

icon Audio

Instruction Manual Covering:

Stereo 40 MK III EL34 KT88

IMPORTANT!
THIS MANUAL CONTAINS
ESSENTIAL HEALTH & SAFETY
INFORMATION FOR YOU AND
YOUR AMPLIFIER. PLEASE
READ & KEEP SAFE AND
REFER TO IF NECESSARY



Earlier gloss version pictured with SG KT88 and upgraded driver valves

Contents

1 Introduction & Final Inspection

2 Quick Set Up Guide

3 Connecting inputs & outputs

4 Getting the best out of your amplifier

5 Trouble Shooting

6 Bias Checking & Valve Replacement

7 Specifications

8 Packing and Shipping

1 Introduction

Thank you for purchasing the *Stereo 40 MKIII*. A great deal of care has been taken in the design, selection of components and production of this amplifier. We are sure that you will hear the difference.

In order to get the best out of your amplifier, please read the enclosed notes. Even if you are experienced with Hi Fi **please read the 'quick set up guide'**. Should you be uncertain about anything to do with your amplifier please contact us for advice.

Valve (or Tube) amplifiers do the same job as a solid state amplifier, but they do it differently. And whilst solid state specifications look good on paper even quite modest valve amplifiers can have a richer, more textured sound. Your ears will have become accustomed to your old amplifier. Sometimes it may take some hours before your ears attune themselves to the new sound.

Your source, loudspeakers and room acoustics will also affect the sound before it finally reaches your ear. Some people find a small adjustment in re positioning their speakers can help too. The weakest link will always affect the final results

when making judgements. Not all recordings are 'equal'! Therefore an amplifier which faithfully reproduces the input signal will also reproduce imperfections in the tonal balance and the recording itself. Setting up and judgements should be made with a 'clean' well balanced recording.

The *Stereo 40 MKIII* is a push-pull Ultralinear stereo power amp, capable of running in either pentode ultralinear or pure triode mode, using the excellent EL34 or KT88* valves in fixed bias. The driver and phase splitting is all triode. The pre-amp is a high quality 'Passive' circuit using silver audio cable and an ALPS volume control. It is sensitive enough to be used with all modern source equipment having an output of 250mv or greater. Its simplicity coupled with point to point hand wiring without the use of printed circuit boards results in an open euphoric sound that is wonderfully detailed and warm sounding.

*This model may be used with e EL34/6CA7/KT77/KT66/KT88/6550

2 Final Inspection - Your Guarantee of Quality

To assure you of optimum performance and reliability, this amplifier has passed our rigorous final inspection and listening test by the Icon Audio team in Leicester. During which the final set up and adjustments were made.

Date/...../.....

Model

Amp Serial Number

Customer

Check amplifier finish	.....	IEC Mains Fuse	1.6A.....
Check valve cover	.....	UK Plug fuse	3A.....A
Internal wiring check	.....	Remote Control Function	.....
Check Triode mode	.....	Sales invoice	.....
Run min 6 hour test	.....	Bottom label	.....
Check inputs & tape monitor	.....	Credit card receipt	.....
Output Valve Bias level	.....mv	Customer survey form	.....
Sound Quality	.....	Bias meter	.....
Channel Balance	.....	Transformer Protection	.....
Valve Microphony	.....	Upgrades:	
Valve Seating	.....	HT delay fitted?	...Y / N
Hum level left/right	...../.....mv	Output valves	.....
RF Test	.....	1 st Stage valve	.....
LED brightness	.....	Phase splitter valve	.....
Serial No sticker and recorded	.....	Mains lead	.....
Mains voltage	110 / 230-240V	Interconnects	.....

Signed off by

Notes:

IMPORTANT READ THIS FIRST

2 QUICK SET UP GUIDE

Box contents:

Amplifier, remote control, mains lead, manual.

1 Unpack unit carefully and check that it is in good condition. Transit damage must be reported to Icon Audio within 3 days. It is important that you keep packaging for warranty/service return.

