

D-TAR MAMA BEAR

PRICE: £289
ORIGIN: China
TYPE: Digital acoustic guitar processor preamp
FEATURES: Patented AGE technology offers 16 digital emulations of classic acoustic guitars while a 16-position input source selector provides digital filter options to prepare pickup tone prior to emulation overlay. Input level control w/ overload LED, dry/processed signal blend control, true bypass, mute, phase reverse, analogue low-cut filter (sub-200Hz roll-off) and output level control. Mic stand mountable (adaptor not included)
EFFECTS: None
DISPLAY: Single LED indicators for input overload, bypass, mute and power on.
CONNECTIONS: 6.4mm jack Hi-Z input, 6.4mm jack & balanced XLR (w/ ground lift) line outputs
MIDI: No
POWER: 16V AC via external power adaptor (included)
DIMENSIONS: 216 (w) x 159 (d) x 69mm (h)
WEIGHT (kg/lb): 1.2/2.7
EXT CONTROLLERS: No
Aria UK
020 8572 0033
www.dtar.com

The rivals

MAMA BEAR
 Fishman Aura £399
 BOSS AD-8 £279
 Korg AX10A £119
 Fishman's Aura has 16 Acoustic Sound Images, 50 user-definable programs, 2 x three-band EQ for image and pickup, image/pickup blend, pickup phase, compressor, chromatic tuner, anti-feedback, global phase switch, jack or balanced XLR output and ground lift. BOSS offers six acoustic guitar/microphone models with pickup/model mix and modelled mic placement, four-band EQ, digital reverb, auto anti-feedback, chromatic tuner, four preset memory, ground-lift switch, stereo/mono operation, electric guitar amp biased output and headphones output. Korg offers models of one mic and 10 acoustics, 40 preset + 40 user programs, multi-FX, built-in expression pedal, chromatic tuner, manual notch, three-band EQ, noise reduction and tap tempo for delay/reverb



PHOTOGRAPHY AMANDA THOMAS

D-TAR Mama Bear, Equinox & Solstice £289, £209 & £269

D-TAR for your gee-tar: the new name in acoustic amplification forms a veritable stack of magic boxes to transform your plugged in acoustic tone by Matthew Wig

D-TAR is an acronym for Duncan-Turner Acoustic Research – as in Seymour Duncan Pickups and Rick Turner, noted US luthier and acoustic pickup designer (formerly of Alembic, Gibson and Highlander). The company launched its first products back in 2003, including acoustic pickups and both on-board and off-board electronics like the Solstice two-channel mixer/blender preamp and, not long after, the Equinox parametric equaliser preamp. However, it is this year's launch of the state-of-the-art Mama Bear digital acoustic processor that has inspired us to assemble all three similarly styled

D-TAR units for review. Concentrating mainly on the Mama Bear, the other two units in the range, nonetheless, both justify a belated mention. Preceded by both the Fishman Aura (Guitarist 251), the BOSS AD-8 and Korg's AX10A (both Guitarist 255) foot pedal units, which all provide a comparable digital processing solution, the Mama Bear is, sensibly, slightly different. It's not a foot pedal, following instead the sort of half rack-unit format of its stable-mates. D-TAR's description of the Mama Bear, its functions and usage, follows Fishman's avoidance of the term 'modelling'. And while BOSS

D-TAR MAMA BEAR	TEST RESULTS
Build quality	★★★★★
Features	★★★★★
Sound	★★★★★
Value for money	★★★★★
<p>■ WE LIKED Credible digital acoustic emulations; very little background noise; useful lo-cut filter</p> <p>■ WE DISLIKED You can't fiddle with the sounds themselves, only try different input settings</p>	

and Korg made ambitious claims about a host of classic acoustic guitars from one box, Mama Bear's manual promotes logical experimentation to achieve



D-TAR EQUINOX	TEST RESULTS
Build quality	★★★★★
Features	★★★★★
Sound	★★★★★
Value for money	★★★★★
<p>■ WE LIKED Potent and precise tone shaping and feedback control; very good price</p> <p>■ WE DISLIKED May be too specialised a unit for its own good</p>	

varied and credible amplified acoustic sounds from your electro-acoustic or piezo bridge electric, rather than fantastical transformations.

