



MXR AUDIO STAND

Discover Your System's Capability

Introduction

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

The MXR 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 MXR Audio Stand. This reference level product from Harmonic Resolution Systems, Inc. will enable your audio/video source and amplification components to achieve peak performance.

The MXR Audio Stand, which includes the HRS Isolation Base as the primary shelf system, is a perfect match for the HRS Damping Plates and Nimbus Products. While the MXR Audio Stand and Isolation Bases work to significantly reduce structure-borne noise, the HRS Damping Plates and Nimbus 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 MXR Audio Stand. It contains instructions necessary for proper assembly, use, and care of this system. Proper care of your MXR Audio Stand will ensure optimum performance and an aesthetically appealing.*

Safety Instructions

IMPORTANT WARNINGS!

*Do not place any tall objects on the top shelf of the MXR Audio Stand. 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 MXR 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 MXR Audio Stand with the shelves (M3 Isolation Bases) installed. You should always move the MXR Audio Stand frame to its final location prior to loading shelves and components. Moving the MXR Audio Stand frame with the isolation bases installed (with or without equipment) can permanently damage the systems adjustable feet or cause the shelves to fall out of the rack resulting in potential damage or injury. Always take the time to remove all of the equipment and shelves to relocate the MXR Audio Stand.

*Do not lift the M3 Isolation Base (shelf) by the inner plate or the external feet attached to the bottom of the rectangular frame. **Always** lift or move the isolation base with the inner plate facing up and the external support feet facing down (same orientation as when used to support your component). **Always** follow these handling instructions to prevent personal injury or damage to the unit.*

Set-Up Instructions

The MXR Audio Stand consists of a frame structure and the isolation bases that support each component. The standard three and four shelf frame structures come in three boxes. Each box will be marked with the model number starting with MXR. There are two longer boxes that contain the left and right vertical panels. The third box contains the panel brace system, the isolation base support brackets, the adjustable rack feet, screws, and wrenches required to complete the assembly process. The only tools not provided for assembly are:

- 1. Adjustable wrench - to lock the feet after leveling the frame*
- 2. Philips Head Screwdriver - for unpacking crates (electric drive recommended)*
- 3. Level - 24" minimum length or equivalent*

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 six feet in size. The more space you have the better, as it will give you room to move around the frame 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 (min size 24" x 45") that will prevent damage to the relatively soft external skin of the vertical panels.

Unpacking Assembly Hardware - Remove all the contents from the smaller cardboard box containing the hardware required to assemble the frame. Place them 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 the surface. Do not stack the parts on top of each other once they are removed from the protective packaging material.

Unpacking Vertical Panels - Unpack the vertical panel by removing the top surface of the crate (see Photo 1). This surface will be marked for clarity and you will need a Philips head screwdriver (manual or electric) to remove the cover.



Photo 1



Photo 2

Lift the panel out of the crate by lifting vertically at each end (see Photo 2). Move the panel and packing material directly to your damage free work surface. Once at the work surface, remove and save the two fitted foam end support cushions. Then open the protective paper covering the panel to expose the unit for assembly. Saving all the packing material is critical to secure transportation of the frame in the future. Shipping or moving the panel by any other means may expose the unit to permanent damage.

Installation of Adjustable Foot System - Unwrap two of the four feet supplied with the unit. Remove the screw and washer from each of the feet (see Photo 3).



Photo 3

Hands tighten the nut all the way down on each individual foot. Then back the nut off one half rotation (see Photo 4).



Photo 4

Place the supplied washer on top of the nut and then screw each of the feet into the threaded inserts on the bottom of the first vertical panel (see Photo 5 & 6). The feet should be threaded into the insert until the washer/nut come in contact with the

vertical panel threaded insert. (This ensures maximum engagement between the insert and the foot). Repeat this procedure and install the second foot to the bottom of the first vertical panel.



Photo 5



Photo 6

Panel Brace Installation - You are now ready to attach the primary brace system to the panel. There are two braces that hold the two end panels together to form the primary MXR Frame Structure. There are two rectangular spacers attached to each brace system when it is shipped that need to be loosened to complete assembly. Simply take the T-wrench or Allen wrench supplied with the MXR and loosen (counter clockwise) each of the eight nuts on the brace assembly (see Photo 7). You do not want to have lots of play in the assembly, you just want to break the torque on each nut so that the brace can be properly located.