2 If Necessary fit the valves, or check that they are firmly in place. The KT88/EL34s should be fitted first observing the numbers 1,2,3,4 on the rear of the valve; this corresponds with the four sockets from left to right viewed from the front. This is essential as each valve is 'set up' in this position. **Do not push or pull the output valves by the glass envelope**, this could cause the glass envelope to become detached from the base, damaging the valve. Take care to observe the alignment of the centre spigot when inserting all valves.

The single GZ34/5AR4 **MUST ONLY BE FITTED TO THE CENTRE POSITION.**

The small valves are fitted at the front. Again observing the "spigot". The middle one is a 6SL7/6H9C/6188, the outside pair are 6SN7/6H8.

Please note the 6SN7/6SL7/6H9Cs are not interchangeable with the KT88/EL34 this could be dangerous and will damage the amplifier.

3 Connect to source units, e.g. CD, Tuner, Tape, Phono pre amp (if used) etc via appropriate phono sockets.

4 Connect to speakers making sure that the correct impedance (ohms) is chosen, (see back of speakers). Most modern speakers are 6 ohms which so this is not critical (see Ch 3). Don't forget to get the correct polarity of speaker cables. (See speaker connections chapter). If 'bi-wiring' both 'common' should go to the black terminal, and both 'positive' (or red) should go to either 4 or 8 ohm terminals.

5 Connect to mains supply using supplied IEC mains lead to 240v supply. **If for some reason the welded plug must be removed, please remove fuse and dispose of immediately.** (As they can be a danger to children if plugged in). The replacement plug should be wired in the following way Brown to Live terminal, Blue to Neutral terminal and Green/Yellow to Earth.

6 Before switching on make sure that the "standby switch" is in the "up" position.

SWITCH ON! The meter should light up. Leave for at least 60 seconds to for the valves to warm up, and then push the "standby" switch into the "down" position. The amplifier should now be working. All valves should have a visible orange glow from the cathode heaters. With the volume control set to minimum (fully anti-clockwise) there should be no sound coming from the speakers except a barely discernible gentle hum. If there are any unpleasant sounds coming from the speakers, switch off and refer to the 'Trouble Shooting' section or contact Icon Audio.

The GZ34/5AR4 valve rectifier acts as a HT delay on switch on. If you do not intend to use the amplifier for a few hours you can switch into "standby", when it will use minimal power and be ready for use "instantly". In standby you may hear low distorted sound from the speakers if you have a source playing. This is normal, reduce the volume during this time.

7 Your unit should now be functioning. If not check wiring again and/Use selector/tape monitor/volume to choose source program and suitable listening volume. Do not operate at a high volume for the first five minutes to allow the valves to warm up properly.

8, Remote Control. If there is a plastic safety tab, loosen rear screws and pull out, re-tighten screws. If the batteries are OK (2x AAA) the blue LED should light when any of the keys are pressed. A little skill is needed in pointing and pressing, as the unit has a motorised "pot" which may not be as responsive as your TV. Maximum range is about 5 meters. System re-sets to 9 o'clock on switch on. Strong light may interfere with operation. **Remove batteries when amplifier is unused as batteries will eventually leak causing damage.**

Please note all these things are normal for valve amplifiers:

A, Valves can get very hot, BEWARE!

B, The transformer cover will get quite warm

C, The amplifier may smell slightly for a few weeks.

D, Mobile phone 'breakthrough' is normal.

E, Valves may make a 'tinkling' sound when warming up and cooling down.

F, The volume control may sometimes appear to sound 'Scratchy', this is not a fault!

G, Valves occasionally "Pop" or "Crackle". If this is regular problem it could be your CH boiler/cooker/fridge etc. (see trouble shooting).

8 Health and Safety. The valves when operating have high surface temperatures. Keep out of reach of children and pets. The use of the supplied guard is recommended in these circumstances. Always unplug when making adjustments. **Like all amplifiers there are potentially lethal high voltages inside (over 400v DC), which when switched off can take twenty minutes to discharge!** Do not remove bottom panel unless you are a competent engineer. There are no user serviceable parts inside. **Like other household electrical appliances do not leave unattended whilst switched on.** Do not adjust the output valve grid bias pre sets without reference to the manual. Incorrect adjustment could cause the valves to overheat, with resulting in damage to valves and amplifier.

