

Crest Audio® Versarray™ Mk III FlyQWIK™ Adjustable Rigging System



⚠ CAUTION! Before attempting to suspend any Versarray™ Rigging Hardware with or without speakers hung from it, consult a certified structural engineer. The Halo/Fly Bar and/or speaker array can fall from improper suspension, resulting in serious injury and property damage. Use only the correct mating hardware. All associated rigging is the responsibility of others.

Correct use and seating of the Quick Release Push Lock Pins Used with all Versarray™ rigging hardware
When using the Quick Release Positive Lock Pins, when the Quick Release Push Lock Pins are inserted, they should be fully seated, so that the black shoulder near the end of the pin has been placed flush with the side of the bracket, or as far in as the pin hole cavity will allow it to be inserted.
You will have to fully depress the center push-button to do this.
You should not be able to pull these pins out unless the center push-button is fully depressed.

Crest Audio® Versarray™ Mk III HALO FG# 03617370

Connects Versarray™ 112 and 215 Sub speakers to overhead rigging.
Provides four M20 X 2.5mm thread forged steel eyebolts for traditional rigging on the top of the halo; halo center bar has 8 single-point hang locations to balance the Halo, and an optional 2 foot fly bar increases the number of separate and distinct balance points to 29. Includes quick-lock pins to mate to optional fly bar and the first VR112 cabinet in a line.

Specifications:

Overall Dimensions, Including Pins and Eyebolts, etc. H x W x D:
11.63" X 27.44" X 20.63" (29.5 cm X 69.7 cm X 52.4 cm)

Halo Only Dimensions H x W x D:
11.63" X 25.50" X 20.63" (29.5 cm X 64.8 cm X 52.4 cm)

Weight: 64 lbs.

Material: All steel construction, 2" by 3" welded steel frame tubing with 3/16" wall thickness, center bar 1 / 2 " thick by 3" solid steel with eight 23mm rigging holes along the center of it's length, Halo coupling mounts for the cabinet front hang straps are dual 1/8" thick steel plates, one pair on each side.

Finish: Entire Halo is flat black powder coated paint finish.

Working Load Limit: 544 kg / 1,200 lbs. for Ultimate Strength Design Factor of 10:1
(This meets PLASA North America criteria and typically exceeds local USA safety requirements.)

Working Load Limit: 453 kg / 1,000 lbs. for Ultimate Strength Design Factor of 12:1
(This is in compliance with the European Union mandated Safety Factor)

Maximum Number of Versarray™ 112 Mk3 passive cabinets: 15

Maximum Number of Versarray™ Pro 112 Powered cabinets: 15

Maximum Number of Versarray™ Pro 215 Powered Sub cabinets: 7 for N. America (PLASA)
6 for European Union

(Note: VR215 Pro Sub cabinets do NOT articulate or angle, they must be hung at a zero degree angle. Therefore, we recommend that they be hung at the top of a line.)

Can fly up to 7 Versarray™ Pro 215 Powered Subs, or 15 Versarray™ 112 Mk3 or Pro 2-Ways

Maximum Combined Number of Versarray™ 112 Mk3 or Pro 2-Ways and Versarray™ Pro 215 Powered Sub cabinets, when used with the Sub Support Frame Adaptor:

MIX OF SUBS VERSUS VR Pro 112

Subs	VR Pro 112	
	EU	N. America
0	12	15
1	9	11
2	7	9
3	5	7
4	3	5
5	1	3
6	0	1
7*	X	0

MIX OF SUBS VERSUS VR 112 Mk3

Subs	VR 112 Mk3	
	EU	N. America
0	14	15
1	10	13
2	8	10
3	5	8
4	3	6
5	1	4
6	0	1
7*	X	0

*N. America (PLASA) ONLY! Maximum Combined Pull-Back Angle, Two or less Subs in the hang: 30 degrees
Maximum Pull-Back Angle, more than 2 Subs in the hang: 15 degrees.

