

KJF AUDIO SA-01 NCCORE POWER AMPLIFIER

The KJF Audio SA-01 NCore 100W (continuous) power amplifier is a no-nonsense but good looking power amp that is made in the UK. Stuart Smith, a long time advocate of Class D power, takes a listen to this £690 power amp.



Stuart Smith

The SA-01 is made by Stefan Whatcott in the UK using NC502MP NCore modules. The SA-01 comes in mono and stereo versions but it is the one box stereo version on test here. You can choose the NCore module you want in the amp on the KJF Audio website depending on the output power you want/need. These are the NC122MP that offers a peak output of 75W into 8 Ohms and continuous power of 25W, the NC252MP that offers a peak output of 200W into 8 Ohms and continuous power of 50W, and finally, the NC502MP that offers 350W peak into 8Ohms and continuous power of 100W. Prices are £540, £590 and £690 respectively. Stefan reckons that “The the older Class D amps would have their outputs effectively modulated by speaker loads with wildly changing impedance plots, whereas the new Ncores

couldn’t care less” adding “They are also happy to keep playing into an almost short circuit so even 1-2 Ohm speakers are no problem really. In fact, you could short circuit the outputs without killing the amp.” I didn’t try this!

It’s the latter of the modules fitted in the review sample giving a total price of £690. As well as the board you would like you can also choose the front panel that comes with the amp and these are Aluminium, Walnut, Sapele, Cherry and Maple (wood front panels are a £25 option). The review sample came with the 8mm Aluminium front panel that has been bead blasted, has an on/off button, and the company logo laser etched into it. The on-off button has an LED halo around it to indicate the current state of the amp and to indicate when it is clipping – I like the latter a good deal. You can



also hold the button down and cycle through different brightness levels which could be useful for some.

Round the back you can choose to have either gold or silver RCAs with the silver adding £20 to the price-tag – the review sample had gold RCAs. The back panel also sports balanced Neutrik XLR inputs and you switch between XLR and RCA with a pair of little toggle switches. There are speaker terminals that accommodate spades, bananas or wire, an IEC and master power switch, and a socket for a 12Volt trigger should you have a suitably equipped pre.

The case itself is a pretty stylish if simple affair and is around shoebox-size 230 x 83 x 370mm (WHD).

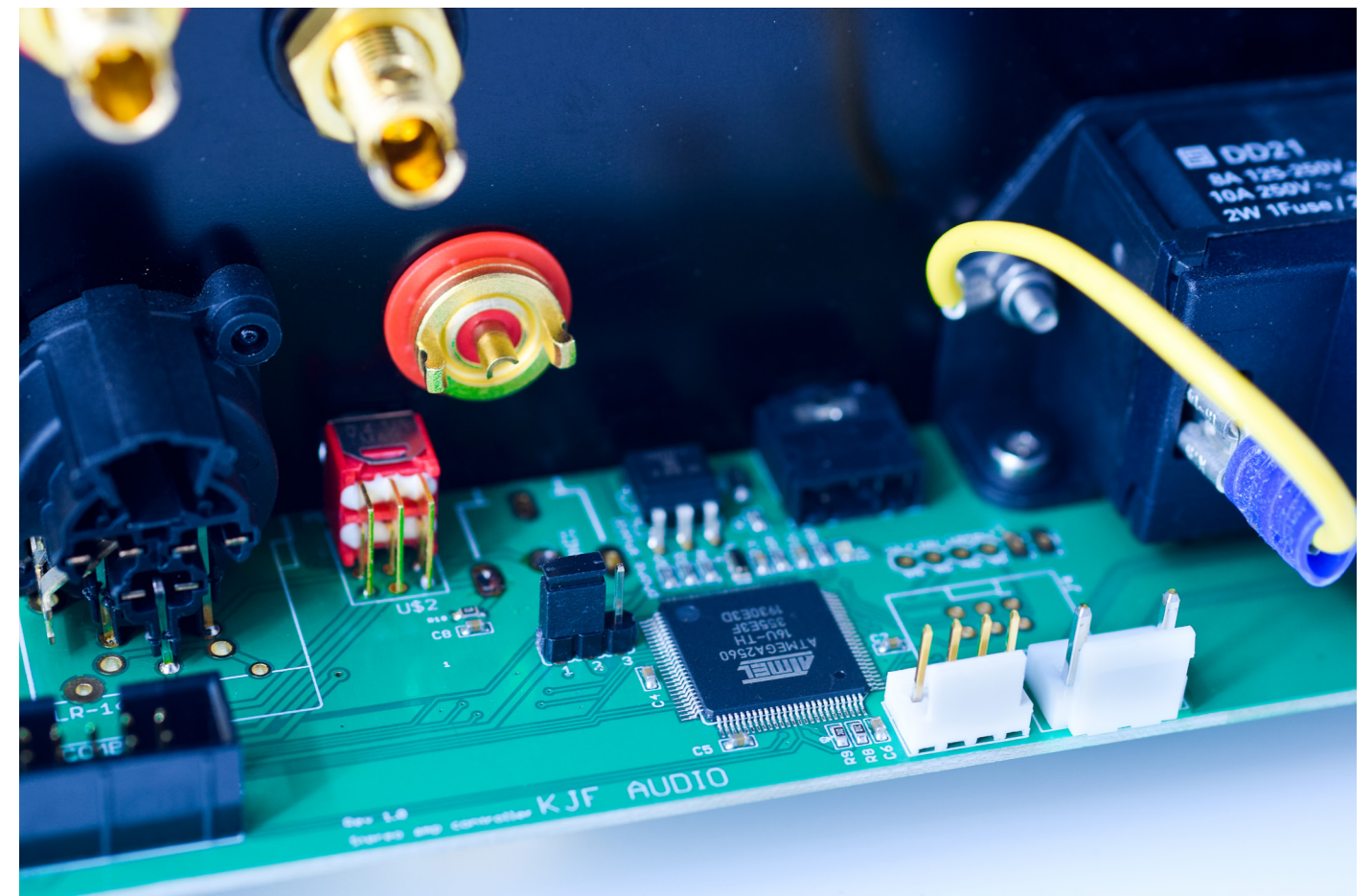
Other features of the SA-01 include muted startup so you don't get a pop through your speakers on power-up (a sensible inclusion), DC detection and protection should the amp have a catastrophic failure, clip indication and over-temperature indication. The amp will operate at 110V or 230V without any need to change anything – plug it in wherever you are

