B 15Z HARMONIC RESOLUTION SYSTEMS

# **VXR AUDIO STAND**

A Low Noise Floor Is Fundamental

# Introduction

Thank you for purchasing the patented Harmonic Resolution Systems VXR Audio Stand (US Patent No.: 10,045,615). When used properly, it will give you many years of superior musical or video signal reproduction.

The VXR Audio Stand significantly reduces the negative impact of structure-borne noise on your audio or video component performance. Decades of engineering experience, custom material development, and listening tests are incorporated into the design of the VXR Audio Stand. This high-performance product from Harmonic Resolution Systems, Inc. will enable your audio/video source and amplification components to achieve high levels of performance.

The VXR Audio Stand, which includes the HRS Isolation Base as the primary shelf system, is a perfect match for the HRS Damping Plates, Nimbus, Vortex, and Helix products. While the VXR Audio Stand and HRS Isolation Bases work to significantly reduce structure-borne noise, the HRS Damping Plates, Nimbus, Vortex, and Helix products significantly reduce the harmful effects of air-borne noise and structural resonance on your components.

Please read this manual completely prior to assembly and use of your VXR Audio Stand. It contains instructions necessary for proper assembly, use, and care of this system. Proper care of your VXR Audio Stand will ensure optimum performance and an aesthetically appealing system.

All HRS products are manufactured in the US by highly skilled craftsmen using superior techniques, exotic finishes, and proprietary materials. HRS is dedicated to producing the finest audio products in the world. To accomplish that, all products advance through a series of intense inspection and approval protocol. All items are inspected 100% to verify the assembly fits are up to our exacting standards. This rigorous protocol, combined with precision design, results in a product that is a pleasure to install, use, change, or expand at any time. From all of us here at HRS, we truly hope you enjoy our product.



Scan here to register for HRS 5-year limited warranty https://avisolation.com/company-warranty/ Your order was built and inspected by the following HRS staff

Manufacturing: \_\_\_\_\_

Inspection: \_\_\_\_\_\_

Packaging: \_\_\_\_\_

# **Safety Instructions**

#### **IMPORTANT WARNINGS!**

Do not place any tall objects on the top level of the VXR Audio Stand. A tall object is any object with a height that is greater than the length of the corresponding HRS Isolation Base. A tall object is also any object that has a height greater than its own width or length. Tall objects must not be placed on top of the VXR Audio Stand for any reason. The object may become unstable and tip over, causing damage to the component, adjacent objects, or injury to people.

Never lift or move the VXR Audio Stand with HRS Isolation Bases or components installed. Move the VXR Audio Stand to its final location prior to loading HRS Isolation Bases and components. Moving the VXR Audio Stand with the HRS Isolation Bases and/or components installed can permanently damage the VXR Audio Stand, and cause the HRS Isolation Bases to fall out, resulting in potential damage or injury.

Do not lift HRS Isolation Bases by the inner plate or the external feet attached to the bottom of the rectangular frame. Always lift or move the HRS Isolation Base with the inner plate facing up and the external support feet facing down (the same orientation as when used to support your component). Always follow these handling instructions to prevent personal injury or damage to the unit.

## **Setup Instructions**

Your VXR Audio Stand may arrive only partially assembled. If your VXR Audio Stand arrived fully assembled, make sure you have followed the unpacking instructions attached to the outside of the crate. If you have followed the instructions properly, your VXR Audio Stand should now be set up at its final location, and you can skip the assembly instructions below and refer directly to "Leveling the VXR Audio Stand" on page 13.

At least two people are required to assemble the VXR Audio Stand. Some subassemblies can weigh in excess of 50 pounds, and the completed system without HRS Isolation Bases will weigh approximately 60 pounds per shelf location. Always make sure you have the proper number of people to move the VXR Audio Stand and its parts safely and easily.

The VXR Audio Stand consists of the primary aluminum structure and the HRS Isolation Bases that support each component. Each box containing parts for the VXR Audio Stand will be marked with a model number starting with "VXR". The total number of boxes depends on the capacity of the system. The standard three and four shelf VXR Audio Stands ship in six and seven boxes, respectively.

**Work Surface** - Prior to unpacking any material, locate a very strong and stable work surface capable of supporting a 500 lb. load, or an area on the floor that provides a soft, scratch-resistant workspace at least  $3'\times6'$  in size. The more space you have, the better, as it will give you room to move around the VXR Audio Stand to complete assembly. It is important that the area be free of all dirt, screws, or small pebbles, and that it is covered with a clean, soft, protective blanket that

will prevent damage to the cosmetic surfaces of the VXR Audio Stand parts. Use a location as near to the intended final location of the VXR Audio Stand as possible to make final setup easier. The completed VXR Audio Stand will be very heavy and difficult to relocate after assembly.

**Unpacking VXR Audio Stand Assembly Hardware** - Remove all the contents from the "VXR Parts Box" containing the assembly hardware. Place the contents in a convenient place near your work surface, and remove all the wrapping material. Do not allow anodized aluminum parts to contact each other, as doing so may scratch their surfaces. Do not stack the parts on top of each other after they are removed from the protective packaging material.

**Unpacking VXR Vertical Leg Subassemblies** - Unpack two Single-Sided VXR Vertical Leg Subassemblies by removing the top panel of their crate. A Philips head screwdriver (manual or electric) is required to open the crate. Carefully remove the VXR Vertical Leg Subassemblies from the crate, and move them directly to your prepared work surface. Set them down with the Bolt Plates facing up.

Store all the packaging material in a safe place. Saving all the packing material is critical to secure transportation of the VXR Audio Stand in the future. Shipping or moving the VXR Vertical Leg Subassemblies by any means other than how it was originally packaged at HRS may result in permanent damage to the unit.

