

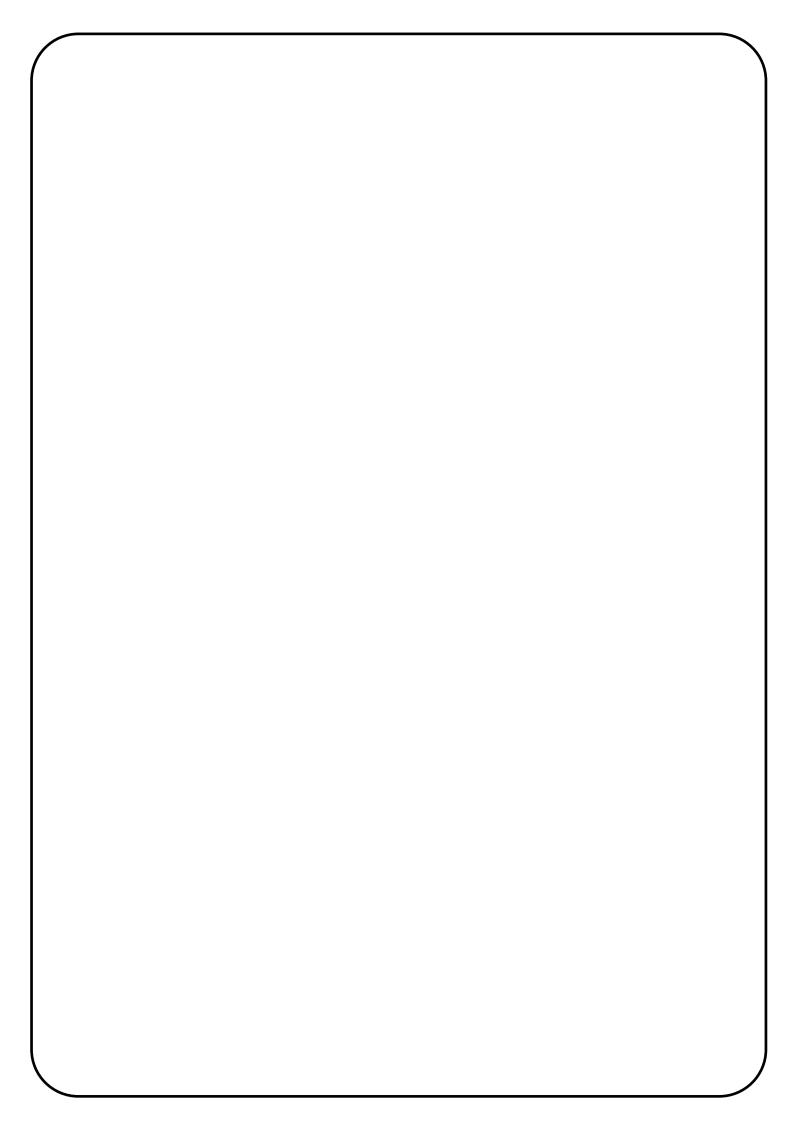
# ACUTUS

# **REFERENCE MONO TURNTABLE**



### **USER MANUAL**







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### WARNING

YOU MUST ALWAYS REMOVE THE PLATTER AND BEARING AND USE THE TRANSIT PACKAGING WHEN YOU TRANSPORT YOUR TURNTABLE OR YOU MAY DAMAGE THE BEARING **"DON'T PUT IT ON THE BACK SEAT OF YOUR CAR—YOU'LL BREAK IT"** 

### **Extended 5-Year Warranty**

AVID is pleased to extend the normal warranty duration to 5-Years from the date of original factory shipping. This warranty is transferable in the unlikely event that you would sell this unit onto another party. Register your product at;

www.avidhifi.com/register

#### Preface

#### Please take time to read this Instruction Manual before unpacking your Acutus Reference Mono Turntable.

This product is meticulously engineered and whilst damage is unlikely with careful handling, the sheer mass of some of the parts could damage the less robust parts within its design. Please keep in mind that certain parts have been deliberately excluded from the warranty, so it is essential to handle and operate the turntable with care and attention.

