the plate/bracket to the enclosure. Bolt placement diagrams are shown for the cabinet brackets that have multiple holes. Several of the brackets are shipped with the 8mm flat head bolts already installed in the most common configuration for that kit.

Tools Needed for assembly:

- Metric socket and ratchet set
- Metric wrench set
- Metric hex key set



Typical bolt placement diagram for 2-way Cabinet (angle) Bracket (PB-3)

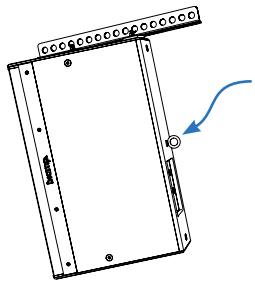


The loudspeaker enclosure must have fasteners in all threaded holes

IMPORTANT: The flat head bolts that come installed in each enclosure must remain in place or be replaced by a threaded fastener from an array bracket. The bolts attach to internal metal brackets that are critical to the structural integrity and rated Safe Working Load (SWL) of each point and each array assembly. Failure to include a fastener in every location could lead to serious injury, or even death.

Safety Cables

IMPORTANT: Attach a safety cable to one of the unused mounting points on the loudspeaker (and/or the bracket assembly). Safety cables must be secured to a suitable load-bearing point separate from the loudspeaker mounting point, with as little slack as possible, oriented to minimize dynamic swinging of the load, so as not to develop undue shock or kinetic force if the loudspeaker mount were to fail. Safety cables and hardware are not included. Please consult a structural engineer for the appropriate cables, hardware, and location(s) for the load and application.



Typical placement for safety cable and hardware (eyebolt not included)

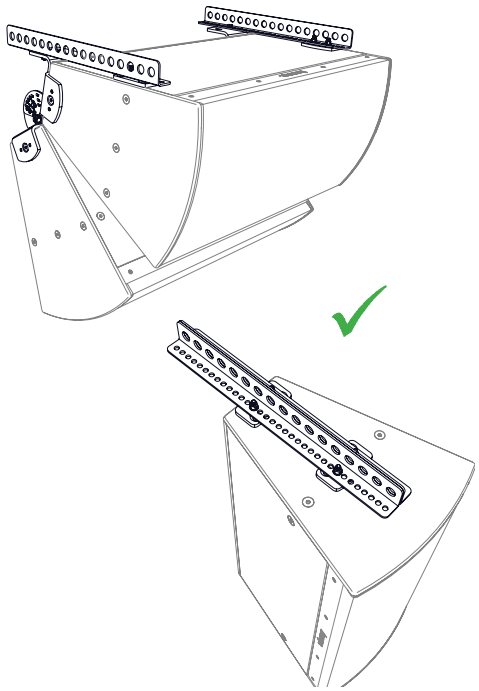
BalancePoint™ Fly Rails

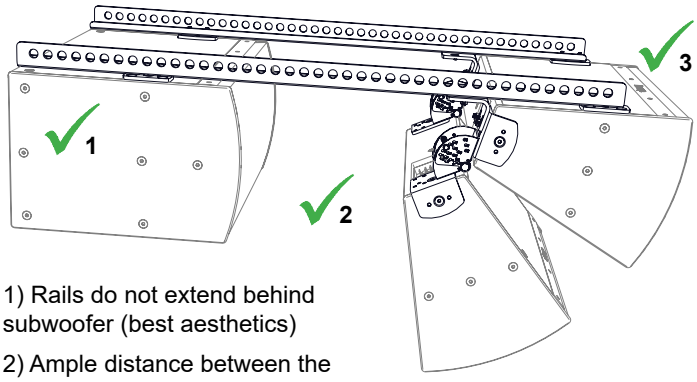
Positioning:

- The fly rails may be mounted in any position required as long as all attachment points are used.
- For the best aesthetics, the fly rails should not extend beyond the front edge of the front cabinet.
- The fly rails can extend beyond the back of the cabinet.
- The rails should be attached to the cabinets using all of the connections shown in the instructions for each assembly. This will ensure that the cabinets don't rotate on the rigging and that the rigging is securely attached to the cabinets.
- In "Subwoofer Behind" configurations, the general rule of thumb is that there shouldn't be less than 6" (152mm) between the face of the subwoofer and the rear of the cabinet in front of it (allows sufficient air movement from the subwoofer cones and parts).

Flying:

- Optimally, each array should be lifted from the hole(s) on the fly rails that produce the desired tilt angle using gravity alone (the "Balance Point").
- A second cable may be used to fine-tune the exact aiming angle and/or stabilize the array from rotation as necessary.

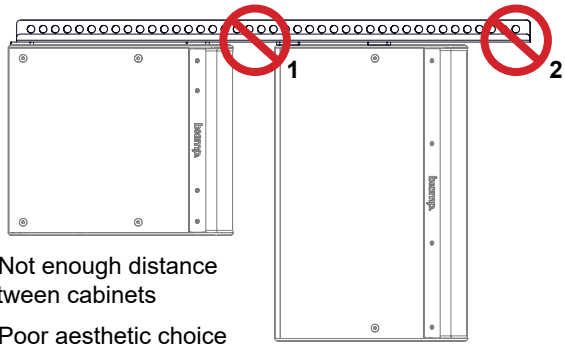




1) Rails do not extend behind subwoofer (best aesthetics)

2) Ample distance between the subwoofer and full-range cabinets

3) Fly rails well behind cabinet face



1) Not enough distance between cabinets

2) Poor aesthetic choice