# icon Audio

## **Stereo 20** Integrated Valve Amplifier



Shown here without the supplied attractive cover. Illustrated on page 2.

# Our new EL84 amplifier represents unbeatable value for money!

Similar in design to our Stereo 40i model, our Stereo 20 features the same amazing sound and incredible build quality.

Its compact size means that it has a footprint of only 1sq foot (30x30cm) including rear connections.

We believe that valve amplifiers only sound as they should if traditional construction methods are used. These include:

- Hand wired point to point wiring
- Using traditional circuit designs
- Minimal front end circuitry
- Top quality components

The STEREO 20 is an integrated three-stage amplifier using the excellent 12AX7 and 12AU7 double triode valves for the first stage and phase splitter. And the superb EL84's as output valves. Operating in 'Ultralinear' 'push pull' mode, the Stereo 20 gives 15watts of beautiful valve sound. And remembering that 'valve watts' are effectively double that of 'transistor watts', the Stereo 20 will give good sound levels in average sized rooms.

Operating in 'Ultralinear' mode gives the power of Pentodes with the quality of Triode output valves.

Although it contains no pre-amp in the conventional sense, it is sensitive enough (200mv) to work well with all modern CD players, tuners, tape decks, minidisk, TV & video etc. It has four inputs and uses the famous blue ALPS volume control.

#### Will it work with my equipment?

Yes the input requirements are no different from any other amplifier. You will need a phono stage if you are using a turntable.

#### What about speaker matching?

The STEREO 20 will match with almost any 4 to 16 ohm speaker. It works well with difficult loads. We have developed and tested the Stereo 20 to work with speakers including: Living Voice, Lowther B&W, QUAD ESL57 Tannoy, etc.

#### What kind of sound does it have?

The STEREO 20 is a low feedback design. The EL84 valve is noted for having a very sweet sound. We believe that the STEREO 20 with its open transparent sound gets the best out of these valves, which is warmer, and more involving than solid-state counterparts. The sweeter treble makes for very easy listening, whether jazz, classical or dance music. It is not 'woolly' and is capable of delivering real bass power down to low frequencies. You can expect to hear a more detailed three-dimensional soundstage with less confusion in complex passages.

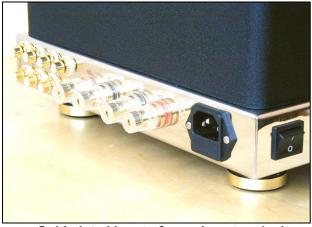
But above all a total absence of 'Listening Fatigue', we guarantee you will not get tired of listening to our amp!

The Stereo 20 is all 'analogue' and sounds great with LP's, FM radio and tape, but it will also help 'calm' digital sources such as CD, MP3, NICAM TV, DVD sound.





Beautiful finish



Gold plated inputs & speakers terminals



With stainless steel & Plexiglas cover

#### Construction

The STEREO 20 is built to a very high standard. The chassis is polished stainless steel, chosen for its non-magnetic neutral sonic qualities. The front plate and transformer cover are 10mm solid anodised alloy plate. The transformer housing is enamelled steel. The valves are mounted on a painted steel sub chassis, with gold decals for the valves. The knobs are gold plated alloy. There is also a very attractive valve cover, (see photo).

Each Stereo 20 is hand built & wired using the point-to-point method without using printed circuit boards. This method of high quality construction ensures the shortest signal paths, low impedance, low capacitance, low inductance signal paths, with low noise, which promote clean sound quality. You can see how certain wires have been twisted together whilst others have been kept apart; Methods like this have critical impact upon the sound quality.

This gives you an amplifier with excellent performance that has superb build quality, which is easily upgraded by those with technical knowledge, and should give long service.

Input terminals are gold plated, as are the large speaker terminals, which will accommodate the largest of cables as well as banana plugs.

Electrolytic capacitors are only used in the power supply and cathode bias, we use 'Black Gate' and others. Only one capacitor is used in the signal path (one per EL84) and they are high quality German polypropylene from. Resistors are oversized 2w and 5w metal oxide for low noise.

We use the famous ALPS 'Blue' volume control, potentiometer, chosen for its superior sound quality. (Visible top left, pic 3).

The unique attractive cover made from stainless steel and high density Perspex gives added protection for more vulnerable situations whilst retaining good looks.

Please note that the reflective surface of the stainless steel chassis and cover appear to take on the colour of their surroundings in the photos, but are in fact neutral in colour.

#### Is it easy to get replacement valves?

Icon only use valves that are still in production and available from many sources including us. Current cost is around £60 for a complete set.

#### How often do they need replacing?

With an approximate life of 4,000 hours, that would give 3 hrs a day for 4 years (approx). And it's easy. On this model it literally 'Plug &Play'.

#### 'Push Pull' output

The Stereo 20 uses the traditional 'Push Pull' is very efficient and produces a good output from two valves working in opposition, but unlike many transistor amps the valves do not 'switch off' contributing to the smooth musical sound, giving the power to drive modern speakers 'Push Pull' also cancels out nearly all even order harmonic distortion and hum. This also keeps the transformers smaller because they don't get saturated with lots of DC.

### **Limited Edition Stereo 20**

For a limited period the Stereo 20 comes with a top quality all European Valve set from JJ, Electro Harmonix & Svetlana. Making an even more dynamic and beguiling sound...

<u>AT NO EXTRA CHARGE!</u>

#### Who is Icon Audio?

We are a small company bases in Leicester who believe that traditional designed, hand built valve amplifiers sound better. Our amplifiers like many of our expensive competitors are assembled in the far east, to our specification, using high quality components from all over the world. The final testing and set up is done in Leicester U.K.

