

Icon-ography

One brand that's put itself on the audiophile map of late is Icon Audio – gaining a reputation for affordable, high quality hardware. The latest version of the MB90 monoblock power amplifiers are glowing examples, says David Price...

The funny thing is, I really don't think companies such as Icon Audio could have existed even just a decade ago. Back in the late nineties, tube-based amplification was regarded as an extreme niche in hi-fi – something akin to how most petrolheads think about kit cars (i.e. “interesting, but not for me”). So perhaps it's a sign of the

times that suddenly it feels like we're getting more new valve products than transistor ones – even CD players often come with glowing glass bottles in their output stages these days!

Icon Audio was in the right place at the right time, which isn't to say that its founder David Shaw was lucky. Rather, he identified the shift back to tubes – just as

this very magazine had, right at the very beginning – and took the plunge. Rather than producing extremely esoteric products, such as AudioNote's umpteen thousand pound Ongaku, David did precisely the reverse and came up with a surprisingly affordable range of kit.

Rather than nailing his colours to the mast – lest we forget, valve diehards are terribly parochial, and

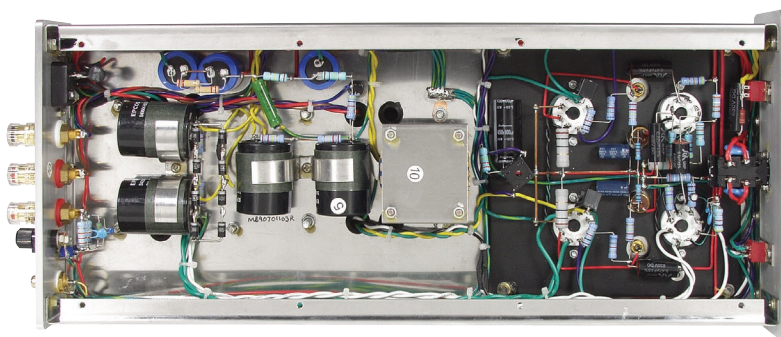
for some only one tube or type of operation will do (i.e. 845, Single Ended Triode, etc.) – he simply opted to make a number of different designs and let the customer decide what they liked best. The result is an intriguingly disparate range of tube amplifiers, including phono stages, preamps, integrations and monoblocks...

He makes no secret of the fact that his amplifier designs are generally based around classic circuits, because as any aficionado knows, there's only a limited number of ways to do what are – unlike solid-state – largely straightforward, uncomplicated topologies. With valve amplifiers, it's the implementation rather than the circuit itself (many of which are generic) that really matters. This means high quality wiring, passive components, power supplies and output transformers are needed to turn an average amp into an excellent one – and then of course there's the quality of the actual tubes themselves.

In the case of the MB90 monoblocks you see here, they're a fairly traditional three stage design, with the front end based on the classic Leak Stereo 20, 50 and 60 series [see p64]. Icon has used pairs of the older and bigger 6SL7 and 6SN7 driver valves from the early 1940s, which have a reputation for a richer sound allied to longevity. To this, designer David Shaw fits ceramic valve holders, silver Teflon audio cable, hard wired audio componentry including Polypropylene audio capacitors, 2W metal film and wire-wound resistors, plus custom low-oxygen copper wire wound Japanese EI transformers and a hefty choke regulated power supply.

The output stage of the amplifier uses the KT90, a more modern derivative of the GEC KT88 which is surely one of the most ubiquitous hi-fi power valves. It operates in a choice of modes – ultralinear (producing a claimed 100W) and triode (with a claimed 50W) – giving "two amplifiers in one", as Icon Audio puts it. Close attention has been paid to the power supply, using eight large capacitors and a large choke in a traditional 'Pi' configuration. This is claimed to give a very low source impedance with a large reserve of power available for large transients without clipping. The MB90 is said to work in both high and low sensitivity modes, letting it work with both passive and conventional preamplifiers – I mostly used an MF Audio Silver Passive.