**Installation of Adjustable VXR Points** - Unwrap two of the VXR Points supplied with the unit. Remove the nut and washer from each foot (photo 1).



Photo 1

Hand-tighten each nut all the way down, then loosen them by one half rotation (photo 2).



Photo 2

Place the supplied washer on top of the nut, and then screw each of the VXR Points into the bottom of a VXR Vertical Leg Subassembly (photos 3 and 4). The VXR Points should be threaded in until the washer is held in contact with the bottom of the VXR Vertical Leg Subassembly. This ensures maximum engagement of the threads.



Photo 3



Attaching the VXR Horizontal Crossmember Subassemblies - The VXR Horizontal Crossmember Subassemblies can now be fastened to the VXR Vertical Leg Subassemblies. Two VXR Horizontal Crossmember Subassemblies will hold the two legs together to form the primary VXR Audio Stand structure. Carefully set two of the VXR Vertical Leg Subassemblies on your work surface, so that the distance between the outside edges is equal to the intended depth of the VXR Audio Stand. For most VXR Audio Stands, this distance is equal to the first two digits in the model number of your VXR Audio Stand (e.g. 19 inches for a VXR-1921 or 17 inches for a VXR-1719) (photo 5). For model numbers that include a "-2" after the size designation, the VXR Audio Stand is designed with the narrower sides as the front and back, so this measurment is equal to the second pair of digits (e.g. 21 inches for a VXR-1921-2 or 19 inches for a VXR-1719-2). Arranging the parts this way will minimize the adjustment required to attach the VXR Horizontal Crossmember Subassemblies.



Photo 5

There are sixteen fasteners holding the VXR Horizontal Crossmember Subassembly rigid that need to be loosened prior to assembly. The eight on the top of the subassembly are circled in photo 6, and there are eight more opposite them on the underside of the subassembly. Remove one VXR Horizontal Crossmember Subassembly from its packaging, and use the provided  $\frac{5}{32}$ " T-wrench or ratchet wrench to loosen (counter-clockwise) the sixteen bolts that connect to the VXR Isolation Base Mounts. Loosen each fastener  $\frac{1}{4}$  turn, just to give the assembly some flexibility for easy installation.





Unless your system includes Solid Brace Inserts, **HRS recommends fastening the top VXR Horizontal Crossmember Subassembly at a height that will sit your HRS Isolation Base as close to flush with the top of the VXR Audio Stand as possible.** For all HRS Isolation Bases that are not designated "Low Frequency" (LF), fasten the VXR Horizontal Crossmember Subassembly at the 3<sup>rd</sup> thread from the top (photo 7A).

For Low Frequency (LF) HRS Isolation Bases, the ideal placement must be determined based on the height of the HRS Isolation Base. If the base that you are placing on top of the VXR Audio Stand measures  $3^{1}/_{4}$ " tall (photo 7D), fasten the VXR Horizontal Crossmember Subassembly at the  $3^{rd}$  thread from the top (photo 7A). If the base measures  $3^{1}/_{2}$ " tall (photo 7E), fasten the VXR Horizontal Crossmember Subassembly at the 4<sup>th</sup> thread from the top (photo 7B).

If you are installing Solid Brace Inserts at the top location of the VXR Audio Stand, fasten the VXR Crossmember assembly at the topmost thread (photo 7C), so that the Solid Brace Inserts will be flush to the top of the stand.



Photo 7A Standard bases and  $3^{1/4}$ " tall LF bases





Photo 7C SBI at top level



Photo 7D

Photo 7E

Lower one VXR Horizontal Crossmember Subassembly into the keyways of the VXR Vertical Leg Subassemblies, at the location desired for the top level of the VXR Audio Stand (photos 8 & 9).

Make sure the assembly is placed so that the HRS logo will be oriented correctly when the VXR Audio Stand is standing upright, with the pocket for HRS Isolation Base Feet facing up away from the floor. Fasten at least one of the 1/4"-20×3/4" screws to the VXR Horizontal Crossmember Subassembly prior to removing your hand from the assembly to ensure it stays in place. It is crucial that the 3/4" long screws are used at this location to obtain proper thread engagement.



Photo 8

Photo 9

Install the rest of the eight  $\frac{1}{4}$  screws to fasten the VXR Horizontal Crossmember Subassembly to the first two VXR Vertical Leg Subassemblies (photo 10A). You will need to use the supplied ratchet wrench at the location closest to the VXR Crossmember, as the T-wrench will hit it, preventing rotation. Make sure the screws are fully engaged, but do not torque them tightly yet. Leave the fasteners <sup>1</sup>/<sub>4</sub> turn away from fully tightened to allow for a very small amount of play while aligning the other legs later on. All the screws in the VXR Horizontal Crossmember Subassemblies will be fully tightened later on in the assembly process. If they are tightened at this time, completing assembly may become impossible.

If your VXR Audio Stand has more than one level, fasten the second VXR Horizontal Crossmember Subassembly at the lowest available location on the legs (photo 10B).



Photo 10A



Photo 10B

If your VXR Audio Stand is more than two levels tall (is a 3V model or taller), the spacing between the two legs must now be checked to ensure that the Bolt Plates are aligned properly. This check does not need to be performed on VXR Audio Stands with fewer than three levels, in which case you may skip ahead to begin installing the second pair of VXR Vertical Leg Subassemblies. These instructions begin at the top of page 10.

Properly aligned Bolt Plates will guarantee that the VXR Horizontal Crossmember Subassemblies can fasten at any and all locations in the future. This check is performed at HRS prior to shipping, but should be confirmed on arrival to make sure nothing has shifted in transit.

