



## Roksan Attessa Streaming Amplifier

The most comprehensively-equipped component of Roksan's Attessa guartet combines phono, line and digital inputs with a BluOS streaming platform and beefy amplifier Review: Mark Craven Lab: Paul Miller

o it turns out that network amplifiers built around BluOS streaming technology are like buses. No sooner had we waved goodbye to the £1299 NAD C 700 [HFN Feb '221, then up popped the Attessa Streaming Amplifier from Roksan, a little more expensive at £1495 but cut from the same just-add-speakers cloth. This joins a competitive market alongside not only NAD's device but Bluesound's £850 BluOSbased Powernode, plus other streaming integrateds including Cambridge Audio's Evo 75 and Audiolab's Omnia. Handy for Roksan, then, that it has a lot going for it.

This is one of two amplifier models in the company's Attessa range, which launched in 2021 below its blak, Caspian and K3 series. Roksan's mission statement for its new entry-level lineup is that 'both performance and convenience are equally important', and to that you could clearly add 'style', as all the Attessa hardware to date has a very attractive design.

### STAR OF THE SHOW

Indeed, from the front the Streaming Amplifier looks identical to the Attessa Integrated Amplifier (£995), and close enough to the Attessa CD Transport (£495) to have me craving a two-box system covering all listening bases. Okay, not quite 'all', as vinyl lovers would also want the Attessa TT [HFN Nov '21], a £995 belt-driven deck that shows Roksan isn't ignoring its analogue fans in this range.

Ensuring a unified look across the Attessa models (apart from the turntable's satin white/black finish options, which are different to the silver or black chassis of the amps and transport) is an insistence

**RIGHT:** Large toroidal transformer [top right] feeds regulated PSUs supporting its Class A/B power amp [two pairs of devices per channel, on heatsink], phono [bottom left] and stacked network/BluOS digital PCBs [bottom right]

on full-width enclosures, which makes a change from the proliferation of half-width offerings we've seen of late. And while wide at 432mm, it's also slim, measuring just 76mm high. Of course, this means there's no space for an all-the-rage fullcolour TFT display, which you might expect from a streaming machine at this price.

Instead, the Streaming Amplifier contents itself with a tinv illuminated power/standby button, plus a thin OLED panel that extends either side of what at first appears to be a standard volume pot but is actually a rotary encoder with haptic feedback. Spin and push this to cycle through the amp's sources (shown on the left side of the display) or pump up the volume (shown on the right). Looking at a dark silver version of this amplifier, its

legends and horizontal volume bar lit up in orange, it reminded me somewhat of a Cylon from the old 'Battlestar Galactica' TV show. In a good way.

#### **GENERATION GAME**

This front panel interface proves a little tricky to get used to, particularly as the controller itself requires a firm nudge. However, it's unlikely anyone would attempt to drive the amp via this system alone (or at all). The unit is supplied with a slender remote [p73] that's a joy to use thanks to a sensible button layout and obvious functions. What's more, it can be comprehensively driven by the BluOS app.

During setup you'll also be instructed to download MaestroUnite, a free app from Roksan's parent company Monitor





Audio. This governs the full Attessa range, enabling integration of the CD Transport and Integrated Amplifier (both having a built-in Wi-Fi module for this purpose) into a single 'system'. This app also handles any over-the-air firmware updates for the Streaming Amplifier, but doesn't enable music streaming. Instead, the BluOS app is your route into this wireless world.

Roksan is a little vaque about the under-the-hood aspects of its Streaming Amplifier, referring to 'next generation' pre- and power amp sections and alluding to some trickle-down tech from its Caspian range in the shape of the toroidal

transformer. The latter helps explain the weight of the amp (10.5kg) while the top-panel vents reveal this is not yet another cool-running Class D device. The claimed output from its Class AB engine (80W/80hm; 130W/40hm) is, according to PM's Lab Report [see p73], entirely realistic.

As a 'hub' product, the Attessa Streaming Amplifier covers most bases. In addition to Ethernet/Wi-Fi, aptX Bluetooth and its BluOS connection, the amp offers a trio of analogue inputs (on RCA), one of

which is for an integrated MM phono stage. There are then four digital ins (two coaxial, two optical), plus USB. There's also an RCA pre-out/subwoofer hook-up. What's missing compared to some rivals is an HDMI eARC port for a simplified connection to a TV.

When using the Attessa amp I found myself admiring some of its little details. The MaestroUnite app can, for instance,

be used to upload new graphical icons to the amp's display panel for its different sources. Furthermore, easily accessible via the remote are adjustments for the phono stage gain setting, L/R balance, and

sensitivity of the analogue inputs and 3.5mm headphone out, plus the option of a 'Standby Plus' mode that makes the machine guicker to wake via BluOS. This uses more power, but is worth instigating.