 **WARNING!**
Crest Audio® is not liable for any injuries or damages that could potentially occur if the specified Working Load Limit is exceeded for any of the Versarray™ FlyQWIK™ rigging components or system configurations.
If there is any question about the capacity of a given configuration of rigging hardware and cabinets, you should con-sult with a certified structural engineer or a **qualified** rigging professional before installing the system.

NOTES:

The ultimate strength for the Versarray™ Mk3 loudspeaker system rigging points was determined utilizing calibrated and certified pull tests.
Maximum number of cabinets was determined using all loading and safety criteria, not just the simple weight of the cabinets versus the WLL of the Halo.

Design and specifications subject to change without notice.

CAUTIONS

 **WARNING !**
IMPORTANT INFORMATION FOR STRUCTURAL ENGINEER AND RIGGING PERSONNEL.
Before you fly the array, be sure to inspect the rigging and flying hardware to insure that it is mechanically sound and has not been damaged. There should be no significant distortion of the shape of the Halo coupling ears, cabinet straps, Angle Slider bracket or Rail, Pivot Bar or a fly bar, and the hardware should be checked for tightness.

 **CAUTIONS:**
IF ANY OF THE BRACKETS, RAILS, CABINET STRAPS, PIVOT BAR OR THE FLY BAR HAS BEEN DAMAGED OR DISTORTED, DO NOT USE, AND DO NOT FLY THE ARRAY UNTIL THEY CAN BE REPLACED OR REPAIRED!

DO NOT USE THE PIVOT BAR OR ANGLE SLIDER BRACKET AS HANDLES TO TRANSPORT THE CABINETS!

DO NOT TRANSPORT THE CABINETS IN ARRAY CONFIGURATION COUPLED TOGETHER, EXCEPT WITH THE RECOMMENDED TRANSPORT CART AND IN THE STIPULATED MANNER FOR THAT CART. TRANSPORT IN SUCH AN UNAPPROVED MANNER VOIDS THE WARRANTY, AND THE SYSTEM WOULD BE CONSIDERED UNSAFE TO BE FLOWN AFTER SUCH AN UNAPPROVED TRANSPORT EVENT.

The Crest Audio® Versarray™ loudspeaker models should be suspended overhead only in accordance with the procedures and limitations specified in the User's Manual and possible manual update notices. This system should be suspended with certified rigging hardware by a qualified rigging professional and in compliance with local, provincial or national suspension ordinances. ALWAYS USE PROPER GRADE HARDWARE. It is the responsibility of the user and installer to make sure that any Crest Audio® Versarray™ installation meets any applicable local, state or federal safety regulations.

 **CAUTION:** Before attempting to suspend this speaker, consult with a certified structural engineer. Speaker can fall from improper suspension, resulting in serious injury and property damage. Use only the correct mating hardware. All associated rigging is the responsibility of others. Maximum enclosure angle 30 degrees.

Failure to follow proper rigging specifications listed in the manual may result in injury or death.

Whenever possible, in addition to the nominal primary mounting method, use a suitable safety chain or wire rope attached to one of the other groups of fly points, and firmly attached to a suitable structural member as indicated by a certified structural engineer.

 **CAUTION:** ALWAYS USE SAFETY CHAIN OR WIRE ROPE.

DO NOT USE THE FLOWN ARRAY AS A LADDER, OR ATTEMPT TO CLIMB UP TO THE RIGGING OR THE HALO USING THE FLOWN LINE OF VR112 CABINETS!
DOING SO IS LIKELY TO DAMAGE THE CABINET HARDWARE AND RIGGING, AS WELL AS POSE A SERIOUS AND DANGEROUS SAFETY HAZARD!

Versarray™ Mk III Halo

Specific Instructions for the basic flying and hanging the Versarray™ Mk III Halo will not be supplied. It provides and follows industry standards for attaching rigging and fly hardware, as well as providing for the currently popular practice of hanging the array via a single hang point that can be a suitably rated chain hoist motor system.

