

Emotiva BasX TA2

Based on the slimmer, lookalike TA1, the TA2 features twice as many output transistors, a far beefier PSU and three times the output... All this, a DAC/preamp and FM radio too
 Review: **Mark Craven** Lab: **Paul Miller**

You shouldn't even need to see the £1099 price tag of Emotiva's BasX TA2 to understand it's one of the American manufacturer's entry-level products: the clue is in the name. Yet this integrated amplifier is about more than just covering off the 'basics', not least as it's positioned as a step up from the £669 BasX TA1 [*HFN* Nov '22].

That model, also described as a 'stereo preamp/DAC/tuner with integrated amplifier', claims a 2x60W/8ohm (and 100W/4ohm) Class AB power output, and features a slender, 67mm-high chassis. The BasX TA2 is beefier both inside and out, upping the claimed power to 135W/8ohm, and growing in height to 102mm. It's still easily accommodated, of course, but will look a little more serious than the waif-like TA1 on your hi-fi furniture.

SUPERIOR SUPPORT

Just as the rated power output of this amp appears generous for the money [and performed even better in PM's lab tests – see p75], so too does the connectivity, which mixes analogue and digital inputs with FM radio, plus some flexible output options. Networking is absent, but there's nothing else missing that you might expect to get at this price, and plenty here that you probably wouldn't.

For physical inputs, the BasX TA2 builds on the TA1, increasing the analogue RCA options from two to four, and adding a second optical digital input. Also on the rear panel are a coaxial digital input, an MM/MC phono input (47kohm/100ohm), and a USB-B port supporting 192kHz/24-bit playback from a PC or hi-fi streamer. Built-in Bluetooth v5.0 (with aptX HD and AAC) and the aforementioned FM radio receiver are both supported by screw-in antennae.

Moving on to the outputs, adjacent to a set of speaker binding posts are analogue

stereo and subwoofer pre-outs, the former with a toggle to switch in a high-pass filter, the latter offering the same for a low-pass filter. There are also 2.1-channel home theatre bypass inputs for adding the amp to a surround sound set-up, plus 12V trigger in/out. This makes Emotiva's affordable amp unusually versatile when it comes to system integration, particularly for subwoofer owners [see boxout, p73].

The initial impression of the BasX TA2 being a more muscular version of the TA1 is reinforced by its milled aluminium front panel, as except for some extra real estate, the two are identical. Above the central power on/off button is a thin black strip containing a VFD display, plus input selection buttons and a 3.5mm headphone socket. On the right is a volume rotary, backlit blue to match the VFD illumination.

It looks rather spartan, but the volume knob doubles as a push/twist controller

for delving into the BasX TA2's menus, and here there's a fair amount of tweaking to uncover. For example, Emotiva provides treble, bass and balance controls, as well as the option of setting the brightness of the VFD illumination, all the way down to off. You can also use the menus to autotune or seek FM radio stations and save them to the amp's 15 memory slots.

ROOM AND BOARD

The controls are reasonably intuitive, and these menu adjustments can be more easily made via the TA2's compact plastic remote control. However, if I may level some criticism at Emotiva's amp, it's that it lacks a degree of general operational slickness compared to some integrated rivals. As an example, the tuner portion of the menus are only visible if you've remembered to switch to the tuner input first. Additionally, while the VFD will show

RIGHT: Two pairs of power transistors (per channel) are bolted onto the TA2's fan-cooled heatsink [right], all fed from a large linear PSU [left]. A daughter board [top right] handles input switching and the AD1955 DAC-based preamp





the sample rate of an incoming digital signal, it only does so briefly when playback is started, and can't be easily recalled. The volume control – a rotary encoder rather than a chunky analogue pot – feels lightweight compared to the rest of the amp and, thanks to its multiple steps, it's not easy to quickly crank up the level. That said, the BasX TA2 does handily remember the last used input and volume setting after power off/on.