To maintain the best performance of the amplifier you should check the bias of the output valves from time to time (say twice a year). Full details will be found in section 7.

3 Connecting inputs & outputs

Many problems associated with Hi Fi equipment involves connecting leads, which are usually either 'BAD CONNECTION' or a 'WRONG CONNECTION'. So it's worth making sure that you have good connections and that your leads are the right way round.

Inputs

The amplifier will work with any equipment having an audio "Line Output" e.g. CD, Tuner, Tape Deck, Streamer, TV, DVD etc having an output of 250mv or more, to get full power.

If you wish to use a turntable you will need a suitable phono pre-amp. Icon Audio or your dealer can advise you. Our all valve phono stage is an ideal partner.

"H" & "L" sensitivity/Power Amplifier mode.

Located on the rear of the amplifier the High and Low sensitivity switch has two functions. The "High" setting is optimised for use as an integrated amplifier and will give you the most gain.

The "Low" setting may be used if the ST40 is used as a power amplifier together with a pre amplifier, as pre amplifiers generally have a higher output. In this mode it is suggested that the volume control be fully clockwise, and volume be controlled on the pre-amplifier for best results. The tape input will provide the most direct signal path. If you have too much gain Icon Audio can modify to suit your requirements. The "Low" setting may also be used if the slope of the volume control is too steep. Feel free experiment for a setting which suits your needs.

There is also a middle position which has no feedback therefore maximum gain. This primarily for use by engineers for testing the amplifier.

Feedback. The sensitivity switch does not attenuate the signal, but alters the gain by adjusting the feedback within the amplifier. In "H" the feedback is low, in "L" position the moderate.

Connecting a tape deck/Recorder/Equaliser

The STEREO 40 will work with any tape deck having suitable output, and it is possible to record from any connected source using the terminals marked 'Pre-out'. The STEREO 40 has a 'Tape Monitor' facility, which enables you to use a 'three head deck' or an equalizer.

Some tape decks 'Present a load' to the amplifier terminals, even when not in use, which can affect sound quality. (You can do an audible check for this by removing the plugs and listening for a change). Therefore for best results do not leave anything connected to "Rec out" unnecessarily.

Connecting loudspeakers

Use only good quality loudspeaker cable. This should be relatively thick and multi-stranded. e.g. QED 'Classic' 79 strand 2.5mm is more than adequate (for amplifiers up to 2,200w!) Take care to connect the correct polarity. The use of 'Banana plugs' or 'spade' connections will ensure a good connection whilst minimising the risk of 'shorts'.

In our experience valve amplifiers are very tolerant of loudspeaker cables, therefore the benefits of very 'exotic' cables may be wasted! But this is personal taste. Icon Audio or your dealer will advise you.

As all cables have losses, keeping the speaker cables short is best. It may be better and be cheaper to re-arrange your room and use shorter cables than to spend a fortune on longer cables!

You can either 'hard wire' your cable to the amplifier by baring enough cable to fit in the connector and twist together to avoid any spare strands touching anywhere else (soldering the stands together helps). **Be warned this amplifier does not have an output protection device, which would degrade the sound. So a prolonged short due to strands of wire touching could damage the valves.** Alternatively use good quality 'banana' plugs, once fitted they are trouble free.

Speaker polarity. It is essential that you observe the polarity of the terminals; they must be the same for the left/right connections at the amplifier end and at the loudspeaker end. Otherwise the sound will be 'out of phase' with the sound stage 'inside out' with reduced bass. **If you are unable to check this or confirm the polarity** (e.g. if you have 'built in' wiring), try the following; Connect the system up and play some music with plenty of bass (e.g. dance music), preferably in mono (most 1950's recordings are mono) and stand the speakers close together. If correct you should hear plenty of bass, if not **reverse the terminals for one channel only, either at the amp or speaker.** You will now hear more, or less bass. The higher bass output is the correct setting to use. Another alternative is to use a test disc. If you are 'bi-wiring' your speakers only two terminals, you must use only 4 or 8 ohms, not both, as this will not load the amplifier properly.

