

**deBont
amplifiers**

Vidur Tube Preamplifier Owner's Manual (v1.2)

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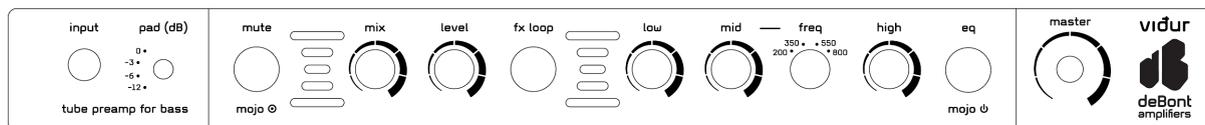
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Front



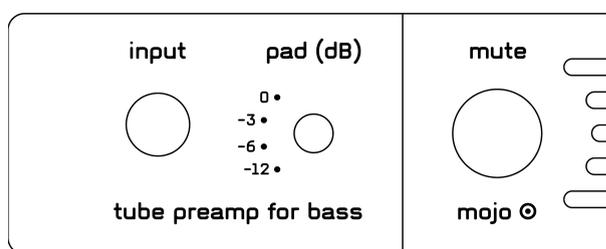
Input

The single jack input will accept any 6.35mm (1/4") jack plug.

Pad control knob

The Vidur is designed to be a clean sounding preamp. It is unlikely the input will run out of headroom. However, other audible, (perhaps preferred) sound colorations might occur when presenting the input with larger signal levels, like slight compression. By setting the pad control knob to any other value than 0dB, the signal level presented to the first stage of the preamp can be reduced to taste. This affects all outputs (tuner, fx loop, line out, main outputs).

- 0dB = full signal is amplified
- -3dB = 1/2 the perceived loudness
- -6dB = 1/2 of the original signal level
- -12dB = 1/4 of the original signal level



Mute button

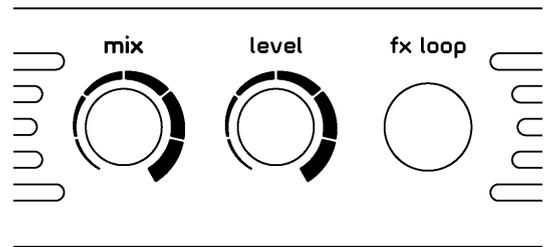
Pressing and releasing the mute button will toggle a true bypass, muting/ unmuting the signal. The tuner output (back) will always remain active. All other outputs will be silenced. This button is also available on the optional footswitch. The ring LED will show the current mute state:

- red: preamp muted
- green: preamp un-muted

FX loop section

Instead of connecting your effects between your bass and the Vidur's input, you can use the available FX loop. This has many technical advantages and makes for a clean setup. The Vidur is equipped with a fully parallel, mixable FX loop. By mixing clean bass with the signal that has been moulded by your chain of effects, the tonal possibilities become even greater. Another big plus of mixing in a bit of clean signal, is the retention of a solid, full, rich bass sound, which some effects pedals, unfortunately, seem to lack.

mix: The mix control determines the balance between your clean signal (dry) and the signal being returned from the FX loop (wet). Turning the control fully counterclockwise results in a 100% dry signal, as if the FX loop was completely disabled. Turning fully clockwise will only give the (wet) effects signal coming in from the FX return connector (see 'back' section below). Anything in between is a mix of the wet and dry signal.



level: The level control sets the overall volume being fed back to the preamp from the FX loop. This is especially useful when regularly switching between the clean- and effects signal. The level control will then act as the balance between the two states.

Note: The FX loop can be used as an auxiliary input/output as well, for e.g. practicing purposes. The audio source (laptop, MP3 player, etc) can be connected to the FX return and mixed in to the desired level with the mix and level controls.

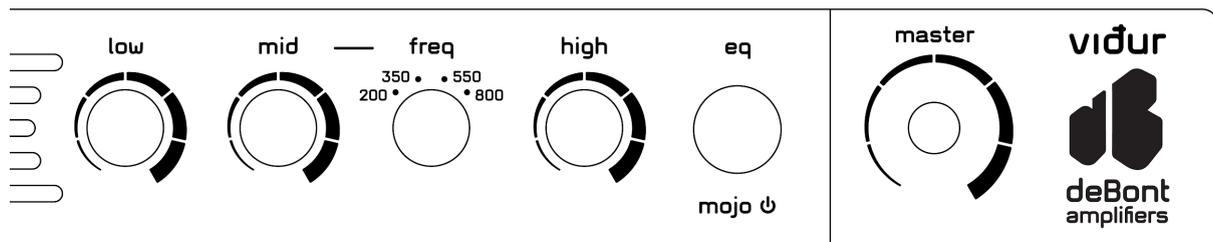
■ FX button

The FX button enables or disables the FX loop section. When disabled, the FX loop is removed completely from the audio path by means of a true bypass. This button is also available on the optional footswitch. The ring LED indicates the current FX loop state:

- red: FX loop disabled
- green: FX loop enabled

■ EQ control

The Vidur comes with an active baxandall type tone control (EQ). It can either cut (counterclockwise) or boost (clockwise) the chosen frequency range.



freq: The 'freq' knob, short for frequency, selects the center frequency preferred for the mid control.