The monoblocks themselves are very well finished, giving away nothing



to Quad, for example in this respect. Each is sturdily made at around 25kg apiece, and there are no rough edges to the casing. The 'sparkle' paint finish of our review samples was excellent, and the 20mm thick front panel confers an air of solidity. I'm afraid I cannot count myself as a fan of the supplied steel trimmed Perspex valve covers, which I think are a bit *gauche* – the tube amp equivalent of blacked out window glass on a car – but you can (and indeed should, for sonic reasons) remove them very easily!

In addition to the ultralinear/triode mode switch, the fascia has another rocker marked 'warm up/standby'. This is claimed to prevent valve cathode stripping during start-up and enables the amplifier to remain in standby on low power without wasting electricity. In

Channel Islands D100s to the Rotel RB-1092 – and so I soon realised the kind of value the Icon Audio MB90s represent...

Kicking off with Peter Gabriel's 'Solsbury Hill', the MB90s running in ultralinear mode, and I could hear a clean and fairly muscular contemporary tube power amplifier. With little of the softness, colouration or warmth that many still associate the breed with, the Icon Audios proved themselves thoroughly modern monoblocks. The opening guitar figure was crisply conveyed, and as soon as the percussion kicked in I found myself on the receiving end of a wide and detailed soundstage, bristling with energy. Bass wasn't the tightest or tautest I've heard from tubes, but it was perfectly capable of playing a tune and extending my

"a fine introduction to the world of serious tube power..."

practice it proves a nice 'halfway house' between running the amp at full whack and not wearing out the valves by switching them on and off all the time. On standby, each MB90 eats 38W, which is considerably less than when on properly (88-200W apiece). I found it best to switch the amp from off to standby a while before the listening session, then fully power up the amps a minute or two before listening in anger, so to speak. Then, if I had to answer the phone, break for dinner or answer the door, the standby mode was jolly useful.

SOUND QUALITY

The MB90s received something of a baptism of fire *chez moi*, being asked to step right into the shoes of Quad II-40 monoblocks and drive my ever awkward Yamaha NS1000M loudspeakers via my reference MF Audio Preamplifier. Considering the sub-£1,700 retail price, I have to say I was surprised with how they rose to the challenge. I've had more than my fair share of power amplifiers at this price of late – everything from the

loudspeaker woofers by fairly sizeable amounts – it was certainly strong and insistent. Vocals proved clear too, this classic 1977 recording showing itself to be superb even by modern standards.

Moving to a more challenging recording in the shape of Stevie Nicks' 'Room's on Fire', and I could hear a touch of hardness to the upper midband, although the song had great dynamic impact. The MB90s seemed in their element with the closely miked 4/4 rock percussion work, pushing the song along with gusto. Snares were satisfyingly big and beefy, making the similarly priced Class D Rotel RB-1092 stereo power amplifier (famous for its massive 584W per channel in HFW Towers!) seem a tad anaemic, tonally speaking. Cymbals glistened with detail, but had less atmosphere than I would have liked, making everything from the upper midband onwards sound a little processed and 'digital'.

I am afraid my patience couldn't last; I suspected the MB90s were capable of better but had planned

to run the gamut of my record collection before switching from ultralinear to triode mode. As it happened, I just couldn't wait. Playing the Stevie Nicks track over again, I wouldn't have recognised the MB90s. Whilst some of the relentless, adrenaline-fuelled gusto of the Icon Audio monoblocks had gone, in its place we had subtlety, transparency and finesse. Those coarse cymbals acquired a velveteen purity; at once smoother yet more atmospheric. The vocal track gained some finesse, making Nicks sound less like Rod Stewart and more like Judie Tzuke. The snares lost a little edge and bite, but seemed to time in a far more natural way; suddenly we had a virtuoso drummer bashing the sticks instead of a session man following a click-track.

Indeed, the move to triode had quite a profound effect right across the board. As previously intimated, the midband and treble sweetened up and opened out, but the bass also took on a new life – becoming softer, looser and less muscular. I found myself turning the volume up on the preamp slightly to account for this, and it worked fine, bringing little apparent extra strain. Still, it was clear that the MB90s had lost a little 'lung capacity' in the name of a more musical sound. I actually far preferred things this way, feeling that what's lost on the swings is more than gained on the roundabouts.

