icon Audio

Instruction Manual Covering:

Stereo 25 MK II Ultralinear Push Pull Amplifier EL34 or KT88

IMPORTANT!

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



designed by David Shaw

Standard version with KT88s

Contents

- 1 Introduction & Final Inspection
- 2 Quick Set Up Guide
- 3 Connecting inputs & outputs
- 4 Getting the best performance
- 5 Trouble Shooting

- 6 Bias Adjustment, Triode mode
- 7 Valve Replacement
- 8 Specifications
- 9 Guarantee
- 10 Packing Instructions

1 Introduction

Thank you for purchasing the **Stereo 25**. 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.

Hi fi reproduction is a long chain of events that includes the recording, editing, mixing etc, before being transferred to a medium such as LP, CD, or FM, before being played through your own source unit, the amplifier and finally loudspeakers.

Your room acoustics will also affect the sound before it finally reaches your ear. Whilst the amplifier is arguably the most important part of a system, it is important to remember that the weakest link will always affect the final results when making judgements. And not all recordings are have a good "balanced" sound, 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 25** is a push-pull Ultralinear stereo power amp, capable of running in Ultralinear mode (half pentode and half triode). Using the excellent 6L6/EL34/6CA7/KT66/KT88 valves. These are in semi auto-bias mode which whilst rarely requiring attention gives maximum power, cool running and wear indication. The driver and phase splitting is all triode for best sound quality and low noise. The pre-amp is a high quality 'Passive' circuit using silver PTFE audio cable and an ALPS 'blue' volume control. It is sensitive enough to be used with all modern source equipment having an output of 300mv or greater. It may also be used as a power amplifier being driven by a separate pre amplifier. 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. The overall design is inspired by the Leak Stereo 50 design. The wide range of output valves that ST25 is capable of using make it extremely versatile and you can customise it to your own taste. Recommended upgrades are Mundorf capacitors and various output and driver valves.

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 | | | |
| Bluetooth receiver fitted | | LED brightness | |
| Check amplifier finish | | Serial No sticker and recorded | |
| Internal wiring check | | Mains voltage | 117 / 235V |
| *Triode modified? | Yes / No | IEC Mains Fuse EU (US) | 1.6A (3A) |
| Power output 1 kHz 8Ω | R | UK Plug fuse | 3A |
| Run min 8 hour test | | Bottom label | |
| Check all inputs | | Optional Bias meter | |
| Output Valve Bias level | V | Transformer Protection | |
| Sound Quality | | Output valves | |
| Channel Balance | | 1 st Stage valve | |
| Valve Microphony | | Phase splitter valves | |
| Valve Seating | | Capacitors (Audio) | |
| Hum level left/right | /mv | Mains lead checked | |
| RF Test | | Mains lead checked | |
| | | | |
| Signed off by | | | |
| Checked by | | | |
| Notes: | | | |
| | | | |

^{*}If Triode modified the output will be lower. This may be easily reversed by an audio engineer.

IMPORTANT READ THESE NOTES THROUGH FIRST!

2 QUICK SET UP GUIDE

- **1 Unpack unit carefully**. Make sure that it is in good condition. If not report to your reseller. 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 bigger output valves (EL34/KT88) should be fitted first observing the numbers 1,2,3,4 on the rear of the valve; this corresponds with the four REAR sockets from left to right viewed from the front. This was the position the valves were tested in. Do not push or pull these valves unduly by the glass envelope, this could cause the glass envelope to become detached from the base. Be careful to note the correct orientation of the central "keyway" between the pins otherwise damage could occur. (Damaged valves are not covered under warranty)

The smaller valves are normally numbered 5,6,7 again left to right (see page 1 photo) and should be gently pushed into place. The middle valve is 6SL7 and the outside pair are 6SN7/CV181 Some Russian tubes may have different numbers, if so go by the number written on the valve.

