

Crest Audio® Versarray™ Mk III



FlyQWIK™ Sub Support Frame



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/Sub Support Frame 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 Sub Support Frame FG# 03617580

Connects Versarray™ 112 MKIII and/or Pro speakers to the bottom of the Versarray 215 Pro Sub for overhead rigging. Includes quick-lock pins to mate to bottom of sub and the first VR112 cabinet in a line.

Specifications:

Overall Dimensions, Including Pins. H x W x D

8.875" X 27.375" X 20.25" (225.43 mm X 695.33 mm X 514.35 mm)

Sub Frame Only Dimensions H x W x D

8.875" X 25.4375" X 20.25" (225.43 mm X 646.11 mm X 514.35 mm)

Weight: 47 lbs

Material: All steel construction, 2" X 3" welded steel frame tubing with 3/16" wall thickness. Halo coupling mounts for VR112 cabinets and Sub coupling mounts for VR215 cabinets are 3/16" thick steel plates.

Finish: Entire sub frame 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: 13

Maximum Number of Versarray™ 112 Pro Powered cabinets: 11

Maximum Number of Versarray™ Pro 215 Powered Sub cabinets: 6

When using the VR Mk3 Sub Support Frame, the Subs must be hung at the top of the line, directly below the Halo. The VR 112's must then be hung below the Sub Support Frame, that will be attached to the bottom most Sub cabinet.

Maximum Combined Number of Versarray™ 112 Mk3 or Pro 2-Ways and Versarray™ Pro 215 Powered Sub cabinets for Halo and Sub Support Frame.

<i>MIX OF SUBS VERSUS VR Pro 112</i>			<i>MIX OF SUBS VERSUS VR 112 Mk3</i>		
Subs	VRPro 112's		Subs	VR 112 Mk3's	
	EU	N. America		EU	N. America
1	9	11	1	10	13
2	7	9	2	8	10
3	5	7	3	5	8
4	3	5	4	3	6
5	1	3	5	1	4
6	0	1	6	0	1



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 consult with a certified structural engineer or a qualified rigging professional before installing the system.

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

NOTES:

The ultimate strength for the Versarray™ Mk3 loudspeaker system rigging points was determined utilizing calibrated and certified pull tests.

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 or Sub Support Frame coupling ears or coupling tongues, 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 an authorized rigging professional and in compliance with local, provincial or national suspension ordinances. ALWAYS USE PROPER GRADE HARDWARE.



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.**

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.



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.

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. See Versarray™ Pro 215 Powered Subwoofer Manual for details and instructions.

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 below for details about the installation of the Versarray™ Sub Support Frame and installation of the Versarray™ 112 Mk III or Pro Speakers to the Sub Support Frame.

Installing the VR Sub Frame to a VR 215 Pro Cabinet

Procedure:

1. After the VR 215 Pro Sub is attached to the Halo, lift the cabinet high enough so that the VR Sub Frame can be placed underneath and properly aligned up with the cabinet. See Fig. 1

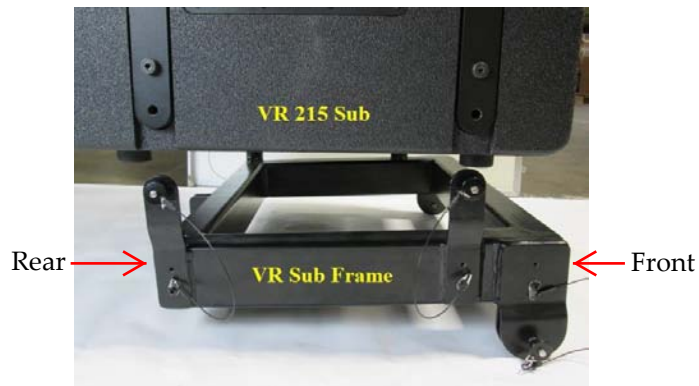


Figure 1

2. Remove the Quick Release Lock Pins from the Sub Coupling Tongues, all four.
See Fig. 2



Figure 2

3. Slowly lower the cabinet stopping just short of touching the Sub Coupling Tongues. This is so any adjustments can be made to the alignment of the sub frame to the cabinet. See Fig. 3

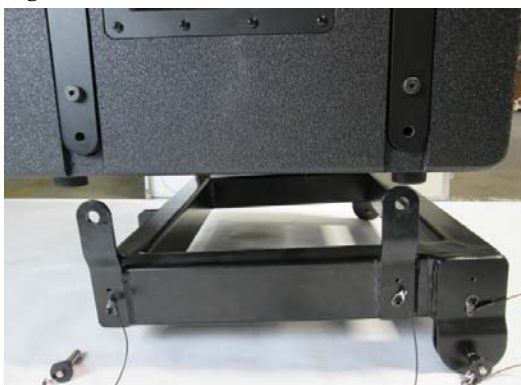


Figure 3

4. Continue to slowly lower the cabinet onto the sub frame, allowing the coupling tongues to slide up into the Sub Coupling Slots on the bottom sides of the cabinet. Lower the cabinet until the holes of the tongue and slots line up with each other.

