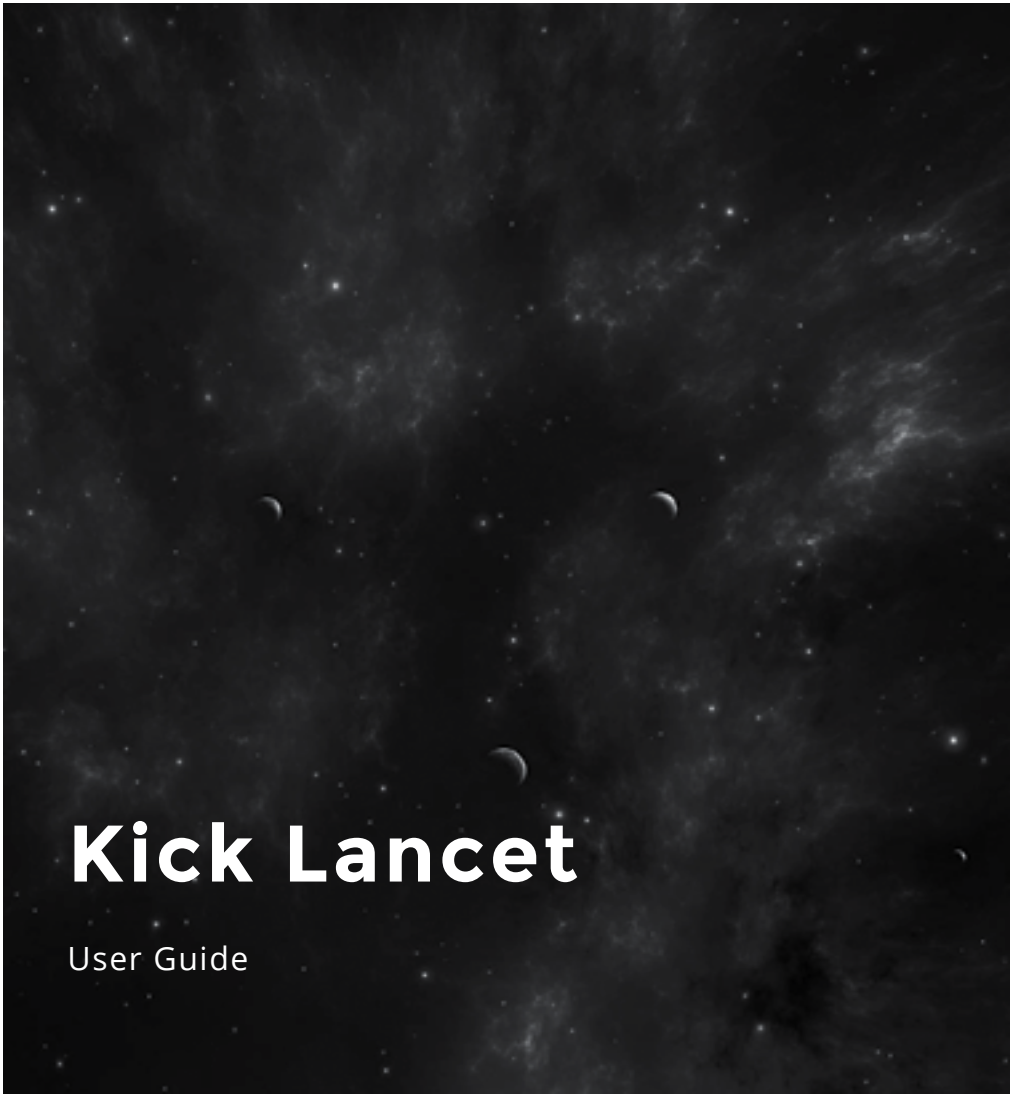
VERMONA

ELEKTROAKUSTISCHE MANUFAKTUR



Kick Lancet

User Guide

Introduction

You can imagine songs without a piano, a guitar or a synthesizer but without a bass drum? At least when it comes to modern music, this instrument is indispensable. Rock, Pop, House, Hip-Hop, Dubstep, Reggae, Techno or Drum'n'Bass won't work without a bass drum, will they? This is probably one of the single most essential sounds. Therefore a dedicated sound generator is the logical consequence.

