

Past Values

Noel Keywood listens to the Klipsch Heresy IV loudspeaker, a design that harks back to the past.



like it. Klipsch (USA) specifically feature a valve amplifier and old motor-bike in their website pics of this loudspeaker. So we're sort-of talking past values here – but not really. The Heresy IV (£3,999) is in truth a synthesis of old and new.

I well remember my Saturday job at a hi-fi shop on London's Edgware Road where, long ago, we used to throw Goodmans Magnum Ks over the counter at eager customers who wished to blow their brains out later, courtesy of its 12in bass unit. The Heresy similarly has a socking great 12in bass unit. Even the cabinet is reminiscent of the Magnum K, meaning big – but not broom cupboard big. Just about liftable at 20.4kg (45lbs). Making both the bass unit and the cabinet it sits in pretty authentic; no mamby-pamby 5in frauds here. This is definitely, genuinely an old-skool loudspeaker that threatens to move brains as they did on Saturday nights in the past.

Around at the back however it is not old. Because here Klipsch use a large port with an

interesting horn shaped mouth exit – most definitely an up-to-date design. It worked very well, our measurements showed. A sneakily modern twist on things placed out of sight on the rear panel. The real reason is that ports are usually placed at rear to best hide cabinet colouration – box boof – they project. But let's not spoil the story!

"Proudly made in the USA" Klipsch say – and this brings me to their heritage, invoking Paul Klipsch and his use of the Tractrix horn profile (1945), patented by Voight in 1927. Horn loudspeakers have a history. Partly explaining the use of midrange and treble horns here. No Magnum K from the UK had anything like this. So here we have focussed invocation to deities of a past era – pity that the horns and front baffle they sit on aren't pretty. Some trim rings around the drivers and a better finished front baffle would have helped highlight the Heresy's unusual features. A traditional grille is supplied to hide the twin horns and big bass unit.

Why fit strange looking horns



Unusual is use of a mid-range horn, running from 800Hz up to 5kHz. This pushes vocals out, from a newly designed polyamide diaphragm compression driver, Klipsch say.

in any case? Put simply, they project acoustic power forward, straight at listeners. This makes them very loud from little input. By moving air efficiently and sending it straight at you they have poke-in-the-face delivery. It's sonically different to the norm and in audio folk-lore more exciting. In practice horns don't measure so well and have strong sonic character, less boring than the norm, but also less accurate, it's like adding salt and pepper to a mild fish dish, to liven things up.

Klipsch say of their K704 Tractrix treble horn that it uses a titanium drive unit (looks like a dome) with front phase plug for "exceptionally even high-frequency dispersion".

The K-702 midrange horn sitting below is a new design with "polyamide diaphragm compression driver".

Together with the 12in bass unit they inhabit a cabinet measuring 630mm high, 394mm wide and 337mm deep, designed to sit on the floor. Horns are vertically directional and Klipsch have aimed them upward toward listener's ears by tilting the cabinet backward.

At rear lies the big horn port and measurement showed this works very effectively, pumping out bass that reaches low. Perhaps other manufacturers need to check out horn port profiles that translate high internal to low external air pressure in better fashion than a tube. That's why horns are described as 'acoustic



The big rear panel carries bi-wire terminals and a large horn-profile port that worked very well, our measurements showed. All the same, strong output from the horns masked its contribution.

transformers'. The Heresy IV is very different here and no 1970s throwback. Something measurement clearly revealed.



The large volume floor standing cabinet sits close to the floor to augment bass, helping raise sensitivity. Just a few Watts are needed to go very loud.

The 12in bass unit does a lot of work in this design, reaching right up to 850Hz: it covers a wide range of frequencies, contributing much to the sound.

The rear also carries bi-wire terminals fitted with linking plates for mono-wiring.

SOUND QUALITY

Initially I connected the Heresy IVs to our PrimaLuna EVO 300 Hybrid amplifier but this was a match not made in heaven. The powerful FET output stage of the PrimaLuna was too vivid for the speedy and forceful Heresys – and volume on the amplifier had to be cranked right down. After a few hours I gave up because the Heresy's horns are prominent and need amelioration.

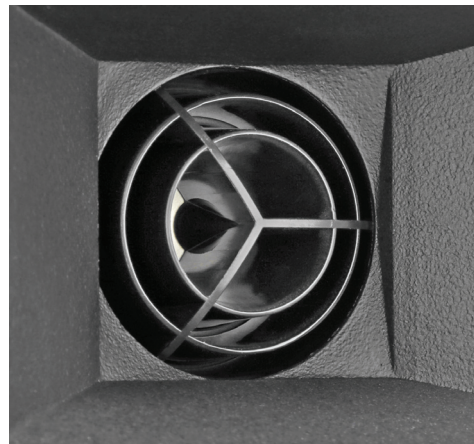
Time for our glorious Icon Audio Stereo 30SE single-ended valve amplifier with all its 30 Watts of sonic purity. This changed matters, bringing in a deeper, fuller sound with less sheen and bite. But, you may be

surprised to hear, it still wasn't quite right (I was surprised too). Where the Stereo 30SE usually opens up the sound stage it did not do so here.

Salvation finally came from our Creek Voyage i20 amplifier. It suited in terms of tonality and also worked best at extremely low output due to its quiet output stage. Even the Icon's KT150s weren't meant to work at milliWatts.

Sources were our Oppo BDP-205D silver disc player connected digitally via QED Quartz glass optical cable to the Creek, with its internal AKM Velvet Sound DAC. Also used was an iPhone 11 Pro Max playing hi-res music files via Bluetooth 5.1.