- **3 Connect to source units**, e.g. CD, Tuner, Phono pre amp, MP3, AV etc via appropriate phono sockets. No "recording" or line output facilities are provided. For this you could use our "Passive" or "Passive R" remote control pre amp. **Or refer to Bluetooth section.**
- **4 Connect to speakers** Make sure 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 the red terminals. Most speakers have a "spread" of impedance between about 3 and 14 ohms. As there is some "overlap" between the 4 and 8 ohm outputs, you may wish to try both to experiment which tonal balance you prefer.
- 5 Connect to mains supply using supplied IEC mains lead to 230/240V supply (or 117V if modified see label). If for some reason the welded plug must be removed, please remove fuse and dispose of immediately. (As they can be dangerous to children). The replacement plug should be wired Brown to Live terminal, Blue to Neutral terminal and Green/Yellow to Earth terminal.
- **6 SWITCH ON!** The LED mains indicator should light up. After about 40 seconds the amplifier should start 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 hum. If there are any unpleasant sounds coming from the speakers, switch off and refer to the 'Trouble Shooting' section or contact your reseller or Icon Audio.

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 few minutes to allow the valves to warm up properly.

Please note all these things are normal for valve amplifiers:

- A, Valves can get very hot, BEWARE!
- B, The transformer cover will get guite warm
- C, The amplifier may have a "new" smell for a few weeks.
- D. Mobile phone 'breakthrough' is normal.
- E, Valves may make a 'tinkling' sound when warming up and cooling down.
- F, One channel may come on before the other at switch on.
- G, There may be a 'click' when switching off.
- 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 hazardous voltages inside, which when switched off can take about 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 bias pre set without reference to the manual. Incorrect adjustment could cause the valves to overheat, 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 once a year). Full details will be found in section 6.

Use of Sub-woofers.

The output transformers in Icon Audio amplifiers are capable of flat frequency response to below 20 Hz which is well below the deepest musical bass note. Therefore, any overall lack of bass is likely result from your loudspeakers being too small and not reproducing bass notes effectively.

Whilst we do not recommend sub-woofers there are obviously some situations where they might help.

Should you wish to connect an active sub-woofer this may done using the loudspeaker terminals. Usually 3 wires are supplied which should be connected to the Left and Right 4 or 8 Ohm terminals (your preference) and a "ground lead" (both "0" terminals are the same). And follow the set up instructions from the manufacturer. There is no RCA sub-woofer output.

Adding a subwoofer may stop the headphone socket from working properly.

In this manual we have attempted to give you all the information to enable you to get the best out of this amplifier, without being overly long or too technical. However, we are always keen for feedback on errors or omissions on the information within!

3 Connecting inputs & outputs

RB ES-T60

Bluetooth Operation

(Where fitted)

- 1. Attach antenna to rear of amplifier unit.
- 2. To start Bluetooth pairing operation switch the rear selector to "Bluetooth".
- 3. Now open the Bluetooth menu of your phone (or other device) and search for "iconaudio" in the list, then "pair" with the ST25.
- 4. Select and play music as required.
- 5. Note the maximum range may be limited by walls, furniture and other interference sources.

6. In most cases once "Paired" re-connection will be automatic. Bluetooth is activated at switch-on. To re-set the Bluetooth circuit switch off for a few seconds.

To give you the best sound quality from your phone or other Bluetooth devices we have used a sophisticated receiver which complements the design of the HP205D

Features:

- Uses the CSR8675 chip, one of the best available.
- Bluetooth digital audio signal reception by I2S digital signal transmission with ES9018 chip decoding.
- The analogue audio output is buffered by a Burr Brown OPA2604AP dual op amp MOS FET chip.
- Uses LDAC protocol and supports a sampling rate of 24bit/96kHz, which exceeds the APTX-HD's 24-bit/48kHz sampling rate.
- Uses an advanced DC power supply with multi-stage voltage regulator for low noise and high quality operation. The Bluetooth module, DAC chip, op amp chip are powered independently. The op amp uses dual (positive and negative) 13V power supply.

Other Inputs

The amplifier will work with any standard piece of hi fi/audio e.g. CD, Phono pre-amp, Tuner, Tape Deck, Mini Disc, TV, Video Recorder, DVD etc having an output of about 300mv or more to achieve full output.

All the inputs are technically the same.

If you wish to use a turntable you will need a suitable phono pre-amp. Your dealer or Icon Audio can advise you. Our PS1 MM/MC all valve phono stage is an ideal partner.

Many problems associated with audio 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.

Using the ST25 as a power amplifier.

As the ST25 is essentially a power amplifier with a volume control, the volume control will be virtually invisible to the pre-amplifier if turned to the full clockwise position. If you have too much gain, "back off" the volume no more than necessary. If you still have too much gain Icon Audio can modify the sensitivity to your specification.

If the amplifier is permanently required to work as a power amplifier, we can modify to your specification. This is then easily reversible.

