





FIRST PLAY



**POSITIVE GRID
BIAS HEAD**
£1,398

WHAT IS IT? Purpose-designed front-end for Bias Amp software, with low-latency, high-quality 600-watt Class D output stage



**POSITIVE GRID
BIAS MINI GUITAR**
£876

WHAT IS IT? Cut-down version of its big bro with 300-watt Class D output stage, and reduced size, weight and functionality

Think Positive

From software to hardware, the Bias Amp concept is positively amazing – check out the colossal 600-watt Bias Head and its smaller sibling

Words Nick Guppy **Photography** Olly Curtis

Digital amp simulations have matured at a scary speed over the past few years, and Positive Grid has underlined its reputation as one of the best with a recent new version of its mega-popular Bias Amp software. The brilliantly designed app works on iOS and Windows platforms, allowing users to build their own virtual amp from scratch as well as tapping into the thousands of ready-made patches on Positive Grid's ToneCloud app. Bias Amp has proved so popular that some guitarists were plugging into audio interfaces and using it live. So, it was a natural step for Positive Grid to introduce its own in the shape of



The coolest part of both heads is the way they quickly interface with desks to provide that same quality direct to a house PA or a recording track

the Bias Head, which promises practically zero-latency operation, as well as the option of a whopping 600-watt power stage. The hardware range has also recently been expanded with the scaled-down Bias Mini, offering dedicated versions for guitar and bass and a 300-watt power stage.

Both heads are exquisitely designed and assembled; the internals are PCB-based and unsurprisingly look more like a computer than a guitar amp. The toaster-sized Bias Head's front panel controls include reassuringly familiar knobs for gain, bass, mid, treble, presence and master volume, while over the top of these is a second row that allows instant tweaking of amp type, number of virtual tube stages, power amp topology and more.

Around the back there are balanced and unbalanced stereo outputs, a headphones jack, MIDI in/out/thru sockets, footswitch sockets, two expression pedal jacks and a send/return for the programmable effects loop, USB socket and a wireless button that allows the Bias Head to communicate with the Bias Amp mobile app via Bluetooth. Tucked away in the bottom corner are useful toggle switches that let you run the amp's speaker and line-outs in serial or parallel mode, for wet/dry rigs, and footswitch calibration.

Despite being much smaller, the half rack-sized Bias Mini manages to keep most of the essential rear panel functionality, while front panel controls stick to the essential amp type, gain, tone and volume, with a clever output level knob governing separate levels for line-out, speaker, headphones and FX send.

As both heads are purpose-built interfaces for the Bias Amp software, you'd expect integration to be faultless, and for the most part it is. Online activation and registration is fairly straightforward, with both amps hooking up to an iPad without any problems. PC owners may need some updates; Bias Amp worked fine with a modern Windows 10 laptop, but failed to run on an older Windows 7 machine, so check out forum posts on compatibility.

The app itself is superb, with beautifully drawn artwork adding to the illusion that you're customising real amps, rather than shuffling '0's and '1's inside a DSP. Effects are noticeably absent, however, but there's a noise gate, hum reduction and several excellent reverbs, with a choice of room, plate and hall algorithms alongside a superb chamber. Upgrade from the standard app and you can access a very tempting Celestion-licensed cab module and load your choice of IR patches, as well as play





This is the powered version of the Bias Head, featuring a powerful 600-watt RMS Class D amplifier

1. The Topology switch lets you swap between different output stage types, such as single-ended and class AB push-pull on the fly
2. The Bias Mini's clever Output level knob controls separate levels for headphones, speaker out, FX send and line-out
3. The Bias Mini's Preset knob accesses all 16 of the Bias Mini's onboard patches, arranged in two banks of eight

with the Amp Match function. Saving presets is quite straightforward – once you're happy with a particular sound, click on 'Save to Head/Rack' in the preset menu and you're good to go.

Both the Bias Head and Bias Mini allow real-time tweaking from the front panel controls like any regular guitar amp, and with the Bias Head you can play with more esoteric features, such as power amp topology, or the number of preamp valve stages. The Bias Head comes with 25 presets out of the box arranged in five banks according to type, while the Bias Mini has 16, arranged in two banks of eight called Red and Green. Turning the preset knob selects the patch, while tapping it swaps from Red to Green and back again.