Carefully lower a third VXR Horizontal Crossmember Subassembly into the keyways near the bottom of the structure to make sure it easily sets into the keyways on both legs (photo 11). Lift the same VXR Horizontal Crossmember Subassembly off the two legs, and set it back into the keyways a few holes up from the first location you checked. It should, again, fit easily into the keyways on both legs. Repeat this step every few holes until you reach the top of the stand. Do not drag the VXR Horizontal Crossmember Subassembly along the face of the Bolt Plates, and do not force the VXR Horizontal Crossmember Subassembly into the keyways if it begins to stick. Even a slight misalignment in your movement can cause interference. When this happens, gently wiggle the VXR Horizontal Cross Member Subassembly to free it and recheck the fit at that location.



Photo 11

If the VXR Horizontal Crossmember Subassembly will not fit in at one or more locations, the legs will need to be disassembled so that the Bolt Plates can be realigned. Remove the VXR Horizontal Crossmember Assemblies and set them aside, and then follow instructions in the section of this manual titled "VXR Modular Leg Length Modification and Bolt Plate Alignment" on page 20.

Install the rest of the VXR Horizontal Crossmember Subassemblies the same way you did the first (photo 12). Make sure to space the VXR Horizontal Subassemblies properly for the components and HRS Isolation Bases that will be placed on the VXR Audio Stand. Make sure to take into account the three-inch height of each HRS Isolation Base when determining your desired spacing. Orient the HRS logos so that when the stand is sitting on its feet, the HRS logos will be in the proper orientation. Make sure that all eight screws that connect the VXR Horizontal Crossmember Subassembly to the legs are fully installed before moving to the next assembly process, but leave them one quarter-turn away from fully tightened.



Photo 12

Remove two more VXR Vertical Leg Subassemblies from their packaging, and place them on your work surface. If you are assembling a multi-wide VXR Audio Stand, use all of the Double-Sided VXR Vertical Leg Subassemblies (with Bolt Plates on two sides) before installing the second set of Single-Sided VXR Vertical Leg Subassemblies. Remove the legs from the crate by lifting vertically at each end, and move them directly to your prepared work surface. Again, saving all the packing material is critical to secure transportation of the VXR Audio Stand in the future. Shipping or moving the VXR Vertical Leg Subassemblies by any other means may result in permanent damage to the unit.

Install VXR Points, nuts, and washers on the VXR Vertical Leg Subassemblies in the same way you did the first set. Unwrap two of the VXR Points supplied with the unit. Remove the nut and washer from each foot (photo 13).



Photo 13

Hand-tighten each nut all the way down, then loosen them by one half rotation (photo 14).



Photo 14

Place the washer on top of the nut, and then thread one VXR Point each into the threads at the bottom of two VXR Vertical Leg Subassemblies (photos 15 & 16). The VXR Points should be threaded in until the washer is held in contact with the bottom of the leg. This ensures maximum engagement between the leg and the VXR Point.



Photo 15

Photo 16

VXR Vertical Leg Subassembly Installation - If you are assembling a multi-wide VXR Audio Stand, use all the Double-Sided VXR Vertical Leg Subassemblies (with Bolt Plates on two sides) before installing the second set of Single-Sided VXR Vertical Leg Subassemblies.

Carefully lower one VXR Vertical Leg Subassembly onto the open side of the VXR Horizontal Crossmember Subassemblies you already installed (photo 17). Make sure the VXR Horizontal Crossmember Subassemblies slot into the keyways on the legs completely (photo 18). Note that the photographs here show the installation of a Single-Sided VXR Vertical Leg Subassembly for a single-column VXR Audio Stand. Make sure that if you are assembling a VXR Audio Stand with multiple columns, you install Double-Sided VXR Vertical Leg Subassemblies at this stage, so that the other columns can be built off of the first.



Photo 18

Install all the 1/4"-20×3/4" screws on the third VXR Vertical Leg Subassembly (four at each mount location), but do not torque the screws tightly at this time. As before, leave them one quarter-turn from fully tightened to allow a very small amount of play for now.

Repeat this "VXR Vertical Leg Subassembly Installation" section to install the fourth VXR Vertical Leg Subassembly (photo 19).



Photo 19

Torque all of the 1/4"- $20 \times 3/4$ " screws to rigidly secure all locations in the VXR Horizontal Crossmember Subassemblies to the VXR Vertical Leg Subassemblies (photo 20). Proper torque is achieved when you can turn the handle of the provided T-wrench 1/8 turn without further rotating the fastener, or 1/8 turn past snug if you are using the provided ratchet wrench. Do not use any extension or large wrenches that could over-torque and strip the threads. Tighten the sixteen 1/4"- $20 \times 7/8$ " screws (eight on top and eight on bottom) in each of the VXR Horizontal Crossmember Subassemblies to the same torque (photo 21).



Photo 20



Photo 21

Clear any objects out of the way, and then have at least two people lift the top of the VXR Audio Stand together to tip it up onto its feet (photo 22).



Photo 22

Leveling the VXR Audio Stand - The VXR Points should be placed directly on carpeted floors. Place them on HRS Floor Protectors instead if your system is located on wood flooring or another surface you wish to guard against scratching. You are now ready to stabilize and level the VXR Audio Stand. If you are extending your VXR Audio Stand into a multi-wide system, the first column must be leveled before building the other columns off of it. If you are setting up your VXR Audio Stand on HRS Floor Protectors, place one under each VXR Points before you begin leveling the VXR Audio Stand.