Photo 7

The HRS logo is machined into the center of each brace. Locate the HRS logo on the brace and orient it so that when the stand is upright on its feet, the logo will be in correct orientation. There are two steps at each end of the brace sub assembly that fit precisely over the attachment block on the panel. Slowly lower the brace assembly onto the block until the steps in the brace contact the block (see Photo 8 and Photo 9). Attach at least one of the 1/4-20 x 3/4" screws to the brace assembly (see Photo 10) prior to removing your hand from the assembly to insure it stays in place. It is very important that the 3/4" long screws are used at this location to obtain proper thread engagement.



Photo 8



Photo 9

Install all eight 1/4-20 x 3/4" screws to the brace (see Photo 10) until they are fully engaged but do not torque the screws at this time. You will want to leave them just loose enough so that there is a very small amount of play to complete balance of assembly. All the screws for the brace system will be fully tightened at a later point in the assembly process. If they are tightened at this time, you may not be able to complete assembly or it will not be level when complete. You will need to use the Allen wrench (or ratchet wrench) at the location closest to the frame because the T-wrench will hit the frame preventing screw rotation.



Photo 10

Repeat the panel brace installation procedure for the second brace at the top of the panel (see Photo 11). Orient the HRS logo so that when the stand is sitting on its feet the HRS logo will be right side up and in proper orientation. Make sure that all eight screws are completely installed on each of the two panel blocks (16 screws total) prior to moving to the next assembly process.



Photo 11

Second Panel Assembly - Remove the second panel from the wooden crate and place it in a separate area to remove all the packing material (see Photo 12 & 13). As noted before, the area and surface used should not pose any threat to the integrity of the panel surface finish. Please follow the same procedure as noted for un-wrapping the first panel.

Note: If assembling an MXR frame that consist of more than two panels then install center panel (isolation base brackets on both sides) at this time as the second panel



Photo 12



Photo 13

Remove all the foam and packing paper from the second panel. It is important that two people perform the next step. With one person on each end of the panel, very carefully and slowly place the attachment block of the second panel into the top of the brace assembly until it contacts the step on the brace (see Photo 15). Immediately install at least one 1/4-20 x 3/4" screw into each end on the panel block and fully engage, but do not tighten the screws (see Photo 16).



Photo 14



Photo 15

Install all sixteen screws, eight at each panel block on the second panel, 1/4-20 x 3/4" screws to the brace (see photo 16) until they are fully engaged, but do not torque the screws at this time. You will want to leave them just loose enough so that there is a very small amount of play to complete balance of assembly. All the screws for the brace system will be fully tightened at a later point in the assembly process. If they are tightened at this time, you may not be able to complete assembly or it will not be level when complete. You will need to use the Allen wrench at the location closest to the frame because the T-wrench will hit the frame preventing screw rotation.



Photo 16

Squaring the MXR Frame - It is now time to torque all of the screws in the two brace assemblies. We recommend using a long level to complete this process. Place the long level across the top or bottom of the frame assembly (see Photo 17 & 18) and very slowly make minor adjustments in the second panel until it is level and square with the first panel.



Photo 17



Photo 18

When the proper location has been achieved, torque all 32 of the 1/4-20 x 3/4" screws at the panel block locations (see Photo 20) and the 16 1/4-20 x 1" screws in the center of the two brace sub assemblies (see Photo 19). All of the screws should be very securely tightened by hand. With the wrenches provided you should apply maximum hand tightening force without straining yourself. Do not use any extension or large wrenches that could over torque and strip the threads.



Photo 19

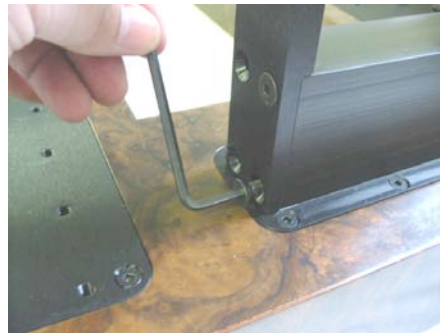


Photo 20

Installation of Remaining Adjustable Foot System - Unwrap the other two feet supplied with the unit. Remove the screw and washer from each of the feet (see Photo 21). Once the washer is removed, hand tighten the nut all the way down on each individual foot. Then back the nut off one-half of a rotation on each foot (see Photo 22).



Photo 21



Photo 22

Place the supplied washer on top of the nut and then screw each of the feet into the threaded inserts on the bottom of the second panel (see Photo 23 & 24). The feet should be threaded into the insert until the washer/nut come in contact with the vertical panel threaded insert (insures maximum engagement between the insert and the foot). Repeat this procedure and install the second foot to the bottom of the second vertical panel.



Photo 23



Photo 24

Once all the feet are installed, you can now stand the frame up on the four feet. You will want to have two or more people carefully lift the frame and clear any objects so you do not damage the panel finish.

