

tobe

Buffer, Booster, Overdrive

1. General

"to be or not to..." no, this quote was not the namesake for this pedal. Rather, the name comes from the Japanese, and here "tobe" asks: "take off, jump, fly...".

tobe is "transparent" !?

This means that the pedal affects the size ("volume") and distortion ("harmonics") of the signal passed through it, but not its frequency response. No bass or treble is cut off, no mid-range is favored, but just as the frequencies are sent in relative to each other, so they come out again. A change in the frequency response is reserved for a subsequent amplifier or another device in the further signal chain.

Various applications can now be implemented with this property:

Buffer

It is well known that longer cable runs tend to have a negative effect on the guitar signal (cable capacitance). The resonance frequency of the pickups is shifted in the direction of lower frequencies, which has the effect of a practical loss of treble.

tobe as the first device in a signal chain, whereby the cable between the guitar and tobe should not be too long (e.g. 3-6m), decouples subsequent devices and especially longer cables from the guitar or its pickups. Connected cables can be of practically any length without negatively affecting the signal.

Booster

The pickups of the guitar (e.g. single coils...) perhaps do not deliver a sufficiently large signal to overdrive the amplifier? **tobe** can also help here; a distortion-free amplification of up to approx. 4x can be set.

Overdrive

And last but not least, the guitar should sound a little "hotter", a little "rougher". Overtones are needed, no problem for **tobe**...

However, you should not expect extreme distortions, **tobe** is not a distortion pedal and certainly not a fuzz pedal. **tobe** is designed more for distorted sounds, which can be ideally controlled with the volume control on the guitar.

2. Connections

2.1 "In"

Instrument input

Here the instrument is to be connected with a cable as short as possible (e.g. 3-6m, low-capacitance). The input of **tobe** itself is high-impedance and low-capacitance and hardly affects the natural resonance of the pickup.

tobe only works if a jack plug is plugged in here. If the connection remains open, **tobe** is deactivated and no longer consumes any power.

2.2 "Out"

Output to the amplifier / further signal chain

Here the cable of any length to the amplifier or to other effect pedals is connected.

If **tobe** is switched on ("Power-LED" ON), the cable connected here no longer influences the resonance of the pickup.

If **tobe** is switched off ("Power LED" OFF), a true bypass is activated (relay) and the cable or the further signal chain has an influence on the resonance and thus the sound of the instrument again.

2.3 "9V DC"

Power supply

An external DC voltage of 9V must be connected here. The polarity doesn't matter. The power consumption is about 50mA.

3. Setting options

3.1 “Volume”

The output amplitude can be set here. The control is in the output stage of the pedal and therefore its position has no effect on the degree of distortion that may be generated with **tobe** (see “Gain” control).

3.2 “Gain”

This knob determines the gain of the pedal's input stage. Of course, this also influences the overall amplification and thus the output amplitude (together with the “Volume” control). But more important is its influence on the overtone content of the signal (distortion). Depending on the level of the signal from the pickups, more and more overtones are generated from the middle position of this control.

3.2 “Boost”

This switch can be used to increase the amplification in the pre-stage of the pedal (“Gain” control) by a factor of 2. Useful e.g. with single coils if their signal is not sufficient to achieve the desired distortion.

3.2 “Footswitch” / “Power-LED”

The pedal is switched on (“Power LED” ON) or off (“Power LED” OFF) with the footswitch. When switched off or without power supply, a true bypass becomes active (relay), i.e. the signal at the output corresponds exactly to that at the input.

Caution: The pedal only works if a jack plug is plugged into the “In” input.

4. Power supply

4.1 Voltage to be connected

A DC voltage of 9V must be connected to the “9V DC” connection. The polarity of the input signal does not matter. The power consumption of **tobe** is approx. 50mA.

5. Final

Some users write to us that the statement "...is transparent" is not correct: When **tobe** is switched on, the sound of the connected guitar is suddenly much brighter, much clearer, and there are suddenly more trebles than when **tobe** is switched off. ...

What's wrong here ?

These users observe exactly the previously described influence of longer cables or longer signal chains on the resonance of the guitar pickup: When **tobe** is switched off (true bypass), this comes into play and shows itself as a loss of the higher frequencies. When **tobe** is switched on, the pedal works as a buffer and prevents the treble-dampening influence of the following signal chain up to the amplifier, it seems as if **tobe** had "raised" the treble. No he did not...

More detailed operating instructions and further technical explanations can be found on the Internet at:

www.i2e-audio.de/ag40_eng.htm

6. Technical specifications

6.1 "In" Instrument input

Input impedance about 1M Ω / 15pF
Protected against electrostatic discharge

6.2 "Out" Output

Output impedance about 1k Ω
Protected against electrostatic discharge

6.3 Power supply

Input voltage 9V DC / polarity does not matter
Power consumption about 50mA

6.4 Housing

Dimensions about 112 x 60 x 40 mm
Weight 250g



Proper disposal of this device: electronic waste