

EBS ValveDrive

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ValveDrive is an up-to-date bass pre-amp/overdrive pedal that in true EBS spirit combines user-friendliness with a great sound and flexibility.

ValveDrive is EBS's latest product and it's so fresh that the main production is actually just starting at the time of writing. The basic design idea was to build a pre-amp/overdrive pedal that is easy to understand and that sounds good – i.e. plug 'n' play. The designing aim was to leave out LCD-displays, a lot of knobs or connections. For those who like this design concept, EBS now offers their ValveDrive.

By the end of the 80's EBS was a small unknown company working from a Stockholm basement that came up with the crazy idea to build a world class bass preamp. Today they are internationally well-known, and have about fifty products in ten different product groups: amplifier heads, speaker cabinets, combos, effects pedals and a lot more. In contrast to Trace Elliot who lost their way getting into PA-systems and guitar amps, EBS is a company with a strong sense of direction, a plus for all the world's bass players.

CONSTRUCTION

The design of the pedal look is something extra. It is built in a metal case with a chrome cover protecting the tube. The air ventilation cut-outs of this cover are tastefully designed as the wave of the EBS logo. The lower placed controls are protected from heavy footwear use and moving of inattentive band members.



Electronically the ValveDrive is designed like an old tube-amp, and is free from transistors or any integrated circuits. The circuit is powered by 12 volts external power supply that is transformed up to 280 Volt, in effect working like the first gain stage in a tube amplifier. The high internal voltage, among other things, creates the same kind of compression that a tube amp does. In many of the compact tube units available for home studio use, the tube uses a lower voltage and the compression effect is almost always simulated.

On the rear panel there are connections for instrument and amplifier and the instrument input has a switch to attenuate the signal level when used with high output instruments.

On the front panel there are controls for Volume, Treble, Middle, Bass and Gain plus two foot-switches called Vintage and Active. The filter section is passive, just like an old tube amp, which

means that it operates differently from active filter designs. Passive filters start from a default setting, from where you only can attenuate the selected frequency ranges. Since the actual output of a frequency band is relative, for example, cuts in mid and treble can be experienced as a boosted bass setting. That is, with different types of passive circuit designs the filters can interact in different ways. In the case with the ValveDrive, you get a relatively "straight curve" (i.e. the same sound when the pedal is bypassed) when the Bass and Treble are set to minimum and the Mid control is set to maximum.

There are many different approaches whether to place the filters before or after the gain stage. On a hard-driven tube amp the filters are obviously placed before (as in an overdriven power amp) which distorts all of the sound. But in this case EBS chose to place the filters after the gain stage, which gives the possibility of coloring the distorted sound.

The switch called Vintage activates a passive clipping filter which alters the basic sound character, adds more tube compression the more gain is used and changes the EQ resulting in slightly less treble. The Active footswitch operates in two different ways depending on the setting of the Bypass/Mute switch. In the Bypass position the switch acts as on a normal pedal, i.e. on/off for the entire pedal. In the Mute position the sound is cut off completely, which is useful if you for example want to change bass or tune.

To change the tube you have to remove the four screws that secure the protective chrome tube cover. Instructions on which type of tube is included in the manual; when changing tubes you should always use a tube from the same brand, Svetlana, to get the pedal to sound like it did when it was new. (Before EBS decided to work with the Russian manufacturer Svetlana they tried about fifteen different brands, and every brand showed a different character. The reason

for choosing Svetlana tube was that it had good dynamics, a tight sound, especially in the low end and in the mids.

IN USE

It's easy to get along with the ValveDrive. Connections are as easy as can be; connect the power supply, plug in the bass and then connect the amplifier. For practical use I would have preferred an internal power supply - less stuff to carry/keep track of and less chance that the power supply cord is ripped out by mistake - but that feature would have increased the price to a less attractive one. But EBS knows what it means to play live and have had the foresight to let the Bypass switch work independently from the power supply, so if it happens it's easy to bypass the pedal.

The Gain control in combination with the Vintage switch gives an impressive range of good sounds. Above all, there is a soft attractive transition from clean to overdriven sounds that are most audible when you play with fingers. Most overdrive/distortion pedals sounds reasonably well when you play with a pick, but while playing with fingers they don't sound as great and sometimes miserable. In this aspect ValveDrive sounds really good, with an even balanced, well-rounded airy distortion.

When gradually increasing the Gain, the filter section gives fantastic possibilities to remove unwanted sounds that you hear when you distort a sound. The Bass control knob has an open character, perfect for adding depth and richness to the sound without any distortion breakup. The Middle knob compensates for the added hardness you get with more distortion and the Treble control can tame a fiery treble. The Vintage switch is especially useful with a high gain setting since it is fast and easy to balance mids and treble and it adds more meat to the sound.

The filters sound really good even when used without distortion. The filter section has the transparent and natural sound associated with tube

amps. The lows are open, the mids can be reduced without any loss of body to the sound and the treble is pleasantly soft. The filters are not as powerful as active ones and as a result not as useful for drastic changes, but on the other hand they sound really musical. So they are very well equipped to add life and warmth to a dry-sounding transistor amp.

CONCLUSION

A distinctive feature of almost all EBS' products is their ability to balance user-friendliness and flexibility and I'm very pleased to conclude that ValveDrive is no exception. One input, one output, gain, volume, bass, middle, treble and an on/off foot-switch with no funny functions even for a novice; at the same time really good distortion sounds are there, along with filtering possibilities and for changing the basic sound character. The filter sections natural-sounding tube character is a big advantage which also gives that the ValveDrive pedal is not only a distortion pedal but also a complete pre-amp.

In a nutshell: A simple, flexible and great-sounding pre-amp.

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Great-sounding passive filters

Good balanced sound when switching from clean to distorted sound

Easy to change to the alternative sound character (Vintage)

Bypass switch with Mute

Solid construction

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Nothing

FACTS EBS VALVEDRIVE	
TYPE:	Valve pre-amp/overdrive pedal
CONTROLS:	Volume, Bass, Middle, Treble, Gain
SWITCHES:	Vintage, Active, Bypass/Mute and 0 dB/-8 dB
FILTERS:	Bass: 0-15 dB damping < 80 Hz bell; Middle: 0-12 dB, damping @ 400 Hz notch; Treble: 0-6 dB damping @ 5 kHz shelving
FREQ. RANGE:	+0/-3 dB 35-20 000 Hz
VALVE:	1 x Svetlana 12AX7
VOLTAGE:	12 V AC, 500 mA