and off you go.

All in all, it's pretty cool looking without it looking like money has been spent on stuff that is there merely for decoration – though the laser engraving of the name on the front is a nice touch and will have added a tad to the price. The previous MA range was much more utilitarian in its aesthetics, whereas the SA-01 is designed in keeping with being at home in the modern listening space – and it succeeds in this goal in an understated “I am what I am” kind of way. It feels solid enough and has a decent weight to it, though it can be picked up with one hand with no problem.

The packaging is simple and effective, which pretty much sums up the unit thus far.

While the SA-01 uses the latest iteration of the Ncore modules with onboard buffers and power supplies, leaving little room to tune the sound, KJF audio have designed their own PCB that they are calling the Stereo Amp Controller. The Hypex modules are clever little things in that they offer the integrator a communication bus to monitor both power and amplification error





monitoring, clipping, temperature monitoring, muting, standby and protection, and reporting from failure to DC. “Until now no other company offering the Hypex amps at anywhere near this price have implemented these available features”, KJF reckon. Stefan added ‘When I was contemplating this amp I wanted to make sure that all the features available were used, this meant designing a PCB with an onboard micro-controller to communicate with the modules, I know that sounds expensive – it was – but it saves a huge amount of time when actually building them as there is much less messy wiring to produce, It also meant I could optimise the layout and ground plane to keep noise out of the sensitive circuitry, in short, it’s a proper grown-up design”

Set up is easy - as expected given the simplicity of the amps layout, and I was up and running within a matter of a few minutes. I used the SA-01 with a variety of loudspeakers including Xavian Perla, Celestion SL6s and the recently reviewed Diptyque dp77. Sources were a mixture of CD, streaming and vinyl (see the Review Equipment list at the bottom of this review for full details).

SOUND

Regular readers will know that we at Hifi Pig Towers are no strangers to Class D and be aware that we have been using the technology for a good number of years. We have owned, and still do own, Class D amplifiers (among other classes of amplifiers) and they are regularly used in both our review systems. In the main I’ll be comparing this amp to our Merrill Thor Class D monoblocs which retailed in 2015 when we first put them into at \$4800, which equates to around £3500, meaning that the amp in question costs around a fifth of the amps the KJF is going up against. Now that may not seem particularly fair, but it is what it is.

First up is the Scratch Bandits Crew on Chinese Man Records and I’ve chosen this because it has a lot of deep, deep and detuned bass on it. Into the Diptyque dp77 speakers (isodynamic and 84dB), and when pushed to very loud volumes, the amplifier did start to clip, indicated by the LED around the on/off button the front panel flashing red – it’s usually green. Now, I was pushing it, and with the same speakers and at a similar SPL the Merrill amps clipped too,

though they don’t have any method of indicating this clipping. One thing I enjoy about good Class D is the speed of the bass and the KJF really doesn’t disappoint, in fact, I’d suggest it is on a par with the Merrills in this respect. The amp is also absolutely silent when nothing is playing. At low volume, it still brings out the same level of detail that these speakers excel at. Switching these speakers out and putting in the notoriously power-hungry Celestion SL6s (82dB) speakers and playing the same tunes there are no complaints by and large and I’m able to push the volume louder than previously without clipping. In fact, I’d say the SA-01 are a fairly decent match for these speakers which it is usually suggested are partnered with high current amps (read the likes of Krell) - this did come as a bit of a surprise as I fully expected the amp to struggle a good deal. It certainly feels like the amp is pretty much in control of what is, let’s be frank, music that could very easily descend into a muddled mush of noise. Again switching speakers, this time to a pair of 88db Xavian Perla, there’s that same control with this record and in honesty, I think the SA-01 is much better suited to these speakers. There is that same control, but the stage seems a tad wider and with more depth. With that comment in mind, I’ll continue the rest of the review the Perlas in place for the duration of the review. I suppose the amp is more at ease and it feels more ‘at ease’ it with the Perlas in place. The overall sound is open and under control.