Note: Maneuvering the frame by hand might be needed to help with aligning the frame while the cabinet seats itself. See Fig. 4 and 5



Figure 4



Figure 5

5. Insert the Quick Release Lock Pins into the aligned holes of the Sub Coupling tongues and the Sub Coupling Slots. See Fig 6 and 7



Figure 6



Figure 7

6. The sub frame is now attached to the bottom of the VR 215 Pro Sub and is ready to be lifted up to have an array of VR 112 Cabinets attached to it. See Fig.8



Figure 8

Hanging Versarray™112 Mk III Cabinets from a Versarray™ Mk III Sub Support Frame

Procedure:

With the Sub Support Frame attached to a VR 215 Sub, and in position just above the VR112 cabinets, 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.9 and 9a.



Figure 9



Cabinet Hang Strap

Figure 9a

2. Either lower the Versarray™ Mk III Sub Support Frame to meet the cabinet, or raise the cabinet up to meet the Support Frame, with the cabinet straps guided into mating with the Support Frame ears on both sides at the same time. Pin the front straps in place using the pins from the Support Frame. See Fig. 10

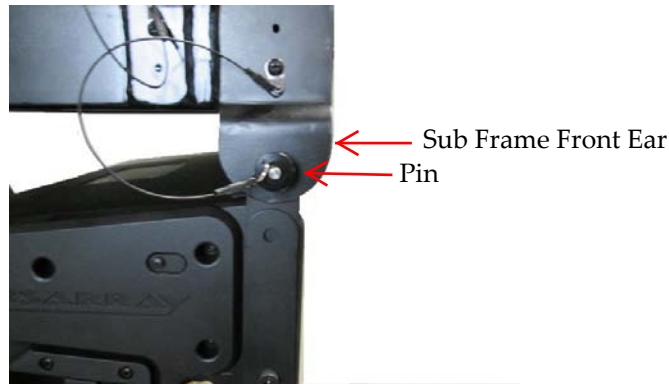


figure 10

3. Remove the Pivot Bar hole pin, and swing the Pivot Bar up to mate with the Center Rear Support Frame Ear hole. The first cabinet will only have a zero degree angle between the Support Frame and the cabinet. Pin the Pivot Bar to the Center Rear Support Frame Ear. See Fig. 11

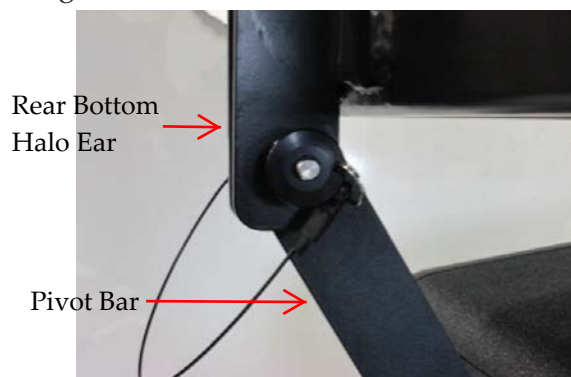


Figure 11

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. 9 and 9a.
5. Either lower the Sub Support Frame 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. 12 and 12a.



Figure 12

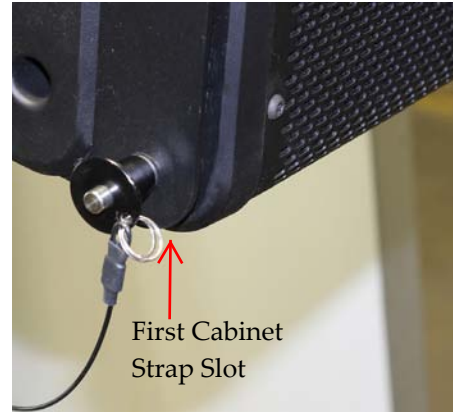


Figure 12a

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. 13 and 13a.