#### Introduction

The Acutus is an audio turntable manufactured to extreme limits of precision, design and detail. There are many unique and novel features in this product and its design allows you to install the pick-up arm and cartridge of your choice. With correct ancillary equipment it will take your listening pleasure to new levels of excellence.

The Acutus has two main components, that being the turntable itself, made up of 6 parts and the external power supply. Whilst it shares some features found in other turntables, it has been designed without compromise not trying to emulate or improve existing designs but redefine the whole thinking behind turntable design.

We hope that you enjoy this product for many years!

#### Warnings

- 1. To prevent fire or electric shocks do not expose either the power supply or motor to rain or moisture
- 2. The Main Bearing contains a Sapphire Cup Jewel and can be damaged if proper care is not taken, such as moving the turntable or dropping the platter when fitting and this part is excluded from warranty
- 3. The threaded spindle is made from brass for sonic reasons and is a much softer than the stainless steel clamp. If cross threaded whilst fitting, the thread will eventually wear out. Some owners have never had occasion to replace this part after decades of use and others damage it quickly. For this reason it is excluded from warranty.
- 4. The platter surface (mat) is a specially designed resin optimised to reduce vibration within the record and is bonded to the platter. You should not try to remove it, or fit another mat over the top as this will stop the clamp/ bearing for working effectively.
- 5. The Reference Mono Power Supply contains voltages which can cause serious injury or death. There are no user serviceable parts inside and absolutely no reason to open it. In situations of failure, either return to your dealer or contact AVID directly. Altering the calibrated components inside will reduce performance and void the warranty.
- 6. The motor is an individually handcrafted component and must under no circumstances be opened or adjusted. If you experience what you believe to be a problem, consult your dealer or AVID directly.

#### Packaging

The packaging is very expensive to replace, so save all the packing in a dry place away from fire hazard.

The Acutus Reference Mono Turntable is a precision instrument and the packaging has been especially designed so that all component parts are safe during transportation. If you should need to return your unit for upgrade, service or repair, you will be required to use its original packaging to keep it from damage. In the event of the packing being lost or damaged further packing can be provided at cost.

Do not transport the turntable assembled. This will cause damage and void the warranty.

#### **Parts Check List**

The packing is designed to eliminate parts being missed, however if something is found amiss please contact your dealer.

Instruction Manual	1	Drive Belt	2	Motor Restraining Band	1
Platter	1	Main Bearing	1	Suspension Lateral O-Ring	3
Sub-Chassis	1	Motor Assembly	1	Wrench Key Size 3mm A/F	1
Clamp	1	Belt Pin	1	4mm Tungsten Carbide Ball	1
Main Chassis	1	Power Cord	1		
Reference Mono PSU (in flight-case)	1	Tonearm (if supplied)	1	Cartridge (if supplied)	1

#### Set Up Instructions

The supplied packaging is vital for protection and shipping. It should be retained as replacement packaging is expensive. The packaging is layered with each part having a suitable compartment. Make sure it is fitted correctly to avoid damage. Unboxing and Set Up videos are available to view on our website or Scan the quick link on the front page.



#### LAYER 1:

#### Power Supply Case. (PSU)

Remove the PSU and lift out layer 1 using the hand holes at the side.

The packaging has a cut out to allow some tonearms to be premounted during transportation. If no tonearm if fitted, the suspension is factory adjusted for a 800g tonearm. Further adjustment of the suspension may be required on final installation.

(Arm shown for illustration purpose only)



#### LAYER 2:

## Subchassis and optional arm/cartridge if fitted.

Lift out by using the hand holes at the side.

Power cord and accessory pack.



#### LAYER 3:

#### Main Chassis, Clamp, Bearing and Motor.

Remove Main Chassis including the white foam packaging.

Be careful when removing motor, clamp and bearing packaging not to drop anything onto the platter below.

Remove foam and protective cover bags.



LAYER 4: Metal Platter. Remove from packaging.

#### PLEASE REMEMBER THAT THIS IS VERY HEAVY



All our suspended turntables offer the opportunity to set up the arm/ cartridge off the suspension. This gives more stability and accuracy. Place the subchassis on a suitable surface and install the pick up arm and cartridge if not already fitted.