### OUALITY STREET

If you've been on the hunt for an all-inone BluOS solution but have felt less than

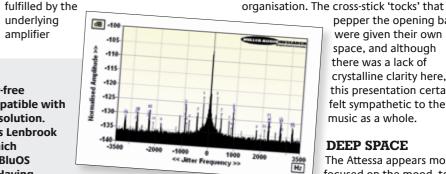
underlying amplifier

'It pushed my

loudspeakers

to "start the

party levels"



music as a whole. **DEEP SPACE** 

pepper the opening bars

were given their own

space, and although

crystalline clarity here.

felt sympathetic to the

this presentation certainly

there was a lack of

The Attessa appears more focused on the mood, tone and rhythm of a piece,

drawing you in by degrees as opposed to catching your attention through sheer detail and dynamics. On this Police staple, that meant it was Sting's distinctive vocal style and the otherworldly effect created by the modulated guitar chords that stayed in my memory after the track had finished.

**ABOVE:** Deceptively simple, the Attessa amp's

navigated by remote [p73] or MaestroUnite app.

Rotary encoder governs input, volume and mute

streaming and other menu options are best

technology, then Roksan's Attessa with

its traditional, tried-and-tested Class AB

output stage might be right up your street.

Amplifier's 'sound signature' has more than

a touch of maturity about it - think a slight

bass and spatial and rhythmic prowess. Put

all that altogether – and add its tangible

around my brain, I called up The Police's

Every Breath You Take: The Singles [A&M

Records; 44.1kHz/16-bit], skipping the

obvious track and heading instead for

'Walking On The Moon'. A few seconds

later I was nodding along to the reggaeinfluenced rhythm and Stewart Copeland's

wonderfully complex percussions, both

appreciating and enjoying this slimline

amp's sense of timing and soundstage

driving power into the mix - and you have

With the manufacturer's name bouncing

tonal warmth, solid but not aggressive

a charming all-rounder.

I'd be tempted to suggest the Streaming

The synthesiser intro of the same set's 'Invisible Sun' gave me an appreciation of the Attessa's ability to lay on a reasonably →

### **BLUOS: HI-FI OVER WI-FI**

BluOS is a lossless, multizone and latency-free wireless music distribution platform compatible with native audio files up to 192kHz/24-bit resolution. The technology is an offshoot of Canada's Lenbrook group, best known for the NAD brand which has acted as pilot and flag-waver for the BluOS ecosystem [most recently, HFN Feb '22]. Having

established its credentials, BluOS is now appearing in third-party products, including this Attessa Streaming Amplifier from Roksan. Moreover, its strong showing in our earlier reviews seems entirely justified from a technical perspective, for not only is the performance of Roksan's PCM5242 DAC-based digital/preamp board identical in all key respects when comparing 'wired' USB and S/PDIF with wireless BluOS, the latter actually proved superior in its jitter suppression! So while the 107dB A-wtd S/N ratio, the minimum 0.0002-0.0008% distortion (20Hz-20kHz over top 20dB of dynamic range) and the ±0.4dB resolution (100dB range) all prove unchanged, jitter was reduced from 220psec (USB, 48kHz) to 105psec via BluOS [see inset Graph]. PM

### STREAMING AMPLIFIER

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ABOVE: Included are MM phono and two RCA line inputs, pairs of optical and coaxial digital inputs, LAN and two USB-A ports (one for the Wi-Fi dongle). A sub/pre output is offered plus a set of 4mm speaker cable binding posts and 12V trigger connections

cosseting low-end, and I was impressed by the depth of the image created, where Copeland's tom-tom drums sounded suitably distant. This skill was something that I noted again and again, the Streaming Amplifier always able to put musical elements front and back, rather than pushing everything forward.

To test the mettle of Roksan's power amp, I dug out Greta Van Fleet's From The Fires CD [Republic Records/Lava, 00602567126034], playing it via my Oppo disc-spinner into the line input. Say what you want about this Led Zeppelin wannabe band (by all means begin with 'they're not as good as Led Zeppelin'), but the set's production values are high and the tracks are mixed to get you off your feet.

### **RAGE HARD**

ROKSANI Attessa

Album opener 'Safari Song' is a typically bluesy rocker and was crafted here with all the necessary bluster. The lurching bassline, splashing cymbals and crunching guitar riffs hit with a delightful punch. The Attessa SA responded well to being asked to really blow away the cobwebs, pushing my B&W 705 S2 standmounts to 'start the party' levels without any sign of a

hardening treble to sap my enjoyment.

However, while there's clearly scads of power on tap, there's arguably slightly less of the snap offered by some contemporaries. So there were occasions when I was conscious of

LEFT: Roksan's system remote works across the Attessa range, offering input selection, volume and mute for the amplifier 'an amplifier' between myself and some elements of the performance.