KICK LANCET has been designed to serve exactly this purpose. Its analogue circuit creates full, round and tight bass drums. At the same time, operation with one knob per function is as easy and intuitive as it gets.

Thanks to MIDI-, audio- and trigger-inputs, KICK LANCET can be used standalone as well as an additional layer to double acoustic drums or other sounds. As a solo performer or team-player, KICK LANCET makes your bass drum kick!

Kick it! - Your VERMONA crew from the
Elektroakustischen Manufaktur, Erlbach

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Important Safety information

The following safety precautions must be observed during all phases of operation, service and repair of this equipment. Failure to comply these precautions or with specific warnings in this manual violates safety standards of design, manufacture and intended use of this equipment.

The manufacturer assumes no liability for the customer's failure to comply with these requirements!

Use near explosive goods

KICK LANCET should not be used near easy flammable or explosive goods.

Dampness

KICK LANCET should not be used in damp or wet places. Make sure KICK LANCET is not used in humid atmospheres (walls, floors, ceilings etc.) because this could cause condensation within unit.
WARNING: Risk of electrical shock!

Accessories

Do only use cables, plugs and adapters, which do not affect the normal use of KICK LANCET.

Cooling System

KICK LANCET should not be used near heating systems, warm or hot fans etc. When using KICK LANCET in a rack, wall system or fixed installation, make sure it has enough space to let the generated heat dissolve.

Spare parts or modifications

Modification instructions and schematics information should only be used from service departments of our officially authorized dealers. To prevent the risk of electrical shock, do not open any unit yourself. Due to the risk of injury, the manufacturer prohibits the installation of additional components or any modification to the existing circuits.

Always disconnect the DC adapter before opening the unit.

The manufacturer will not be liable for any clams in these cases!

Getting Started

To ensure top quality, we carefully inspected KICK LANCET before packaging. Nevertheless, the unit could have been damaged during transportation. Therefore, we ask you to take a serious look at the unit when unpacking. Do not hesitate to contact us, should there be anything unusual with KICK LANCET or its packaging.

You should find the following items in the box:

- KICK LANCET
- a DC power adapter (DC 12 V / 1000 mA)
- this manual
- lots of punch

Connections and Powering

If you came here without any problems, you can finally start up your KICK LANCET:

1. Connect the provided power supply unit to KICK LANCET's **12 VDC** jack.

⚠ **Actually, you don't have to take care of correct polarity as KICK LANCET can handle center-negative as well as center-positive power supply units.**

Only use the included power supply! You may already own a suitable-looking power supply that offers the same connector and even the same voltage. However, KICK LANCET requires a DC adapter with exactly 12 V and 1000 mA. Using an unsuitable power supply may cause damage to the unit.

2. In case you want to trigger KICK LANCET using MIDI, connect the **MIDI IN** to the MIDI output of a keyboard or a sequencer. If you prefer using an analogue trigger signal consult chapter ***"Using the analogue trigger-inputs GATE, SWITCH and AUDIO" on page 11***.

3. Connect the **OUTPUT** jack of KICK LANCET to an appropriate audio input of a mixing console, an audio-interface or an amplifier.

⚠ **CONNECT FIRST, AND THEN SWITCH ON! To protect your speakers, your audio-interface and, last but not least, your ears, we urgently recommend, setting up all cable connections while the equipment is switched off. Do not underestimate level peaks and resulting possible damage that could occur when plugging in or remove audio cables.**

4. Start KICK LANCET by switching on **OVERKILL** on the unit's rear. The corresponding green LED will be lit.

Congratulations, KICK LANCET is now ready to take off. Within the following sections we describe how the sound generation works and the use of controls and connections.

Controls and Connections

Sound Generator Controls

DECAY sets the length of the sound until fade out. The first half of the control allows creating tight kick drums for dance music. From noon-setting of the control, the kicks are significantly increasing in length. These sounds are often found in genres such as Hip-Hop or R'n'B. With **DECAY** set to maximum, long sounding bass drums can be achieved. Use these for Jeep Beats, D'n'B and Dubstep - BOOoom.

PITCH sets the overall sound frequency. Of course the lower range of this knob is relevant when creating bass drums. Start from a 9 o'clock position. With **PITCH** adjusted to a higher value, you may as well create tom- and percussion sounds. **PITCH** interacts with the following parameters **BEND** and **TIME**.