Mama Bear

Like all these D-TAR boxes, the Mama Bear's front and back panels get a retro-looking design, and here it's variegated olive-green 'rainbow' edges. While these panels are actually plastic overlays, the box is solid metal, finished in D-TAR's standard cream. It's not tank-like construction, but this isn't a foot pedal; and we get some basic stuck-on rubber feet, decent standard knobs and positive buttons. The blend control gets a sensible 50/50 mix notch, while the 16-way rotary selectors click round positively. Jack inputs are tough plastic, while the XLR output socket has gold-plated pins. Three threaded holes on the underside are for an optional adaptor for mounting on a mic stand. This unit's potent capabilities are belied by its simple 'one knob, one function' layout.

Whereas the Fishman Aura transforms an electro-acoustic guitar's pickup system tone into that guitar's ideal mic'd-up sound, using source-specific Acoustic Sound Images that work best with a close match, the Mama Bear is not designed to exactly emulate the acoustic tone of your electro. Nonetheless, the type of pickup you have fitted is still a key factor in the processing chain. By using the Mama Bear's input source selector to match your pickup type, its signal gets some sophisticated digital tweaking so that it is prepared for overlaying one of the 16 so-called target instruments. The classic acoustic 'sonic signatures' of the latter digital emulations may sound nothing like your own electro does acoustically, but if you're going to significantly process your pickup's signal, you may

prefer to have some highly prized acoustic sounds to play with. The second stage of this processing chain is more akin to the BOSS AD-8; and while D-TAR has lots more virtual instruments in its library, BOSS offers extra features, effects and EQ, although it doesn't contend with the sonic variables different pickup types introduce. D-TAR has taken considerable effort to capture the essence of each target instrument for its digital algorithms, but we, of course, have to accept that there are certain fixed parameters present here since there's no mic placement modelling or mic type options.

With the Mama Bear's core functions taken care of by its 32-bit digital microprocessor and 24-bit A/D D/A converters, this leaves a simple, sparsely equipped device. Its ultra-high impedance input and the input selector cater for any kind of under-saddle or soundhole pickup, although this unit is not designed for contact pickups or mics. Small yet vital inclusions include variable input gain with a clip indicator (so often omitted), a processor bypass switch for quick A/B'ing, a mute switch and phase reverse for feedback cancelling. Additionally there's an analogue low-cut filter to gently roll off sub-200 Hz frequencies since some of the emulations can boost bass response.

The dual true line level outputs offer appropriate parallel connections, with a ground lift for hum-free DI'ing.

While this unit can be mounted on a mic stand for handy on-stage access, it obviously lacks footswitchable parameter changing, although a brief muted pause when switching between target instruments may scupper 'on the fly' sound changes anyway.

SOUNDS: Firstly, as a control experiment, we sought a sound something like our test guitar's acoustic tone. Using a cutaway jumbo body Avalon JS201CE with a Fishman Prefix Plus system we dialled in 'Flat Film UST #2 - flat EQ' on the input selector (there's also a 'smiley face' EQ

option) and chose the 'Super Jumbo' target instrument. Fishman's Matrix pickup is a flat (as opposed to coaxial) PVDF plastic piezo film UST.

With blend wound fully wet (processed), the tone we get is very impressive and pretty much useable as is without adding any more EQ. Not only is that crucial body and air interaction restored, giving the sound three-dimensional space, but the actual 'sonic signature' – a lush, deep, slightly scooped jumbo vibe – is predictably fitting. The low-cut switch trims some excess boominess to leave a smoothly ironed out acoustic sound, which should prove very handy for DI recording. Its liveliness at high monitoring volume, however, suggests a 50/50 wet/dry blend (or thereabouts) will suit gig environments better.

Input selector options can be experimented with, but these are relatively subtle variations. Only when you select the 'Neutral, no input compensation' setting, which sounds very mushy, do you realise how vital this half of the process is. Essentially, it helps you achieve more consistent tones from the target instrument stage. We also got a thinner, but equally good tone via the 'Slope-shouldered Dreadnought' emulation, a funky 'Small Body Blues' twang and an enjoyably quirky lo-fi honk from 'Gypsy Jazz'.

The new Mama Bear processor falls nearer the Fishman Aura in its intention, but matches the BOSS AD-8 more on price

Even on full effect blend the end result is not entirely devoid of traces of piezo pickup dynamics, and don't expect miraculous transformations on

every setting – the Resonator settings didn't really happen for us. Smoother sounding, and with less background hiss, Mama Bear overlays don't deliver quite as crisply microphonic an environment as Aura Sound Images, but with the right combination of settings this slightly more subtle processor certainly puts the wood and air back into your sound.

Equinox

This unit is identically constructed except for the brown-shaded spectra on its front and back. With three knobs per parametric EQ band, and two per notch section, it's rather cramped but hardly confusing.