Isolation Base Bracket Installation - Each of the isolation bases has four feet on the bottom that supports the shelf. Each of these feet sits in the pocket of a bracket screwed to the MXR panel. There are two brackets on the first panel and two brackets on the second panel (four total) for each isolation base. The MXR is designed so that one isolation base sits at the very top location (see Photo 26) and one isolation base sits at the very bottom of the frame (see Photo 25). When the brackets are in these locations, the isolation bases will automatically be located just above the top brace and bottom brace. The other brackets can be located as needed depending on location for component size. Make sure that all four brackets for each isolation base are in the same location (plane) on the frame. There are four 1/4-20 x 5/8" screws used to attach each bracket to the aluminum panel in the frame (see Photo 26). Locate each bracket on the frame and install the four screws. You should fully engage each screw prior to applying final torque. The T-wrench (see Photo 26) should be used to install the screws. You will find that the handle length clears the end of the bracket for easy installation.

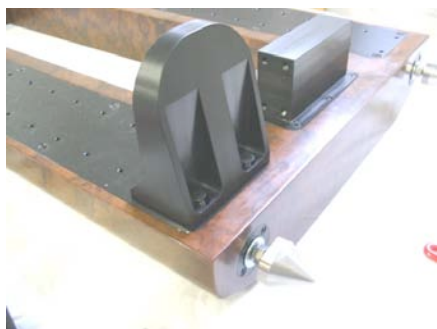


Photo 25 Bottom Bracket Orientation



Photo 26 Top Bracket Orientation

*Be **very careful** not to cross-thread the fastener. The fastener should thread in very easily. If it does not, back it out and start it in again. If necessary, loosen the other three nuts on the bracket and move the bracket position until all the screws thread in with minimal torque. Once all four screws on each bracket are engaged, hand-tighten the screws using the T-wrench. The top of the T-wrench handle will twist about 10 degrees (1/36th of a rotation) without screw rotation to obtain correct torque. Do not over torque the screws because you will strip the threaded holes in the aluminum panel. The brackets can be assembled with the panels horizontal or with the stand upright on the floor. Repeat this process until all the brackets for the isolation bases are installed and the screws properly tightened.*

Note: If your MXR has more than two panels, stand the MXR frame up after the first two panels are complete. Attach the feet on each of the remaining panels and install them one at a time as shown above until all the panels are in place. Check the panel orientation by alignment of the letters (a, b etc) that are marked on the frame to indicating proper orientation of matched wood veneer panels. Square each additional panel to the first two by using a level across the top. The feet can then be used to level and stabilize the stand after complete assembly.

***Final Assembly of MXR Audio Stand** -You are now ready to stabilize and level the frame. Move the frame to its exact final location for use in your system. Once the frame is in the final location, check to see if the frame is level and stable. If not, you can accomplish this by rotating the feet counter-clockwise (note: if looking down at the feet from the top of the frame the rotational direction appears to be a clockwise rotation). If there is instability, find out which foot is causing the instability by rocking the frame with a level across the top. When the frame is level, adjust only the feet required to make it completely stable and level. **Never** back the foot system out more than six rotations from full engagement (.25") for **any** reason. There should always be four complete rotations of engagement remaining on the foot system. If you have lost track of where you are, start over by fully engaging the foot per the original instructions and work your way back out. If the floor the frame is sitting on is so uneven that this adjustment range is not acceptable, then you must place a metal shim under the feet to keep the foot engagement specified.*

Once all the feet are in a location so the frame is stable and level, then tighten the nut on the feet so that it interferes with the frame insert (see Photo 27). This is accomplished with clockwise rotation (counter-clockwise rotation if viewing foot from top of MXR) on the nut only while holding the foot. Once the nut is tightened, the foot will be very stable and will not change position.



Photo 27

Isolation Base Installation into MXR Frame - Uncrate each of the isolation bases if not already complete. Make sure you read and follow all of the instructions in the isolation base manual prior to installing into the MXR Audio Stand frame. You will want to verify that the frame size matches the isolation base size. The MXR-1921 uses the 1921 isolation bases. The MXR-1719 uses the 1719 isolation bases.

Match the load range of each isolation base with the component weight. Matching the isolation base to the proper component weight will insure optimum performance. The load range 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 arrange to have this corrected.