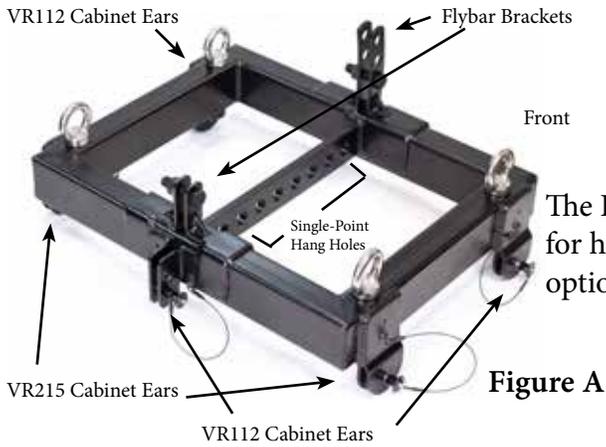
Seek the recommendations of a certified structural engineer or an experienced rigging professional for any questions about this type of use of the Versarray™ Mk III Halo.

Instructions for maximizing the single point hang balance point options are provided, due to the unique flexibility the Versarray™ system provides.

Single Point Hang - Balance Point Options

The Crest Audio® Versarray™ Mk III Halo has 8 single-hang balance points provided via the center bar of the Halo frame. In many cases, using one of these with a suitable shackle and rigging system will provide a suitable starting angle for the array once it is flown and guyed.

If the particular configuration chosen for the Versarray™ 112 Mk III line array hang does not fully balance to your needs using only the Versarray™ Mk III Halo, then an optional Versarray™ Mk III 2 Foot Fly Bar can be added to the Halo, and the combination now provides 29 discrete balance points to choose from.



The Halo parts referred to in the following connection instructions for hanging the Versarray™ 112 Mk III cabinets, and incorporating the optional Fly Bars (2 or 6 foot model) can be seen in Figure A

Figure A



The Versarray™ Mk III Halo is shown with the optional Versarray™ Mk III 2 Foot Fly Bar mounted in position in the primary location and orientation in Figure B.

Figure B

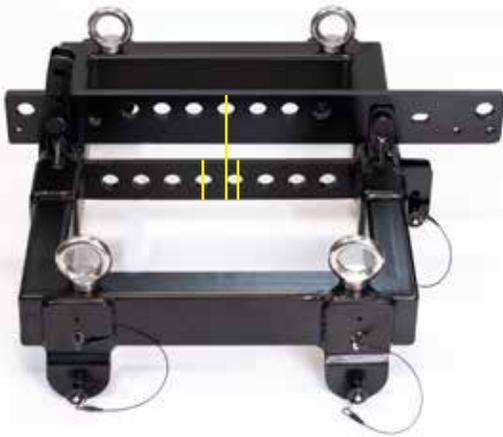


Figure C shows how the holes on the optional 2 Foot Fly Bar line up with the original Halo single-point hang balance holes. Note that the hole centers are located approximately 1/3 of the way offset towards the front of the Halo, providing more possible balance points for a single point hang situation.

Figure C

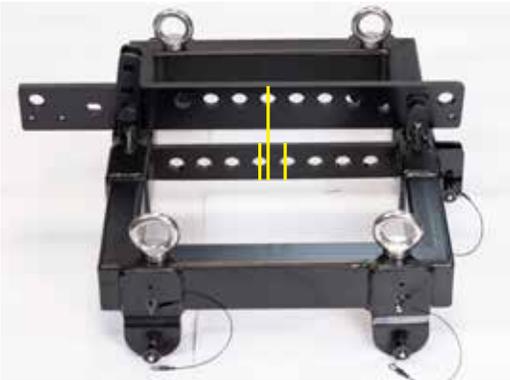


Figure D shows the same Versarray™ Mk III 2 Foot Fly Bar installed in reverse, using the original holes to mount to the Halo. This offsets the optional 2 Foot Fly Bar holes by approximately 1/3 of the way towards the rear of the Halo, providing yet more possible balance points.

