icon Audio

Instruction Manual Covering:

Stereo 40 MK IV 6L6

With 6L6 & CV181

With 6P3 & 6SN7

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

Contents

1 Introduction

Thank you for purchasing the *Stereo 40 MK* IV. 6L6. This version of the amplifier is specifically designed to use the 6L6 family of output valves which includes 6L6, KT66, 5881, 6P3, EL34 and equivalents. The circuit is virtually the same as the more powerful Stereo 40 KT88 but with lower power and less features.

The Stereo 40 was first introduced in 2000 since then it has undergone many refinements and upgrades which make it one of the finest amplifiers in its class capable of very high definition when used with high quality input material and loudspeakers.

In order to get the best out of your amplifier, please read the enclosed notes thoroughly. 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 Icon Audio or your agent for advice.
Valve (or Tube) amplifiers do the same job as a solid state amplifier, but are very simple and have a warmer, more pleasing sound. Your ears will have become accustomed to your old amplifier, so it may take some hours before your ears attune themselves to the new sound. Also allow for a "Burn in" period which may take up to several months.

Setting up:
You will need at least one source such as CD, Digital Streamer, Phono preamp etc, a pair of suitable loudspeakers, interconnects, and loudspeaker cables. (See section 2)

Site the amplifier where it will have adequate ventilation away from heat sensitive materials.
Larger more efficient loudspeakers will give a higher volume and deeper bass (90dB or more). Some experimentation may be needed to get the best effect. Make sure that the loudspeakers are "in phase" by checking the polarity at both ends of the loudspeaker cable.

Your source, loudspeakers and room acoustics will also affect the sound.
Setting up and judgements should be made with a 'clean' well balanced recording.

The Stereo 40 MK IV is a push-pull Ultralinear stereo amplifier, using fixed bias. The driver and phase splitting is all triode. The pre-amp is a high quality 'Passive' circuit using high quality audio cable and an ALPS volume control. It is sensitive enough to be used with all modern source equipment. Its simplicity coupled with point to point hand wiring all add up to give exceptional listening performance.

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	ST40 MK IV 6L6
Amp Serial Number	…….
Customer	……

Check amplifier finish	…….	Mains voltage	117V / 230-240V
Check valve cover	…….	IEC Mains Fuse	1.6A…….
Internal wiring check	…….	Internal HT Fuse	2x T250mA ceramic
Triode mode conversion	…….	Internal Screen Grid Fuse	4x T100mA
Run min 8 hour test	…….	UK Plug fuse	3A.….A
Check all inputs	…….	Mains lead in box	…….
Power UL 1 kHz 8Ω	...……L……R	Remote Control Function (only if purchased as an option)	…….
Sound Quality	…….	Remote handset in box	…….
Channel Balance	…….	Bottom label	…….
Valve Microphony	…….	Transformer Protection	…….
Screwdriver included	…….	Output valve type	……..…….
Hum level left/right	...../…..mv	Driver valve type	…….
RF Test	…….	Capacitor Upgrade	…….
Meter brightness	…….	Mains lead	…….
Serial No sticker and recorded	…….		

Signed off by …….

Checked by …….

Notes:

IMPORTANT READ THIS FIRST

2 QUICK SET UP GUIDE

Box contents:
Amplifier, Cover, 4x 6L6/KT66, 4x 6SN7, remote control (option), mains lead, manual, screwdriver.

1 Unpack unit carefully and check that it is in good condition. Report any transit damage to your re-seller immediately. 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 6L6/KT66/6P3s should be fitted first observing the numbers 1,2,3,4 on the rear of the valve, corresponding with the four sockets viewed left to right from the front. Take care to line up the centre spigot when inserting all valves. **Try not to pull the output valves by the glass envelope**, this could cause the glass envelope to be detached from the base, damaging the valve.

The four smaller 6SN7/CV181/6N8 valves are fitted at the front. Again observe the position of THE "spigot". These are numbered 5/6/7/8. Fitting the valves as numbered. This valve does not require any adjustment.

Please note the 6SN7/CV181 are not interchangeable with the 6L6/KT66 this could be dangerous and will damage the amplifier.

3 Connect to source units, e.g. CD, Tuner, DAC Streamer, Tape, Phono pre amp (if used) etc via appropriate RCA/phono sockets. To prevent hum screened interconnects should be used.

