



**AVIDHIFI**

# **REFERENCE FOUR**

**LOUDSPEAKER SYSTEM**



**USER MANUAL**



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## **WELCOME**

Congratulations on the purchase of your new AVID Reference Four loudspeakers. We are sure that with care they will provide you with years of unrivalled musical enjoyment.

As with all AVID products, these loudspeakers are the result of many hundreds of hours of development and testing to ensure that they exceed the performance we know our customers expect from AVID.

Please read these instructions fully before attempting to setup and use the loudspeakers—failure to do so may result in damage or possibly injury.

## **CAUTION**

Although compact, these loudspeakers are extremely heavy and it is highly recommended that a minimum of two people are needed to assemble and position the Reference Four loudspeakers. As with all loudspeakers, the exposed drive units are susceptible to damage if touched.

## **GETTING STARTED**

If you have chosen to use a third-party loudspeaker support, please ensure that they are capable of supporting the weight of the Reference Fours, also ensure that they are sufficiently stable, so there is no risk of them being knocked over.

If you purchased the matching AVID stands, a simple assembly procedure is required (see “Assembling stand”) - again, take care, as parts involved are heavy and can easily be damaged or cause injury—please take care to avoid scratching any of the cosmetic surfaces.

## PLACEMENT RECOMMENDATIONS

Like any loudspeaker the Reference Four is affected to a great extent by the listening environment. The Reference Four is quite easy to accommodate, but following some simple guidelines will help:

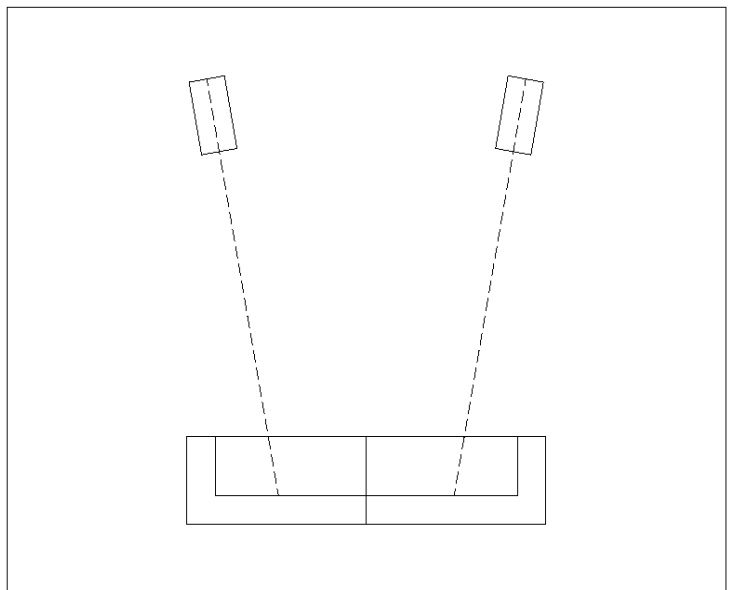
Position the loudspeakers symmetrically in the room (e.g. equal distance from either side wall). Where possible avoid asymmetrical rooms (e.g. "L" shaped or rooms with a single alcove to one side) - any asymmetry will result in an imbalance of the stereo image, and an uneven frequency response.

Don't place the loudspeakers too far apart—the distance between the two speakers should be slightly less than the distance from them to the listening point—again, experimentation is required. If the sound is lacking bass, and the centre image is vague, try placing the speakers closer together, conversely, if the sound is bass heavy, move the speakers further apart, and away from the rear walls.

Twist the two speakers so that they are pointing slightly toward, but not directly at, the listening position—this should produce a nice sharp stereo image, but create enough spread for several people to enjoy the performance.