The STEREO 40 is designed to work with full range, medium to high efficiency having impedance of 4 ohms to 8 ohms. Speakers having efficiency of lower than 86db will have greater difficulty in providing a high sound level. But this will also depend upon individual speakers, room size, type of music and positioning etc.

Speaker impedance. It is important to use the correct speaker impedance terminals, as this will give the best sound quality and power matching. If using 15-ohm speakers use the 8-ohm connections. If you are unsure or "6 ohms" or "4 to 8 ohms" is quoted; a rule of thumb guide is to try both positions. The loudest being the best match. Although your personal taste should be the final deciding factor.

If two pairs of speakers are required to be connected, they must both be 8-ohm and connected 4 ohm terminals. Contact Icon Audio for more information. Damage could occur if care is not taken.

4 How to get the best out of your amplifier

- Do not leave the amplifier switched on all the time. This is not necessary
- Do not switch off and on without a short rest of 60 seconds (to reset the 'soft start')
- Do not adjust the output valve grid bias unless you know how
- Do not switch from Ultralinear to Triode without switching to Standby or switching off
- Do not operate the amplifier without loudspeakers connected
- Do not use valves other than listed as there could be danger of shock or overheating
- Do check the bias regularly at least once a month for best performance.
- Make sure the speakers are in phase.
- Use the best possible source material.
- Use efficient, well-designed speakers.

What is safe maximum volume?

The Stereo 40 MKIII will run happily all day long at a high volume; the valves are not stressed any more than at zero volume. Running into gross distortion will however stress the whole amplifier. To find the maximum safe volume, play full range music and advance the volume until distortion occurs, (this is normally between 12 and 3 o'clock on the volume control) back off the volume control about 30 degrees, this is approximately full music power. However this position will vary according to the level and type of music and the output of the source unit. For example CD players tend to be higher than say tuners or phono stages.

Triode Switch. This switch causes the KT88/EL34s to operate as Triode valves. Please remember to put the amplifier into "**Standby**" first as switching will stress the output transformers. The majority of listeners prefer the "triode" sound believing it to be more pleasant to listen to, but the power will drop to about 50%. As the gain in triode is nearly the same the volume will be the same. But at higher volumes you may hear some distortion as you are running out of power, in which case switch to ULTRALINEAR.

Leaving the amplifier switched on

Do not leave the amplifier switched on 24/7. Your valves will be worn out in approximately nine months! Whilst the amplifier will sound at its best when it is properly warmed up, there is no advantage leaving it switched on when it is not in use. See (**Standby Switch**). **We would always advise that any item of home electronics is switched off when not in use**

Standby Switch. If the amplifier is not needed for a few hours, it can be left in the "standby" state. This enables the valves to be fully warmed and ready to use the instant you put the standby switch down. In the "standby" position the amplifier is only using about 50% of normal power. It also enables a healthy cloud of electrons to build up around the hot cathode. Also it allows the silver "getter" inside the valve to "mop up" any gas that has built up inside and therefore keep the vacuum "hard" for best performance. There is no benefit to leaving the ST40 on standby indefinitely. If not in use switch off!

'Burning in'

Although the amplifier should sound good within about 10 mins it can take up to an hour to sound at its best and will take several months of regular use before it is fully 'run in'.

Upgrading Valves!

Good quality new valves sound better, have good performance and reliability. The upgraded valves supplied with selected models are the result of careful comparison with other makes. But beware of paying excessive amounts for "New Old Stock", second hand or "Fake", valves. At this time we recommend Tung Sol, our Russian and US NOS, Shuguang, Treasure, Full Music, JJ.

Cabinet Care

To remove dust we suggest gentle brushing of the polished stainless steel cabinet with a soft paintbrush. Other marks can usually be removed with a damp cloth. The Perspex valve cover may need a gentle wipe with soapy water and drying with a duster. On no account use anything wet on the amplifier, and always clean with the power disconnected.

