



# LÜTZ

## USER GUIDE

Thanks for your Horrothia Lutz purchase. Long may you make incredible sounds with it. Please read through this guide and become acquainted with it so you can maximise your sonic potential.

**1** Output socket. Plug into amplifier / following pedals.

### 2 & 4

Curly cable simulators. 2 = output, 4 = input. Old style curled cables introduce capacitance and so roll off high frequencies. This in conjunction with fuzz / drive can have a nasal effect on the sound and reduces brightness. Left position emulates a shorter curled cable, right a long cable. Centre position bypasses the simulation.

**3** DC input, centre negative 2.1mm jack. Works best at 9V. Please don't exceed this. Current consumption around 100mA.

**5** Input socket.

**6** Power sag control. Full right = no sag. This controls the voltage and current to the fuzz circuit. At high gain settings rolling it left will decrease high frequencies, some gain and introduce more compression. It will make crackly noises as you move the control - this is normal. This is barefaced fuzz baby. Start full right.

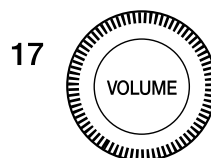
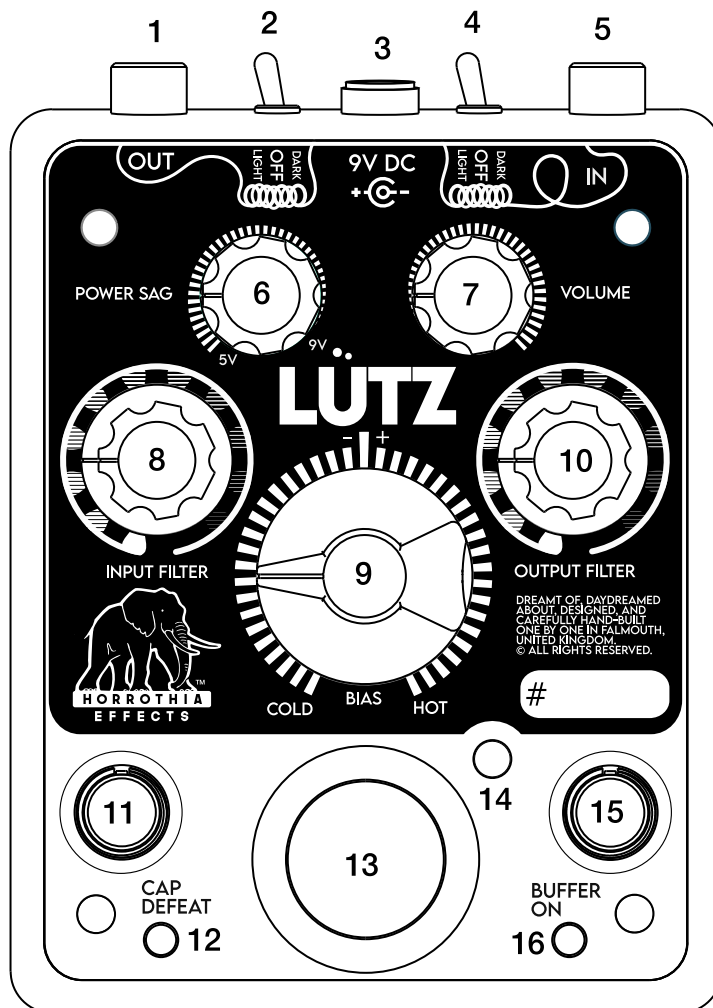
**7** Output volume. Lots of it. Start with it low.

### 8 & 10

Input and output high pass filter 12 way switches. Input Filter controls the audio bandwidth fed to the main fuzz part of the circuit. Full left gives the most low end, and the most gain. Output filter controls the post fuzz audio bandwidth, from full range (left) to very thin (right).

**9** Bias control. Think of this as a kinda gain control. Its useful range changes depending on the other controls, but start at noon. This is where the circuit is 'correctly' biased. Turn to the right for more gain / destruction, and to the left for a thinner, gated sound. This control may also crackle when it is turned, depending on the position of other controls.

**11** Switch this on (12 lit red) and the power capacitor in the circuit is removed from the circuit. With bias turned up full, Power Sag and guitar volume lowered, the circuit will start to oscillate to a frequency controlled by all of these controls plus the input filter switch and the input curly cable switch. Switch Cap Defeat off to stop oscillation. It can be artistic, it can be chaotic.



- 13** Effect bypass via relay. With power removed it defaults to bypass.
- 14** Effect bypass status LED. Green when engaged.
- 15** Pre-fuzz buffer switch. This adds a single transistor buffer stage before the fuzz circuit for more gain. 16 shows the status - white = engaged.
- 17** Your guitar volume control. The Lutz was designed to work fluidly with your guitar volume and to clean up with it turned down. This works best with the buffer turned off and very well with the bias turned up to around 3 o'clock and beyond. This is where you will find the most brightness with guitar volume rolled back.

### Starter setting:

Input and Output curly cable switches off, Power Sag 100%, Volume 20%, Input and Output Filter at 1 (lower left), Bias 50%, Cap Defeat off, Buffer off.

If you have any questions about the functioning of your Lutz, please don't hesitate to contact us at [horrothia.effects@gmail.com](mailto:horrothia.effects@gmail.com)