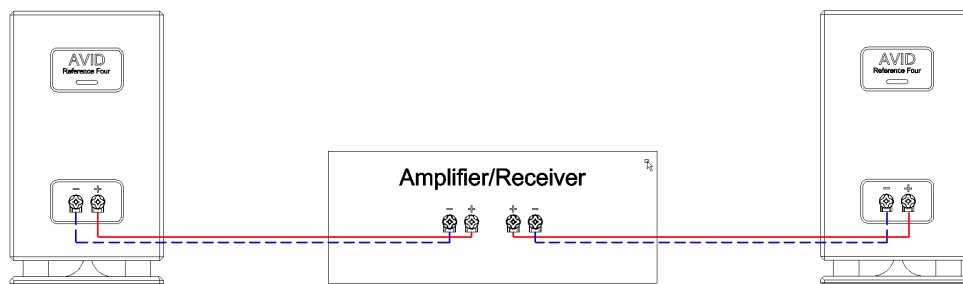
Positioning the loudspeakers close to the wall immediately behind them will increase bass output, but at the expense of clarity and stereo image—experiment to find out the best compromise for you, but start at around 45cm (18"), and adjust until you are happy with the sound.

Try to avoid locating the listening position such that your head is too close to the wall behind you—if this is unavoidable, try to ensure there are some soft furnishings or heavy curtains between you and the wall.



## CONNECTING UP

The Reference Four uses a single pair of connectors that should be connected back to your amplifier/receiver. Always ensure that the '+' terminal on the loudspeaker connects to the '+' terminal on the amplifier, and likewise, the '-' terminal connects to the '-' terminal on the amplifier. Connecting the speakers incorrectly could result in the loudspeakers being connected "out of phase" - this normally results in negligible bass response, and a poor stereo image.



## SYSTEM MATCHING

The Reference Four is a benign load, and most amplifiers will be able to drive them without difficulty. High quality amplifiers of 40W per channel or more should be more than capable of attaining sensible sound levels in a typical listening room—however there are real benefits to be enjoyed by using quality amplifiers with even greater power. Don't be too concerned about matching amplifier power to speaker power, in fact, damage is far more likely to occur when using an underpowered amplifier than a supposedly overpowered amplifier (though care is still needed in extreme cases).

## LOOKING AFTER YOUR LOUDSPEAKERS

The only cleaning required should be a light dust with a lint-free cloth - no harsh cleaning fluids should be used. DO NOT touch the high frequency dome as this is extremely fragile, and any creases will affect the overall sound quality. The Low frequency driver can be gently dusted if necessary, but again, care is required.

Be careful when using heavy speaker cable—this can put a heavy load on the terminals, which could ultimately break—avoid sudden shocks, such as allowing the cables to be pulled, or tripped over.

## **OPTOMISING SOUND QUALITY**

The ultimate sound quality of your sound system relies on a host of variables, though there are some key points that you should take into consideration

- Ensure that all your audio equipment is securely positioned—not just the loudspeakers. A good quality equipment rack can dramatically impact on the performance of your complete system.
- Make sure there is a mix of hard and soft furnishings in your listening room—to much soft furniture can result in a dull, “closed-in” sound, whereas hard furnishings tend to create a very lively sound, which can sound harsh and also suffer from echoes.
- Try to remove any unnecessary electrical equipment out of the room— if powered on, they can create electrical noise that will impact on your Hi-Fi system, and in the case of televisions, the large flat screen panel causes reflections disrupting the stereo image.
- Use good quality interconnect and loudspeaker cable. With regard to loudspeaker cable, there are large currents flowing between the amplifier and speaker, so long lengths of cable should be avoided, as resistance increases directly with length. Having stated this, it is important that both left and right channels are both of the same length, even if one loudspeaker is nearer to the amplifier than the other.

## **CABLE CHOICE**

Whilst AVID do manufacture a range of loudspeaker cables, designed to match the performance of our loudspeakers, our loudspeakers will function with most cable types. When choosing a cable, it is best to remember the following:

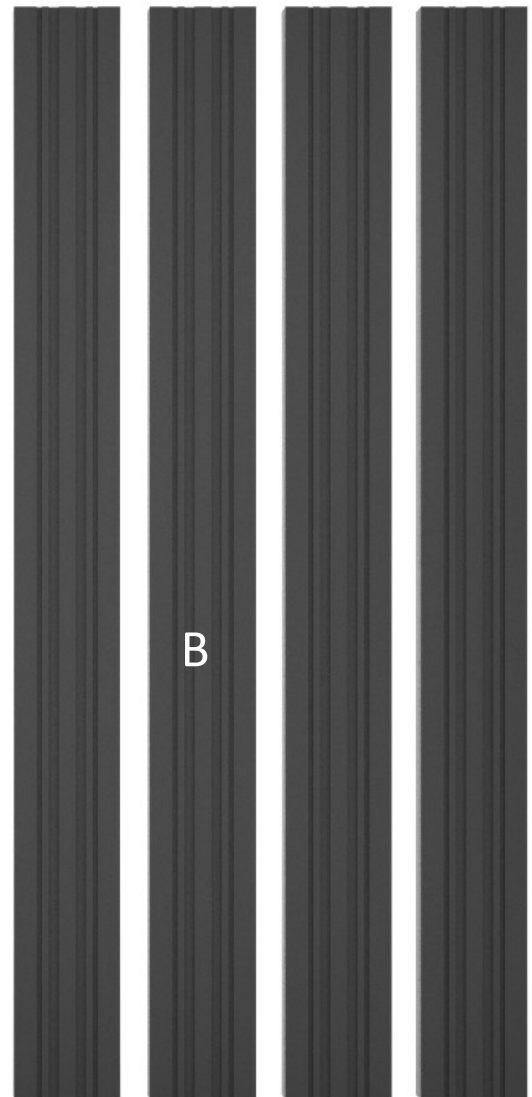
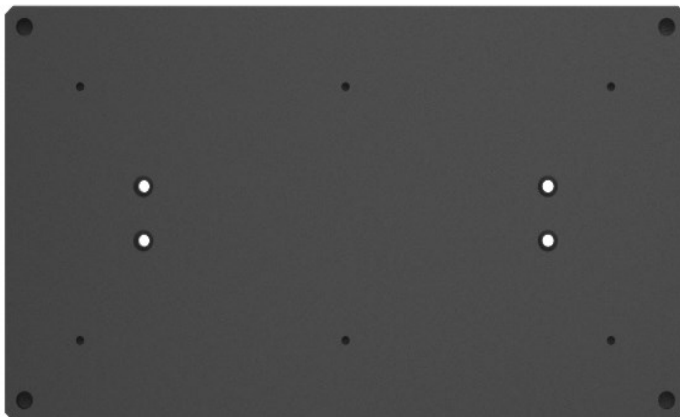
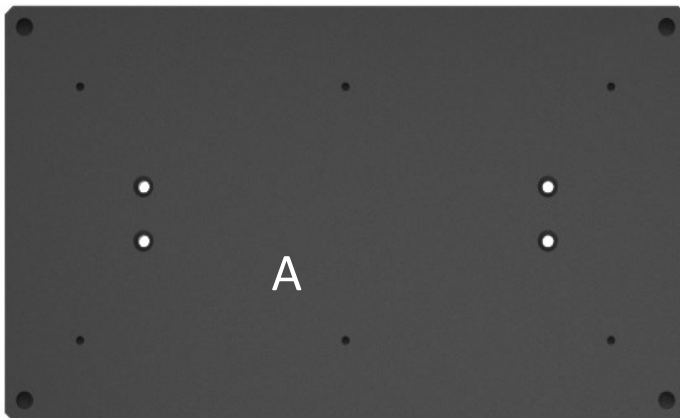
- These speakers are capable of handling very high powers. To attain these powers a low-resistance connection is necessary—a cable with a large cross-sectional area is highly recommended.
- To further reduce the DC resistance of the loudspeaker cable, it is recommended that cable lengths should be as short as possible, and of equal length.
- The DC resistance of connections at either end of the cable is equally important—ensure all connections are clean and secure.

## SPEAKER STAND

The Speaker stands are supplied as an easily assemble kit.

Each stand comprising:

- (A) 1 x Base
- (B) 2 x Pillar
- (C) 4 x 15mm countersink hex bolt (use for base to speaker plinth)
- (D) 4 x 35mm countersink hex bolt (use for base to pillar)
- (E) 4 x Spike/locknut combination





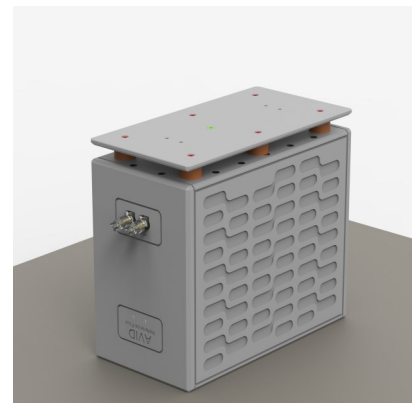
## STAND ASSEMBLY

Please follow the following steps closely to minimise the risk of damage to the product and ensuring that the stand and speaker are securely mounted.