Move the VXR Audio Stand to its exact final location for use in your system. Once the VXR Audio Stand is in the final location, use the provided bubble level to check if it is level and stable. If it is not, level the VXR Audio Stand by extending the VXR Points using the provided 1<sup>1</sup>/<sub>4</sub>" ratchet wrench. If there is instability, find out which VXR Point is causing the instability by gently rocking the VXR Audio Stand with the provided level laid across the top. Only adjust the VXR Point(s) required to make the VXR Audio Stand completely stable and level. Never thread any VXR Point out more than six full rotations from full engagement. There must always be at least four complete rotations of engagement remaining on each VXR Point.

If you have lost track of how many threads of engagement remain, start over by fully engaging the VXR Point per the original instructions before threading it back out. If the floor that the VXR Audio Stand is sitting on is so uneven that the allowed adjustment range is not adequate, place a metal shim under the VXR Points as necessary to provide proper support of the VXR Audio Stand at each location.

Once all the VXR Points are in a location where the VXR Audio Stand is stable and level, use the provided  $1^{1}/_{8}$ " crescent wrench to tighten the nut on each foot against the bottom of the VXR Audio Stand so that it locks the foot in place. Use the  $1^{1}/_{4}$ " crescent wrench to hold the VXR Point

in place while you do this (photo 28). The nut is properly tightened when the VXR Audio Stand cannot rock in any direction (i.e. all VXR Points are in constant contact with the floor or HRS Floor Protectors).



Photo 28

**Multi-wide Systems -** Every column of the stand after the first will be built off the first while it is standing at its final location. Unpack another VXR Horizontal Crossmember Subassembly, and loosen the fasteners circled in photo 29 that hold it rigid, just as you did for the ones in the first column. The fasteners on the top of the VXR Horizontal Crossmember Subassembly are circled in photo 29, and there are an equal number opposite them on the underside of the subassembly. Only loosen each fastener one quarter-turn to give the assembly some flexibility for easy installation.



Photo 29

Have another person hold a VXR Horizontal Crossmember Subassembly in the desired place at the bottom of the stand while you fasten it to the Bolt Plates using a  $\frac{5}{32}$ " T-wrench and eight  $\frac{1}{4}$ "-20× $\frac{3}{4}$ " screws (photo 30). Attach the rest of the VXR Horizontal Crossmember Assemblies in the same way (photo 31).



Photo 30

Photo 31

Once all the VXR Horizontal Crossmember Subassemblies are in place, collect the next two VXR Vertical Leg Subassemblies in your work area. You must install VXR Points, nuts, and washers into these legs as you did for the others. Unwrap two more of the VXR Points supplied with the unit. Remove the nut and washer from each VXR Point (photo 32).



Photo 32

Hand-tighten each nut all the way down, then loosen them by one half rotation (photo 33).



Photo 33

Place the supplied washer on top of the nut, and then thread each of the VXR Points into the bottom of a VXR Vertical Leg Subassembly (photos 34 & 35). The VXR Points should be threaded in until the washer is held in contact with the bottom of the leg. This ensures maximum engagement between the leg and the VXR Point.



Photo 34

Photo 35

Carefully set one VXR Vertical Leg Subassembly against the exposed side of the VXR Horizontal Crossmember Subassemblies, so that the protrusions on the mounts all line up with the keyway on the leg (photo 36). If you are setting up your VXR Audio Stand on HRS Floor Protectors, place one under the VXR Point on this leg before it is secured. Use the provided level to make sure the new VXR Vertical Leg Subassembly is perfectly level to the existing stand assembly (photo 37). Adjust the height of the VXR Point as necessary to achieve this, but make sure to keep at least 4 full threads of engagement between the VXR Point and the VXR Vertical Leg Subassembly.

Once the leg is level with the existing stand assembly, one person should hold the leg in position against the VXR Horizontal Crossmember Subssemblies, while another fastens the leg to the VXR Isolation Base Mounts using four 1/4"- $20 \times 3/4$ " screws at each level (photo 38). Leave the fasteners 1/4 turn away from fully tightened until the VXR Audio Stand is completely assembled. Do not force the alignment of the VXR Horizontal Crossmember Subassembly and VXR Vertical Leg Subassembly. If the VXR Subassemblies do not line up easily, make sure the fasteners (photo 29) holding the VXR Horizontal Crossmember Subassembly have been loosened a full 1/4 turn from fully tightened.



Photo 36

Photo 37

Photo 38

Repeat this process for the second leg of this column. Make sure all legs are leveled to each other before fastening the new leg. When assembling a stand with more columns, repeat this section to install the next column. Use the provided  $\frac{5}{32}$ " T-wrench and ratchet wrench to apply the final torque on each fastener prior to installing additional columns. Final torque is achieved when you are able to turn the T-wrench handle  $\frac{1}{8}$  turn without rotating the fastener. Do not use any extension or large wrenches that could over-torque and strip the threads.

**Installing HRS Isolation Bases into the VXR Audio Stand** - Make sure to read and follow all of the instructions in the HRS Isolation Base manual(s) prior to installing any into the VXR Audio Stand. Verify that the VXR Audio Stand size matches the HRS Isolation Base size. The VXR-1921 uses HRS 1921 Isolation Bases. The VXR-1719 uses HRS 1719 Isolation Bases.

Note the load range of each HRS Isolation Base to determine which component of your system each base is matched to. Matching the HRS Isolation Base to the proper component weight will ensure optimum performance. Load ranges can be changed for a nominal factory fee, so if you do not have the correct load range for a component, please contact Harmonic Resolution Systems or your authorized HRS dealer to have this corrected.

Load the HRS Isolation Bases from the front of the VXR Audio Stand, with the HRS logo facing you. Briefly rest the rear feet of the HRS Isolation Base in the pockets at the front of the desired layer of the VXR Audio Stand, so that another person can reach in from behind the stand to hold the HRS Isolation Base from behind. Lift the HRS Isolation Base together, and carefully guide it between through to rest all four HRS Isolation Base Feet into the VXR Isolation Base Mount pockets at the same time.