Even with the mild mannered Creek amplifier the Heresy's remained forward in the midrange, throwing vocals at me. Sinéad O'Connor was loud and clear singing Foggy Dew (CD), but the Chieftain's



The treble horn has concentric diffusers in front of its titanium dome pressure driver. Such assemblies are very efficient.

bodrans by way of contrast fell back from the perspective I am used to, lessening any sense of bass heft.

Plucked bass in the Pink Panther theme (CD) was similarly reticent. The Heresy's were not bass heavy or warm, coming across as dry and controlled. I moved the cabinets against the rear wall to maximise room gain (17ft long room) and bass, which helped a little.

With bass heavy tracks the big bass units showed their



The front baffle has a black spray painted finish and the drive units lack trim rings, exposing the fixing screws. Looks better with the grille in place.

mettle, bringing lovely insight and control to drum strikes in Dadawa's *Canton Story* (CD). Equally, her whispered vocals were thrown out clearly where I sometimes struggle to hear them. Daft Punk's *Giorgio by Moroder* (24/88.2) with its insistent bass line also came over well, as did the prominent synth kick drum behind Safri Duo's *Samb Adagio* (CD). However, there was boxiness in the sound, a rap by knuckles on the cabinet rear panel showing where this was coming from.

Extended treble from the close-miked guitar strings of Neils Lofgren's *Keith Don't Go* (CD) brought the treble horn into play big time, showing just how strenuous it can be – and this is sort-of the point with horns: they come at you. Especially when used enthusiastically in the design process – as here. The high treble of this track was sharp – sending

"Their big 12in bass units give expressive bass but the midrange and treble horns dominate – in keeping with modern trends"

out Lofgren's tortured strings with a power I've not heard before.

Johannette Zomer, singing Handel's *Lascia ch'io Pianga* (DSD), certainly soared – as she is meant to in this lovely piece. Forward and clear, there was however some unevenness of contrast that I suspect was caused by the midrange horn. Seemingly a modulation, due to its uneven output (see Measured Performance).

Via Creek's high resolution Bluetooth receiver, music from my iPhone 11 Pro Max running 24bit files courtesy of Onkyo's HF Player (paid-for version, £9) I could bring into play Onkyo's equaliser to reduce upper treble and boost bass slightly, this giving a smoother and more credible balance. This made my classic-Rock test tracks like *Busy Being Fabulous* from The Eagles (CD) pass through without top-end shimmer.

Horns image well, especially when there are strong highs – and that was the case here. However, the low cabinets produced an arc of sound that seemingly reached about ear height when seated, plausible for vocalists if not as ethereal as that from taller loudspeakers, like our reference X-Stat electrostatic panels in Martin Logan's ESL-X that image celestially.

CONCLUSION

The massive sensitivity of these loudspeakers, plus their prominent treble, combine to make them unusually amplifier sensitive I found. Their big 12in bass units give expressive bass but the midrange and treble horns



Treble (high frequency) horn at top, mid-range horn at centre, scalloped for closer proximity to the 12in bass unit. Horns like this project acoustic power forward to listeners.

dominate – more in keeping with modern trends than past values. These are past values as set by the BBC in the UK I must note; in the USA it was perhaps different.

With a big but slightly boxy sound the Heresy's did strike me as similar to 'speakers of the past. They were an idiosyncratic combination of old and new that is characterful and best heard first. Horns have merit with their forceful approach: think lively. Best mated with a sweet sounding EL84 valve amplifier like Audionote's *Oto I* suspect. Or any specialised low power amplifier.

MEASURED PERFORMANCE

The Heresy IV was extremely sensitive, if not up to the near-impossible 99dB quoted: we measured 96dB from 2.8V input, 6dB higher than even big floor standers – so quite a feat. This is hugely loud from one Watt, making valve (tube) amplifiers of 20W or less usable, and even 3W will go decently loud.

Frequency response was uneven right across the audio band, especially in the working region of the midrange horn (800Hz-5kHz). The treble horn was smoother extending up to 16kHz. The 12in bass unit peaks at 120Hz before rolling down to 50Hz, but the big rear port (red trace) contributes to low bass, extending down to 25Hz. It is tuned to 40Hz and applies broad damping, the impedance trace shows. Overall impedance measured 7 Ohms, meaning this is nominally an 8 Ohm load, although it does dip down 4 Ohms.

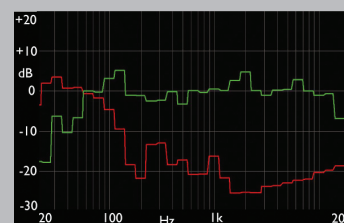
The uneven response means this loudspeaker will be characterful, but

it maintains reasonably even balance across the audio band and bass is well controlled. **NK**

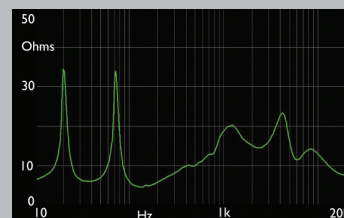
FREQUENCY RESPONSE

Green - driver output

Red - port output



IMPEDANCE



KLIPSCH HERESY IV £3999



EXCELLENT - extremely capable

VERDICT

Bright, projective sound from an unusual horn loudspeaker. Idiosyncratic – listen first.

FOR

- expressive bass when driven hard
- forcefully vivid dynamics
- wall placement

AGAINST

- sharply bright sound
- uneven midrange
- slightly boxy

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