5 Trouble Shooting

1. Amplifier Dead

Check the 1.6 amp (3 amp USA) mains fuse at the back of the amplifier. To gain access, remove the mains lead. The fuse is in a small plastic drawer, which forms part of the socket assembly. To open insert a flat bade screwdriver or similar and prise open. **The fuse in use is the innermost** the outer is a spare. Should the replacement fuse also blow there is a fault. Replacements should be 1.6 (or 3 amp USA) amp 'anti-surge'. Available from Icon Audio free.

The fuse in the plug should be a 3 or 5 amp fuse, although unlikely, this should be checked if the amplifier fuse is OK.

2. No sound

ST40 lit up but no sound from either channel could be internal fuses blown (unlikely) or GZ34/5AR4 failed. The bias reading is "zero" Try another GZ34. Have you selected the right input? Are the connections OK? Is everything switched on? Are the speakers connected?

If you think you have tried everything and the meter light is working and the heaters are glowing the internal fuses may have blown. They are located inside the amplifier and should be replaced by a competent engineer. Replacements free on request from Icon Audio.

Distorted sound.

Try another source; if sound improves then it's probably something wrong with the first source. If no improvement try different speakers, if no improvement could be an amplifier problem.

Hum Problems

If you experience hum, try disconnecting all inputs, if hum persists this is probably an amplifier fault.

If not, identify which input is causing hum. Connect one input at a time. A common cause is a 'hum loop' caused by having too many earths, and may be identified by unplugging each input source from the mains. One remedy for this is to use an interconnect which only has the screen connected at one end. Other causes of low-level hum can be from adjacent equipment, so experiment with moving equipment around to see if this makes the hum better or worse.

Interference Problems

The amplifier design incorporates features and devices which make it resistant to mains-borne interference. But some CH boilers/fridges/cookers etc can generate RF (radio frequency) interference which travels through the air (and walls). Although rare this can be very irritating. In this case a simple capacitor is often all that is needed to effect a permanent cure (ask us).

One channel missing.

Usually 'bad' connection on either the input or the speakers. Try swapping the connection over to establish if the cause is:

- (a) Input to the amp. Sound will move to the other channel.
- (b) Amplifier or speakers. Sound will not move.
- (c) If none of these, check internal fuse for that channel (see section 5.2).

Strange noises coming from speakers:

Turn volume to minimum on unused input, if problem corrected either fault with source unit or with connection. If noise persists, problem with amplifier.

If a whole output valve glows red (other than the heater), often accompanied by a hum through the speakers, switch off immediately, and refer to Icon Audio or a service engineer, as this could be valve failure.

A valve that is lit up is not a guarantee that it is working properly; conversely a valve that is not lit up will not be working (usually cold to the touch).

Valve Replacement (see also section 7)

Valve life will depend upon such things as hours of use and number of on/off cycles, Do not switch on and off unnecessarily (see **Standby**). Also it is not good practice to remove the valves unnecessarily as this can strain the pins and cause tiny air leaks.

Service: Should you suspect a problem, you could return the unit to Icon Audio for a periodic service or return the valves for testing free of charge. You should carefully remove the valves (the KT88/EL34s should be held by the base when removing, to prevent damage) numbering them with a marker from left to right as you do so in order that that may be replaced in the same position. They should be well packed in cardboard & foam or similar, and returned to Icon Audio for testing. (Valves are very rugged if packed properly).

Mains Supply

This amplifier is hard wired to work on 230/240v ac. The transformer may easily be re-configured for 110/120v ac. Contact for more information.

6. Bias Checking & Adjustment

If you are unsure about any aspect of bias contact your retailer, Icon Audio or a competent service engineer.

The Stereo 40 MKIII uses the 'Fixed bias' method of valve operation. This has the advantage of higher power, lower feedback and cooler running. However you should regularly check the bias reading using the built in meter to ensure best performance from the amplifier. This is very easy.

1, Tools you will need:

A small flat blade screwdriver.

2, How to read the meter.