Make sure that the HRS Isolation Base feet are located securely in the pockets of the VXR Isolation Base Mounts. This will automatically occur when the front and back edge of the HRS Isolation Base is in line with the front and back face of the VXR Audio Stand. If the front and back edges do not line up with the front and back of the VXR Audio Stand, contact HRS or your authorized HRS dealer.



Completed VXR-1921-3V-080-080-B (left) and VXR-1921-3T3-080-080-B (right) Both systems shown with HRS M3X2 Isolation Bases

**Loading Components into the VXR Audio Stand** - Measure the height of each component to determine if the HRS Isolation Bases are at the proper locations. Carefully load each component into the VXR Audio Stand. Be careful not to hit the front edges of the HRS Isolation Bases. Once all the components are loaded, check to see that none of the HRS Isolation Bases are overloaded.

By placing one or two fingers on the bottom of the VXR Isolation Base Mount, and your thumb on the top of the corner of the HRS Isolation Base, you should be able to move the top of the HRS Isolation Base slightly by squeezing your fingers together. HRS G7 Feet do not require this test, as they have no compliance by design. If your SF or LF Isolation Base Feet have no compliance, remove the HRS Isolation Base and component to verify that the load range of the HRS Isolation Base is correctly matched with the component. The load range of each HRS Isolation Base is identified by the colored sticker on the back of the base (see the HRS Isolation Base manual for instructions). Please consult with your authorized HRS dealer if you need assistance. The HRS Isolation Base load range can be modified at any time by HRS or your authorized HRS dealer.

If needed, you can move any HRS Isolation Bases up or down by removing them and adjusting the location of the corresponding VXR Horizontal Crossmember Subassembly. Always follow the instructions below for adjusting the height of VXR Horizontal Crossmember Subassemblies when relocating HRS Isolation Bases in the VXR Audio Stand. Be very careful not to cross-thread the fasteners. The fasteners should thread in easily. If any do not, thread them out and start in again. If necessary, remove other fasteners at the same interface, and adjust the location of the VXR Horizontal Crossmember Subassembly until the fasteners all thread in easily. Only apply proper torque once all fasteners are fully threaded into the VXR Audio Stand.

Adjusting the Height of the VXR Horizontal Crossmember Subassemblies - If you need to adjust the locations of the VXR Horizontal Crossmember Subassemblies for any reason, first remove all components and HRS Isolation Bases from the VXR Audio Stand. The VXR Horizontal Crossmember Subassemblies fit very tightly into the VXR Audio Stand, and they must be partially disassembled to be relocated.

Once all components and HRS Isolation Bases have been removed from the stand, use the provided  $\frac{5}{32}$ " T-wrench or ratchet wrench to remove all six screws from the top of each of the two VXR Horizontal Crossmembers. This will allow you to remove the tops of the VXR Crossmembers (photo 40). Once they are removed, set the tops of the VXR Crossmembers aside on clean, soft surface, so they will not be scratched or damaged.



Photo 40

Next, support the bottom of each VXR Crossmember while you remove the four screws that secure them to the VXR Isolation Base Mounts, so that they do not fall onto the lower parts of the VXR Audio Stand. Remove the bottoms of the VXR Crossmembers as well (photo 41), but keep the Spacers with the HRS logo attached to the bottom VXR Crossmember. Set the VXR Crossmember parts aside for now (photo 42).



Photo 41



Photo 42

With the VXR Horizontal Crossmembers removed, you are now able to remove the eight fasteners securing the VXR Isolation Base Mounts to the VXR Vertical Leg Subassemblies (photo 43). Have someone support the VXR Isolation Base Mounts as you do this, so they do not fall onto lower parts of the VXR Audio Stand.



Photo 43

Once all the fasteners have been removed, you can move and reattach the VXR Isolation base Mount at your desired location. Torque all eight 1/4"-20×3/4" screws on each VXR Isolation Base Mount with the 5/32" T-wrench until you can turn the handle of the T-wrench 1/8 of a rotation without turning the screw.

Refasten the bottoms of the VXR Horizontal Crossmembers to the VXR Isolation Base Mounts using four 1/4"-20×7/8" screws on the underside of each VXR Crossmember (photo 44). Make sure to orient the VXR Horizontal Crossmembers so the HRS logos are facing out. Refasten the VXR Crossmember tops at the center two holes first, using two 1/4"-20×7/8" screws (photo 45).



Photo 44



Photo 45

Finally, thread in the other four 1/4"-20×7/8" screws at the ends of each VXR Horizontal Crossmember top (photo 46). Torque all the fasteners in the VXR Horizontal Crossmember Subassembly until you can turn the T-wrench 1/8 turn without the fastener rotating. When all the fasteners are properly torqued, the relocation of the VXR Horizontal Crossmember Subassembly is complete. All HRS Isolation Bases and components can be placed back in the VXR Audio Stand at this time.



