LFO: Low frequency oscillator

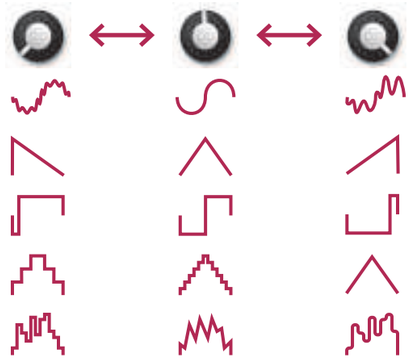
5 waveforms are provided, each of them continously variable:

- **Sine** with wavefolding
- **Triangle** with controllable ascending/descending ratio
- **Square** with duty cycle control
- **Stepped triangle** with variable number of steps
- **Clocked noise** with interpolation control



Knob	TWIN & EXPERT mode	SPLIT mode
1	Frequency	Ch. 1 Frequency
2	Waveform	Ch. 1 Waveform
3	Waveshape variation	Ch. 2 Frequency
4	Initial phase	Ch. 2 Waveform

The trigger resets the LFO to the phase set by the "initial phase" control.



TAP: Tempo synchronized LFO

This function is similar to the LFO **except that the frequency is synchronized** to the rate of the input trigger signals, or to the "taps" on the buttons (G) and (H).

Knob	TWIN & EXPERT mode	SPLIT mode
1	Amplitude	Ch. 1 Waveform
2	Waveform	Ch. 1 Shape
3	Waveshape variation	Ch. 2 Waveform
4	Initial phase	Ch. 2 Shape

DRUM: Analog modeling drums

Channel 1 is a **modeled analog bass drum**, and channel 2 a **modeled snare drum**.

Knob	TWIN & EXPERT mode	SPLIT mode
1	Frequency	BD attack
2	Frequency modulation/ tone	BD decay
3	Attack/noisiness	SD tone
4	Decay	SD noisiness

Note: With extreme noisiness and tone settings, the snare drum turns into a hi-hat.

Tips

Hold the **function selection switch (F)** for 1 second to unlock 4 new secret functions. Repeat this operation to go back to the 4 standard functions.



Mutable Instruments



Peaks

Dual trigger converter



About Peaks

Peaks is a 2-channel multi-function signal generator: envelopes, synchronized low-frequency oscillations, or drum signals can be generated in response to triggers.

Installation

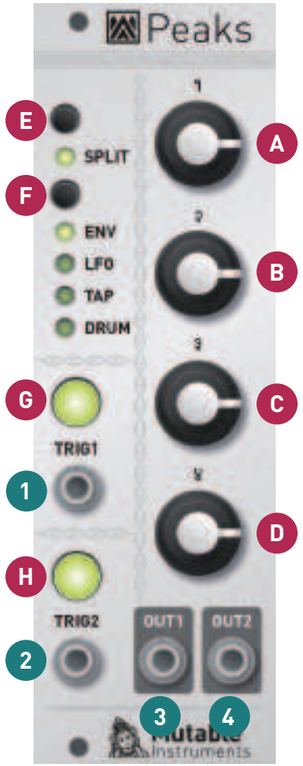
Peaks requires a **-12V / +12V** power supply (2x5 pins connector). The red stripe of the ribbon cable (-12V side) must be oriented on the same side as the "Red stripe" marking on the board.

The power consumption is as follows:
-12V: 2mA ; +12V: 60mA.

Online manual and help

The manual can be found online at
mutable-instruments.net/modules/peaks/manual

For help and discussions, head to
mutable-instruments.net/forum



Front panel

A. B. C. D. Parameters. Refer to the tables in the next sections.

E. Control mode selection switch and LED.

F. Function selection switch and LEDs.

G. H. Manual trigger buttons for channels 1 & 2.

1. 2. Channel 1 & 2 **trigger inputs.**

3. 4. Channel 1 & 2 **signal outputs**.

Control modes

Peaks can operate in 3 different modes:

TWIN: Both channels share the same parameters but can be triggered independently. The 4 knobs control the 4 parameters. Perfect for duophony!

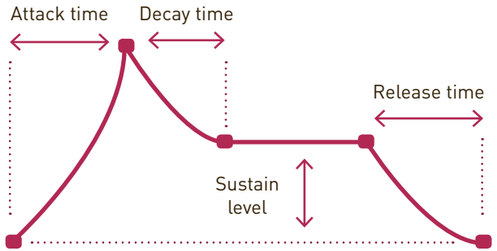
SPLIT: Knobs 1&2 control two main parameters of channel 1; and knobs 3&4 two main parameters of channel 2.

Press the button **(E)** to switch back and forth between TWIN and SPLIT mode. The LED is lit in SPLIT mode.

EXPERT: Channel 1 and 2 are completely independent.

Hold the button **(E)** for 1 second to enter the EXPERT mode. Press **(E)** to change the channel. The LED blinks once when channel 1 is active, twice when channel 2 is active. Hold **(E)** for 1 second to leave the EXPERT mode.

ENV: Envelope generator



Knob	TWIN & EXPERT mode	SPLIT mode
1	Attack	Ch. 1 Attack
2	Decay	Ch. 1 Decay
3	Sustain	Ch. 2 Attack
4	Release	Ch. 2 Decay

In Twin & Expert modes, the envelope is an ADSR and requires a Gate signal.

In Split mode, the envelope is a simpler AD, and only requires a Trigger signal.