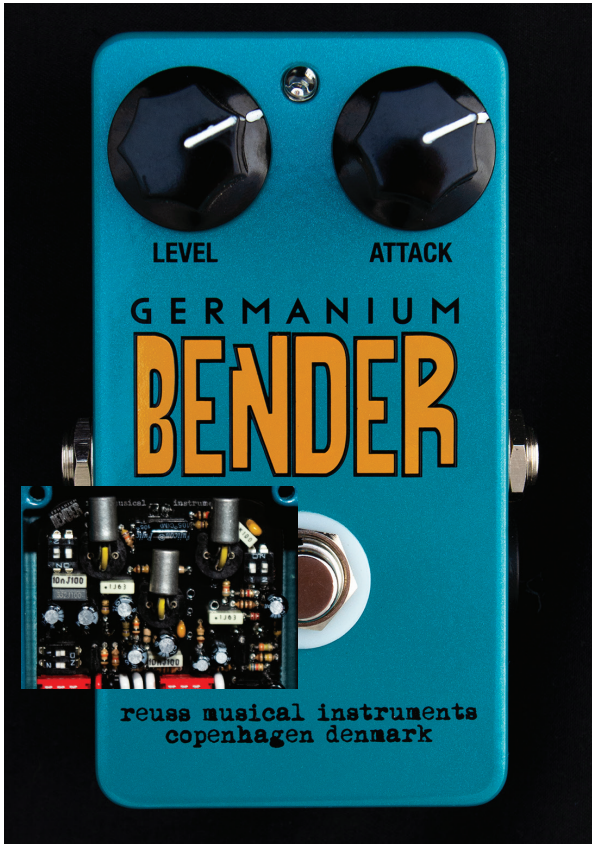
The Manual

Reuss Germanium Bender

Premium 1960s germanium fuzz tones from this amazing little tonebender mark II based pedal. Made with NPN germanium transistors for modern power polarity and flawless pedalboard integration. Switchable supply voltage and tone filters inside.



Controls

- 'LEVEL' is the level control. Turning it clockwise increases the output level of the pedal. It goes very loud (much louder than a vintage pedal), to compensate for the volume loss when running the pedal at the optional 3 or 6 volts.
- 'ATTACK' is the fuzz control. Turning it clockwise increases the amount of fuzz.

Switches

- The footswitch turns the effect on and off, indicated by the orange LED.

Internal switches

- There are three double 'DIP' switches inside the Germanium Bender. See illustration.
- The first switch, left side next to the red ribbon connector, controls the supply voltage for the vintage fuzz circuit ('starve mode'). The circuit is designed for 9V, but 'starving' it by running it at lower power can give interesting results. Lane 1 selects if the starve mode is active. Setting it to 'ON' makes the pedal run at the default 9V. Turning it off activates the starve. Lane 2 selects the supply voltage in starve mode. Turning it 'ON' makes the pedal run at 3V. Turning it off sets the pedal to run at 6V. You'll notice the pedal behaving noticeably differently in the three power modes. 3V makes it sound much like an old Gibson Maestro FZ-1A. Strangled and gated. At 6V it is less strangled and gives an interesting compression and swelling decay.
- The left side switch 'above' the starve switch will reduce the treble of the signal "inside" the fuzz circuit. Lane 1 cuts less and Lane 2 cuts more highs. Both lanes 'ON' cuts even more.
- The right side switch activates treble reduction of the output of the pedal (before the recovery gain stage). This one is reversed compared to the left side switch: Lane 1 cuts more highs than Lane 2. Both 'ON' cuts even more. The right side switch is more subtle.
- The pedals ships set to 9V operation with a minimal high-cut activated at both tone switches. If you want vintage-identical sound, set both tone switches in off positions. This gives an extremely rich high-end at maximum fuzz levels - which is impressive, but can get a bit too much. However, if you like to run the pedal at lower fuzz levels, you might want to turn the filters off.

Connectors

- Right side jack is the input of the pedal. Connect your instrument here.
- Left side jack is the output.
- There is a DC connector for an external power supply at the right side of the pedal. The DC connector is a standard guitar pedal 'negative centre'-type jack. ONLY use this type. Reversing the polarity can damage the pedal. The DC input voltage should not exceed 9V, but if the internal power starve switches are activated, you can feed it 12V and then 3V mode will be 4V and 6V mode will be 8V. The pedal can also run on a 9V battery (not included). Vintage purists will tell you to run the pedal with a carbon-zinc battery for optimum sound (not an alkaline).

Please note: The pedal is drawing power from the battery, when there is a jack in the input connector. Alway remove the input jack when the pedal is not in use, if you are running it with a battery

Also please note: The Germanium Bender is a vintage fuzz at heart and it needs a high impedance signal to sound correct. A low impedance input signal from a buffered bypass pedal will make it sound wrong. Always put a vintage fuzz first in the chain to be on the safe side (tuner pedals can have buffered bypass too, so beware!)

Features and Specifications

- True to vintage germanium fuzz circuit based on the tonebender mark II, built with three carefully matched vintage new old stock OC140 NPN germanium transistors
- Switchable modifications for supply voltages (starve) and tonal response via DIP switches inside the pedal
- Recovery gain stage and output buffer added to the vintage circuit for modern convenience and optimum pedalboard integration.
- Pedalboard friendly negative ground powered without additional 'charge pump' circuitry (thanks to the NPN germanium transistors). Doesn't require isolated power supply.
- Extremely high build quality. Completely handmade in the European Union.
- Vintage-style 'through hole' construction
- Compact aluminium enclosure in a "peacock sparkle turquoise" metallic powder coat finish with silk sceen printed graphics
- High quality Neutrik jacks
- Upgrade quality footswitch (rated for 50000 stomps)
- Runs on a standard 'Boss-style' 9V DC 'negative centre' guitar pedal power supply or a 9V battery.

Battery access

Remove the four screws at the bottom side of the pedal with a philips head screwdriver to remove the bottom plate and gain access to the battery.

Warranty

All Reuss pedals comes with a limited 24 months warranty against manufacturing faults
The warranty is not covering normal wear and tear or abuse.