Photo 46

**VXR Modular Leg Length Modification and Bolt Plate Alignment** - All the necessary equipment to disassemble and reassemble the VXR Vertical Leg Subassemblies is included with your VXR Audio Stand. Refer to these instructions if you need to disassemble your VXR Audio Stand for any reason, including altering the height by adding or removing leg sections. To

disassemble and reassemble the Vertical Leg Subassemblies, you will need the following tools supplied with the VXR Audio Stand:

- $-\frac{1}{8}$ " T-wrench (photo 47)
- $-\frac{5}{32}$ " T-wrench (photo 48)
- Ratchet wrench with  $\frac{5}{32}$ " bit (photo 49)
- Two VXR Modular Bolt Plate Assembly Jigs (photo 50)

- Nine metal shims of each thickness: .015", .010", .004", .003", .002", and .001" (see photo 51) 54 pieces total

- Eight  $\frac{1}{4}$ "-20× $\frac{3}{4}$ " flathead cap screws packaged with assembly jigs (photo 52)



Photo 47



Photo 48



Photo 50



Photo 51



Photo 52

Always remove all components and HRS Isolation Bases from the VXR Audio Stand before adjusting or removing any part of the VXR Audio Stand. Once the VXR Audio Stand and the area around it are free of any objects that may cause damage, prepare a work area the same way as during initial assembly. Locate a very strong and stable work surface, capable of supporting at least twice the weight of the completed assembly, or an area on the floor that will provide a soft,

scratch-resistant workspace at least  $3' \times 6'$  in size. The more space you have, the better, as it will give you room to move around the VXR Audio Stand to complete assembly. It is important that the area be free of all dirt, screws or small pebbles, and that it is covered with a clean, soft, protective, blanket that will prevent damage to the cosmetic surfaces of the VXR Audio Stand parts. The blanket should be at least  $25'' \times 45''$  to provide a spacious work area, but for large stands, make sure to use a blanket large enough to fit the entire stand with open space to work.

At least two people should work together to tip the VXR Audio Stand over onto one side in your work area (photo 53). If you are working with a mluti-wide stand, you will need to remove VXR Vertical Leg Subassemblies and VXR Horizontal Crossmember Subassemblies until you are left with only a single-wide VXR Audio Stand. At that point, the VXR Audio Stand can be tipped onto its side.



Photo 53

Use the  $\frac{5}{32}$ " T-wrench and ratchet wrench to remove the four  $\frac{1}{4}$ "- $20 \times \frac{3}{4}$ " screws that connect one leg to the VXR Horizontal Crossmember Subassemblies at each level of the stand. Multiple types of screws will be removed throughout the disassembly process, so be careful to keep them separate and labeled so they can be identified easily when you eventually reassemble the VXR Audio Stand. Once all the screws have been removed, two people should work together to carefully lift the leg off the stand and place it in your prepared work area (photo 54). Repeat this process for the second leg.



Photo 54

Now use the  ${}^{5}/{}_{32}$ " T-wrench and ratchet wrench to remove the  ${}^{1}/{}_{4}$ "-20× ${}^{3}/{}_{4}$ " screws holding one VXR Horizontal Crossmember Subassembly to the final two VXR Vertical Leg Assemblies. Support each VXR Horizontal Crossmember Subassembly as you remove its screws so it does not tip over. As you detach the VXR Horizontal Crossmember Subassembly, carefully lift it away from the VXR Vertical Leg Assemblies and set it aside on a clean, soft, surface where it will be out of the way until you begin reassembling the stand. Repeat this for the rest of the VXR Horizontal Crossmember Subassemblies.

Whether you are extending or reducing the height of your VXR Audio Stand, you will need to at least partially disassemble each VXR Vertical Leg Subassembly. Determine where on the VXR Vertical Leg Subassembly the change will be made. You will only need to fully disassemble the leg sections adjacent to where the change is being made. If you are altering a Double-Sided VXR Vertical Leg Subassembly, the Bolts that hold the leg together can only be accessed from one side, and the other side can be left as is. Find the small "X" stamped onto the bottom (photo 55). The side of the leg that is marked with the "X" is the side whose Bolt Plates will need to be removed so that you can access the fasteners necessary to modify the leg.



Photo 55

Begin disassembling the first VXR Vertical Leg Subassembly by using the provided  $\frac{1}{8}$ " T-wrench to remove the  $\#10-24\times^{3}/_{4}$ " screws from a modular Bolt Plate section at the location you are modifying (photo 56). Also use the  $\frac{1}{8}$ " T-wrench to loosen (but not remove) the  $\#10-24\times^{3}/_{4}$ " screws in the other Bolt Plate sections.



Photo 56

Once all the  $\#10-24\times^{3}/_{4}$ " fasteners have been removed from one section of the Bolt Plate, remove that section of the Bolt Plate and set it aside on your prepared work area. If you have difficulty lifting the Bolt Plate section out of the VXR Vertical Leg Subassembly, thread  $^{1}/_{4}$ "-20 $\times^{3}/_{4}$ " screws into the Bolt Plate threads, and use them as handles to lift the Bolt Plate out (photo 57).



Photo 57

With the first modular Bolt Plate section removed, the other(s) will be easy to lift out. Use the 1/8" T-wrench to remove the  $#10-24 \times 3/4$ " fasteners from the two Bolt Plate sections adjacent to the one you just removed. When all the screws in a section have been removed, lift it out and set it aside in your prepared work area.

The leg sections now must be separated at the location you are modifying. Use the 1/8" T-wrench to remove the now-exposed 1/4"- $20 \times 3/4$ " socket head screws that hold the leg sections together (photo 58). When all four screws at one joint have been removed, carefully lift one end of the VXR Vertical Leg Subassembly, and separate the two parts. Support both parts of the leg so they do not drop suddenly or slide across the work surface (photo 59). Use this method to separate each VXR Vertical Leg Subassembly, and set aside any leg sections that you are removing from the VXR Audio Stand.



Photo 58

Photo 59

It is now time to begin reconstructing the VXR Vertical Leg Subassembly. Have someone stand the assembly up on one end, and hold it steady and upright. If you are adding a leg section, carefully slide it onto the existing assembly while it is being supported. If you are removing a section, slide the remaining part of the VXR Vertical Leg Subassembly on in the same way. The compression provided by assembling the leg upright (photo 60) is critical to the function of the VXR Audio Stand. Run your fingers down all four sides of the VXR Vertical Leg Subassembly at the seam where the two sections now meet to make sure that the two sections are flush to each other.