With the BluOS module and the Streaming Amplifier's Burr-Brown/ TI DAC in play, and Monitor Audio's Silver 500 7G floorstanders [HFN Oct '21] also called into action, I set off in pursuit of deep, deep bass. That isn't quite what I found with the Moonraker EP from dance music producer Spexion [Murda Sound Digital; 44.1kHz/16-bit], as the low notes on 'Fracture' felt a touch underfed. But the Attessa SA still had immense fun with the swirling electronic details of the title piece, and nailed the synergy between the drum and bass elements.

As for the delicate stuff, this all-in-one is up there with the best at the price. London Grammar's 'Metal & Dust' [If You Wait; Metal & Dust Recordings MADART1] sounded soft and elegiac, vocalist Hannah Reid cast as a plaintive presence. Yet it was Bernard Herrmann's overture for the Alfred Hitchcock classic North By Northwest [100 Greatest Film Themes; Silva Screen SILCD1235] that caught me most by surprise with its raging mix of panicstricken strings, fortissimo brass and percussion. The Attessa SA delivered it all with power, scale and nuance and delectable soundstaging.  $\oplus$ 

### **HI-FI NEWS VERDICT**

Perhaps the most conventional of BluOS amps around, Roksan's Attessa SA partners its hi-res streaming talents with a range of physical connections, a clean, smart aesthetic and a Class AB power amp that keeps on giving. Yet the USP of this entry-level device is arguably its musical bent – there's a grown-up performance here that'll have you listening for hours. Not sure about that control knob, though.

Sound Quality: 83%

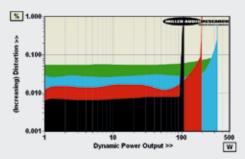


### LAB REPORT

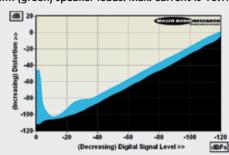
### **ROKSAN ATTESSA STREAMING AMP**

Slimline chassis rated at 130W/4ohm? It might be tempting to think the Attessa SA is another 'off the shelf' Class D amplifier, but it's not... In practice this is a very capable Class AB amp that meets its specification at 2x88W/8ohm and 2x145W/4ohm with sufficient headroom to accommodate 105W, 195W and 330W into 8, 4 and 20hm under dynamic conditions at <1% THD. However, there's a current limit of 16.7A that trips the electronic protection at 280W/10hm [see Graph 1, below]. Midband distortion is held in check at ~0.0035% from 1-80W (~0.0085% via the left channel), increasing very slightly at low and high frequencies - 0.006%/20Hz and 0.007%/20kHz. The response shows a slight HF roll-off amounting to -0.6dB/20kHz (to -10dB/ 100kHz) but the most unusual feature is a +9.2dB boost at 3Hz suggesting care with big, reflex-loaded loudspeakers. Otherwise gain ('Low' sensitivity) is a sensibly limited +35dB and the A-wtd S/N ratio about average for the class at 85.2dB (re. 0dBW).

The performance of the Attessa's DAC stage is determined, in part, by Roksan's choice of the TI PCM5242's slow roll-off (low latency) minimum phase filter. Reduced time domain distortion (no pre-echo/limited post-echo) is traded for a minimal 5.5dB stopband rejection and early treble roll-off of –2.1dB/20kHz with 44.1kHz and 48kHz sample rates. Higher sample rates fare better with responses of –1.35dB/20kHz to –7.6dB/40kHz (96kHz) and –15.7dB/90kHz (192kHz) while distortion falls as low as 0.0005-0.0008% at –10dBFs from 20Hz-20kHz [see Graph 2]. The preamp's A-wtd S/N ratio is a creditable 107dB via the coaxial input while jitter is suppressed to 220psec (48kHz) and 320psec (96kHz). I discuss the BluOS performance in our boxout [p71]. PM



ABOVE: Dynamic power output versus distortion into 80hm (black trace), 40hm (red), 20hm (blue) and 10hm (green) speaker loads. Max. current is 16.7A



ABOVE: Distortion versus 48kHz/24-bit digital signal level over a 120dB range (1kHz, black; 20kHz, blue)

### **HI-FI NEWS SPECIFICATIONS**

| Continuous power (<1% THD, 8/4ohm)         | 88W / 145W                  |
|--|-----------------------------|
| <b>Dynamic power</b> (<1% THD, 8/4/2/10hm) | 105W / 195W / 330W / 280W   |
| Output imp. (20Hz-20kHz, Pre/Amp)          | 22ohm / 0.055-0.140ohm      |
| Freq. response (20Hz–20kHz/100kHz)         | +0.2dB to -0.55dB/-10.1dB   |
| Digital jitter (48kHz/96kHz)               | 220psec / 320psec           |
| A-wtd S/N ratio (DAC/Amp)                  | 107.3dB / 85.2dB            |
| Distortion (DAC, OdBFs/Amp, 10W)           | 0.0002-0.007%/0.0075-0.012% |
| Power consumption (Idle/rated o/p)         | 31W / 255W (1W standby)     |
| Dimensions (WHD) / Weight                  | 432x76x373mm / 10.5kg       |