Connecting a tape deck. (Or CDRW/MP3 etc) The STEREO 25 will work with any tape deck having suitable output, it is not possible to record.

Connecting loudspeakers

It is important to use good quality loudspeaker cable. This should be relatively thick and mutistranded. i.e. QED 'Classic' 79 strand or similar. Take care to connect the polarity correctly. The use of 'Banana plugs' or 'spade' connections will ensure a good connection whilst minimising the risk of 'shorts'.

In our experience Icon valve amplifiers are very tolerant of cables, therefore the benefits of some 'exotic' cables may be negligible. But this is also personal taste.

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 (FM tuners are usually switchable to 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 use only 4 or 8 ohms connections, not both.

Headphone Operation

The ST25 II incorporates a high quality headphone circuit that uses dedicated low output windings within the output transformers to give the same pure valve sonic signature that we are famous for. Matching will suit 16 to 300 ohm headphones, but virtually any impedance may be used. Better results will be obtained with low efficiency types.

4 Getting the best performance from 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.
- Do not adjust the output valve grid bias without reading the manual.
- Do not operate the amplifier without loudspeakers connected.
- Do not use valves other than listed as there could be danger of shock or damage.
- Make sure your speakers are in phase.
- Use the best possible source material.
- Use efficient, well-designed speakers.
 Generally, the bigger the better!

What is safe maximum volume?

The Stereo 25 will run happily all day long at a high undistorted volume; the valves are not stressed any more at full power than at zero volume. But running into distortion will 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 until the distortion stops. However, this position will vary according to the type of music and the output of the source unit. Be careful of high level transients

which could damage the amplifier, speakers and blow fuses.

Leaving the amp switched on

DO NOT leave the amp running 24/7 without switching off. 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. It is using electricity and as valves have a finite life.

'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'.

Changing and Upgrading Valves!

New good quality valves will sound better. The upgrade valves supplied with selected models are the result of careful comparison with other makes. But beware of paying a premium for "New Old Stock" valves where you may be paying for rarity value and not performance. Used valves are not recommended. YOU MUST USE A MATCHED SET!

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. On no account use anything wet on the amplifier, and always clean with the power disconnected.

5 Trouble Shooting

Amplifier Dead

Check the IEC socket 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, you should disconnect from the mains and seek qualified help or Icon Audio. Replacements should be 'anti-surge' or "T" (for time), these are available FREE OF CHARGE on request.

The fuse in the wall plug (where applicable) should be a 3 or 5 amp fuse, although unlikely to fail, this should be checked if the amplifier fuse is OK.

Valves glowing but no sound (on either or both channels)

Have you selected the right input? Is the volume control advanced? Are all the connections OK? Is everything switched on? Are the speakers connected?

One channel missing.

Usually 'bad' connection on either the input or the speakers. Try swapping the connection over to establish the cause. E.G. if the Left channel works, try the Left RCA plug into the Right. If no sound its either the amplifier or the speaker. Speakers rarely fail, so if the speaker connections are good suspect the amplifier.

Internal Fuse Blown. There is a fuse inside for each channel. These usually fail due to a valve fault, spare fuses are inside. Fuses should be checked by a competent electrician with the bottom off. REMOVE POWER FIRST. There are two "T250ma" spare fuses inside. Repeated blowing of the fuse would indicate a fault. Refer to your dealer or Icon Audio.

Distorted sound.

Try another source, if sound improves then it's probably something wrong with the first source. If no improvement try headphones, if no improvement it is likely to be an amplifier problem.

Distorted sound at higher volumes may be because one of the output valves is not working. This could be due to a faulty valve. A symptom of this would be no 8v bias voltage at the test point. Refer to an engineer or lcon.

Strange noises coming from speakers

Turn volume to minimum on unused input, if the noise disappears, the fault is with the source or the connection. If noise persists, the problem is 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.

For further help please contact your dealer or Icon Audio.

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 to 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.

Valve Replacement (see also section 7)

Recommended valves are EL34/6CA7/KT77 or KT88/6550, 6L6, 5881 and KT66 are also compatible. You will need a QUAD MATCHED SET for best results, otherwise the bias voltage may vary too much.

If replacing with the same type and brand no adjustment is normally necessary, although checking is advisable to confirm the amplifier is working correctly (8v dc on each valve, see below).

If changing to a different type you must check the bias voltage with a suitable meter as damage and poor performance may result.