BEND adjusts the intensity of a pitch modulation by an envelope (TIME). Higher values will increase the amount of modulation but also increase the perceived pitch of the sound, especially with **DECAY** set to shorter values. Regard **PITCH**, **BEND** and **TIME** as being interactive.

With pitch modulation being completely absent, bass drums may sound flat and not distinctive; therefore we recommend at least a little dose of **BEND**. To create dance kicks use higher **BEND** settings and lower **TIME** settings. For long booming kicks keep the control in the lower half.

With **PITCH** being set to its maximum, **BEND** can no longer modulate the pitch.

TIME adjusts the release time of the pitch envelope. In general, short settings are useful for bass drums while longer values will make the sound lose its kick specific character. A long decay is useful to create percussions and effect sounds.

FM FREQ sets the modulation frequency within a range between approx. 30Hz and 3kHz. Here, the sound is modulated in pitch using a sine wave. With values starting from the knob's 9 o'clock position, the modulation enters the audible range, resulting in a broad frequency spectrum. This allows creating atonal and metallic timbres. At lower values, **FM FREQ** will result in modulations comparable to a typical LFO (vibrato)

FM INT defines the intensity of the frequency modulation, being specified using **FM FREQ**. Set fully counterclockwise, FM is switched off.

ATTACK adds a short fixed needle impulse to the sound's start. This will support the bass drums' assertiveness. Set **ATTACK** while judging the complete mix. What might appear too intrusive when being soloed might already sound too gentle within a full mix. We recommend adding a little **ATTACK** even to soft bass drums.

NOISE adds a short fixed noise to the sound's start. This imitates the noise of the beater hitting an acoustic bass drum. Like **ATTACK**, adjust **NOISE** while judging the complete mix. What might appear too intrusive when being soloed might already sound too gentle within a full mix.

WAVE is a mix control that seamlessly blends a sine waveform into a rectangular shape. Here, the sound changes from soft to hard. Within the first half of the control's range, the sound receives additional rawness and depth. At higher values, the sound will start to overdrive and distort.

BALLS is a sound control that enhances the bass frequencies as well as higher frequencies in a certain proportion. Simply put: **BALLS** makes your bass drum PHAT. We recommend using this control with caution. Te human ear easily adapts to this sound and we might tend to turn BALLS higher and higher.

VOLUME controls the output level of KICK LANCET.

TRIG button and OVERKILL switch

TRIG

The **TRIG** button primarily serves to manually trigger the sound. Here, you may play your bass drum without any keyboard or sequencer attached. This is useful when creating new sounds. The output volume is fixed and equals 3/4 of the level reached at full velocity.

A small automatic function allows easier handling. Press and hold the **TRIG** button for three seconds and the sound will automatically be retriggered. The tempo of this 4-to-the-floor beat can be adjusted using the **TRIG** button that will now serve as a tap tempo function. Set the desired tempo by tapping four times.

To leave automatic mode, press and hold **TRIG** for another three seconds.

OVERKILL

The **OVERKILL** switch connects KICK LANCET to the connected DC power supply unit. A green LED shows an active powered unit.

⚠ **The OVERKILL switch is no power switch. It simply removes the connection of KICK LANCET to the DC power supply. Please do always disconnect the PSU from the socket when not using KICK LANCET for a longer period!**

Connections

12 VDC Connect the supplied DC power supply here.

MIDI IN Connect the MIDI-output of a MIDI-sequencer, a groove box, a drum machine or master keyboard here.

MIDI THRU This output forwards the MIDI-data from KICK LANCET's MIDI IN and allows connecting more MIDI devices.

OUTPUT This jack carries the audio output signal. From here, connect KICK LANCET to a mixing desk, and audio-interface or an amplifier.

The trigger inputs **GATE**, **SWITCH** and **AUDIO** will be described in chapter ***"Using the analogue trigger-inputs GATE, SWITCH and AUDIO" on page 11***.

MIDI functions of KICK LANCET

KICK LANCET receives MIDI notes including velocity data, allowing the sound to be played dynamically. The note numbers and MIDI-channel can be set as desired. In addition, the function of **GATE** and **AUDIO** jacks can be adapted using MIDI control commands (***see "Using the analogue trigger-inputs GATE, SWITCH and AUDIO" on page 11***).