The EQ works in the following ranges:

- **low:** low cut/boost @ 80Hz. +/- 9dB, shelving
- **mid:** band cut/pass @ 200, 350, 550 or 800 Hz. +/- 10dB
- **high:** high cut/boost @ 1,2 kHz +/- 9 dB, shelving

Note: The EQ setting is completely independent of the mojo setting.

■ EQ button

The EQ button has two functions:

1. Pressing and releasing the EQ button enables/disables the EQ section. When disabled, the EQ is completely removed from the audiopath by means of a true bypass. Signal level remains the same and the sound is comparable to when all EQ controls are centered. This button is also available on the optional footswitch. The ring LED indicates the current EQ state:
 - red: EQ disabled
 - green: EQ enabled
2. Pressing the EQ button for two seconds will enable *mojo selection* (See below). The EQ ring LED will be off during this state. Pressing either the mute- or FX button will switch the mojo state. Short-press the EQ button again to exit the mojo selection state. During the selection state, the mute- and FX ring LED's will blink, showing the current mojo state:
 - red blinking: mojo disabled
 - green blinking: mojo enabled

Note: The EQ state is completely independent of the mojo setting.

■ Mojo

The Vidur comes with an optional passive filter network in the first stage of the preamp, a.k.a. '*mojo*'. This gives you even more tonal possibilities to play with. Depending on taste, setting, or the bass being used, you can enable or disable the filter on the fly (see below).

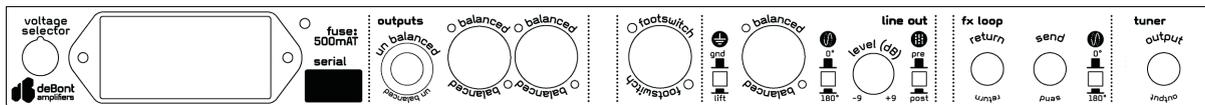
Note: As this is a passive filter, enabling it will decrease the perceived audio volume slightly.

Note: The 'mojo' is completely independent of the EQ state or setting.

■ Master

The master will control the signal level to the main outputs. Tuner output, fx loop and line out are not influenced in any way.

Back



Tuner out

This unbalanced output is always on, independent of the mute state. It can be used to connect a (rack)tuner or act as a simple, low quality line output.

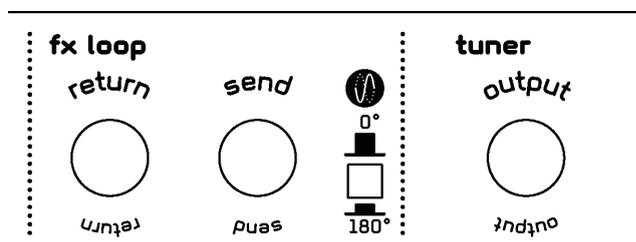
FX loop

The FX loop connectors work in conjunction with the FX loop section on the front panel

send: The send connector provides an unbalanced output signal, capable of driving any effect with a clean bass signal.

Note: If not used for the FX loop, the 'send' can act as an unbalanced line output.

Note: All outputs are physically muted at turn on/off, preventing pops and other unwanted noises.



return: The return connector takes the signal from the effects chain and feeds it back to the amplifier. How the signal is treated depends on the settings made on the FX loop section on the front panel.

Note: If not used for FX loop, you can use this connector as an auxiliary input. Please see 'FX loop section' above.

phase : shift the phase of the send signal by 180 degrees.

Note: Many effects out there shift the phase by 180 degrees. When mixing a shifted return signal with the original signal, the two will cancel each other out completely or to a large extent. By flipping the signal that's send to the effects to begin with, the returned signal is in phase again with the rest of the preamp, negating the issue. So, if you experience loss of perceived volume when mixing the wet and dry signal, flipping the phase button will usually resolve this.

send level: The signal level required by various effects varies from small to (very) large. This is rarely an issue, but depending on the bass being used, plus the pad setting on the front panel, the level might not be optimal. Inside the preamp, near the send connector, you'll find a jumper (JP1) used to boost the signal that's send to the connected effects.