Figure D

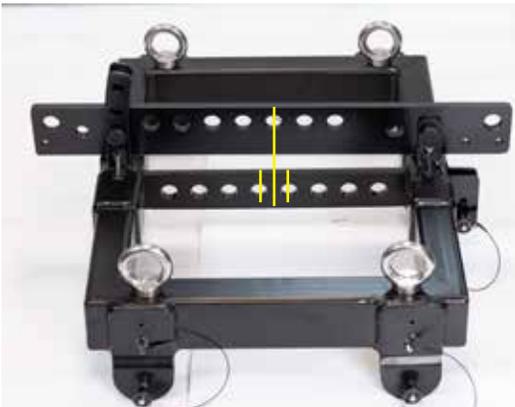


Figure E shows the optional Versarray™ Mk III 2 Foot Fly Bar installed in the original orientation, but using the second set of Halo mounting holes on the bar to offset the 2 Foot Fly Bar by approximately 1/2 of the hole spacing. This provides yet another set of possible balance points, providing altogether another 21 possible balance points, in addition to the 8 on the Halo itself. Reversing the bar using this set of Halo mounting holes will not provide a different offset, as it is split between the existing hole locations of the Halo center bar holes.

This 2 Foot Fly Bar mounting option provides yet another 7 possible balance points for a single-hang situation, making a total of 21 additional balance point options in addition to the original 8 in the Halo.

Figure E

Hanging Versarray™ 112 Mk III Cabinets from a Versarray™ Mk III Halo

Assuming the Halo is in position just above the cabinet/s, on a motorized hoist or manually cranked hoist, proceed as follows.

1. Remove the top front quick release lock pins, slide the front hang straps up and pin them in place using those pins, with the front hang straps extending upward. The strap should be sticking up approximately 2.13". Do this for both sides. See Fig.1 and 1a.



Figure 1



Figure 1a

2. Either lower the Versarray™ Mk III Halo to meet the cabinet, or raise the cabinet up to meet the Halo, with the cabinet straps guided into mating with the Halo ears on both sides at the same time. Pin the front straps in place using the pins from the Halo. See Fig. 2

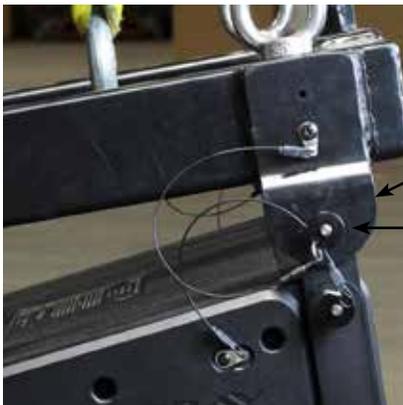


Figure 2

3. Remove the Pivot Bar hole pin, swing pivot bar up to mate with the center rear bottom Halo ear hole. The bottom hole on the Halo ear provides a zero angle between the Halo and the first cabinet, the upper hole an angle of 5 degrees between the Halo and the first cabinet. Pin the Pivot Bar to the desired hole using the pin from the Halo. See Fig. 3

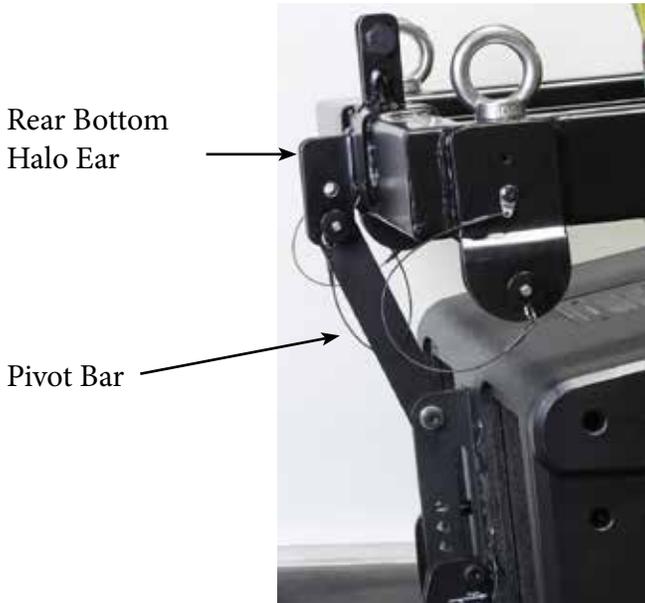


Figure 3

4. Adding the second Cabinet.

Remove the top front quick release lock pins, slide the front hang straps up and pin them in place extending upward. The strap should be sticking up approximately 2.13". Do this for both sides. See Fig.1 and 1a.