Setting the MIDI-channel and note number

By default, KICK LANCET receives data on MIDI-channel 1 and note number 36 (C). To change the note number and the MIDI-channel carry out the following steps:

1. Deactivate **OVERKILL** to switch off KICK LANCET - all LEDs are off.

2. Press and hold the **TRIG** button while restarting the unit by pressing **OVERKILL**. The LED above the **TRIG** button starts blinking.

3. Send a MIDI note to KICK LANCET, e.g. by hitting a key on your master keyboard connected to the unit. KICK LANCET stores the corresponding note number and MIDI-channel and automatically changes to play mode.

RESET

You can reset the MIDI-channel and note number settings to factory default. Step one and two equals the procedure above for setting the MIDI channel. Only step three differs:

3. Deactivate KICK LANCET by pressing **OVERKILL** again. The next time you start the unit, it will be reset to factory defaults.

Using the analogue trigger-inputs GATE, SWITCH and AUDIO

As an alternative to playing KICK LANCET via MIDI, the unit can also be triggered by various analogue signals. There are three options.

GATE

This jack allows triggering KICK LANCET using a 5 volts gate signal with positive slope. A compatible trigger signal is generated by multiple analogue sequencers, modular systems and analogue synthesizers. Beyond that, KICK LANCET has the ability to interpret different voltages of a trigger signal as dynamics.

The function of the **GATE** jack can be specified by MIDI control command #84. You need to send a corresponding value (0, 1, 2 or 3) on the set MIDI-channel to KICK LANCET:

CC# 84 Value	Description
0	**standard 5V (factory default)** An incoming voltage of approx. 0.5 volts will trigger KICK LANCET at a fixed volume.
1	**standard 5V + accent** A voltage between approx. 0.5 and 5 volts will trigger KICK LANCET at a fixed volume. Voltages between 5 and 10 volts will trigger a second, fixed accent volume.
2	**standard 5V + dynamic** A voltage between approx. 0.5 and 5 volts will trigger KICK LANCET at a fixed volume. Higher voltages (5-10 volts) are interpreted dynamically. At 10 volts, the full volume will be reached.
3	**dynamic** KICK LANCET will be dynamically triggered, depending on the trigger voltages, ranging between 0.5 and 10 volts.

SWITCH

This jack allows triggering KICK LANCET with a simple switch contact with a short circuit. You may use a common foot pedal with an A-contact. Naturally, dynamic aspects will not be reflected using this method.

AUDIO

This input allows triggering KICK LANCET by any audio source. Naturally, the quality of this function is highly depending upon the audio signal itself. Only clear percussive sound signals will result in usable results. A reasonable sound source would be the individual output of a drum machine for example. This way, an old drum machine with PCM sounds can be easily combined with the deep and rich sound of KICK LANCET.

Because of the similarity of the signals, this input may also be used to connect a drum pad.

The input's sensitivity can be adjusted using the submerged trim pot next to the **AUDIO** jack.

The function of the AUDIO jack can be specified by MIDI control command #85. You need to send a corresponding value (0 or 1) on the set MIDI-channel to KICK LANCET:

CC# 85 Value	Description
0	**fixed volume** The sound of KICK LANCET will be triggered with a fixed volume, independently from intensity of the input signal.
1	**dynamic (factory default)** KICK LANCET will be triggered dynamically, depending on the volume of the input signal.

Technical Specifications

Sound Generator	
Controls	DECAY, PITCH, BEND, TIME, FM FREQ, FM INT, ATTACK, NOISE, WAVE, BALLS, VOLUME
Button	TRIG
GATE input	
trigger voltage	0.5 V to 10 V
AUDIO trigger input	
max. Input Level	-32 dBu
Impedance	100 kΩ
MIDI	
Connections	MIDI IN, MIDI THRU
NOTE ON	envelope trigger
Velocity	volume
Control Change Messages	CC# 84 and CC# 85 (see ***section "Using the analogue trigger-inputs GATE, SWITCH and AUDIO" on page 11)***
Miscellaneous	
Power Supply	external DC adapter with 12 V / 1000 mA
Dimensions	about 21 cm x 14,5 cm x 5,5 cm
Weight	0.5 kg
optional Accessories	Wooden side panels

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