With the leg sections in place and flush to each other, use the 1/8" T-wrench to fasten them together with the 1/4"- $20 \times 3/4$ " socket head screws (photo 60). Torque these screws until you can rotate the handle of the T-wrench 1/8 of a rotation without further turning the screw. It is important to do this now, because these fasteners will be inaccessible once the Bolt Plates are reattached to the VXR Vertical Leg Subassembly. Make sure to keep the VXR Vertical Leg Subassembly upright to provide the necessary compression, and to keep the two sections flush to each other. Once the leg is reassembled, carefully lay it back down in your work area so the Bolt Plates can be reattached.



Photo 60

Place all the necessary Bolt Plate sections in the leg channels. Make sure the seams between the Bolt Plates line up with the seams between the leg sections. Loosen all of the  $\#10-24\times^{3}/_{4}$ " screws in each Bolt Plate section by one full turn. Leave them engaged enough to remain seated in the countersinks, but make sure they are not torqued. Install the  $\#10-24\times^{3}/_{4}$ " fasteners at each remaining location using the  $^{1}/_{8}$ " T-wrench. Thread the screws so they are seated in the countersinks of the Bolt Plates, but do not torque them tightly yet. You should still be able to easily shift the Bolt Plates by hand. Proper use of the provided shims and VXR Modular Bolt Plate Assembly Jigs as described in this manual is necessary to ensure the Bolt Plates in your VXR Audio Stand are aligned to fit a VXR Horizontal Crossmember Subassembly at every location.

To ensure the Bolt Plates are straight and centered, use the metal shims to center each Bolt Plate section in the channel before you torque them to the VXR Vertical Leg Subassembly. The first step is to see if the .010" shim or the .015" shims are the best starting point. Begin by placing a .015" metal shim at the end of the Bolt Plate channel, and on both sides of the two Bolt Plate sections closest to the end of the VXR Vertical Leg Subassembly (photo 61). Do not force shims into the gap; the total shim thickness will be adjusted for a snug fit later on. If .015" shims will not fit at all 5 locations, use .010" shims at all 5 locations instead. Place the four shims along the sides of the bolt plate as near to the seam as possible without straddling it (photo 61).



Photo 61

With the thick shims (.015" or .010") in place, determine by trial and error which thin shim (.001"-.004") produces the most snug fit at each of the 5 locations, without needing to be forced into the gap. Always add shims equally to both sides of the Bolt Plate to ensure it remains centered. The total thickness of shims required may vary along the length of the VXR Vertical Leg Subassembly, but it must be equal at locations across from each other (photo 62). Repeat this shim placement method at the next seam along the leg as well to completely align the first two Bolt Plate sections.



Photo 62

Rest the Bolt Plate Assembly Jigs in the keyway channel at both seams, and secure them by threading the accompanying 1/4"- $20 \times 3/4$ " screws through the four holes in each Bolt Plate Assembly Jig and into the Bolt Plate sections until they are finger tight (photo 63). When the Bolt Plate Assembly Jigs are located correctly, they will straddle the seams between the Bolt Plate sections while still allowing access to all of the fasteners that secure the Bolt Plate onto the VXR Vertical Leg Subassembly.



Photo 63

The first two Bolt Plate sections are now properly aligned and can be tightened in place. The Bolt Plate screws should be torqued following the numbered sequence (1 to 8) shown in photo 64. Use the 1/8" T-wrench to torque the  $#10-24 \times 3/4$ " screws until you can rotate the handle of the T-wrench 1/8 of a full rotation without turning the screws any further. The Bolt Plate Assembly Jigs must remain in place the entire time you are torquing the Bolt Plate down. Never tighten down any Bolt Plate section that does not have Bolt Plate Assembly Jigs and shims holding it in alignment at both ends.



Photo 64

You will now center and secure the next Bolt Plate in the Vertical Leg Subassembly. Remove only the shims and one Bolt Plate Assembly Jig that are located at the top Bolt Plate location. These will be used at the next available seam (photo 65). Use the shims to center the next Bolt Plate as before. Start with .015" or .010" shims on both sides of the Bolt Plate, and add .001" - .004" shims at both locations until the fit is snug and a greater total thickness of shims cannot be inserted without forcing them. Remember that the total thickness of the shims required may vary along the length of the VXR Vertical Leg Subassembly, but it must be equal at locations across the Bolt Plate from each other. After the shims are in place, install the Bolt Plate Assembly Jig and the four 1/4"-20×3/4" screws to be finger tight (photo 65).



Photo 65

Use the 1/8" T-wrench to tighten down the  $#10-24 \times 3/4$ " screws in the newly aligned section until you can turn the handle of the T-wrench 1/8 of a rotation without further rotating the screw. Repeat the entire shim/jig process for each Bolt Plate section, moving only one Bolt Plate Assembly Jig at each step, so that every Bolt Plate section has a Bolt Plate Assembly Jig and shims aligning it at both ends while you tighten it down. Once one of the VXR Vertical Leg Subassemblies is complete, duplicate this process for the others until they are all complete.

You are now ready to mate the remaining VXRVertical Leg Subassemblies of the rebuilt VXR Audio Stand. Please continue by following the instructions in the section of this manual titled "Attaching the VXR Horizontal Crossmember Subassemblies" on page 5.