- Jumper ON: instrument level
- Jumper OFF: +6dB (double the signal level)

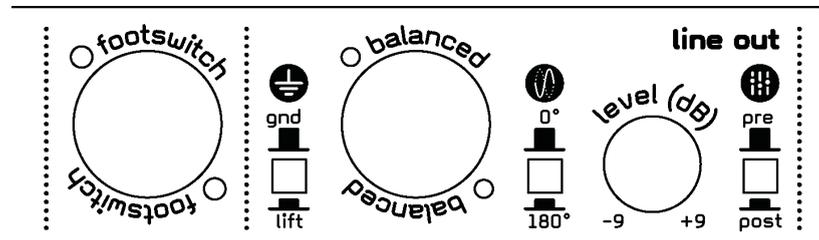
Warning: Please treat changing this jumper as you would changing the tubes. See the 'how to replace tubes' section below and ignore step 5 and 6.

Line out

This standard XLR connector will provide a balanced line level output signal. It's capable of driving (very) long leads to mixing consoles, recording equipment, etc. The line out is surrounded by various controls for maximum flexibility.

- **pre/post** : sets the point where the signal is tapped from inside the preamp; before (pre) or after (post) the EQ.
- **level**: adjust the output level by +/- 9dB
- **phase** : change the phase of the output signal by 180 degrees*.
- **ground lift** : (dis)connect pin 1 from the XLR connector. This will effectively cure any ground loop issues.

Note: There are a few examples why changing the phase of the line out signal might be necessary. Bad wiring, specific distances from the FOH speakers when using a speaker cab on stage, or wrong settings within a mixing console to name a few. These issues will result in a phase shift, recognizable by a vague tone or complete signal loss. Flipping the phase button will usually resolve the issue.



Note: All outputs are physically muted at turn on/off, preventing pops and other unwanted noises.

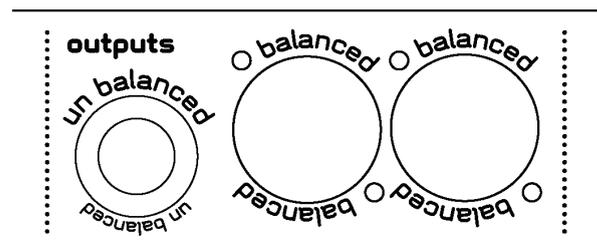
Footswitch

All three functions of the buttons found on the front panel (mute, fx loop and EQ) can be controlled externally by the optional footswitch. For convenience and the ability to use a widely available type of cable, a RJ45 connector is used. The control is fully parallel. If you prefer to build your own footswitch, or integrate these functionalities into a larger control system, the pinning is available in appendix A below or on <http://debontamps.com/manuals/>

Main outputs

The Vidur preamp comes with three output connectors.

- **Jack output, (un)balanced**: A 6.3mm (1/4") standard jack connector. Can be used unbalanced (TS) or balanced (TRS). Using the jack output will mute the XLR outputs.
- **XLR outputs, balanced (2x)**: These standard XLR connectors are wired in parallel. Since most solid state power amplifiers come as two channel, two input devices, the second XLR is there simply for convenience.



Note: All outputs are physically muted at turn on/off, preventing pops and other unwanted noises.

■ Voltage selector

The Vidur can be used in countries with mains voltages ranging from 110VAC to 120VAC or from 220VAC to 240VAC. Choose the voltage closest to the actual mains voltage by turning the selector with a small screwdriver until it clicks into place. Failure to do so will either cause the preamp to not work properly, or cause serious damage to the inside electronics.

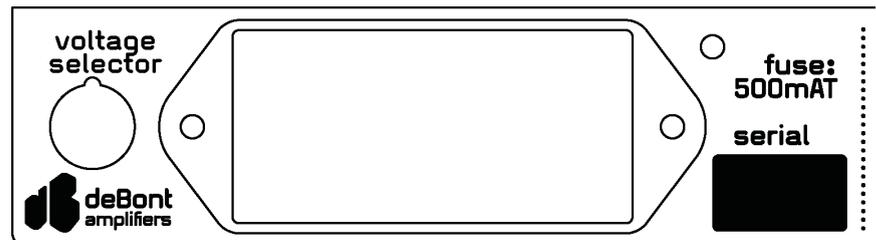
■ Power cord receptacle

The Vidur is fed by a IEC 60320 C13 plug, better known as a computer plug. Please make sure the power cord is undamaged and of proper quality.

■ Power switch

Use this switch to turn the preamp on or off.

Note: There's no standby switch as seen on most other tube amplifiers. The Vidur will take care of all processes normally associated with standby switches automatically.



Note: After power on, the preamp will enter a startup procedure. The three LED's (mute, fx loop and EQ) will indicate the progress. After the startup, the EQ LED will blink three times with the current mojo setting.