For example, Jean Michel Jarre's 'Oxygene' went from sounding like impressive hi-fi to a truly enrapturing experience. Yes, the bass was softer and looser, but it was orders of magnitude more tuneful, and this held right the way up the frequency spectrum. There was beautiful tonal detailing to JM's vintage keyboards, and a deliciously wide and deep recorded acoustic. Best of all was how the music flowed rhythmically,

showing 'the magic of valves' to full effect. Conversely, switching to ultralinear gave a far more brawny sound, with oodles of strong bass, more marked dynamic crescendos and an air of confidence that the MB90s lacked in triode mode.

After the first few hours, I found I did nearly all listening in triode mode and never went back. Suitably run in and warmed through, I hooked them up to a pair of classic Mission 752s - a very easy load - and the Icon Audios became even more relaxed. I can see that they're not faultless, but they ran the Quad II-40s very close in triode mode, making the latter more expensive power amplifiers sound a little processed, no less! Compared to the aforementioned Rotel RB-1092, more or less a direct price rival, they're far more dimensional and subtle, and seem able to flow music along nicely. My only criticism is simply that each mode shows what's wrong with the other. In ultralinear it's a genuinely powerful tool but lacks subtlety, whereas in triode the absolute reverse is true!

CONCLUSION

I can see the Icon Audio MB90s winning a great many friends, as they're a fine introduction to the world of serious tube power. Although not competition for considerably pricier high end designs like McIntosh's MC275, they do so much right at the money that it's hard to complain. Some might regard the switchable ultralinear/triode operation as a gimmick, but I actually think it's a great thing to have on a 'do-it-all' entry level tube power amplifier. For example, if a buyer



finds his speakers can't hack their modest 50W in triode mode, he can just flick the switch to ultralinear - whereupon these monoblocks will drive pretty much anything – and start saving for more efficient loudspeakers. Their real strength though is that carefully set up, run in, warmed through and with the resonant valve covers off, the Icon Audios really are clean and open – especially when compared to the fuzzy Class AB solid-state designs that inhabit this price point.

VERDICT

With their transparent and open sound, these powerful and versatile tube monoblocks offer excellent value for money.

ICON AUDIO
MB90 £1,699.95PR
 Icon Audio
 +44 (0)116 2440593
 www.iconaudio.co.uk

- FOR**
- power in ultralinear mode
 - musicality in triode mode
 - build, finish
 - value

- AGAINST**
- valve cover styling

REFERENCE SYSTEM
 Marantz CD63KI DP CD player
 MF Audio Silver Passive Preamp
 Quad II-40 power amplifiers
 Yamaha NS1000M loudspeakers

MEASURED PERFORMANCE

The MB90 produces a healthy 84 watts (8 Ohms) in Ultralinear mode and 81 watts from the 4 Ohm tap (into 4 Ohms), so there's little loss of coupling efficiency at the lower impedance. This is a lot for one pair of valves; the KT90s certainly deliver power. These days the 4 Ohm tap is usually a better match to loudspeakers as most use 4 Ohm bass units. Triode mode gives a maximum output of 40 watts.

There was little change in distortion behaviour between Ultralinear and Triode modes and in both the MB90 measured well. It has no crossover distortion and at all frequencies distortion was relatively low (0.02%, 1 Watt at 1kHz) and dominated by third harmonic. Higher order harmonics, those that are audibly nasty, were minimal. Using High gain increases distortion, typically from 0.02 to 0.16% but this comprises mainly second and third harmonic. As valve amplifiers go this is a very good result.

In both modes bandwidth measured a wide 3Hz-30kHz and damping factor was relatively high at 8. Together with good power output the MB90 is likely to have strong bass of good quality.

At High gain there was a 1mV hum

component at 100Hz which may be just audible close up to the loudspeaker, but not at a normal listening distance. At Low gain hum and noise were negligible.

The MB90s turn in a fine set of results and look good as powerful valve monoblocks. NK

Power	84 watts
CD/tuner/aux.	
Frequency response	3Hz - 33kHz
Noise	-84dB
Distortion	0.05%
Sensitivity	0.43/1.4V
Damping factor	8

DISTORTION

