

EBS 412 Evolution ProLine 2000 speaker cab

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EBS continues to put their money on building new bass amplifier heads. Last year's new model HD 350 just got a big brother (genetics, anyone?).

The first impression is an open-sounding, clear and transparent sound quality. The basic sound is functional as is, but can also be a starting point for more experimentation. There is plenty of power. Full power is at 2 ohm, but you get plenty of punch with a four ohm-speaker cab as well. Next to the input jack is the character-switch that gives TD650 a bigger sound by increasing the bass and treble, and a slight reduction of the middle-register. The result is a more polished sound that retains focus, and is great for slap bass.

I think that the character-sound option sounds the best with a slight increase just where the middle and treble-registers meet. This is in order to get a more cutting sound. I like that the small important switches have LED indicators, nothing is worse than small, tiny switches on a semi dark stage. The gain-control knob adjusts the input level for every type of bass. The LED-indicator next to it lights up with strong signal transients.

My active Music Man bass reached nine o'clock on the knob. Passive basses with low output must at least reach the midpoint, to sound best.

Excellent filters

In my review of EBS Fafner three years ago, I praised the excellent treble filters. In principle, we have the same controls here. Treble to adjust presence, and bright for sparkle you get almost total control. Most amps can only adjust the amount of treble, but here both controls can



counteract or interact with each other to really change the character of the treble sound. It sounds best when you use a pick, where you can get everything from "aggressive bone-crushing" to finely tuned high-tech sounds.

The bass filter provides a focused low end that never becomes too muddy, in spite of the thick sound. The "sweepable" middle filter can increase or decrease every register, from the low bass to treble. This means that it can be used as third treble control or a second bass control.

With the level control at its lowest setting, it removes a very small amount of a frequency, which is particularly good for feedback-problems or unwanted resonance. In other words, almost anything is possible with the mid-frequency control. The whole filter section can be disengaged with a bypass-function – the characterfilter is not affected.

The compressor is standard on EBS equipment. In my opinion, you should be careful with compression so you do not lose the dynamics of your playing, but this one is so good that I used a small amount, almost all the time. Even with lots of compression, there is no annoying pumping, which gives it a high grade. The compressor uses a LED-indicator to show that is working.

Tube armed drive control

As a final point comes the finest function, the tube drive control. It works wonders with sounds that need a little something.

For example, a slap sound can sound meatier and less sterile with a tiny amount of almost inaudible distortion.

Distorted rock sounds are no problem either; you can get all variations, like high gain distortion when the dial comes close to five-o'clock. In normal mode, distortion is done by the tube simulation circuitry, but the Tube-switch enables the tube for a more warm, realistic tube sound.

Frequencies below 350 Hz are not affected to maintain low-end punch.

The distortion characteristics can be expanded with the boost drive function that sends the full signal to the distortion circuitry. If you want to sound like Geezer Butler or Jack Bruce, just press both buttons to get a growling sound like an old tube amplifier. I am something of a distortion fanatic myself, and have never tried an amp with so many variations. Some real tube amps may sound better for one particular sound, but with this amp you get many variations – a whole different ballgame.

The front panel has one XLR output together with buttons for ground lift and post equalization, which puts the signal directly after the gain control or tone controls and the effects loop. Yet, another switch enables the speaker simulation if you would like the "direct cabinet sound" sent to the PA without any "miking" hassles. On the rear panel, there are Speakon outputs for the speakers and then an output for tuner, a line out as well as an input if you want to use EBS TD650 as a power amp.

The effects loop has two returns, one for a serial loop – which lets all signal pass through the effect, and another parallel loop splits the signal and part of the signal bypasses the effects – which is very useful if the effect makes the sound thin.

The effects loop returns can also power a 9V effect pedal with a stereo cable, and a button activates the function. With this function, you do not have to bother with external power or a battery for your pedal. Following is another button that activates the phantom power for your bass via its input jack.

The chassis is made of robust metal with front panel holes where the cooling fan disposes of hot air. Under the chassis, it is quite easy to change the tube.

The owner's manual is educational and informative. It gives some sound examples, that work well, but more "straggly" sounds could have been included. A footswitch for the effects loop and the filter bypass would have been nice, but apart from that, I do not miss single function.

EBS large 4x12"-speaker cab

I evaluated the amp with EBS' large 4x12 speaker cabinet. It is the same size as the "refrigerators" with eight 10"-speakers. In spite of the size and weight, it is quite easy to move thanks to wheels at the back and large handles at the sides. Naturally, the sound is there as well. I like the 4x12" configuration, it is a good compromise between 10" - speakers - that can have a hard middle register and not enough low end, and 15"-speakers - with a more indistinct sound and response. However, here the sound is powerful, well balanced with plenty of low-end punch – to dial in extra sub-bass is no problem.

The output is more than enough and yet the power amp is not used for its full effect with a 4-ohm speaker. The low frequency 12"-speakers have extended stroke length and rubber on the outer edge of the speaker cone. With this setup a tweeter must be used to avoid any muddiness. The tweeter is heavy-duty with a 2-inch voice coil and sounds very natural, not at all harsh but at the same time not too clean. In combination with the bright control, it is easy to dial in a cutting treble sound. The 4x12" configuration have a punchy rock sound but can be used for any style. The review was done with a customized Jazz-bass and a 5-string Music Man. Apart from the EBS- 4x12" an old 4x12" cab and an EV-15"-cab.

Conclusion

Yet again, EBS has managed to create a professional amplifier with an amazing sound and well-planned functions – it is great that we have a first-class Swedish bass equipment manufacturer. So far, this model is the most powerful and complete amplifier in their range – which also makes it the most expensive. Nevertheless, you get a lot of sound, power and functions for the money. The TD650 is a good amp for everyone who needs a clear and transparent sound. The basic sound is easy to alter with the drive control, which provides many kinds of distortion. The extremely efficient tone controls are hard to beat; a nudge gives you a different characteristic. The treble controls must be mentioned, since they are extraordinary. The 4x12" speaker cab has loads of punch and it would be fun to try the amp with two of them to get my chinos fluttering.

Specifications: EBS TD650

TYPE:	Mosfet power amp with tube preamp
OUTPUT POWER:	650 W@ 2 ohm, 460 W @ 4 ohm
TUBE:	ECC 83 (12 AX7)
EFFECTS LOOP:	Serial and parallel
EFFECTS:	Compressor and distortion
IN/OUTPUTS:	Instrument in, effect pedal send, return serial & parallel serial (with phantom power), power amp in, balanced XLR, tuner out, preamp out, 2 speaker outputs (Speakon).
DIMENSIONS:	480 x 360 x 130 mm – 3U high
WEIGHT:	12 Kg

EBS-412 Evolution ProLine 2000 speaker cab

TYPE:	Bass reflex
SPEAKERS:	4x12" + 1x2" titanium tweeter with fader
SPEAKERIMPEDANCE:	4 ohm
MAX POWER:	800 W RMS
DIMENSIONS:	580 x 1240 x 440 mm (W x H x D)
WEIGHT:	61 Kg.

Designed and manufactured by EBS Sweden AB,
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