

# **EXR AUDIO STAND SYSTEM**

A Low Noise Floor Is Fundamental

#### Introduction

Thank you for purchasing the patent pending Harmonic Resolution Systems EXR Audio Stand System. When used properly, it will give you many years of superior musical or video signal reproduction.

The EXR Audio Stand System 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 EXR Audio Stand System. 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 EXR Audio Stand System, which optionally 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 EXR Audio Stand System and 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 EXR Audio Stand System. It contains instructions necessary for proper assembly, use, and care of this system. Proper care of your EXR Audio Stand System will ensure optimum performance and an aesthetically appealing system.

All HRS products are manufactured in the US by highly skilled craftsmen using superior techniques 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.

Your order was built and inspected by the following HRS staff:

Production Process:	 
Inspection Approval:	 
Packaging:	

# **Safety Instructions**

#### **IMPORTANT WARNINGS!**

Do not place any tall objects on the top level of the EXR Audio Stand System. A tall object is any object with a height that is greater than the length of the 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 EXR Audio Stand System 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 EXR Audio Stand System with Isolation Bases installed. You should always move the EXR Audio Stand System to its final location prior to loading Isolation Bases and components. Moving the EXR Audio Stand System with Isolation Bases installed (with or without equipment) can permanently damage the system or cause the Isolation Bases to fall out of the rack, resulting in potential damage or injury. Always take the time to remove all of the equipment and Isolation Bases to relocate the EXR Audio Stand System.

# **Setup Instructions**

The EXR Audio Stand System is a complete system that can be used with or without HRS Isolation Bases. The components required to assemble the system are shipped in one or more boxes. The number of boxes depends on the system size. Each box containing parts for the system will be marked with the model number starting with EXR. All the wrenches required to put the system together are included with the shipment.

**Work Surface** - Prior to unpacking any material, locate a very strong and very stable work surface (capable of supporting 250 lb. load) or area on the floor that will give you a very soft scratch resistant work area that is at least three feet by three feet in size. The more space you have the better as it will give you room to move around the system 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 of the same size that will prevent damage to high quality finish on the frame.

**Unpacking Assembly Hardware** - Remove all the contents from all the boxes marked with the EXR model number. Place all the hardware on a table adjacent to your selected work surface and remove all the wrapping material. Be careful not to drop or allow the anodized aluminum parts to contact each other as they may scratch each other. Do not stack the parts on top of each other once they are removed from the protective packaging material. To make assembly easier, group identical parts together in an organized manner. Group all the struts by length.

This EXR audio stand system will be assembled upside down. Depending on what system configuration you have purchased there will be a number of Frame Mounts that have threaded caps already attached. Do not try to remove these threaded caps as they are bonded to the frame. These Frame Mounts with threaded caps will be the top of the audio stand system.

**Step 1.** One EXR Horizontal Support Assembly is designated as the top-level of the audio stand and has threaded EXR Caps bonded into the four EXR Frame Mounts. Place it upside-down on your work surface so the threads of the installed caps face up, and the front face with HRS logo faces away from you (photo 1).



Photo 1

Steps 2-5 describe how to add a second level (and any subsequent levels) to your EXR Audio Stand System. If you are constructing a 1V model EXR (i.e., a single-level stand), proceed immediately to step 6. (Note that assembly photos going forward show a two-level audio stand system, but that all written instructions apply to any size stand, thanks to the modular design of the EXR.)

**Step 2.** Place a polymer ring around the threads protruding through each Frame Mount (photo 2). The polymer ring should sit completely flat inside the Frame Mount. Apply a few drops of the provided WD-40 3-in-1 oil to the end of each thread.



Photo 2

**Step 3.** Identify the four EXR Struts of the correct size for this level of the EXR. Keep in mind that the EXR is being assembled upside-down, and so the first EXR Horizontal Support Assembly is the top level. The struts will provide component spacing equal to 3.5 inches less than their total length (including threads). e.g. Struts that measure 13.5 inches end-to-end will provide 10 inches of spacing. If you will be using HRS Isolation Bases in your EXR, remember that the isolation bases are approximately 3 inches tall when determining your required spacing.

Fully thread one strut onto the threaded cap in each EXR Frame Mount (photo 3). Use the provided HRS Grip Pad (photo 4) to tighten each strut between <sup>1</sup>/<sub>4</sub> and <sup>1</sup>/<sub>2</sub> rotation past when it contacts the polymer ring.