■ Main fuse

This fuse cuts power to the entire amplifier in case of a serious electrical fault.

■ Replacing a fuse

Turn the preamp off, unplug the power cord and let the remaining energy drain for at least 20 minutes before checking and/or replacing any of the fuses. Always replace with a fuse of the same type and rating as stated on the back of the preamp next to the fuse holder.

Note: Fuses usually blow for a good reason. Please consult a qualified technician when replacement is necessary.

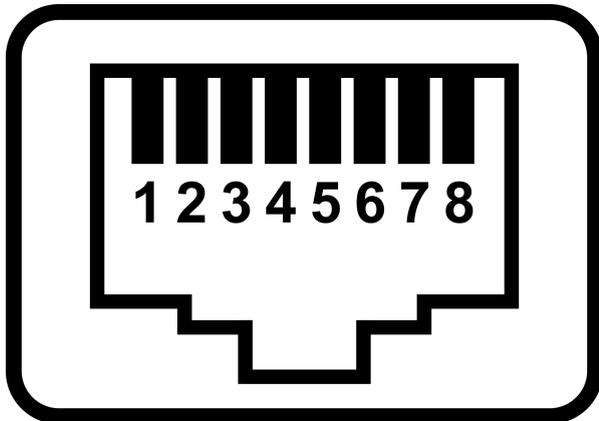
■ How to replace tubes

Preamp tubes, or small signal tubes, as used in the vidur preamp, will last for many years. If one does get faulty, or you want to experiment with different makes and models, you can replace them yourself!

!WARNING! Never turn the amp on when the top cover is removed. The voltages used inside the Vidur preamp are lethal!

- 1) Turn the preamp off.
- 2) Unplug the power cord.
- 3) Let the tubes cool down and the power supply drain and remaining energy for about 20 minutes.
- 4) Remove the top cover.
- 5) Carefully and slowly remove the tube you want to replace by gently pulling and ever so slightly wiggling it. Easy does it.
- 6) Press the new tube into the socket. It can only go in one way. Don't force anything.
- 7) Replace the top cover and tighten screws.
- 8) Turn on the amp and rock on.

Appendix A - footswitch connector pinning



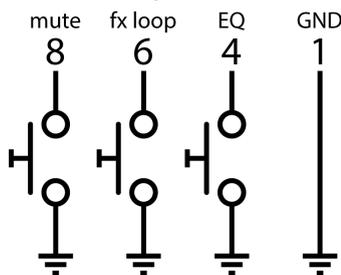
1. GND
2. +5V
3. EQ LED
4. EQ switch (NO, pulse)
5. FX LED
6. FX switch (NO, pulse)
7. Mute LED
8. Mute switch (NO, pulse)

*(NO, pulse) = normally open, pulse/momentary contact switch

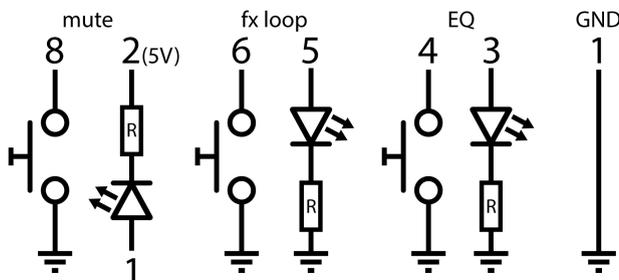
- Image shows pinning when looking into the connector on the back of the preamp.
- Connecting the switch contact (4,6,8) momentary to ground, the function associated with that contact will toggle from enabled to disabled and vice versa.
- When the function is disabled, the LED contact goes LOW.
- Two color LED arrangements are possible. See 'examples' below.

Examples

Switch only

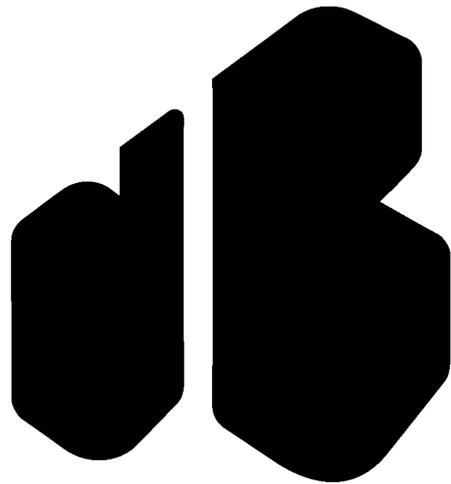


Switch + LED



Switch + 2 color (red/green) LED

(coming soon)



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revisions:

- 1.0 first draft
- 1.1 added mojo feature
- 1.2 altered mojo operation
added notes regarding output muting on turn on/off