#### **CLEAN THE TOP OF THE SPINDLE WITH CLEAN TISSUE PAPER**

Place the clean bearing ball into the top of the spindle.

This part of the bearing must always be kept clean and free of oil.

# DO NOT USE GLUE OR ANY LUBRICATION AS THIS WILL DAMAGE THE BEARING AND THE PLATTER WILL NOT ROTATE CORRECTLY

#### **CAREFULLY LOWER THE MAIN BEARING ONTO THE SPINDLE**

Please be extremely cautious while installing the bearing onto the shaft to avoid dropping or banging it, as this could result in damage to the sapphire. Please note that any damage caused to the sapphire will not be covered under the warranty.

#### **NEVER ADD ADDITIONAL BEARING LUBRICATION**



Gently and gradually place the platter onto the main bearing, ensuring that the spindle does not come into contact with or leave any scratches on the tapered bore in the platter.

#### **USE EXTREME CARE**

To detach the platter, grip the edges of the platter and carefully rock it back and forth while lifting to release it from the main bearing. It is crucial to avoid lifting the bearing itself while doing this to prevent any damage.



If you have bought an AVID tonearm and cartridge, we provide an alignment gauge specifically designed for setting up your equipment accurately. You should refer to the instructions provided in the tonearm manual or seek assistance from your dealer.

However, if you are using a different tonearm, you will need to install a record and clamp and use the alignment gauge provided with the chosen tonearm. Once done, you can remove the clamp and record and proceed to cautiously disassemble the platter and bearing for installation onto the main chassis and suspension.



For optimal performance, it is recommended to position the Main Chassis on a sturdy and level surface, such as a standard audio equipment rack or a wall-mounted shelf, especially if you have a suspended floor that tends to bounce. This will aid in minimizing any undesired suspension movement.

Although the feet can be adjusted to fine-tune the levelling, extreme adjustments may result in the motor not being perpendicular to the chassis, causing the drive belt to run inaccurately on the platter. Therefore, having a level surface is advantageous.



Insert the motor into the designated cut-out in the main chassis, ensuring that the lower rubber O-ring on the motor aligns with the groove on the side of the chassis.

You can adjust the motor foot to achieve the appropriate height.



After positioning the motor in place, secure it to the main chassis using the rubber O-Ring provided. Stretch the O-Ring around the motor, fastening each end to the bolt heads on the side of the main chassis.

Ensure that the motor is level with the supporting surface and that the securing O-Ring is positioned close to the lower motor ring to avoid any wobbling or movement.

It's essential that the motor is in direct contact with the same hard surface as the turntable to ensure proper grounding, which eliminates any vibration.



Gently install the subchassis onto the main chassis, ensuring that the subchassis legs are placed into the suspension adjusters positioned in the middle of each of the springs.

Be cautious to prevent the subchassis from tipping off due to the weight of the tonearm installed on it. You can apply some downward pressure to the subchassis while making sure that the legs are entirely inserted.

Take care the bearing ball does not fall out when fitting the subchassis.

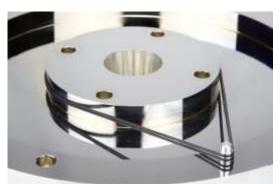


Now, as previously directed, reinstall the main bearing, ensuring that you are extra careful not to harm the sapphire bearing by dropping it too hard onto the bearing ball.



To install the drive belts, you must first attach them to the platter using the designated belt fitting pin.

Turn the platter over so that the top side is facing down. Locate a small hole on the rim of the platter. Once you have identified the hole, insert the belt fitting pin.



It is essential to have clean hands when handling the drive belts, and also recommended that you clean the platter drive hub and motor drive pulley before installing the belts. Using isopropyl alcohol cleaner is suitable for this purpose.

Carefully stretch each of the two belts over the hub and onto the fitting pin one at a time, ensuring that they aren't twisted together.



Gently fit the platter onto the bearing, taking care not to scrape the spindle onto the platter bore.

Ensure that the fitting pin is positioned over the motor drive pulley, as this will simplify the process of installing the drive belts.