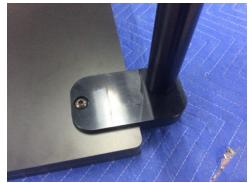


Photo 3



Photo 4

**Step 4.** Place a polymer ring around the threads of each strut just as you did for the caps on the top level. Be sure the polymer rings sit fully on the strut as shown in photo 5. The polymer ring should sit on the non-threaded shoulder just below where the thread stops. Apply a few drops of WD-40 3-in-1 oil to the ends of these threads as well.



Photo 5

**Step 5.** Carefully lift another EXR Horizontal Support Assembly and lower it onto the existing assembly so that the strut threads pass through the Frame Mounts as in photo 6. The Frame Mounts should seat fully onto the threads and rest in full contact with the polymer rings.



Photo 6

Make sure all Frame Mounts are fully seated by measuring the distance from mount to mount at each corner as in photo 7. This distance will vary depending on the length of struts installed at this level of the system, but the distance should be equal  $\pm^{1}/_{32}$ " at all four corners. If they are not all equal, at least one Frame Mount is not seated correctly and proper assembly of the system may be rendered impossible. This is most commonly caused by a polymer ring being pinched between a Frame Mount and the corresponding strut as in photo 8. If this is the case, lift the EXR Horizontal Support Assembly slightly to relieve pressure on the polymer ring and make sure it falls back in place to sit completely flat on the strut, then carefully lower the assembly straight down back into place. This may need to be done for more than one polymer ring. Use a tape measure again to confirm that this process has made all four corners even  $\pm^{1}/_{32}$ " before continuing.



Photo 7

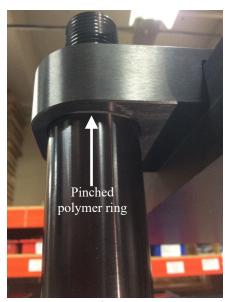


Photo 8

If your EXR Audio Stand System includes another level, repeat steps 2-5 for the next EXR Horizontal Support Assembly to add it to the stand. Be sure to select the correct size of strut for each level of your stand to provide adequate space for each of your components. If you have added all necessary levels to the EXR, proceed to step 6.

**Step 6.** Place a polymer ring around the threads protruding through each Frame Mount. The polymer ring should sit completely flat inside the Frame Mount. Apply a few drops of the provided WD-40 3-in-1 oil to the end of each thread.

**Step 7.** Fully thread an EXR Locking Nut onto the threads protruding through each Frame Mount so the locking nuts fully contact the polymer rings you placed in step 6. Thread the locking nuts on with the narrow end facing down into the Frame Mounts. Apply final torque to the EXR Locking Nuts by using the provided custom nylon wrench to tighten each nut another \(^{1}/\_{4}\) to \(^{1}/\_{2}\) turn after they contact the polymer ring (photo 9). This final torque provides stiffness to the structure to ensure excellent performance for your system.



Photo 9

**Step 8.** Thread on the EXR Washers just until they contact the locking nuts, and then thread on the EXR Points just until they contact the washers (photo 10). Do not torque the washers or points tightly.



Photo 10

**Step 9.** Assembly of the EXR Audio Stand System is now complete. Carefully lift and flip the EXR upright and move it to the desired final location for use in your system. Depending on the size of your audio stand, this may require multiple people. Make sure to orient the audio stand system so that the front face with the HRS logo(s) faces forward. The stand points should be placed directly on carpeted floors. Place them on HRS Floor Protectors (sold separately) instead if your system is located on wood flooring or another surface you wish to guard against scratching. Please contact your dealer or HRS if you require HRS Floor Protectors.



A completed EXR-1921-3V-080-080-B on HRS floor protectors

Leveling the EXR Audio Stand - The EXR Audio Stand System is now ready to be leveled. Place the provided level on the top EXR Horizontal Support Assembly and apply gentle pressure against each side of the stand to see if it rocks back and forth. If the stand does rock back and forth and/or does not sit level, thread out the point(s) that must be extended to level the stand <sup>1</sup>/<sub>4</sub> turn at a time until the stand is level with all four points in contact with the ground. Do not thread out the point(s) more than five full rotations. Each point must have three full rotations of engagement with the thread for proper performance and strength.

If more adjustment is required, place a shim under the point(s) so that the additional travel is achieved without violating the three full thread minimum engagement requirement.