The Equinox covers three broad, overlapping frequency bands in its parametric section and two overlapping low to low-mid bands for its notch section. As a true parametric equaliser, the Q (bandwidth) is adjustable from 2.5 down to 0.15 octaves for either broad or very precise tone pruning.

This unit's input, with adjustable

D-TAR EQUINOX

PRICE: £209
ORIGIN: China
TYPE: Three-band parametric equaliser preamp
FEATURES: 39-408Hz, 212Hz-2.35kHz & 1.8-20kHz fully parametric EQ with frequency sweep, gain (+/-15dB) and Q (bandwidth) controls; 40-400Hz & 80-800Hz notch filters with frequency sweep and gain (-15dB cut only) controls, input level w/ overload LED, +20dB gain button, separate bypass switches for EQ and notch. Mic stand mountable (adaptor not included)
EFFECTS: None
DISPLAY: Single LED indicators for input overload and power on
CONNECTIONS: Stereo/ TRS 6.4mm jack Hi-Z input for mono input or in/out interfacing via single stereo lead, dual mono 6.4mm jack outputs & balanced XLR output w/ ground lift
MIDI: No
POWER: 15V AC via external power adaptor (included)
DIMENSIONS: 216 (w) x 159 (d) x 69mm (h)
WEIGHT (kg/lb): 1.3/2.9
EXT CONTROLLERS: No

The rivals

EQUINOX
 Fishman Pro-EQ Platinum £195
 LR Baggs Para DI £195
 Taylor K4 Equalizer £749
Fishman offers four-band EQ, phase switch, notch filter, XLR (with pre/post EQ switch) and jack outputs, ground lift, 'Smooth' control (compression), voltage doubler circuit, tuner send, input gain control and battery/adaptor/phantom powerable. Baggs offers class A FET input with gain control, five-band 'Quasi-Passive' EQ (including semi-parametric mid and notch), phase switch, XLR and jack outputs, battery/phantom powerable, low cut filter and effects loop. Taylor offers fully parametric mid EQ w/ switchable 80-800Hz/800-8kHz sweep, low/high shelving EQ, XLR/jack combi input socket, phase switch, effects loop, mute, headphones output w/ volume, ground lift, XLR or jack outputs and tuner out

Our CD demo of the Mama Bear is by D-Tar consultant Al Petteway, who can be contacted at www.alandamy.com

D-TAR SOLSTICE

PRICE: £269
ORIGIN: China
TYPE: Two-channel mixer/blender preamp
FEATURES: Two identical channels, each with jack and XLR inputs, separate volume controls for both inputs, switchable +15V phantom power (available to all inputs), -20dB pad for XLR inputs, three-band fixed EQ (+/- 12dB @ 155Hz, 796Hz & 10kHz), signal overload indicator (post EQ), phase reverse and mute. Mono FX loop w/master mix control and master volume. Mic stand mountable (adaptor not included)
EFFECTS: None
DISPLAY: Single LED indicators for input overload, mute and power on
CONNECTIONS: Both channels – stereo/TRS 6.4mm jack high-Z inputs for either mono or dual source (eg tip – pickup, ring – internal mic) signals, balanced low-Z XLR input, stereo/TRS 6.4mm jack insert point and separate balanced XLR post-EQ, pre-mix output. Buffered low-Z 6.4mm jack mono master output, 6.4mm jack tuner output, pre-master/post-mix balanced XLR output w/ground lift and 6.4mm jack FX send/return
MIDI: No
POWER: 15V AC via external power adaptor (included)
DIMENSIONS: 216 (w) x 159 (d) x 69mm (h)
WEIGHT (kg/lb): 1.3/2.9
EXT CONTROLLERS: Mute footswitch (not included)



D-TAR SOLSTICE	TEST RESULTS
Build quality	★★★★★
Features	★★★★★
Sound	★★★★★
Value for money	★★★★★
<p>■ WE LIKED Superb for blending and hooking up any pickup/mic system, or two guitars, as a compact all-in-one preamp/mixer solution</p> <p>■ WE DISLIKED Nothing much</p>	

→ gain, clip indicator and a +20dB gain boost, handles any line level or weaker instrument signal, and also allows single stereo cable connection with the Solstice's or a mixing desk's insert points. EQ and notch bypass switches offer an A/B'ing facility. Dual mono outputs to drive a power amp, or powered speakers, and an XLR DI-out (w/ground lift) also provide stand-alone preamp functionality.