*Load the Isolation Bases into the brackets (see Photo 28), with the HRS logo facing the front of the rack system. Be sure that the isolation base (shelf) foot is located securely in the pocket of the isolation base bracket. This will automatically occur when the front and back edge of the isolation base is in line with the front and back face of the two vertical panels. If the front and back edges do not line up with the front and back of the rack structure then, contact Harmonic Resolution Systems or your certified retail location because you do not have the proper size isolation base or frame. Measure the height of each component and see if the selves are in the proper location. If needed, you can move the isolation base (shelf) up or down by removing the shelf and adjusting the location of the four brackets for that isolation base. Always follow the instructions above for bracket installation when moving brackets. Be **very careful** not to cross-thread the fasteners. The fastener should thread in very easily. If it does not, back it out and start it in again (repeat as necessary). If necessary, back out the other three nuts and move the bracket until they all thread in with minimal torque. Apply proper torque once they are all fully threaded into the rack frame.*



Photo 28 Completed MXR Audio Stands. Singlewide shown on left, and double wide shown on the right.

Loading Components into MXR Frame - Carefully load each component into the MXR Audio Stand. Be careful not to hit the front edge of the isolation base because you will scratch the aluminum frame. Once all the components are loaded, you should check to see that none of the isolation bases are overloaded. By placing one or two fingers on the bottom of the bracket 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) when you squeeze your finger(s) together. If there is no compliance, remove the isolation base and component to verify the load range of the isolation base is correctly matched with the component. The load range of the isolation base is identified as part of the part number on the tag attached to the bottom (see the isolation base manual for instructions). 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 at any time by sending it to Harmonic Resolution Systems or an authorized dealer to have the primary isolation stage rebuilt.

MXR Cable Organizer Accessory – The cable organizer system is available for the MXR as an accessory. It bolts into the back of the MXR frame using the remaining threaded holes in the MXR panel that are used to support the isolation bases. They should be installed using the 1/4-20 x 1/2" bolts supplied with the organizers. The organizers are installed at a right angle to the panel with the holes vertically aligned to pass the cables through in an aligned and organized manner. Be **very careful** not to cross-thread the fastener. The fastener should thread in very easily. If it does not, back it out and start it in again. If necessary, loosen the other fasteners on the cable organizer and move it to a position that allows all the screws to thread in with minimal torque. Once all four screws on each organizer are engaged, hand-tighten the screws using the ratchet wrench

supplied with the MXR frame. The cable organizer can also be used to support the weight of a network box for cables that apply this approach.

Solid Brace System for Oversized Isolation Bases (Accessory) – The MXR Audio stand can also be set up to accommodate a larger isolation base at the top of the frame. This is often done for large turntable systems but the brace system can be used to support and large audio component. The billet machined brace system is installed directly onto the existing MXR brackets. With the HRS logo in proper orientation carefully lower the brace system on top of the brackets. The bearing tape in the machined pockets of the solid brace system will come in contact with the top of the bracket. There is a precise fit of the width of the brace system to the frame. Be very careful not to scratch the frame during installation of the solid brace system. If necessary loosen the top brace that connects the panels in the MXR frame prior to installation of the solid brace inserts and re tighten after assembly. Once the solid brace inserts are in place you can load the oversized isolation base into the top channels of the solid brace system.





Care and Maintenance

The MXR Audio Stand 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 MXR Audio Stand frame using a professional quality ultra soft lint-free micro-fiber cloth available in high quality automotive stores. Use a lightly water damped cloth if you need to clean dirt from the frame. Do not use commercial furniture polishes on the MXR. If polishing is necessary to prevent damage from harsh sun or other elements, then use only HRS certified furniture polish on the MXR frame. For premium painted MXR frames use only HRS approved wax or detail solution.

Please follow the care instructions in the isolation base manual to clean and care for the shelves (isolation bases) of the MXR Audio Stand. 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 will cause permanent damage to the assembly.

Clean the metallic parts of the isolation base and MXR Audio Stand 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 MXR frame or 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 MXR frame 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!

Do not place objects with sharp or pointed feet directly on the 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 isolation 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 the shelf brackets

Warranty

Limited Five Year Warranty

Harmonic Resolution Systems warrants to the purchaser that each HRS MXR Audio Stand is free of manufacturing defects for a period of five (5) years from the date of purchase. This warranty is subject to the following conditions and limitations.

- 1. A copy of the original purchase receipt from a certified Harmonic Resolution Systems authorized retailer is used to verify the date of original purchase and ownership.*
- 2. This warranty is void and inapplicable if the product has been handled other than in accordance with the instruction specified within this document, abuse 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.*
- 3. Warranty does not cover normal recommended care and maintenance.*
- 4. 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.*

During this period, Harmonic Resolution Systems will repair or replace any defective components free of charge. A Return Authorization Number (RA Number) 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 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 prepaid.

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

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