4 Connect loudspeakers to the BLACK (0) terminal and either 4 or 8 Ohm RED terminals. (See your speaker info). Make sure the polarity is correct. (See speaker connections chapter). If 'bi-wiring' both black and both red leads should be connected together. A second banana plug can go vertically through the terminal hole.

5 Connect to mains supply using supplied IEC mains lead to 230/240v supply (or 117v North America). **If for some reason the welded (fixed) plug must be removed, remove the 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. 230V to 117 conversion is possible refer to an engineer.

6 SWITCH ON! The meter should light up, the valves will heat up. The amplifier will start working within about 45 seconds. 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 virtually 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 dealer or Icon Audio. When using for the first time check the bias reading The pointer should be in the black section (see section 6.2). Select source required and adjust volume control.

7 Your unit should now be functioning. If not check wiring again making sure the correct input is selected and volume control is not at "zero". Do not operate at a high volume for the first five minutes to allow the valves to warm up properly.

8, Remote Control. (Optional version) 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. Batteries should be replaced every two years to prevent leakage. Remove batteries when amplifier is not in regular use to prevent leakage.

Please note all these things are normal for valve amplifiers:

A, Valves can get very hot, BEWARE!
B, The middle transformer will get "hand hot".
C, The amplifier may smell slightly for a few weeks.
D, Occasional Mobile phone 'breakthrough' is normal (move your phone away!).
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 heating 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. Avoid situations where flammable material such as paper or curtains may come into contact with the valves. Always unplug when making adjustments. **Like all amplifiers there are potentially lethal high voltages inside, which when switched off can take a few 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.

Do not change the output valves without reading section 6.

To maintain the best performance of the amplifier you should check the bias of the output valves regularly (say monthly using built in meter). Full details will be found in section 7.

3 Connecting inputs & outputs

Inputs
The amplifier will work with any equipment having an audio “Line Output” e.g. CD, Tuner, Phono pre-amp, Streamer, Tape Deck, TV, DVD etc.
If you wish to use a turntable you will need a suitable phono pre-amp. Icon Audio or your dealer can advise you. One of our pure valve phono stages is an ideal partner.

Connecting a tape deck/Recorder
A fixed output is available for recording purposes which is unaffected by the volume control.
Playback may be made using one of the three inputs.

Connecting loudspeakers
Use good quality loudspeaker cable, less than 10M is recommended. 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.
Warning! 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.

Bi-Wiring
Not recommended but a matter of personal preference. Connect your loudspeakers up as normal. Take care to use correct polarity for both bass and high frequency connections. The ST40 loudspeaker terminals will accommodate two banana plugs, the second one vertically through the terminal shaft.

Speaker polarity. (phasing)
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. This is a common mistake which will seriously degrade the sound! Most vocal tracks should be in the centre image, if in doubt reverse the connections of ONE loudspeaker the best “centre image” is the correct connection..

The STEREO 40 is designed to work with full range, medium to high efficiency (ideally higher than 90dB) having impedance of 4 ohms to 8 ohms. Speakers having efficiency of lower than 88db 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.

4 or 8 Ohms? Speaker impedance.
This is not always clear as loudspeaker impedance can vary depending upon frequency. If it is not clear either 4 or 8 may be safely used generally best bass performance is likely to be correct.
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. 8 Ohms will sound a little louder, the 4 Ohms position having a little more “weight” in the bass end. Although your personal taste should be the final deciding factor.

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

Subwoofers
The ST40 6L6 output transformers have been designed to deliver the deepest bass at full power down to 20Hz which is well below a Church organ’s lowest note, so any lack of bass is due to either the loudspeakers or the recording. (check phasing see above). Floor standing speakers are recommended.
However a powered subwoofer may be connected to the 8 Ohm speaker terminals, use the L+, R+ and common connections (both Black terminals are connected together). This method takes no power from the ST40.

4 How to get the best out of your amplifier

- Do not leave the amplifier switched on when not in use. Valve life will be reduced.
- Do not switch off and on without a short rest of 30 seconds.
- Do not adjust the output valve grid bias without reading section 6.
- Do not operate the amplifier without loudspeakers connected.
- Do not use valves other than listed as there could be danger of shock or damage.
- Do check the bias regularly at least once a month for best performance.
- Do make sure the speakers are in phase.
- Do use the best possible source material.
- Do use efficient, well-designed speakers.