Meanwhile, the lid off shot [p72] reveals what Emotiva describes as a 'highly optimised circuit layout,' where the amp board (with heatsink and cooling fans), toroidal transformer and power supply circuitry are isolated from the analogue input and DAC stage (the latter based around an Analog Devices AD1955 chip). Note that analogue signals bypass the amp's digital circuitry, and the bass

management, tone and volume controls all operate in the analogue domain.

POWER PLAY

Any prospective buyer of the BasX TA2 may consider some of its functions – specifically the HT bypass and bass management

features – unnecessary, so it's worth stressing that the upgrade in power over the TA1 makes a tangible difference to the listening experience. From recollection, this amplifier sounds more purposeful but also more

at ease; it attacks the dynamics of music with greater gusto and with tighter control of its well-extended lows. Elements of the TA1's sonic signature do remain, however, which is not surprising because much of the underlying technology is the same. The DAC stage isn't one to completely uncover the tiniest of musical details, and with

'Here was a sounding-board for her heaven-sent vocals'

ABOVE: Not as minimalist as it looks, the new TA2 features an elongated display strip, two tiny selection buttons and a click/twist rotary encoder for tuning, volume and navigation

some pieces there's a congested feeling to the soundstage, a lack of air. Nevertheless, for the most part the BasX TA2 had me listening with a grin on my face.

Mercury Rev's *Deserter Songs* [V2 Music VVR1002772] isn't an obvious album with which to audition a power-pushing American amp, as its collection of psychedelic, Beatles-esque tracks is dying for a deft touch presentation. Yet the TA2 acquitted itself well with the full-bodied tone of the brass on 'Holes' and the wispy strings on 'Endlessly'. It also spread the band's instruments across a soundstage that, while lacking an expansive sense of depth, had sufficient space.

Florence + The Machine's cover of Candi Staton's 'You Got The Love' [Lungs; Universal Music 44.1kHz/16-bit] is an even more polished production, with a mix that puts the singer front and centre. The TA2 zeroed in on the vocals, revealing the cracks, breaths and distinctive tone of Florence Welch's voice, while bass guitar and piano churned away behind. On this piece the weight of the low frequencies felt a bit overbearing, leading me to the amp's trim controls to dial the bass down a mark. This isn't something I'd usually do, but I welcomed the option.

STACK ATTACK

There were no such problems with Alice In Chains' early-'90s grunge masterpiece *Dirt* [Columbia 472330 2], as the BasX TA2 sounded spot-on in its rendition of the ferocious riffs and pounding drums. The dynamic surges in the chorus of 'Rooster', and the sludgy guitar lines of 'Junkhead', created the impression of the group standing in front of a stack of amps, the raw energy of their playing apparent.

When these songs became more layered, the amplifier's affordable nature shone through as it became harder to really focus on individual elements. Yet this wasn't a constant concern. A runout ↪

SUBWOOFER SOLUTION

Emotiva has a product catalogue that looks to cover all (affordable) bases across hi-fi and home theatre. It produces stereo amps, DACs and pre/power combinations; multichannel processors, power amplifiers and AV receivers; and loudspeakers, subwoofers and headphones. This multi-pronged approach finds its way into the BasX TA2, which is far from your common-or-garden stereo integrated amp. The addition of an FM tuner – a 'digital' front-end integrated into the Bluetooth receiver solution – is not uncommon practice on AV amplifiers (or 'receivers') that are intended to function as a full system hub. Incidentally, DAB radio is not an option on the TA2. Moreover, the amplifier's home theatre bypass connection allows it to be incorporated into a multichannel set-up, acting as a – most likely more powerful – amplifier for the front left/right channels in a surround sound system.

Yet it's the BasX TA2's bass management functionality that is the most unusual, bringing greater flexibility to a speaker/subwoofer set-up than is the norm – whether the unit is being used to power loudspeakers via its speaker outs, or solely as a preamp. Through the amp's subwoofer pre-out [see p75], the signal to a connected (active) subwoofer can either be sent as full-range, or via the TA2's analogue low-pass filter (LPF). On the TA1 model, the LPF is fixed at 90Hz, but here there's a small dial offering a variable 40Hz-200Hz roll-off.