#### WATCH OUR BELT FITTING VIDEO:





With a gentle touch, lift the platter edge to expose the motor pulley. Rotate the platter to engage the belts with the grooves of the drive pulley. Using your finger, hold the drive belts against the underside rim of the platter, and then remove the fitting pin. Finally, let go of the drive belts, and they will be secured in place.

#### DO NOT SWITCH THE TURNTABLE ON

Now fit the clamp and manually rotate the platter **SLOWLY** by hand to align the drive belt correctly, otherwise the lower belt will fall off.



#### WARNINGS AND USING THE CLAMP.

The female part of the clamp is made from stainless steel and the male bearing spindle part is brass. You will need to take care not to strip or cross thread the clamp onto the main bearing.

Before fitting the clamp **ALWAYS WIND THE MIDDLE COG UP** to the top cog. If this is not done you will eventually strip the brass thread.



Holding the underside of the platter with your fingers, place the clamp onto the spindle. This gives you control of the platter whilst not leaving unsightly fingerprints on the platter wall.

Using the top cog, screw the record down tightly. Then using the middle cog screw down until the record is flat and in full contact with the platter. You can control the amount of screw down force used depending upon the record thickness.

To release the clamp, hold the platter in the same way and UNWIND THE MIDDLE COG UP, releasing the tension on the record. Then use the top cog to unscrew the clamp off the spindle.



Now fit the lateral suspension O-rings to each suspension tower.

Stretch the O-ring so it fits between the platter and the subchassis post, making sure its correctly fitted into the location groove and not caught between the post and platter wall.



Stretch over the two main chassis posts. Take care when doing this near your cartridge.



#### SUSPENSION SET UP AND ADJUSTMENT.

With the Main Chassis ideally on a level surface, the turntable platter in turn should be approximately parallel, however **THIS IS NOT CRITICAL** and other factors are more important to obtaining best performance.

Once set up, the platter complete with record and clamp should bounce with a smooth piston type movement, the drive belts running without any flicking movement. You can easily see this by looking underneath the platter whilst it's running.

As a starting point, level all the suspension posts with the main chassis posts. This is done by inserting the supplied Allen wrench into the hole on the subchassis suspension post, pushing down to engage the wrench and turn clockwise to lower or anticlockwise to raise the suspension point. Some fine tuning is always advisable, but once correctly adjusted, the springs self-lock in position and should not require readjustment.

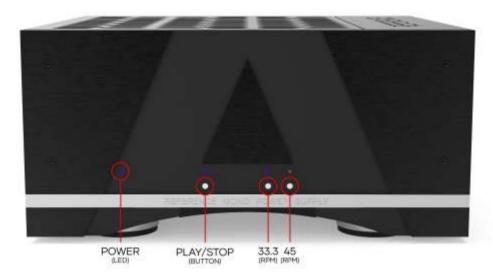
#### **DRESSING THE ARM LEAD**

Proper cable management is crucial for the suspension to function correctly. If the tonearm lead is too stiff or improperly dressed, it can hinder the suspension's movement. Therefore, it is crucial to dress the leads in a way that allows the suspension to work unimpeded.

The main chassis features a cable clamp that should be used to secure the cable and prevent it from being pulled inadvertently. However, be careful not to over-tighten or crush the cable while clamping it in place.

After ensuring that the suspension is working correctly, you can clamp the cable in place. If possible, it is recommended to leave the lead unattached, as long as it does not affect the suspension. Avoid using thick, heavy, or stiff leads, as they can negatively impact the suspension's performance.

**Power Supply** 



#### **Connecting and Switching On Power**

The Reference Mono PSU Mains input socket is an IEC type socket on the rear panel and you should use the cable provided or a suitable alternative. The Power On Switch is an integral part of the IEC socket.

We do not recommend using mains conditioners or filters and suggest plugging directly into the mains supply.

#### Front Panel

We have not put any screen printing on the front panel as it would spoil the cosmetic appearance. The image above shows the control button functions. When ON, a light shows on the front left. It is recommended that when not in use the unit be switched off, as this will extend the life of the internal components. There is no sonic benefit in leaving the unit permanently switched on.

When the PSU is switch ON the speed defaults to 33rpm with a corresponding indication light. To select 45rpm push the right button and its light will shine. PLAY button on the right also provides the STOP function.