Once the system is level, hold the extended point(s) with one hand and thread the washer down with your other hand back against the top of the point. Gently torque all four washers against the tops of the points with the HRS Grip Pad. This will lock the points into place and prevent any motion out of the threaded connection. The result should be a very stable, firm, and level structure.

Installing HRS Isolation Bases into the EXR Frame (optional) - If your system includes HRS Isolation Bases, unpack each base that will be installed in the EXR Audio Stand System. Make sure to read and follow all of the instructions in the isolation base manual prior to installing bases into the EXR. Also verify that the EXR size matches the isolation base size.

Note the load range of each isolation base to determine which component of your system each base is matched to. Matching the 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 local certified retail location to have this corrected.

Load the isolation bases into the EXR Audio Stand System with the HRS logo facing the front of the system. Carefully pass each isolation base between the front struts of the stand, and have another person support the rear edge while you both gently lower the base to contact the shelf surface. Sliding isolation base feet along the shelf surfaces may scratch them. Make sure that the outside edges of each isolation base line up with the outside edges of the EXR Horizontal Support Assembly.

Loading Components into the EXR Audio Stand System - Carefully load each component from the front of the EXR Audio Stand. Be careful not to hit any part of the shelves or isolation bases. If you are utilizing isolation bases in your EXR, make sure that none of the isolation bases are overloaded. By placing one or two fingers on the bottom of the EXR Horizontal Support Assembly, and your thumb on the top of the isolation base, you should be able to move the top of the isolation base slightly (at all four corners) by squeezing your fingers together. If there is no compliance, verify the load range of the isolation base is correctly matched with the component. Please consult with your authorized Harmonic Resolution Systems dealer or contact Harmonic Resolution Systems if you need assistance. The isolation base load range can be easily modified by sending it to Harmonic Resolution Systems or an authorized dealer to have the primary isolation stage rebuilt.

The maximum load capacity of each shelf of the EXR Audio Stand System is 250 pounds (113 kg). Never load more than 250 pounds onto a single shelf of the EXR, and never exceed a total load of 1000 pounds (453 kg) for the full system.

Modifying or expanding your EXR Audio Stand System - Please contact HRS or your local certified dealer if you would like to modify your EXR. Thanks to the modular design of the EXR, expanding your system by adding shelves or even splitting into multiple stands can be done in your own home with parts available from HRS. Simply remove all components from your EXR, and turn it upside-down on a work surface prepared the same as for the original assembly process. Remove the EXR points and washers by hand, and use the custom nylon wrench to remove the EXR locking nuts. After that, EXR Horizontal Support Assemblies and struts can be added, removed, and interchanged freely. Make sure to install and tighten all parts according to the original assembly instructions in this manual.

#### Care and Maintenance

The EXR Audio Stand System is a very low maintenance item that will provide many years of trouble-free performance by applying these basic care instructions.

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

Please follow the care instructions in the isolation base manual to clean and care for any isolation bases installed in the EXR Audio Stand System. Read and follow the instructions received with the isolation base to ensure optimum performance and cosmetic appeal.

Do not spray, soak, or submerge the rack frame or isolation bases in water or cleaning solutions. The rack system and isolation bases are made from many different parts and materials. Submerging, spraying, or soaking the rack system or isolation base may cause permanent damage to the assembly.

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

Do not wash the interior flex element of the 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!

Placing ultra-sharp pointed feet directly on the isolation base may cause permanent scratches.

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 isolation feet even if you see a coating or white substance on the surface of the flex element.

### **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. If the purchaser registers the unit with Harmonic Resolution Systems by mailing in the warranty card, together with a copy of the bill of sale, within 14 days of the date of purchase, said purchaser would be registered for an extended service contract. The extended service contract 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 warranty is subject to the following conditions and limitations.

- 1. The 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 model and serial number, the date of purchase, the name and address of the purchaser and authorized 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.
- 2. Warranty does not cover normal recommended care and maintenance.
- 3. Harmonic Resolution Systems 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.
- 4. 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 warranty period.

During the 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 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 with 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, with shipping and insurance 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.

HARMONIC RESOLUTION SYSTEMS INC. 2495 Main Street, Suite 227 Buffalo, NY 14214 Telephone: 716-873-1437

Web: www.AVisolation.com E-mail: sales@AVisolation.com