If possible warm up the amplifier for 10 minutes. Standby "off", in Ultralinear mode, volume at "zero". Rotate the bias knob through V1-V4. This corresponds with the rear output valves left to right (viewed from the front). Each valve should have the black pointer in or near the black section. (50-75). About 10% percent difference ON EACH PAIR (1,2 and 3,4) will make little difference in performance. Greater than this requires adjustment, especially if the reading is 80 or more it should be reduced as this valve is drawing too much current. Lower than 50 will cause no harm but the performance will be reduced.

NOTE

3. The readings are affected by your local mains voltage. So if they are all slightly high or low this is probably OK, and check again later. If one valve is giving a high or low reading it is easier to adjust that one valve in line with the others.

4. How to adjust the bias:

Make sure you are reading the valve to adjust, e.g. read V1 to adjust V1 screw. If the reading is incorrect, set this by using the screw very slowly up or down until the correct reading is obtained. They are very sensitive so adjust very carefully. If the reading appears a little unstable this is normally due to mains fluctuations.

You may need to repeat this a couple of times as the adjustment of one valve may affect the other readings.

5, If one or more valves are showing erratic readings or you cannot set the correct voltage, then that valve is probably faulty or out of specification. If you are unable to set the reading high enough this means the emission of the valve is too low.

Replacing the KT88/EL34 Valves

Important: Do not attempt to change the KT88/EL34 without reading these notes. Failure to do so could be both dangerous and damaging to the amplifier.

When replacing valves, it is recommended that you use a "matched quad", or two matched pairs for best performance.

Health & safety: High voltages are present inside the amplifier and on exposed valve sockets when valves are removed, so take suitable care. It is not necessary to remove the bottom cover. Beware valves get hot in operation!

5, **Changing valves:** You should if possible check the bias setting before you attempt to change the valve(s), in order to familiarise your self with the procedure.

The safe way to change especially if they are a different type is to change and re-bias one pair at a time.

Remove the first pair of old valves and fit the replacement pair. Switch on and measure and adjust the bias.

Do not allow the reading to go above 95. Don't worry how low the reading goes this will not cause damage. Continue in the same way and fit all four valves. Do final adjustment when the amplifier is fully warmed up.

If all is well there should be no more than a barely detectable hum from the speakers, and the amplifier should sound OK when tested.

6, If you cannot set up the bias then the valve is probably faulty or is unsuitable.

If the valves are brand new, you will need to check again after approximately 10 & 100 hours, after that only occasionally or if you suspect a problem.

NOTE: If you are changing to a different type of valve, be ready to change the bias quickly, as the setting from say KT88 to EL34 may be quite large.

Use the "standby" switch to cut power to the valve.

7, **To avoid damage to the amplifier and electric shock hazard you must use only valves marked KT88/EL34 (or 6550, 6CA7, KT66, KT77, 6L6, 5881), 6SL7/6N9C/6188, 6SN7/6N8/CV181 Or that you know to be direct equivalents.** Use only valves which you know to be new or good condition and test the amplifier thoroughly before resuming normal use. The new high power KT120/KT150 are not recommended as they will exceed the maximum heater power and power transformer burn-out may result.

8, Replacing the small valves:

6SL7 (centre) and 6SN7 valves. Neither of these requires any set up procedure. It's just 'plug and play', although care should be taken when removing and inserting not to break the centre spigot. (These valves are similar with the same pin connection; accidental wrong insertion would not cause damage).

Icon Audio are happy to check the valves/amp or your re-bias your amp free of charge.

9, GZ34/5AR4 Rectifier. Generally these last about the same audio valves, they generally get weaker after several years so we recommend replacement when replacing output valves otherwise the amplifiers performance and power may be reduced. Replacements may be obtained from Icon Audio. The 274B is not strong enough for the ST40, arcing and premature failure is likely.

Explanation:

***RMS watts** Do not literally exist! But this figure is based upon the RMS voltage output (V^2/R).

***Push Pull** is a very elegant way of virtually cancelling out non linear distortion, noise and hum. Whilst dramatically increasing the power and damping factor. In Class AB about 1/4 of the output is pure class A. Unlike transistor designs there is NO crossover distortion before the amplifier reaches full output.