When changing record you must always stop the motor with the power supply. Never just grip the platter and try to remove the clamp. This will stall the motor and damage the PSU by drawing more current. Warranty would be void.



Speed Adjustment (see our video guide)

The speed will have been adjusted at the factory, however you many wish to check this sometimes, although there should be no drift from the locked speed. To check the speed you will need a strobe disc or alternative. With the turntable playing, select which speed you wish to adjust and press and hold both 33rpm and 45rpm buttons together until the light flashes. The flashing light indicates adjustment mode is selected. Pressing the 33rpm button slows the platter and 45rpm increases the speed. Once correct speed is achieved press both buttons again to lock.

#### DO NOT SEE HOW FAST OR SLOW YOU CAN ADJUST THE SPEED AS THIS WILL OVER-LOAD THE SUPPLY AND IT WILL POSSIBLY BECOME FAULTY. THIS DAMAGE IS EXCLUDED FROM OUR WATTANTY.

#### **Rear Panel**

PSU output socket is a locking DIN type, matching the motor supply lead. Connect the motor lead and lock in place to avoid it being pulled out. Do not alter this cable, it will affect the motor performance and void the warranty. The IEC mains socket also houses the main fuse and should only be replaced with the same value in the table below. The Soft Start Power On LED's just confirm that this part of the circuit is operational.

The feet on the power supply are not adjustable and not designed to turn.

Replacement Fuse Guide	
220~250v	T6.3A slow blow
100~120v	T6.3A slow blow



For users who have to use two-pin mains sockets, please note that on a standard IEC mains female plug, the right hand pin (see image) is the 'Live' pin—always make sure this is connected to the live pin on the wall socket. Failure to do so will mean that the neutral feed will pass through the mains switch rather than the live feed , which is less safe and should be avoided.

#### **SERVICING**

Because of the careful design of this product general servicing is not required.

The only things that will need attention will be changing the Drive Belt, which we suggest be replaced Bi-annually.

#### **CLEANING**

To maintain the visual appearance of Acutus, occasionally dust the surfaces with a normal duster - no need for any sprays or polishes.

Fingerprints, greasy marks or similar smudges can be removed with a damp cloth with mild soapy water or isopropyl alcohol cleaner.

DO NOT ATTEMPT TO CLEAN THE DRIVE BELT WITH ANYTHING.

IF DIRTY OR GREASY IT WILL PROBABLY NEED REPLACING.

Never use cleaners containing abrasives, as this will damage the surface.

#### 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, which ever comes first, extending to five years subject to the product owner having submitted the Registration form

#### www.avidhifi.com/register

Also the following conditions being observed.

- The product must have been purchased through an authorized AVID dealer
- This warranty is in favour of the original purchaser only, except where...
- Warranties are transferable to subsequent owners provided the new owner completes the product registration form. Warranty obligation is passed from dealer to manufacturer.
- During the warranty period, AVID will repair, or replace any defects in 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 there 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

#### **Specifications**

	ACUTUS REFERENCE TURNTABLE
DRIVE	TWIN BELT
SPEEDS	33/45 RPM
PLATTER MASS	10 Kg
BEARING	Inverted Stainless Steel
THRUST POINT	Tungsten Carbide/Sapphire
SUSPENSION	3 Point, frequency adjustable springs in vertical, O-Ring lateral
TONEARMS	SME fitting. Adapters available for single or twin tonearms
MOTOR	Hand built 24v 140mNm AC Synchronous
DIMENSIONS	(overall) 460 x 400 x 210mm (WxDxH) (footprint) 410 x 360mm (WxD)
NET WEIGHT	19.0 Kg (42lb)
PACKAGING (Turntable)	540 x 510 x 570mm (WxDxH)
(Power Supply)	670 x 570 x 260mm

#### **REFERENCE POWER SUPPLY**

DIMENSIONS NET WEIGHT VOLTAGE INPUT 490 x 450 x 236mm (WxDxH) 52 Kg (115lb) 100-240VAC 50 Watts max. (depending on region)

AVID reserves the right to improve or change its products without notice at any time.