Siting
The amplifier should be placed on top of a unit or an open shelf where air freely circulates.

What is safe maximum volume?
The Stereo 40 MK IV will run happily all day long at a high volume; the valves are hardly stressed any more than at zero volume. Running into distortion will however stress the whole amplifier. The maximum safe volume is just before distortion occurs. However this will vary according to the level and type of music played.

Triode Mode.
Normally the ST40 6L6 is in "Ultralinear" mode which means the valves are used in 50% Pentode, 50% Triode. This give 90% of the power of pure Pentode with 90% of the characteristics of pure Triode.
If requested the amplifier may be converted to pure Triode with about 40% reduction in power.

Headphone Use.
A headphone amplifier may be connected to the REC OUT terminals which will reproduce whatever the selector switch is set to.

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.

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. The valve types used give a fast warm up and are fully working in 60 seconds.
We would always advise that any item of home electronics is switched off when not in use

'Burning in'
Although the amplifier should sound good within a few minutes it can take up to 30 mins to sound at its best and will take several months of regular use before it is fully 'run in'.

Upgrading and replacement 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 valves. At this time we recommend Genelex, E.H. Tung Sol, Psvane, JJ, which we are happy to test and supply.

Cabinet Care
To remove dust we suggest gentle brushing of the cabinet paintwork 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

Problems with the amplifier should be referred to Icon Audio or a qualified engineer who can test the amplifier carry out necessary valve replacement, repairs and safety test. But if this is difficult due to your location some basic information is given below. Always disconnect power taking precautions when checking.
Many problems with Hi Fi equipment are due to poor connections, so check these first.
There are too many possible combinations of circumstances to list all possible fault combinations here. Common problems are listed below.

Blown Fuse.
Fuses blow for a reason, often due to an output valve fault or another fault condition. So replacement of the fuse without fixing the fault will probably result in the fuse blowing again and could be dangerous. Replacement fuses are included with the amplifier. For continued safety they should be replaced with the same type available from Icon Audio.

1. Amplifier Dead (No lights or valve heaters)
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 blade screwdriver or similar and prise open. **The fuse in use is the innermost** the outer is a spare. **See diagram P7**.
The amplifier should be checked for faults before this is replaced. Replacements should be 1.6 (or 3 amp USA) amp 'anti-surge'. Available from Icon Audio free of charge in the UK.
The cable plug fuse (if fitted) should be a 3 or 5 amp fuse, although unlikely, this should be checked if the amplifier fuse is OK, or another mains cable tried.

2. No sound on one channel.
The ST40 is lit up but no sound from one channel. And the bias reading is "zero" for both valves on that channel.
Possible cause is a faulty output valve blowing the internal HT fuse supplying that channel.
Possible action: Replace faulty valve or pair if they are likely to be worn. Then replace 250mA HT fuse for that channel from the spares included. Highlighted Red in diagram (P7).
Disconnect the power cable, invert the amplifier, remove bottom plate and replace the fuse on the problem channel two spare 250mA fuses are attached to the bottom plate.

No bias reading on one valve.
Possible cause is faulty output valve blowing the SCREEN GRID fuse for that valve. This is normally a valve fault so replace that valve and the fuse. Highlighted Green in diagram (P7).

All four output valves bias but one channel missing:
One of the 6SN7/CV181/6N8 valves may have failed. This may be proved by swapping from the working channel. If the problem persists the amplifier may need to be serviced.

Distorted sound on one channel.
Possibly a valve fault, may be proved by swapping valves from good channel.

Hum Problems
Test by disconnecting all inputs, if hum persists this is probably an amplifier fault.
A common cause is a 'hum loop' caused by having too many grounds, and may be identified by unplugging each input source from the mains. One remedy for this is to use an interconnect with the screen connected only at one end. Other causes of low-level hum can be from adjacent equipment, experiment with moving equipment around to see if this improves the problem.

Interference Problems
The amplifier design is resistant to mains-born interference. But some heaters, boilers, fridges, cookers etc can generate intermittent Radio Frequency airborne interference, usually "pops" or "clicks".

Background Noise on one channels.
A rustling/crackling noise on "0" volume is usually one of the front 6SN7/CV181 front. Which one may be found by swapping these valves from Left to Right.

