

EBS HD350

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Sweden's musical offspring ranges from ABBA to Yngwie Malmsteen, but the Swedish exports creating the biggest buzz among bassists are from amp and pedal manufacturer EBS.

Based in Solna, Sweden, EBS has been manufacturing products exclusively for bass players since 1988. While generally better known in Europe than in the U.S., stateside bassists have become more aware of EBS since Marcus Miller chose the HD350, a lightweight but heavy-sounding head, for his recent tours.

Scandinavian Design

The HD350's rackmountable steel chassis benefits aesthetically from a pair of stylishly simple chrome-plated handles. A cumbersome rack isn't necessary, though, since the head also has four large rubber feet. All of the controls are clearly labelled, and EBS firmly secures the solid-feeling pots to the front panel - a more durable approach than attaching the pots only to the circuit board. A peek under the hood reveals thoughtful design and careful execution.

Wiring is minimal, well dressed, and well secured to reduce the chance of failure from vibration. The power amp's six MOSFET transistors are attached to a large, six-finned, sheet-metal heatsink that's cooled by a variable-speed fan. This arrangement works remarkably well: The HD350 was surprisingly cool even after extended high-power testing. The HD350's toroidal transformer is mounted in typical fashion, with one large bolt through its center. Apparently the nuts securing the bolt weren't sufficiently tightened on our test amp - the transformer was loose inside the chassis following one of our earliest test gigs.



Heavy transformers can cause significant damage when loose, but fortunately, no damage occurred. (EBS Technical Director Mats Kristoffersson tells us our test amp was assembled during one small rush shipment from an alternative facility. Ordinarily, the mains transformer is fastened with a reinforced, hardened 1/4" industrial bolt and nut, held into position with a toothed locking washer using a high-torque permanent fastening tool.)

Eclectic Electronics

The HD350 borrows some features from previous EBS products. It continues the company's tradition of providing a phantom-powering option for active basses via the input jack. A stereo instrument cable with trs (tip-ring-sleeve) connectors is required, and you need to replace the battery with a plug that shorts the battery-connector terminals. You can also phantom power an EBS effect pedal through the input jack, as well as through the effects loop return jack.

(Only EBS pedals are set up to be powered in this manner-the phantom power enters through the pedal's output jack.)

Also, only the last pedal in an effect chain can be phantom powered - the power can't be passed through to other pedals. The compressor/limiter circuit comes with a prestigious pedigree: It's a simplified version of EBS's popular Multi-Comp pedal, being equivalent to a MultiComp in full-range standard compression mode. The single knob adjusts the compression ratio; the gain automatically adjusts to maintain a constant volume level. EBS borrowed the HD350's drive circuit from its MultiDrive pedal. It simulates mild tube-like distortion, affecting only frequencies above 350Hz, to maintain clear and tight fundamentals. Because its output doesn't compensate for gain changes, the drive circuit can boost the signal level considerably. The balanced output also has an authentic-sounding, switchable speaker simulator. This adds depth and midrange thickness, with rolled-off treble that reduces the dry, brittle "gritch" you often encounter when using a direct box. Investigating The Funk The HD350's versatile tone controls accommodate a variety of playing styles, but there's no denying its true calling:

This amp was born to funk.

Engaging the character button applies the standard slap-approved mid scoop, accompanied by bass and treble boost to enhance the scoop and maintain a consistent volume level. Without any EQ tweaks, the head made a Fender J-Bass sound balanced, woody, and complex. Paired with a Hartke 4200 4x10, the HD350 reproduced busy thumbstyle playing effortlessly and with authority. There was no blurring or congestion in the lower midrange and below, a common problem with amps less suited for high-velocity slapping. The bright knob can apply just the right amount of high-frequency color to further illuminate high-string snaps. Combining a Fender P-Bass and an Eden

D-410XLT cab worked well for mildly overdriven rock tones, which were helped by the drive knob's added wool and midrange girth.

The tone gets woollier and thicker as you increase the drive knob; it also begins to mimic tube-like compression at higher settings. Additional compression from the comp/limit knob can produce singing, guitar-like sustain with upper harmonics that gradually emerge from the distortion. I used the HD350 on a variety of gigs ranging from quiet jazz to loud R&B.

It never took more than a few quick knob twists to adapt its sound to different musical and acoustical requirements. I found the semi-parametric mid's unusually broad range (it actually extends from the bass to lower-treble) extremely valuable when dealing with less-than-ideal acoustics. Another staffer, who took the HD350 on a funk/R&B gig, dug the amp's detailed fingerstyle tone as well as the crunchy highs and wide bottom of its muscular slap sound.

Complaint Department

It's hard to check the position of the HD350's buttons - they're small and black and surrounded by a non-contrasting black panel. When you're moving the amp, buttons can get bumped accidentally. Status-indicating LEDs could ensure that the buttons are in their desired positions. Tuner mute buttons have become standard on amps in the last few years; even though the HD350 has a tuner-out jack, a mute button is conspicuously absent. The HD350 has Speakon output jacks but no 1/4" output jacks. EBS tells us that European electrical-safety standards do not allow 1/4" jacks for high-power amplifier outputs - so don't forget to pack those Speakon-equipped speaker cables on your way to the gig. Portable Smorgasbord The EBS

HD350 proves that you don't need an entire forest of knobs to get a good sound - just a few well-chosen (and well-voiced) tone controls. Its light-weight, compact size makes it painless to transport, and its reasonable price makes it painless on your pocket book as well. No, it won't make you sound exactly like Marcus - he keeps the secret of his elusive sound under his hat.

Tech Specs

The HD350's power amp uses two pairs of power-supply rails-the complementary positive and negative voltages required by a typical solid-state amplifier's output transistors. Under moderate power demands, the output transistors run on the lower voltage rails, producing less heat. (The hotter an amp runs, the more likely it is to fail.) It takes more power to faithfully reproduce snappy transients, so on demand, the amp temporarily "switches gears" to the higher-voltage supply rails for these more demanding signals. The result is a head that runs cool yet has a wide dynamic range. This type of design is typically called a Class G amplifier; EBS describes it as an "accelerated power amp."

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Easy-to use, versatile, affordable, and lightweight.

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Character and filter bypass settings can be hard to see. No tuner mute button.

Facts

Power rating: 350 watts rms into 4ohms (4ohms minimum load)

Dimensions: 19" x 12 1/2" x 3 1/2"

Weight: 20 lbs

Input impedance: 1Mohms

Comp/Limit: Fixed threshold;
maximum compression ratio 3:1

Character pre-shape button:
+6dB @ 75Hz, -2.5dB @ 800Hz, +3dB @ 6kHz

Tone controls:
bass: ±15dB @ 100Hz, shelving
middle (semi-parametric): ±12dB @ 50Hz-3kHz
treble: ±15dB @ 4kHz
bright: +20dB (boost only) @ 10kHz

Made in: Sweden

List price: \$1,195

Warranty: One year limited
EBS Sweden, www.ebs.bass.se

Construction: 4

Electronics: 4

Ease of Use: 4,5

Sound: 4,5

Value: 4,5