#### **EC DECLARATION OF CONFORMITY**

#### We the Manufacturer, AVID HIFI Limited

Bicton Ind. Park, Kimbolton, Cambridgeshire. PE28 0LW (UK)

TEL: +44 (0)1480 869900 / Email: info@avidhifi.co.uk / Web: www.avidhifi.com

Acknowledge our sole responsibility, that the product:

#### KIND OF EQUIPMENT: Turntable/Record Player

TYPE DESIGNATION: **ACUTUS** (All Variants)

In accordance with the EMC Directive **2014/30/EU** is in compliance with the following norm(s) or document(s): Technical regulations: **EN 55032:2015+AC:2016 / EN 55035:2017 EN 61000-3-2:2014 / EN 61000-3-3:2013** 

&

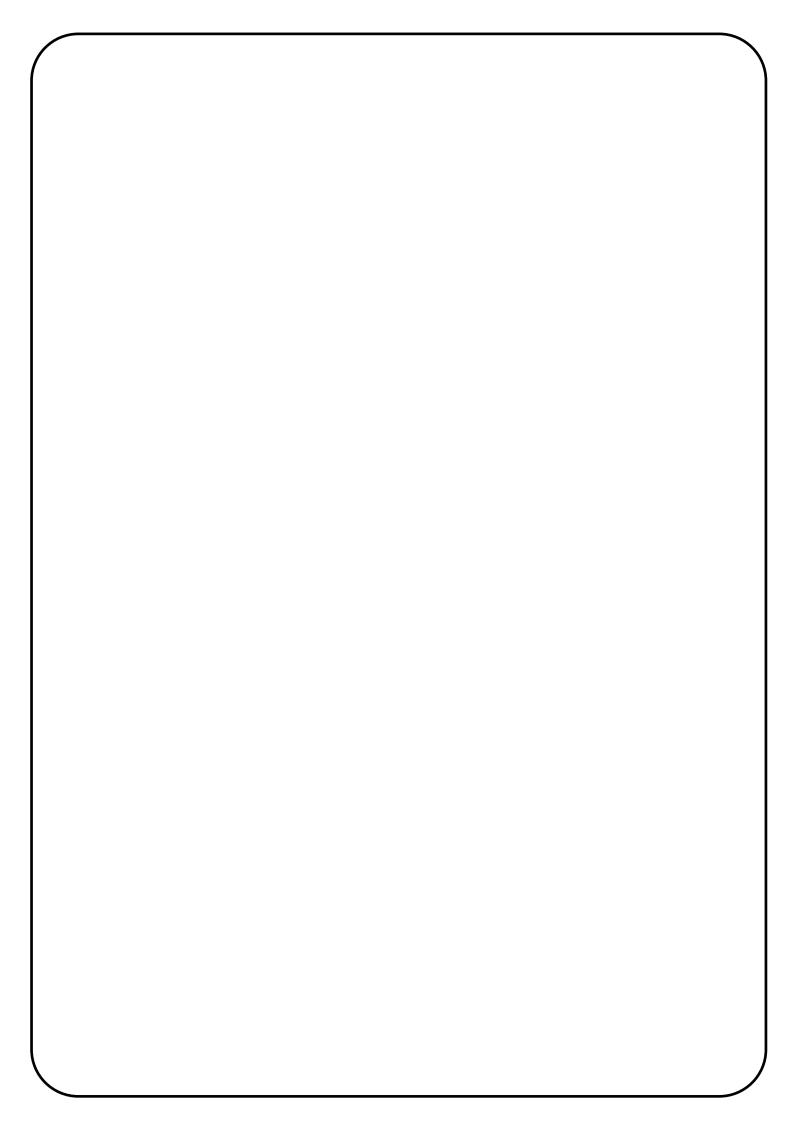
In accordance with the Low Voltage Directive **2014/35/EU** is in compliance with the following norm(s) or document(s): Technical regulations: **EN 62368-1:2014** 

&

Is in conformity with Directive (EU) 2015/863 Restriction of Hazardous Substances in electrical and electronic equipment.

Conrad Mas (Managing Director)

#### Date: 4th January 2021





# AVID HIFI Ltd

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