5. Either lower the Halo and first cabinet to meet the second cabinet, or raise the second cabinet up to meet the first cabinet, with the second cabinet straps guided into mating with the first cabinet bottom strap slots. Pin the front straps in place using the pins from the first cabinet. See Fig. 4 and 4a.



Figure 4

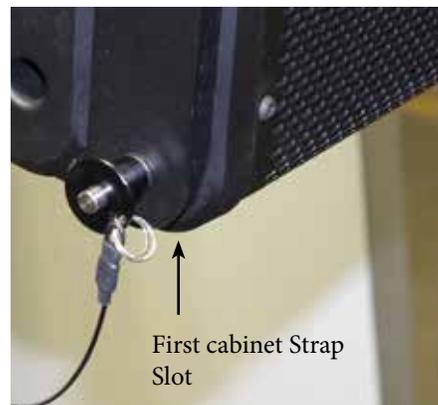


Figure 4a

6. Remove the Pivot Bar hole pin on the second cabinet, swing pivot bar up to mate with the Pivot Bar hole of the first cabinet. Pin the Pivot Bar into place using the bottom rear pin on the first cabinet. See Fig. 5 and 5a.

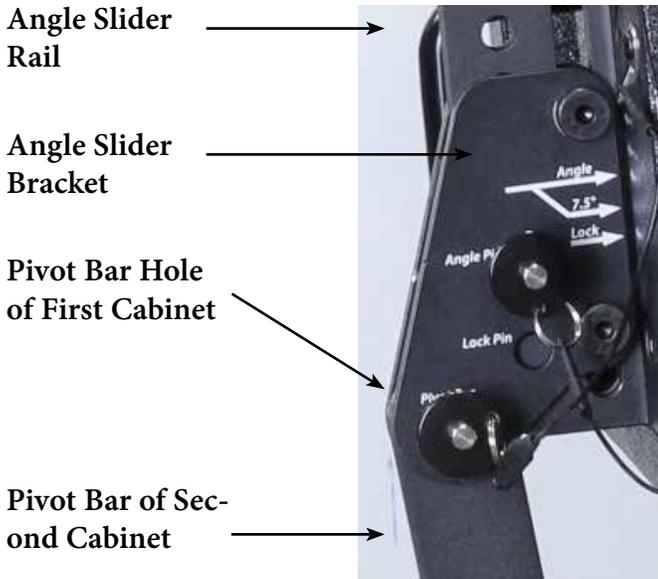


Figure 5



Figure 5a Alternate View

⚠ NOTE: Once the Pivot Bar hole pin is removed, the cabinet is free to swing through all possible angles, be sure to keep fingers, hands and your body out of the possible path of the cabinet hardware or the cabinet itself, to avoid injury.

7. The angle of the second cabinet can now be adjusted. To set the angle between the first cabinet and the second cabinet to a nominal amount, remove the Lock pin from the hole it is in, and slide the Angle Slider bracket Angle Arrow to the desired angle as shown by the arrow labeled Angle on the Angle Slider Rail, and put a pin from the first cabinet (the one you removed from the Lock hole) into the Angle Pin hole on the Angle Slider bracket.

You can set the angle between the first cabinet and the second cabinet to be any of the following angles: 0 degrees, 2.5 degrees, 5 degrees, 7.5 degrees, 10 degrees, 12.5 degrees, and 15 degrees

As an example, see See Fig. 6, showing a set angle of 2.5 degrees.



Angle Setting 2.5 degrees

Figure 6

The angle for 7.5 degrees uses a different set of arrows, due to the hardware bolt being in the way of a correctly located screened angle on the Angle Slider Rail using the Angle arrow on the Angle Slider bracket. This is why there is an arrow that is an offshoot of the Primary Angle arrow on the Angle Slider bracket, just below it, labeled 7.5 degrees. This is lined up with the arrow marked 7.5 degrees on the Angle Slider rail. See Fig. 7.