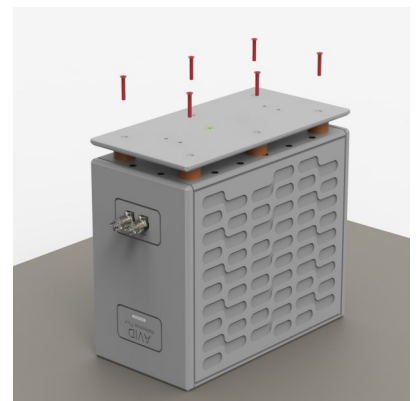
The stand makes use of the plinth attached to the bottom of the speaker. This plinth must be removed from the speaker first.

Find create a space on the floor and cover it with some soft material to protect the cabinet finish.

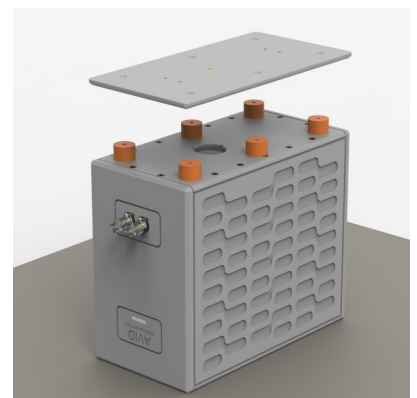
**1** Carefully remove the loudspeaker from the carton and place it on its top on the protective blanket, so that the bottom of the plinth is accessible.

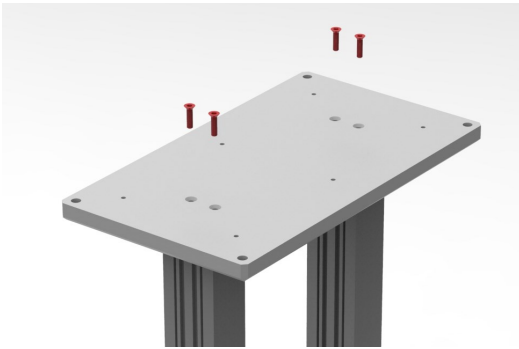


**2** Using the supplied 4mm Allen key, remove the six M6 bolts (DO NOT remove the single bolt near the centre of the plinth—highlighted in green here). Store the bolts safely, as you will need them later!

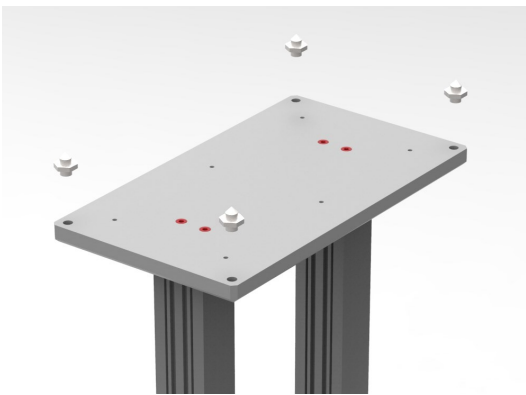


**3** Carefully lift the plinth. Leave the anodised legs where they are, but if any have moved, make sure they are returned to their correct recessed location on the bottom of the speaker.