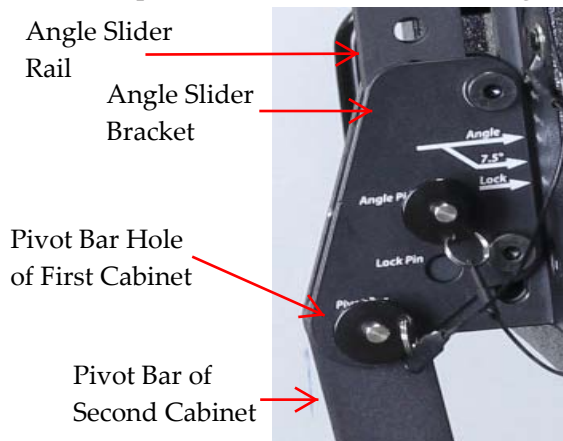


Figure 13



Figure 13a 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. 14, showing a set angle of 2.5 degrees

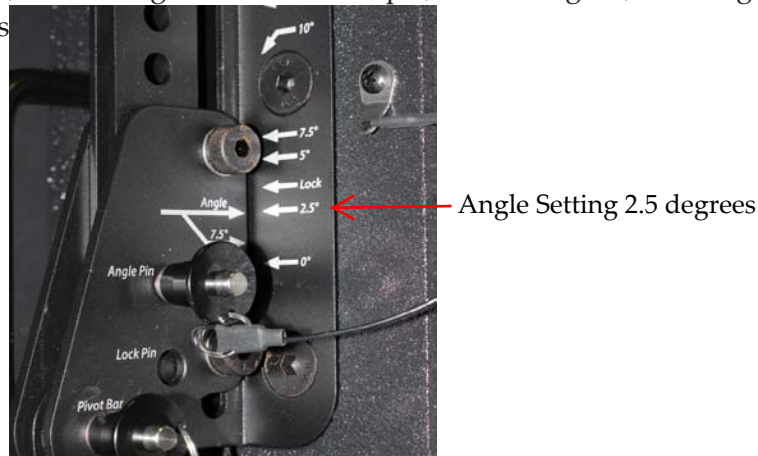


Figure 14

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. 15

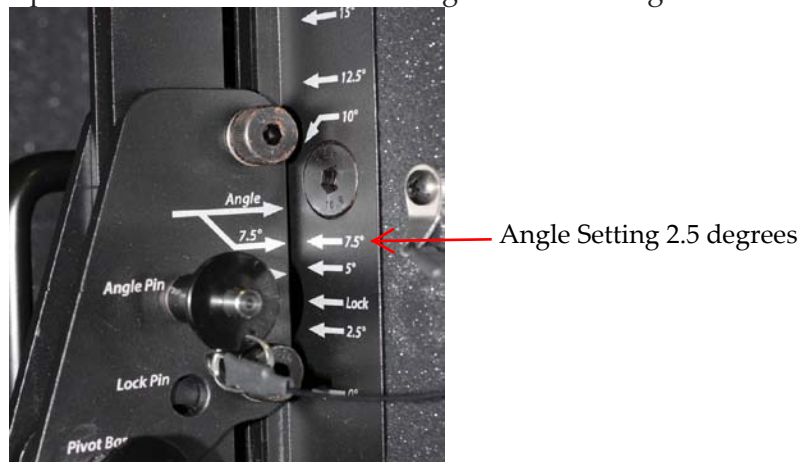


Figure 15

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.

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. 16.

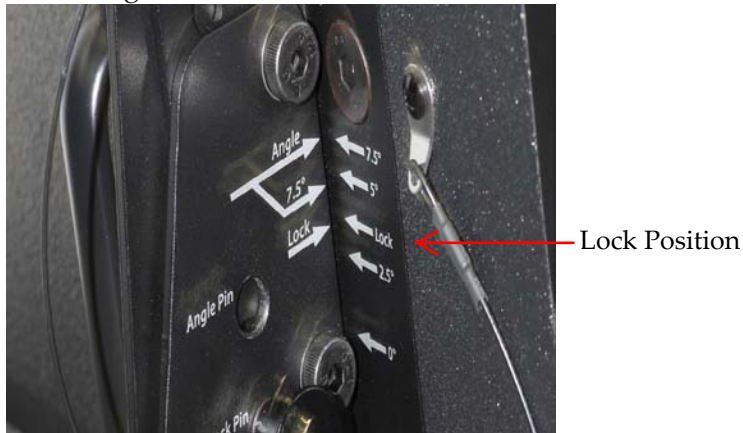


Figure 16

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 4 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.



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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.

Crest Audio 5022 HWY 493 N. Meridian, MS 39305 (601) 483-5365 FAX (601) 486-1278



Logo referenced in Directive 2002/96/EC Annex IV
(OJ(L)37/36, 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