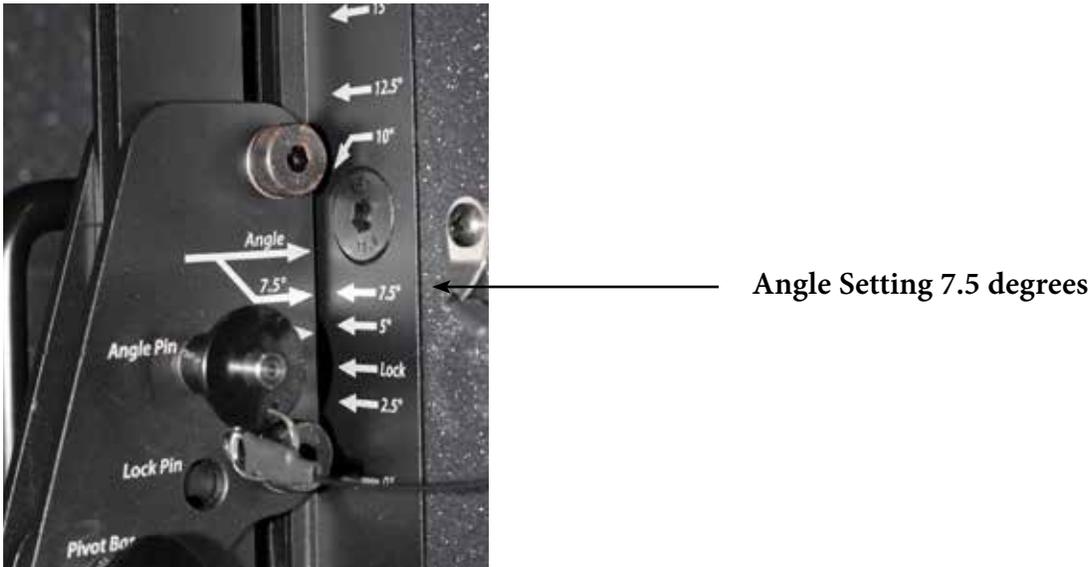


Figure 7

Adding additional cabinets follows this same basic hook-up progression, with the Angle Slider on the top cabinet of a given pair setting the angle between those two cabinets.

NOTE: Any Versarray™ Sub cabinets that might be flown in the same array off of the same Halo should be located at the top of the array, as they have no angle adjustment capability, and can only be hung at a 0 degree angle.

Hanging Versarray™ Pro 215 Powered Subs Below a Versarray™ Mk III Halo

The Versarray™ Pro 215 Powered Subwoofer can be hung below a Versarray™ Mk III Halo, up to 7 Subs per Versarray™ Mk III Halo, or some combination of Subs and Versarray™ 112's, as per the chart listed out above this section, in the Halo Specifications section.

The attachment of the Subs to the Halo is substantially the same basic procedure as in the section Hanging Versarray™ 112 Mk III Cabinets from a Versarray™ Mk III Halo, in that the Subs have the same sliding strap and pin on the rear sides as the front sides, but no Angle Slider Bracket or Angle Rail, or Pivot Bar connections. Another way of putting it is that there are four sliding hang straps on the Sub that connect to the four ears at the corners of the Halo frame, using the attached quick release lock pins.

The Versarray™ Pro 215 Powered Subs can only hang at a zero degree angle relative to the Halo, so they must be placed at the top of a mixed model line array, and then the Versarray™ 112 Mk III cabinets hung below the last Sub in the array using a Versarray™ Sub Support Frame. See the Versarray™ Sub Support Frame Owner's Manual for specifications and the details about hanging the Subs.