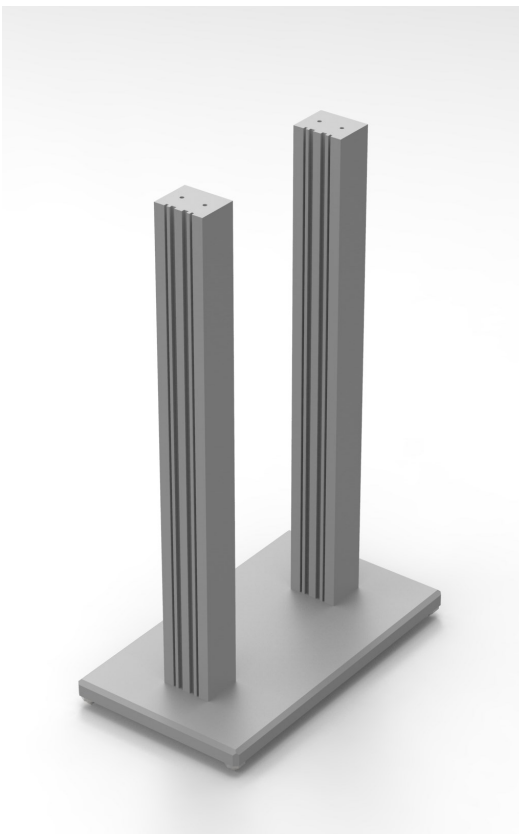




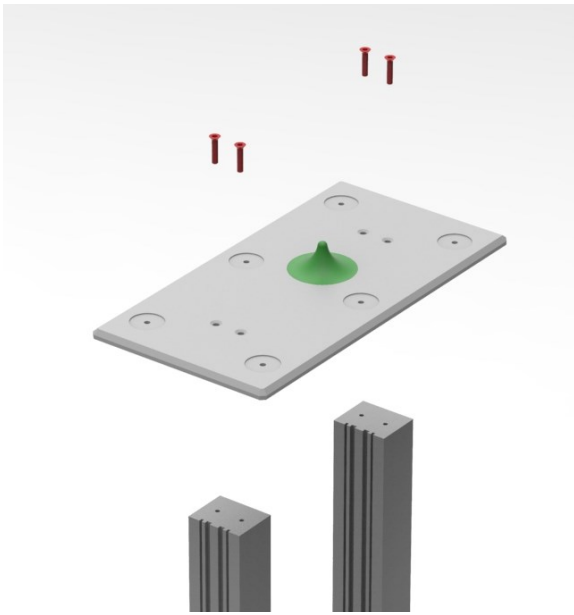
**4** Using the supplied 25mm countersink bolts (D), attach the two pillars (B) to the base of the speaker stand (A).



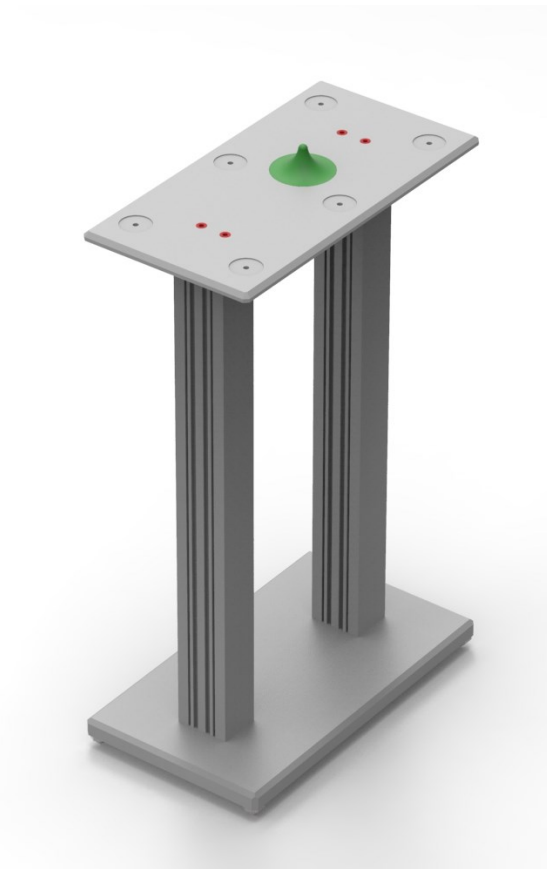
**5** Locate the spikes (E) and screw them into place on the plinth using the supplied lock nuts to secure them in place—ensure all four spikes are set to the same level.