There's also variable 40Hz-200Hz control for the corresponding high-pass filter (HPF) on the TA2's stereo preamp output, which also applies to its internal amplifiers. This means that loudspeakers in a 2.1 system can – if desired – only cover certain frequencies, eg, 80Hz and above. Just remember to make sure the HPF is set to 'Off' for regular stereo listening...

INTEGRATED AMPLIFIER



ABOVE: Four line, MM/MC and HT/sub ins sit alongside filtered low-pass (sub) and high-pass line outs, all on RCAs. Two optical, one coax and USB-B digital ins (192kHz/24-bit) are joined by FM and BT antenna(s). Speaker outs are via 4mm binding posts

of The Eagles' *Hell Freezes Over* live set [2018 remaster; Geffen Records 44.1kHz/24-bit], and the majestic acoustic version of 'Hotel California' (when you can hear it above the whooping and clapping crowd), found the TA2 on top form. The sound came together with clean acoustic guitar and crisp percussion, well focused on the stereo stage. Bass notes were plump, the kick drum resonant, and the vocal harmonies sweetly layered.

Jennifer Warnes' 'Bird On A Wire' [*Famous Blue Raincoat*; Porch Light 44.1kHz/16-bit] was similarly exciting, with its drum and palm-muted guitar forming a large, buoyant sounding-board for her smooth, heaven-sent vocals.

SPINE TINGLING

Listening via the BasX TA2's USB-B input, and through its analogue input from sources including Hegel's Viking CD player [HFN Sep '23], it became clear that this integrated is at its best with well-recorded music. It will not 'sweeten' tougher, rougher albums but what it does do, brilliantly for the price, is present

any genre with plenty of power. Indeed, part of the thrill of listening to the BasX TA2 is simply turning the music up loud.

Playing 'The Pusher' from Steppenwolf's self-titled debut album [Geffen Records; 192kHz/24-bit], through some



LEFT: Emotiva's BPR-2 remote offers access to the TA2's 'menu tree' plus input select, volume, mute and display dimming

Perlisten R7t floorstanders [HFN Aug '22], I didn't get much beyond the TA2's 60 volume setting (out of 80) before putting down the remote and soaking up the largescale portrayal of this languid stoner rock classic. The amp's neutral intonation laid bare the various flavours of guitar tone and piano, just as it served up the trumpets of The Rolling Stones' 'Bitch' [*Sticky Fingers*; Polydor 376 483-9] with both considerable force and impressive detail.

The title track of Simon & Garfunkel's *Bridge Over Trouble Water* [Columbia; 192kHz/24-bit] is certainly more sedate, but the power of the amp's performance was still apparent in the strong, spine-tingling rendition of the two vocalists and the deep, gospel-like piano backing.

And what about some hip-hop? Eminem's 'Lose Yourself' [*Curtain Call: The Hits*; Interscope Records 0602498890844] is built upon a repetitive bassline that thumps out from the BasX TA2 like a heartbeat, while the rapid-fire lyrics hit with clarity and snap. 'Lose yourself in the music', commands the Detroit rapper – something that's easily done with this Emotiva amp... ☺

HI-FI NEWS VERDICT

This feature-packed integrated amp makes quite the impression. Outrageously powerful for a model at the price, the BasX TA2 paints largescale, dynamic images with plenty of bass heft and midrange presence – attributes that make up for a lack of top-end smoothness and insight. Excellent connectivity, including FM radio, asynchronous USB, and some useful tricks, further cement the value-for-money status.