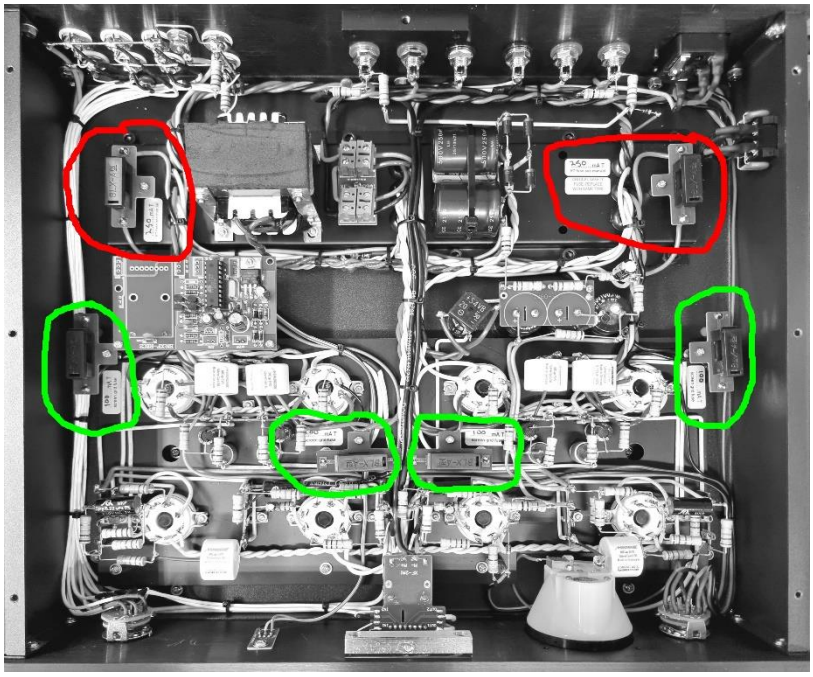
6L6/KT66 Valve overheating
If the whole output valve glows red getting very hot, switch off immediately. This is a valve failure and requires replacing. This may have blown internal fuses. Try a replacement valve or refer to Icon Audio or a service engineer.

Valve Replacement (see also section 6)
Valve life will depend upon such things as hours of use and number of on/off cycles, Do not switch on and off unnecessarily. 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, return the amplifier to Icon Audio or a qualified engineer for a test and service. In the UK Icon Audio can test your valves free of charge. You should carefully remove the valves, numbering them from left to right and packed carefully. We recommend the amplifier be checked every five years.

Notes on above fault finding
The above notes are assuming that Left and Right inputs and Loudspeakers are correctly connected.

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). The 6SN7 valves have two heaters.




AC230V

6. Bias Checking & Adjustment

If you are unsure about any aspect of bias adjustment contact your retailer, Icon Audio or a professional valve amplifier engineer.

The Stereo 40 MK IV 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 (normally supplied).
2, **How to read the meter.**
If possible warm up the amplifier for 5 minutes, 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 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 slightly.
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. Normally adjustment intervals are 2-3 times a year or if you suspect a problem.
6. **Possible problems:** If the reading is unstable, 100%, or "zero %" this is probably a valve failure, in which case refer to your dealer or Icon Audio. Also the internal HT fuse may have blown for 1&2 or 3&4 (spares inside).

When not reading bias, the meter on the front panel gives an approximate power indication. (Full power both channels in mono = 100%).

Valve Replacement

How long do the valves last?
In normal use about 5 years (5000 hrs) when they will start to wear out. The quality and power will slowly deteriorate. Sometimes the heater will fail and the valve will remain cold to the touch.
Occasionally a 6L6/KT66 may suffer catastrophic failure which may cause a noise through that speaker and possibly over heating which may blow a fuse. In the UK Icon Audio offer free valve testing if the valves or complete amplifier is returned to us. The decision to replace one valve or all valves will depend upon the age of the remaining valves.
You are welcome to email us for advice or replacement valves.

Replacing the 6L6/KT66 Valves

Important: Do not attempt to change the 6L6/KT66 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 normally necessary to remove the bottom cover. Beware valves get hot in operation!

7, Changing valves: You should if possible check the bias setting before you attempt to change the valve(s), in order to familiarise yourself 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.
The bias adjusters are "clockwise" to increase "anti-clockwise" to decrease.
Make sure the selector is set to the correct valve!
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.