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 output valves 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 either hard wired to work on 230/240v or 115vac 50/60Hz depending upon country. The transformer may be re-configured for either voltage by a qualified engineer. Contact for more information.

6 Bias Adjustment and setting

Read these notes all the way through first. If you are unsure about any aspect contact your retailer, Icon Audio or a competent service engineer.

The Stereo 25 uses the Icon "semi fixed bias' mode of valve operation. There is only one adjustment, this affects all valves. *This will only rarely need adjusting if at all* as the amplifier can compensate for some valve deterioration. This has the advantage of higher power, and cooler running. However occasionally (say once a year, or if you suspect a problem) it is advisable to check the bias reading using the optional meter to ensure best performance from the amplifier. This is a safe procedure which involves measuring **8v DC** in the four sockets next to each output valve and adjusting if necessary.

- 1, <u>Tools you will need:</u> The optional meter or one set to measure approx approx 20v (DC), and a small flat blade screwdriver. Adjustment is done at zero volume with speakers connected. Check and adjust (if necessary) as soon as the amplifier starts working and again 30 mins later. Icon Audio can supply a suitable meter for £15 + P&P (at 01/2021), or you have one already.
- 2, <u>Connect:</u> the black probe to the chassis 'earth' by unscrewing the '0' speaker terminal and tightening the

probe in the exposed hole. And the other in the test socket adjacent to the valve on test. Set the 'lcon' meter to 20v or the 'black mark'. See pics.



Making the 'earth' connection.

3, <u>Checking Bias:</u> You should get a reading of ideally 8v if each valve is conducting correctly. But this will vary from about 6v to 9v. About -20% should be the maximum variation. Bear in mind that your mains voltage fluctuations can affect your readings up to about 10%. There is no provision to adjust individual valves, which is not necessary on the ST25.



Showing a probe reading 1st output valve

4, Adjusting: If all the valves are high or low, set the 8v by using the single adjusting screw. If one valve is significantly higher or lower, then it may be faulty or life expired. The adjustment is very sensitive so adjust very carefully. If the reading appears a little unstable this is normally due to mains fluctuations. The Stereo 25 uses semi-fixed bias, where the output valve is allowed to find its own individual fine bias level. Only occasional checking should be necessary. Bear in mind that valves with an output of up to 25% below the others are unlikely to have much of an audible effect of the sound at normal listening levels. If changing to a different type of valve turn the voltage down on the old valves first to a low level to avoid overloading the power supply with the new valves. Allow new valves to warm up for 5 minutes then set to correct level.

*Triode Operation

If this model was ordered with 100% "Pure Triode" modification (see page 2) the output will be reduced to about 19 Watts per Channel making it better suited to higher efficiency vintage designs. All other specifications and instructions remain the same.

The ST25 is normally configured for "Ultralinear" operation (50% Triode 50% Pentode) giving about 30W output. This is a good compromise for power, distortion and sound quality.

This modification is easily made or reversed by an engineer. More information available on request.

7 Valve Replacement/Problems

Valves are semi-consumables rather like the tyres on a car or the stylus on a turntable. Most problems with the amplifier will be valve related. If the amplifier sounds OK and the bias voltages on the output valves are OK then the amplifier is probably best left alone.

Likely reasons for valve failures include: (i) heater stops working = cold valve. (ii) internal short = valve glowing or arcing with noise from speakers. (iii) air leak = valve glows blue inside and noise from speakers. And the "silver" coating may turn white (iv) intermittent with any of above. (v) loss of emission over time with consequent power loss (usually over a long period of time). But this is not a comprehensive list.

Common problem with the small valves is when they become excessively microphonic or "noisy". This can usually be identified by tapping with a pen. Sometimes they can go "noisy" rustling/spitting/hissing. The small valves are double triodes, so you should see a "double glow" inside. We are able to provide telephone assistance with valve problems. And can test and supply single valves to match up with a relatively new matched set

ALL SUPPLIED VALVES ARE TESTED IN THE SAME/SIMILAR UNIT BEFORE DESPATCH TO ASSURE YOU OF THE BEST QUALITY/RELIABILITY!

<u>Important!</u> Do not attempt to change the output valves without reading these notes. Failure to do so could be both dangerous and damaging to the amplifier. Keep these notes handy.

Take care that you orient the valve correctly before inserting. Line up the centre "Spigot" first.

Should you accidentally break a spigot on a valve, return to Icon with the broken piece(s). We can normally repair this for £5 plus £2 P&P (UK),

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!