Keeping on the theme of difficult music I pull out Soulwax’s Essential from June of 2018. It’s a deceptively simple-sounding record (CD actually in this case), but it’s full of complex ‘analogue’ synths, it’s well mixed, and pushes kit to the extremes at both frequency extremes. The SA-01 doesn’t bat an eyelid, and again there’s that feeling of command from the amp. The helpfully named second track ‘Essential Two’, which follows ‘Essential One’ and precedes ‘Essential Three’ again has a lot going on and a squidgy synth line running throughout that can become confused at times with some amps, but the SA-01 takes it in its stride – there’s a sample in there, and I’ve not noticed this before, but I’m sure it’s from The Flying Lizards ‘I Want Money’ – genuinely I’d never noticed it before, but, of course, I am listening very closely here. There is no doubting that this amp suits these

speakers and material very well indeed. There is a common failing that is often aimed at Class D amplifiers and that is that the top end can sound brittle, and, for want of a better word, broken. I’m just not getting this at all with this amp and with these speakers, and I am pushing it a fair old bit. It’s also nicely balanced across the frequency range here, though this kind of program is heavily weighted to the top and bottom of that range. I’m looking (and listening) hard to find fault with this amp here, I really am. Little effects and details in this record come and go in the mix and they are presented as they should be.

Changing the tone somewhat and here I reach for Rufus Wainwright’s Want One album, and this is the first time I’ve really felt that the amp on test here didn’t deliver in the same way as the Merrill amps – the Merrills just seemed to be a little ‘sweeter’ in the mid-band presentation. On this material, I’m just finding the presentation to lack a bit of excitement and, conversely, refinement. Is it bad?...no, not at all, and had I gone out and spent a tenner short of £700 on an amp that performed like this I’d be well chuffed. This is a big scale recording in parts, with orchestras recorded at Angel Studios in London and Avatar in New York, and I felt the amp got a little muddled on some of the more hectic and full on orchestral passages. With that said Wainwright’s voice is presented really nicely and with a good degree of insight into his tone, which is pretty unique. It is also projected nicely out into the room and there is a good degree of openness and space presented. Really, to moan at this price for an amp would be a bit much given all that you are getting on the positive. On the simple vocal and piano of the song Pretty Things I begin to forget the points I made above and feel I can almost reach out and touch/see Wainwright sat at the studio’s piano, simply mic’ed and simply recorded – wonderfully reproduced and hard to fault! Go Or Go Ahead (another simple track for the most part) is likewise beautifully presented, with only the slightest lack of definition becoming evident when the track gets a little busier. Detail of spatial cues to the recording space and the recording style are well in evidence with 14th Street, and orchestration and choir come in and sound great - by way of calling me a liar with regards my previous comments - but it is a little

REVIEW

less busy than the other tracks I banged on about. Trumpet on Harvester of Hearts on this record is presented gloriously, with the right amount of pap pap pap (that's a technical term) and very realistic presence.

CONCLUSION

There are obvious comparisons to this amp, and there's plenty of brands putting out simple amps using Hypex modules, in this case the MC502MP. To a great extent you are getting what it says on the tin with most of these amps, but it is not they I have had in front of me for the last week or so. For the money this amp is excellent and if partnered well with speakers relevant to its abilities will give you very good service. It feels as if it is in control of everything that is going on at the top and bottom of the frequency range and only seemed to lose it a little with regards our reference in busier passages with lots of mids and lots going on in the mix.

Do I recommend this amplifier? Yes, I recommend it highly, and feel that for the money being asked you are getting an amplifier that will serve you well – bear in mind it is for the main part being partnered here with kit, specifically speakers, that (in price terms) are well further up the ladder, but it really doesn't embarrass itself at all.

AT A GLANCE

Build Quality: Well put together and looks good in a minimalist kind of way. Certainly a no-frills product on the build front, no doubt to keep costs down, but it does look pretty cool on the rack. Has both XLR and RCA outputs where many similar amps only provide XLR

Sound Quality: Partnered well, and especially with the right speakers, you have a gem of an amplifier for the money here

Value For Money: It comes in at a little less than similarly spec'd products I have come across and so I'd say it offers very good value for money

Pros:

Good value

Nice Looking, no-frills design

Clipping circuit is a nice touch

Soft start

Open and engaging sound

Good control of bass with appropriate loudspeakers

Articulate with regards to spatial cues

RCA and XLR inputs

12V trigger and cable included at no extra cost

Cons:

Can become a tad muddled on hectic material, particularly in the mids

Does perform differently with different loudspeakers, so do keep this in mind

Price: £690 as tested