Hanging Versarray™ 112 Mk III cabinets below Versarray™ Pro 215 Powered Subs

See the Versarray™ Sub Support Frame Owner's Manual for details about connecting the Frame to the Versarray™ Pro 215 Powered Sub, and for hanging Versarray™ 112 Mk III cabinets below the Versarray™ Sub Support Frame. As with the Subs being hung from the Halo, the top connections on the Adaptor to the Subs is similar to how the Subs connect to the Halo, in that there are four fixed metal tongues sticking up that connect to the four ears at the corners of the Halo frame.

For connecting the Versarray™ 112 Mk III cabinets to the bottom of the Adaptor, the procedure is very similar to hanging the Versarray™ 112 Mk III cabinets below the Versarray™ Mk III Halo, as the bottom fitments on the Adaptor are similar as those present on the Halo.

Alternate Method of Setting Angles Between Cabinets

Instead of following Step 6 (Hook-up Pivot Bar) and then Step 7 (Set Angle Between Cabinets), set the angle on the Angle Slider bracket and rail before un-pinning the Pivot Bar, and connecting it to the previous cabinet. Each method will work, but one will be more easily implemented with one person setting up the rig, versus having two or more people available.

Dismantling an Array

To take the line array down, you simply reverse the process, and remove one cabinet at a time, placing the rigging hardware into the nominal storage and transport positions.

Retract all the hang straps, and pin into place, place the Pivot Bar into the proper position to pin it into the Pivot Bar Hole, remove the pin from the Angle Pin hole, and slide the Angle Slide bracket into the LOCK position (LOCK arrow lined up with the other LOCK arrow), and pin into place. See Fig. 8.

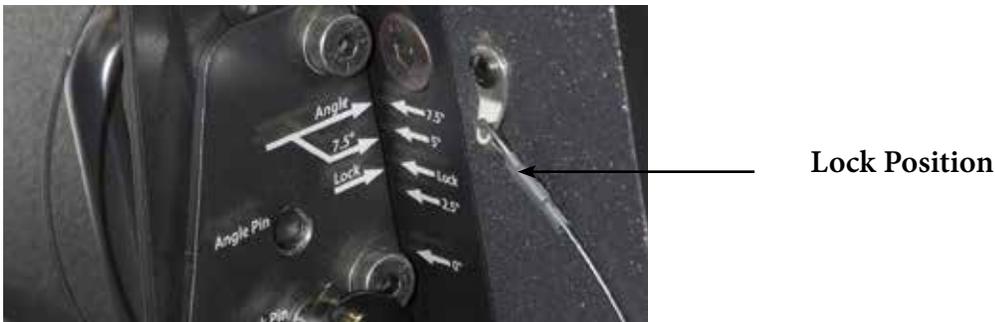


Figure 8

Make sure that all the quick release lock pins are re-inserted into their default positions.

Cabinet hardware and rigging must be placed into the storage and transport positions, to move or transport the cabinets individually, or the product Warranty is voided.

The only exception is use of the Crest Audio® designed transport Carts, capable of transporting 3 Versarray™ 112 Mk III while in a straight line array configuration, with all cabinets set to 0 degrees. Instructions for the proper use of the Cart will be in the Cart Owner's manual.

Using the Versarray™ Mk III 6 Foot Fly Bar with the Versarray Mk III Halo

Another optional rigging component is the Versarray™ Mk III 6 Foot Fly Bar, used when there is a need to fly two Versarray™ Mk III Halo's at once. This configuration would be used when it was desired to fly the Versarray™ Pro

215 Powered Subs up with the Versarray™ 112 Mk III or Versarray™ Pro 112 cabinets on a separate Versarray™ Mk III Halo. The VR112's would fly in front of the VR Subs, and some time delay dialed in to align the 112's with the Subs.

See the Versarray™ Mk III 6 Foot Fly Bar Owner's Manual for details about connecting and using the fly bar with two Versarray™ Mk III Halo's



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Warranty registration and information for U.S. customers available online at
www.peaveycommercialaudio.com/warranty
or use the QR tag below



Features and specifications subject to change without notice.

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 Logo referenced in Directive 2002/96/EC Annex IV
(OJ L37/38, 13.02.03 and defined in EN 50419: 2005
The bar is the symbol for marking of new waste and
is applied only to equipment manufactured after
13 August 2005