8, 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.
If the meter should go over 100% reading, switch off and allow to cool down, on switching on the valve will warm up slowly allowing time to make adjustment.

9, Use only valves marked 6L6/KT66/6P3/EL34 or that you know to be direct equivalents. And 6SN7/CV181/6N8 for the smaller valves (V5,6,7,8).
Use only valves which you know to be new or good condition and test the amplifier thoroughly before resuming normal use.
KT88/6550/KT150 valves are not suitable.

10, Replacing the smaller 6SN7/CV181/6N8 valves:
These do not require 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.
If using two pairs of different brands use the outer sockets for one pair and the inner sockets for the other pair.

Technical Notes:

Meter Function:
This is set to give optimum bias at 65% reading. When reading power 100% = both channels 2x 28W or one channel 50%. All continuous at 1kH.

*__RMS watts__ Based upon the RMS voltage output (V^2/R). Indicates the maximum continuous undistorted output power.

***Push Pull** is a very elegant way of 2 valves in opposition, 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 at any power of the Stereo 40.

***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.

Mains Supply
This amplifier is configured to work on 230/240v ac, (or 117v USA, Canada) this may be changed over. Contact us for more information.

7 Specification & Features

(Typical conditions @ 235v 50Hz)

- 6L6/KT66/6P3/5881/EL34 output valves
- 6SN7/6N8 double triodes for first stage
- 6SN7/6N8 double triodes phase-splitter
- Icon in-house designed and wound Ultralinear output transformers with tertiary winding.
- Hand wired point to point components
- Ceramic valve bases for minimum noise/leakage
- 28W x2 (6L6) at clipping
- Signal to noise level -85db
- Low Feedback of 8.5dB
- Frequency response 6L6:
- 20Hz to 20kHz 8 Watts -0.2dB
- 20Hz to 20kHz 28 Watts -1 dB
- Power bandwidth 20Hz to 60kHz -1dB 28W
- THD Typically 0.05% THD at 8 Watts
- THD Typically 0.2% THD at 28 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
- Optional Mundorf Silver/Gold in oil upgrade
- Japanese ALPS volume pot.
- Internal wiring using PTFE silver plated cable
- Valves carefully matched for best performance
- Gold plated Input & speaker terminals
- Inputs for CD, Tuner, Aux
- Line level record output.
- 380mV sensitivity for 28W output UL
- 220-240volts, or 117v for north America
- 150W "0" Signal, 170W Watts 8W output
- 1.6 amp (3amp USA) AS rear fuse (with spare)
- 250ma T Ceramic fuse internal HT (critical safety part)
- 390mm W, 210H, 410D amplifier overall, 20kg
- Carton= 38x54x52cm 28kg packed
- IEC mains lead, (5amp fused UK)
- Conforms to CE ROHS and WEEE where applicable

Specification subject to change without notice.

8 Packing Instructions

It is important that the original box and packing be used for shipping, 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, remote control or mains cable.

If packing the valve cover in the amplifier box ensure that is it does not come into contact with the amplifier paintwork as damage will result during shipping.

- 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 “Bubble wrap” or similar for protection.
- If the amplifier is stored in the box, keep upright and remove batteries from remote control to prevent corrosion.

icon Audio (UK) Ltd

351 Aylestone Road Leicester LE2 8TA

sales@iconaudio.com www.iconaudio.com

Phone +44 (0) 116 244 0593 +44 (0) 7787 158791

04.22 V Gen Pr 14/11/2023

Caution: This amplifier is heavy!

Lift the amplifier out of its packing by using the two “hand cut-outs” in the bottom packing near the transformers.

Or you may find it easier to remove the unit using the following procedure:

1. With the top packing in place, turn the box “upside down” with the “flaps” open.
2. Lift the cardboard box off.
3. Remove the bottom packing first.
4. Turn the unit the right way up and remove the top packing.

Please be careful not to damage any small switches and knobs on the front and rear panel

When re-packing ensure small switches do not foul packaging, the two hand cut-outs are normally towards the rear of the amplifier.

Do not ship with the valve cover as damage is likely to occur, unless you have the original packing. Or send separately. Do not return valve cover for service.

(Please keep this information for future use).