SOUNDS: It's easy to overdo it with EQ, especially while annihilating frustrating under-saddle pickup quirks. That's where the Q control works so well. Balancing this with the gain, especially when pruning mids, you can precisely target nasal 'honk' without losing warmth, getting your electro-acoustic about as loud, clear and resonance free as it's ever going to be.

Solstice
 The Solstice gets 'cinnamon rainbow' panels, but it's otherwise identically

fashioned. This unit is a comprehensively inter-connectable compact mixer/blender for live or studio applications. It can even function as a stereo mic preamp. All four separate controllable inputs run simultaneously, and your myriad outputs cover both mixed and separated channel signals from a variety of points in the signal path, for a nifty mini-rig.

Its 'handle anything' ultra-high impedance jack inputs can auto-route stereo dual source signals to separate channels. The mic input stages are similar to 1970s Neve designs, and Solstice's 15V-only phantom power is suitable for many decent condenser mics and on-board mini-electret mics.

Rather than shelving EQ, all three EQ ranges are of the fixed peaking-type. While each channel has its own in-line insert point (Equinox patches in here), there's also a properly mixable side-chain mono master effects loop.

SOUNDS: More about managing your signal's routing than its tone, the Solstice will definitely preserve your sound, thanks to its first class instrument and mic input stage, low-noise circuitry and pro-quality outputs. Its EQ section is limited, but does have a well-focused mid-range for electro-acoustic tweaking. Importantly, it offers more complex electro-acoustic systems the interfacing possibilities they need to perform at their best.

Verdict

D-TAR's UK distributor Aria recently brought the price of this brand's gear down; and we can appreciate the value this delivers. The new Mama Bear processor falls nearer the Fishman Aura in its intention, but matches the BOSS AD-8 more on price. Compared to the AD-8 it sacrifices extra features for a superior range of digital acoustic emulations/models, stripping to the

bare bones and keeping itself refreshingly simple.

The Equinox is a potent, dedicated EQ unit, and is a fraction of the price of Taylor's K4. But aside from its interface tie-in with the Solstice, it faces stiff competition from Fishman's and Baggs's

little preamp/EQ/DI boxes, which aren't quite the same thing, but provide enough tweaking options for many acoustic players.

The Solstice, on the other hand, is an undeniably useful addition to your gig bag, and is excellent value. Its generous and handy features certainly offer a viable alternative to Fishman's long-standing blender. **T**

D-TAR has taken considerable effort to capture the essence of each target instrument for its digital algorithms, but we have to accept certain fixed parameters



D-TAR Mama Bear Target Instruments

Here are the very rare and expensive reference guitars that D-TAR sourced and recorded to create the algorithms for its digital 'sonic signatures' in Mama Bear's Target Instrument selection.

- 1: Parlor – Pre-Civil War Martin 'lady's size' guitar
- 2: Small Body Fingerstyle – Martin 5-21-T tenor guitar from 1933
- 3: Small Body Blues – Gibson L-00 from around 1932
- 4: Mahogany Orchestra Model – OM-18-LJ (Laurence Juber model), a cutaway OM with Adirondack spruce top and mahogany back/sides
- 5: Rosewood Orchestra Model – OM-28-LJ, as above, but with Brazilian rosewood back/sides
- 6: Boutique Fingerstyle – A Traugott (top US small shop builder) small body steel string
- 7: Slope-shouldered Dreadnought – Gibson J-45, 1944 'banner peghead' model
- 8: Grand Auditorium – Laurence Juber's custom Taylor Grand Auditorium with mahogany back/sides and cedar top
- 9: Slope-shouldered Jumbo – 1936 Gibson Roy Smeck Stage Deluxe, with spruce top and mahogany back/sides
- 10: Mahogany Dreadnought – Martin D-18 from 1944
- 11: Rosewood Dreadnought – a composite of two 1934 Martin D-28s, and one 1940 Martin D-28
- 12: Super Jumbo – A relatively recent Bozeman (Montana)-made Gibson J-200
- 13: Hollow Body Archtop Jazz – A 1928 Gibson L5
- 14: Gypsy Jazz – A DuPont 'Petit Bouche', faithful contemporary reproduction of the small oval soundhole version of the Selmer Maccaferri
- 15: Biscuit Blues Resonator – A late 1920s National single cone, biscuit bridge resonator
- 16: Tricone Resonator – A 1929 National Tricone

D-TAR Mama Bear

Guitarist RATING ★★★★★

D-TAR Equinox

Guitarist RATING ★★★★★

D-TAR Solstice

Guitarist RATING ★★★★★