**VXR Cable Organizer Accessory** - The cable organizer system is available for the VXR Audio Stand as an accessory. It bolts into the back of the VXR Audio Stand using the remaining threaded holes in the VXR Vertical Leg Subassemblies that are not being used to support the VXR Horizontal Crossmember Subassemblies. There is a separate manual for installation of this VXR Audio Stand accessory, and it is shipped with the hardware for the VXR Cable Organizer. Please follow those instructions to ensure proper installation when using the accessory.

# **Care and Maintenance**

The VXR Audio Stand is a very low maintenance item that will provide many years of troublefree performance by applying these basic care instructions.

Clean the external surfaces of the VXR Audio Stand using a professional quality ultra-soft lintfree micro-fiber cloth available in high quality automotive stores. Use a lightly water damped cloth if you need to clean dirt from the VXR Audio Stand. Do not use commercial furniture polishes on the VXR Audio Stand.

Please follow the care instructions in the HRS Isolation Base manual to clean and care for any HRS Isolation Bases in the VXR Audio Stand. Read and follow the instructions received with the HRS Isolation Base to ensure optimum performance and cosmetic appeal.

Do not spray, soak, or submerge the VXR Audio Stand or HRS Isolation Bases in water or cleaning solutions. The VXR Audio Stand and HRS Isolation Bases are made from many different parts and materials. Submerging, spraying, or soaking the VXR Audio Stand or HRS Isolation Base will cause permanent damage to the assembly.

Clean the metallic parts of the HRS Isolation Base and VXR Audio Stand using a lint-free soft (non-abrasive) cloth. Use a damp cloth with a mild soap or Pledge Multi-Surface Cleaner if required. Do not use abrasive cleaners or solvents to clean the VXR Audio Stand or HRS Isolation Base, as they will damage the quality of finish. Solvents and solvent-based cleaners will attack and damage some of the materials used in the VXR Audio Stand and HRS Isolation Base and should never be used.

Do not wash the interior flex element of the HRS Isolation Base feet even if you see a coating or white substance on the surface of the flex element. This coating is intentional and is put in the flex element to protect the isolation material from the environment.

#### Warnings!

Do not place objects with sharp or pointed feet directly on the HRS Isolation Base.

Do not immerse in water or spray with water or any other liquids.

Do not use abrasive cleaners or abrasive sponges.

Do not wash with any solvent-based cleaning solutions.

Do not wash the interior flex element of the HRS Isolation Base Feet, even if you see a coating or white substance on the surface of the flex element.

Be very careful not to cross-thread the fasteners when moving VXR Isolation Base Mounts.

#### **Limited Warranty**



#### Scan here to register for HRS 5-year Limited Warranty

Harmonic Resolution Systems warrants the product designated herein to be free of manufacturing defects in material and workmanship, subject to the conditions herein set forth, for a period of 90 days from the date of purchase by the original purchaser. The purchaser is required to register the unit with Harmonic Resolution Systems by visiting https://avisolation.com/company-warranty/ and completing the limited warranty registration, within 14 days upon receipt of any HRS product. Scan QR code to register for HRS 5-year limited warranty.

The limited warranty extends the 90 days to a period of 5 years from the date of purchase by the original purchaser, or no later than 6 years from the date of shipment to the authorized Harmonic Resolution Systems dealer, whichever comes first.

This limited warranty is subject to the following conditions and limitations.

- 1. The limited warranty is void and inapplicable if the product has been used or handled other than in accordance with the instructions in the owner's manual, abused or misused, damaged by accident or neglect or in being transported, or the defect is due to the product being repaired or tampered with or modified by anyone other than Harmonic Resolution Systems. The product must be packed and returned to Harmonic Resolution Systems by the customer at his or her sole expense. A written description of the defect and a photocopy of the original purchase receipt must accompany a returned product. This receipt must clearly list the model and serial number, the date of purchase, the name and address of the purchaser, the authorized HRS dealer, and the purchase price. Harmonic Resolution Systems reserves the right to modify the design of any product without obligation to purchasers of previously manufactured products, and to change the prices or specifications of any product, without notice or obligation to any person. This warranty is void and inapplicable if the product has been handled other than in accordance with the instructions specified within this document, abused or misused, damaged by accident or neglect or in being transported, or the defect is due to the product being tampered with, modified or repaired by anyone other than Harmonic Resolution Systems.
- 2. The limited warranty does not cover normal recommended care and maintenance. Harmonic Resolution Systems Inc. shall not be responsible in any way for consequential or indirect damages or liabilities resulting from the use of the product covered herein, or, resulting from any breach of this warranty or any implied warranty relating to said product.

3. Harmonic Resolution Systems shall not be responsible in any way for damage to finishes resulting from normal use, or exposure to sunlight or the environment, even within the normal and extended limited warranty period.

During the limited warranty period, Harmonic Resolution Systems will repair or replace any defective components free of charge. A Return Authorization Number (RA Number) obtained directly from Harmonic Resolution Systems is required before any product is returned to Harmonic Resolution Systems for any reason. This number must be visible on the exterior of the shipping container(s) for Harmonic Resolution Systems to accept the return.

Units shipped to Harmonic Resolution Systems Inc. without a visible RA Number on the exterior of the shipping container(s) are subject to be returned to the sender, freight collect.

Units to be repaired by Harmonic Resolution Systems must be sent shipping and insurance prepaid by the original purchaser in the original packaging material. A returned product should be accompanied by a written description of the defect.

Repaired units will be returned by Harmonic Resolution Systems shipping, and insurance will be prepaid by the customer.

All other warranties or conditions, either written or implied, are void.

### (MADE IN USA)

All Harmonic Resolution Systems Inc. products are 100% made in The United States of America by skilled craftsmen using only the finest materials and our personal dedication to the highest workmanship standards.

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