**6** Now place the stand so that it is resting on the floor, on its spikes.

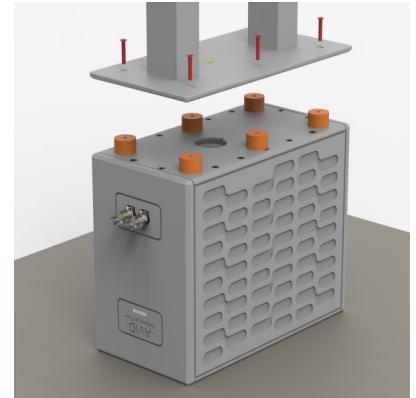


**7** Take the plinth you previously removed from the loudspeaker and bolt it to the top of the pillars (ensuring that the anodised deflector is pointing upwards), using the four 15mm M6 bolts (C) supplied. Ensure they are done up tightly—there should be no movement between the plate and the pillars.



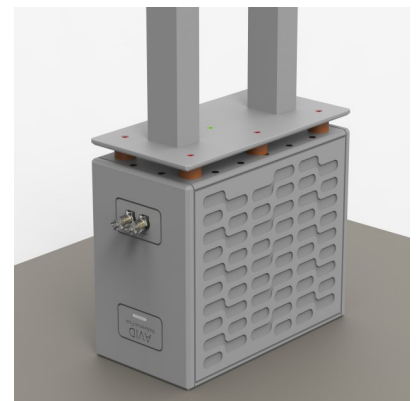
**8** Note the position of the anodised deflector (shown in green)—this defines the rear of the stand when attaching the speaker (it will align with the port on the bottom of the loudspeaker cabinet). Failure to ensure this will result in damaging both the deflector and the bottom of the loudspeaker cabinet—please take care!

**9** Attaching the stand to the loudspeaker is most easily done by turning the stand upside down, and carefully lowering it onto the bottom of the loudspeaker. Ensure that the anodised legs locate fully into the shallow recesses in the top of the stand. **It is highly recommended that at least two people carry out this step.**

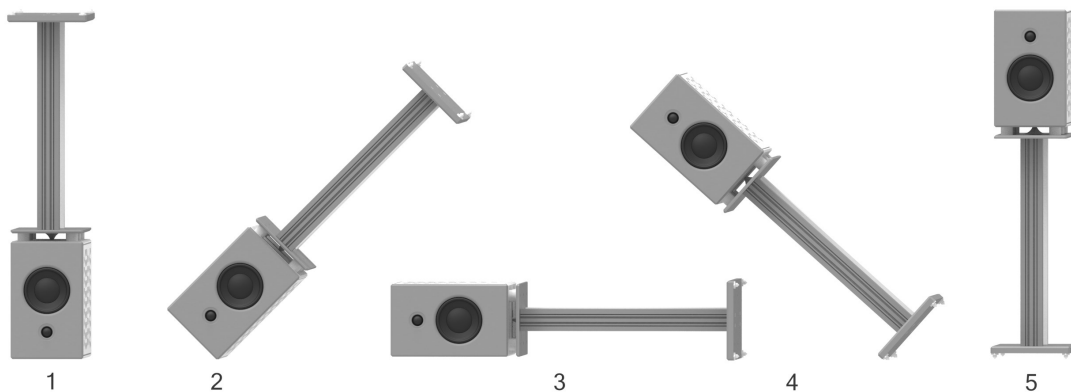


**10** Once the stand is correctly located, attach the stand securely using the six 40mm M6 bolts removed in step 1.

**IMPORTANT** Ensure all six of these bolts are secure before moving onto the next stage.



**11** Once all the screws are in place, the whole assembly can be carefully rolled over to its correct vertical orientation and placed in its final position. Place some soft material under the loudspeaker during this procedure to avoid damaging the finish. Please take care, as the whole assembly now weighs approximately 40kg, and could cause serious injury if dropped or knocked over.