#### Where can I hear one?

At one of our agents or if you are able to travel to Leicester you are welcome to call at our premises by appointment. We also offer you the chance audition our amplifier. In your own home! It can be very difficult to make an informed, balanced decision about buying a crucial piece of new hi-fi. It may be inconvenient, you may have to travel, the demonstration facilities offered may not be ideal, and not all advice is impartial! Plus new equipment needs to bed in for a couple weeks to be at its best.

#### What is so special about Valve Amplifiers?

There are many theories why valves are better at reproducing music. Here are some of ours: Transistors are a great current switching device used in TV's, computers and digital equipment. It is small, easy to mass-produce and very cheap. So it is not surprising that most mass-produced equipment manufacturers like them.

Although transistor amplifiers specifications look good on paper, but many people find that they have a 'dry' 'clinical' sound that is uninvolving and gives rise to 'listening fatigue' which takes some of the joy out of listening to music. Therefore in more enlightened times when people are listening to more subtle qualities in audio possibly with better recordings and speakers, many people are discovering that valve amplifiers are a better solution.

#### **Better Linearity**

Valves behave the same at low and high frequency, at low and high power, and of course run hot all the time. Transistors don't do this and therefore need a lot of 'help' often in the form of feedback to keep them working properly.

#### Low Feedback

Transistor amps require huge amounts of 'feedback' to bend the sound into shape, but this can have a serious effect on sound quality. This is hard to measure, so does not appear in the specification.

#### **Transistor Switching**

The output stage of many transistor amps involves 'two transistors switching on and off, many people think that they can hear this as an unpleasant 'harshness'. None of the valves in the STEREO 20 ever 'switch off' this contributes to the smooth musical, yet accurate sound.

#### **Greater Headroom**

Music is incredibly transient with a huge range of very quiet sounds to very loud. Transistor amps get very distorted very quickly when they run out of power. Transistor distortion is very unpleasant. Valve amps have lots of 'headroom' by which they run into distortion gradually and valve distortion is gentler on the ear. Therefore valve amps only need to be half the power of transistor designs, yet sound just as loud!

# Icon's 'Intelligent' HT Delay timer option £79.95 Preserve valves and performance!

It is well known that applying the HT voltage (420v on the EL34's) to valves before they have had a chance to warm up can cause premature 'cathode stripping' which will reduce both the efficiency and the life of the valve.

The old method of using a valve rectifier which warmed up slowly overcame this problem, unfortunately valve rectifiers have lots of other problems including inefficiency, size and cost and high source impedance which limits dynamics. Our solution is a unique active timer delay, which delays the switch on of the HT until the valves have reached their correct operating temperature, Thereby preventing cathode stripping and preserving the life of the valves. Also helps the getter keep the vacuum 'hard'. This circuit has no sonic effects, is simple and very reliable. Especially recommended if you are using expensive or 'new old stock' valves.

(Fitted by request at time of order)

### Want to trade in your old equipment?

Ask us for a quote. You should have the instructions and either the original box(s) or be able to pack the equipment suitably for transit. We can uplift direct from your home (usual cost £20.00) and upon confirming the agreed condition of the item will deduct the amount from the sale price. We regret that it is impossible to offer the 30-day trial period with part exchange.

#### Price of the Stereo 20 £499.95

(without upgrade options including U.K. mainland delivery)

#### How to order:

Contact us by email or phone to discuss availability, payment etc. You can then pay by credit card or cheque. Your amplifier will normally be dispatched within 2 days or when cheque is cleared.

#### 30-Day Trial

If upon testing the amplifier on your own system you are not happy with the amplifier for any reason, Icon Audio will refund the purchase price using the same payment method.

#### **Conditions**

The unit must be returned in new condition in original box and packaging within 30 days of purchase, together with accessories and instructions. The customer is responsible for return carriage and insurance.

### **Specifications and Features**

- All hand wired point to point
- No printed circuit board or tag board
- Japanese Blue ALPS volume pot.
- · All Triode front end
- 4x EL84 Russian output valves
- 1x 12AX7 (ECC83) pre-amp valves
- 2x 12AU7 (ECC82) phase splitter valves
- 2x 15 Watts RMS per channel
- Signal to noise level -89db
- Freq response 7hz-70khz +or-0db @1w
- Freg response 30hz-20khz +0-1db @10w
- Total harmonic distortion 0.2%
- · Japanese EI transformers with low oxygen copper
- Attractive cover included in the price
- Minimal feedback used
- 'Ultralinear' operation
- High quality 2w metal film, & wire-wound resistors
- Blue LED mains indicator
- Polypropylene audio capacitors
- Internal audio wiring using silver gilt cable
- Valves carefully matched & burnt in.
- · Ceramic valve holders for minimum leakage
- Centre tapped heater circuit for minimum hum
- Pre-amp 6.3v heater circuit floated at 60v to minimise heater-cathode leakage
- · Polished stainless steel chassis
- 6mm solid aluminium front plate
- 6mm solid aluminium transformer cover
- Gold plated Input & speaker terminals
- Inputs for CD, Tuner, Aux, Phono
- 200mv input sensitivity.
- · 'Soft Start' device fitted.
- 230/240volts, 100watts (max) 1A anti-surge fuse
- C E certified
- 300W (, 160H 265D (210) (340D), 10kg (figures in brackets allow for rear connections & ventilation)

(Specifications subject to change, errors & omissions excepted 01/09/05)

### The Project Phono Pre-amp

No phono pre amp? We can offer you the excellent Project unit for only £49.95. MM or MC. Beats the performance of many much more expensive units.

For Trade & Export inquiries welcome

# icon Audio

351 Aylestone Road Leicester LE2 8TA

**Phone 07787 158791** Fax 0116 244 0593

Sales@iconaudio.co.uk