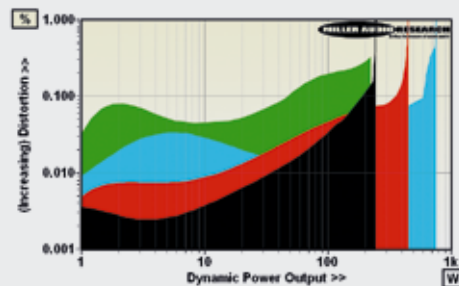
Sound Quality: 85%



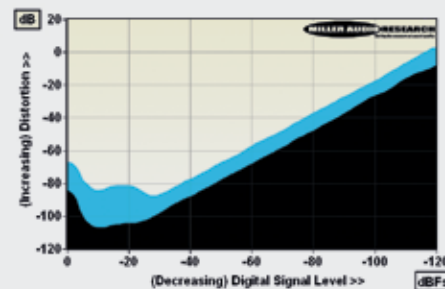
EMOTIVA BASX TA2

'The new BasX TA2 builds on the legacy of our TA-100 [HFN Apr '19] and TA1 [HFN Nov '22]', says Emotiva, but with 'significantly more output power'. It's not kidding – while both the TA-100/TA1 offered 2x63W/8ohm and 2x93W/4ohm, the TA2 pumps out nearly triple this at 2x184W/8ohm and 2x280W/4ohm. This is significantly more generous than Emotiva's own 135W/200W spec. I might add. Also, while the TA1 offered a dynamic output of 87W, 153W, and 234W into 8, 4 and 2ohm loads, respectively, the TA2 goes far further with 245W, 451W and 760W [Graph 1]. And, while the TA1 was protected at 52W/1ohm, the TA2 shuts down at 229W/1ohm (15.1A), so the latter actually delivers more (19.5A) into 2ohm... Gain is unaltered at +41.6dB and the A-wtd S/N ratio is held to a wide 91.5dB (re. 0dBW) despite the larger PSU with its potential for higher hum fields. Distortion, too, holds to within 0.005% from 1W-10W/1kHz and 0.005-0.045% from 10W-100W. The ±1dB response limits are 6Hz-55kHz.

The AD1955-based digital stage achieves a maximum 3.78V output (at 0dBfs) but, as the power amp is still in-circuit, my tests were conducted at a 'safer' 2V/0dBfs output where the TA2 achieves a creditable 107.1dB A-wtd S/N ratio and 0.005%/1kHz distortion (increasing to 0.045%/20kHz). This falls to 0.0004-0.008% at -10dBfs although distortion increases at all levels at LF (0.02%/20Hz/0dBfs) where the TA2's line output impedance increases from 35ohm (midband) to 618ohm/20Hz. AD's standard linear phase digital filter offers a 79dB stopband rejection and response limits of -0.1dB/20kHz (CD/48kHz data), -1.6dB/45kHz and -4.4dB/90kHz (96kHz and 192kHz data). Jitter remains <150psec for all sample rates. PM



ABOVE: Dynamic power versus distortion into 8ohm (black trace), 4ohm (red), 2ohm (green) and 1ohm (cyan) speaker loads. Maximum current is 19.5A



ABOVE: Distortion vs. digital signal level over a 120dB dynamic range (preamp out), 1kHz (black); 20kHz (blue)

HI-FI NEWS SPECIFICATIONS

Power output (<1% THD, 8/4ohm)	184W / 280W
Dynamic power (<1% THD, 8/4/2/1ohm)	245W / 451W / 760W / 229W
Output impedance (20Hz-20kHz)	0.028-0.048ohm (618-35ohm, pre)
Freq. resp. (20Hz-20kHz/100kHz)	-0.15dB to -0.15dB/-2.5dB
Digital jitter (S/PDIF at 48kHz/96kHz)	135psec / 145psec
A-wtd S/N ratio (re. 0dBW/0dBfs)	91.5dB (Analogue) / 107.1dB (Dig)
Distortion (20Hz-20kHz; 0dBW/0dBfs)	0.002-0.036% / 0.005-0.045%
Power consumption (idle/rated o/p)	14W / 487W (1W standby)
Dimensions (WHD) / Weight	432x102x412mm / 11.3kg