## Specification

<b>HF:</b>	1 x 28mm (Titanium voice coil former)
<b>MF:</b>	1 x 160mm (75mm Titanium voice coil former)
	NEODYMIUM/FERRITE MAGNET ASSEMBLIES
	ALUMINIUM VOICE COIL WINDINGS
<b>Frequency Response:</b>	40Hz - 22kHz +/-3dB
<b>Sensitivity:</b>	88dB 1W@1m
<b>Recommended Power:</b>	40 - 130W
<b>Impedance:</b>	6.5 Ohm
<b>Crossover Topology:</b>	2.5 way, 2nd Order
<b>Cabinet Construction:</b>	Aluminium Plate. All internal volumes sealed with O-Ring gaskets
<b>Dimensions (HxWxD)</b>	
<b>Cabinet:</b>	367 x 210 x 440 (mm) 14.5 x 8.3 x 17.4 (in)
<b>inc. stand:</b>	995 x 210 x 440 (mm) 39.2 x 8.3 x 17.4 (in)
<b>Reference Four Net weight:</b>	25 KG each
<b>inc. stand:</b>	40 KG each

Specifications are subject to change

## Warranty Statement UK Residents

**AVID HIFI** Limited products are warranted against defects in materials and workmanship for a period of two years from the original date of purchase, or no later than three years from the date of shipment to an authorized **AVID** agent, whichever ever comes first, extending to five years subject to the product owner having submitted the Registration form ([www.avidhifi.com](http://www.avidhifi.com)). Also the following conditions being observed.

- The product must have been purchased through an authorized **AVID** dealer
- By default, the warranty is in favour of the original purchaser only, however warranties are transferable providing the new owner completes the online product registration form. In this case, warranty obligation will pass from dealer to manufacturer.
- During the warranty period, **AVID** will repair, or replace any defects due to material or workmanship, without charge for parts or labour.
- Should product need to be returned, a written description of the defect and a photocopy of the original purchase receipt must accompany it. Receipts must show the model, serial number, date of purchase, name and address of purchaser and authorized dealer and the price paid.
- Returned product must be packed in the original packing and returned to **AVID** or original dealer by the customer at his/her expense. **AVID** will pay return freight of its choice.
- The warranty is void if the product has been used or handled other than in accordance with the instruction manual supplied, abused or misused, damage by accident or neglect or in being transported, or the defect is due to the product being repaired or tampered with by anyone other than **AVID** or an dealer with prior authorization.
- The warranty is void if the product serial number has been removed, altered or made illegible.
- The warranty is void if the product has been taken out of the country of purchase.
- **AVID** shall not be held liable for incidental or consequential damages of any kind arising from the sale or use of its products.
- The warranty applies to ex-demonstration product, using manufacture date as purchase date.
- Where the product is sold under a consumer transaction (as defined by the Sale of Goods Act 1979) the statutory rights of the purchaser are not affected by this warranty.
- Products are sold on the basis of specifications applicable at the time of sale. **AVID** shall have no obligation to modify or to update products once sold.

## Outside UK

**AVID** has formal distribution in many countries throughout the world. In each country the **AVID** importer has contractually accepted the responsibility for the product warranty. Warranty should normally be obtained from the importing agent or distributor from whom you obtained your product. In the unlikely event of service required beyond the capability of the importer, **AVID** will, of course, back up the warranty.

- Where product has been either supplied directly or there is no current distributor, **AVID** accepts responsibility for the warranty period. Returned product must be packed in the original packing and returned to **AVID** by the customer at his/her expense. **AVID** will pay return freight of its choice. The warranty is only valid in the country of purchase.
- Products outside their original destination requires that units with remaining warranty be returned to the country of purchase for the warranty to be valid. Customer is responsible for freight both ways and all associated import and export charges.
- Foreign distributors are not required to provide warranty service, repair or change AC mains voltage on units that they did not originally import and sell.
- Foreign distributors may at their discretion offer service for a fee.

MISCELLANEOUS: ANY IMPLIED WARRANTIES RELATING TO THE ABOVE PRODUCT SHALL BE LIMITED TO THE DURATION OF THIS WARRANTY. THE WARRANTY DOES NOT EXTEND TO ANY INCIDENTAL OR CONSEQUENTIAL COSTS OR DAMAGES TO THE PURCHASER.

WARRANTOR. Inquiries regarding the Limited Warranty may be sent to the following address:  
**AVID HIFI** Limited. Bicton Industrial Park, Kimbolton, Huntingdon. PE28 0LW ENGLAND





# AVID HIFI



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