Feel & Sounds

The overall quality of the presets on both heads is excellent; your idea of what constitutes a perfect AC30 or tweed Bassman may not always line up with other people's, but there's plenty of flexibility in the software to deal with that. What's more important is that the core tones are very usable for both live and recording situations, with plenty of instant-gratification patches in the ToneCloud for those occasions when time is in short supply.



The higher-gain distortions keep noise down to respectably low levels, helped by the noise gate. We're also very impressed with the lower gain voicings, particularly the glassy treble complexity of the '64 British J45' patch and the touch-sensitive midrange throatiness of 'Tweed Lux'.

The coolest part of both heads, though, is the way they quickly interface with desks to provide that same quality direct to a house PA or a recording track. While effects have to be added separately, the built-in reverbs provide all the ambience you need for exceptional realism; the rooms, halls and plates are all very adaptable, while the chamber emulation is one of the best we've heard and essential for recreating the vibe of early guitar sounds from both sides of the Atlantic. Both heads have volume to spare for any size gig.

Verdict

Whatever your opinion of digital modelling, products such as the Bias Head and Bias Mini definitely have their place, now and in the future, making it easy to get consistently great sounds on stage and in the studio, while bypassing the tedium of tweaking EQs and mic positioning.

The playing experience comes very close to the real thing, convincingly replicating the response and dynamics of a real valve circuit. The new Bias Mini Guitar (and Bass) heads will open the digital door for many new customers – they're more accessible and compact, making for a powerful and portable tool, ideal for small to medium-sized gigs. They're not cheap, but you're not just buying the hardware; the price also includes the wonderful Bias Amp software and entry to Positive Grid's feature-rich ToneCloud portal.

If you're thinking of going digital, there's never been a better time to think Positive. **G**

4. Both heads feature seamless editing and hook-up with the Bias Amp mobile app, using Bluetooth wireless control



POSITIVE GRID BIAS HEAD (POWERED VERSION)

PRICE: £1,398
ORIGIN: Taiwan
TYPE: Digital modelling preamplifier with Class D power stage
OUTPUT: 600W RMS
VALVES: None
DIMENSIONS: 314 (w) x 190 (h) x 153mm (d)
WEIGHT (KG/LB): 7/15
CABINET: Steel/aluminium
CHANNELS: 25 presets, 5 banks of 5
CONTROLS: Gain, bass, mid, treble, presence, master volume, output level. Amp type, model, tube stage selector, distortion, topology, power amp, 1 custom assignable
FOOTSWITCH: Standard latching footswitch changes presets – also compatible with MIDI and Positive Grid switches
ADDITIONAL FEATURES: Stereo balanced and unbalanced line outputs with ground lift, programmable effects loop, headphones socket, MIDI in/out/thru, USB, Bluetooth wireless
OPTIONS: Bias Footswitch and Bias BT-4 Bluetooth Footswitch, both £198.89
RANGE OPTIONS: There's a non-powered DSP version for £1,098, while the rack versions are the same prices for powered or DSP-only

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8/10

PROS Excellent low-latency sounds; superb app

CONS Effects aren't part of the standard software (bar reverb)



POSITIVE GRID BIAS MINI GUITAR

PRICE: £876
ORIGIN: Taiwan
TYPE: Digital modelling preamplifier with Class D power stage
OUTPUT: 300W RMS
VALVES: None
DIMENSIONS: 260 (w) x 45 (h) x 240mm (d)
WEIGHT (KG/LB): 5/11
CABINET: Steel/aluminium
CHANNELS: 16 presets, 2 banks of 8
CONTROLS: Preset select, gain, bass, mid, treble, presence, master volume, output level
FOOTSWITCH: Standard latching footswitch changes presets – also compatible with MIDI and Positive Grid switches
ADDITIONAL FEATURES: Mono balanced line output with ground lift, programmable effects loop, headphones socket, MIDI in/out, USB, Bluetooth wireless
OPTIONS: Bias Footswitch and Bias BT-4 Bluetooth Footswitch, both £198.89
RANGE OPTIONS: There's a specially-adapted bass version, also £876



9/10

PROS Excellent amp emulations in a very portable package

CONS MIDI on fiddly adaptors; no effects in the standard app