<u>Changing valves</u>: If possible check the bias setting before you attempt to change the valve(s), in order to familiarise yourself with the procedure.

Use good quality matched output valves. This will stop wide variations in bias voltage. Matched sets and odd replacement valves may be obtained from Icon Audio.

If changing all the output valves be ready to adjust the bias in order not to overload the power supply. Do not allow the reading to go above 12v. Don't worry how low the reading goes this will not cause damage. 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. If the valves are not matched the highest reading valve should be limited to 10/11v

6, If you cannot set up 8v, then the valve is probably faulty or is unsuitable. (if the readings are zero on one

channel, the HT fuse for that channel may have blown, two spares are inside the chassis).

7, To avoid damage to the amplifier and electric shock hazard you must use only valves marked 6L6/EL34/6CA7/KT66/KT88. Use only valves which you know to be new or good condition and test the amplifier thoroughly before resuming normal use. Kt120/150 ARE NOT SUITABLE as the higher heater current will overload the power transformer, and risk of failure, (not covered by the warranty).

8, Replacing the small valves:

6SN7 (outside pair) **6SL7** (centre) Neither of these requires any set up procedure. It's just 'plug and play' although care should be taken when removing and inserting not damage the centre "spigot" and "keyway. These two types of valve are similar may be changed temporarily for test purposes.

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

8 Specification & Features

(Typical conditions EL34 valves@ 240v 50Hz. 8 Ω)

- 6L6/EL34/6CA7/KT66/KT88 output valves
- 6SL7 double triode for first stage
- 6SN7 double triode phase-splitter
- Hand wired point to point components
- No printed circuit board
- Ceramic valve bases for low noise/leakage
- 30w RMS per channel Ultralinear (EL34)
- 15w RMS per channel Triode (hardwired option)
- Dedicated headphone transformer winding
- Signal to noise level -90db
- Freq response 20-20khz +0 0.5db 1W
- Bandwidth 10Hz (0db) -55kHz (-3db) (12.5W)
- Bandwidth 18Hz 62kHz -3db (25w)
- 0.2% THD
- Custom hand wound transformers using Japanese long grain steel
- Supplied with attractive safety guard
- Minimal feedback used
- Audiophile quality oversized resistors
- Audiophile quality polypropylene audio caps
- Japanese 'Blue' ALPS volume pot.
- Valves carefully matched for best performance
- Gold plated Input & speaker terminals
- 3 line Inputs for CD, Tuner, Phono etc
- Gain= 70 (80hms)
- 250 mv sensitivity for full output
- 230/240volts, 180watts (max signal)
- Internal fuse 2x T250ma ceramic
- Fuse T1.6TA (230v) (T3A 117v) anti surge
 IEC rear socket fuse (with spare in fuse holder)
- UK mains plug fuse 3A
- 320W, 310D, 230H, 23kg
- IEC mains lead, (5amp fused, UK mains lead only)
- CE, ROHS & WEEE compliant Specification subject to change without notice.

9 Guarantee & Shipping

Thank you for purchasing one of our amplifiers. We hope you will be pleased with it.

This amplifier is guaranteed by your UK reseller for 12 months from the date of purchase for parts and labour, excluding shipping. Valves are consumables and therefore on a 12 months prorata wear basis.

Other countries may vary, ask your re-seller. Please keep your receipt as proof of purchase.

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.

Fyclusions

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

10 Packing Instructions

It is essential that the original custom box and packing be kept for shipping as this provides vital protection during transit. Do not write on box, but use labels. Should the original box and packaging be lost pack very carefully in alternative packaging.

- When returning units for service, <u>do not</u> send the valve cover, remote control or mains lead unless requested.
- Valves MUST be removed, numbered and packed in "Bubblewrap" or similar for protection inside the valve cover, or space where the valve cover would normally fit.
- If shipping with valve cover ensure that the cover cannot come into contact with the transformers by using cardboard and using packing tape over the plastic bag.
- Re-use the supplied plastic bag to keep the amp clean and free from damp.
- The mains lead normally fits in a foam cutout underneath the amplifier.
- If the amplifier is stored in the box, keep upright.

icon Audio UK LTD

351 Aylestone Road Leicester LE2 8TA UK www.iconaudio.com Phone +44 (0) 116 244 0593 Cell +44 (0) 778 715 8791

2023-11-14 G version