***Ultralinear** (or Distributed Load). This is a true "win-win" output stage design. Having virtually the all the characteristics and low distortion of pure Triode valves, whilst keeping 90% of the power of pure Pentodes types. But still inferior to pure triode.

***The Leak Stereo 20** (& 50/60) series used a single ECC83 triode first stage coupled to an ECC83 double triode "long tailed pair" phase splitter. Originally developed by A D Blumlein in the 1930's. This design was also widely used by GEC, Mullard, Sugden etc. However the "TL+" series used an EF86 Pentode, now widely regarded as having an inferior sound).

***Power output** level will vary from 25 watts (6L6) up to 45 watts (KT88) depending upon the output valve type.

7 Specification & Features

(Typical conditions @ 230v 50Hz)

- KT88/EL34 output valves or eqv (6550)
 - 6SL7/6H9C double triodes for first stage
 - 6SN7 double triodes phase-splitter
 - GZ34/5AR4 full wave rectifier
 - Low or medium feedback used (L and H)
 - Icon designed and manufactured Tertiary wound output transformers
 - Hand wired point to point components
 - No printed circuit board
 - Ceramic valve bases for low noise/leakage
 - 40w RMS per channel Ultralinear
 - 20w RMS per channel Triode mode
 - Signal to noise level -90db
 - Freq response 20-20kHz +0-.5db 28w UL
 - Freq response 15-25kHz +0-1db 28w UL
 - 0.15% THD at 8 watts
 - Channel balance typically less than 0.2dB
 - 4 and 8 ohms output taps
 - Choke regulated power supply
 - Supplied with attractive valve cover
 - Audiophile quality metal film resistors
 - Audiophile quality polypropylene audio caps
 - Japanese ALPS volume pot.
 - Rubicon/Nichichron power caps.
 - Internal wiring using PTFE silver plated cable
 - Valves carefully matched for best performance
 - Gold plated Input & speaker terminals
 - Inputs for CD, Tape, Tuner, Aux
 - Record loop with monitor switch
 - 250mv sensitivity for full output "H"
 - 800mv sensitivity for full output "L"
 - 220-240volts, 76w SB, 140w Min, 240watts max
 - 1.6 amp (3amp USA) AS rear fuse (with spare)
 - 390W, 210H, 410D Amp overall 25kg
 - Carton= 34x51x49cm 28kg packed
 - IEC mains lead, (5amp fused)
 - Conforms to CE ROHS and WEEE where applicable
- Specification subject to change without notice.

Our Guarantee to you

Icon Audio guarantee this amplifier for 12 months from date of purchase. This covers parts and labour. Valves are guaranteed on a 12 months reducing balance basis as they are consumables.

We expect our amplifiers to give a service life of approximately 20 years, with regular maintenance. During this time we will make every effort to supply spare parts and repair them at an economical cost. Supply is subject to availability from third party suppliers which Icon Audio is not responsible for. This does not cover unique parts including remote control systems, meters and cosmetic parts.

If you believe the unit is not functioning correctly, it may be helpful to contact us first as we may be able to assist you. Then we would request that you return the item to us for further action.

You are advised to inform us of any change of address in order that we may keep you up to date of any upgrades or improvements. Check our website.

Exclusions

Claims for any damage to either amplifiers or valves must be reported within three days of receipt.

This amplifier is designed for normal domestic hi fi use. It is not guaranteed for commercial, Public

Address use, or use in other situations. The guarantee becomes void if the unit has been modified in any way not approved by Icon Audio.

8 Packing Instructions

It is essential that the original box and packing be kept in good condition, as this provides vital protection during transit. Please do not write on box, but use removable labels. If returning for service do not send the valve cover, as this is easily damaged. The valve cover is normally supplied in a separate box with the valves. **We recommend that the cover be sent separately as rough handling can damage both cover and amplifier.**

- Re-use the supplied plastic bag to keep the amp clean and free from damp.
- The mains lead and remote control fits in a foam cut-out underneath the amplifier.
- Valves should be removed, numbered and packed in "bubblewrap" or similar for protection.
- If the amplifier is stored in the box, keep upright and remove batteries from remote control to prevent corrosion.

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