

BUZZZY!

16 voice - 4 part MIDI polysynth



Arp & Clock

Arpeggiators automatically synchronize to the **MIDI clock** (from DIN or USB). The **internal part clock** (Arp Tempo) is used when no MIDI clock is available.

Power

Buzzy! is a **USB powered** device. You can safely attach:
- a computer / tablet / smartphone
- a USB wall adapter or power bank

USB

Provides power to the device
Supports **MIDI over USB**

MIDI IN

Connect to a MIDI keyboard, controller, sequencer ...

HEAD

Headphones output

LEFT / RIGHT

Stereo line outputs

PART

Select the currently edited part
• *long press*: init the part
• *ALT + long press*: enter the **MIDI Learning mode** for the edited part

ARP Mode

Enable the part arpeggiator
• *long press*: set the **hold mode**

ENV Mode

Choose an **AD or ASR** envelope
• *long press*: set the **loop mode**

FX (Space / Delay / Filter)

Enable part effects
• **ALT + FX**: set the FX variation
• **FX + RANGE**: set FX mix level
Space & Delay FX are exclusive

ALT
Allow access to the alternative sound parameters
Double click: lock the **ALT** switch

WAVE / ENGINE

Wave: select the wave variation
Engine: select the part engine (Pulse, FM, Wave, Noise)

LEVEL / PAN

Set the part volume and panning
Level: set the sound volume
Pan: set the position in stereo

DECAY / ATTACK

Configure the volume envelope
Decay: set decay / release time
Attack: set attack time

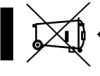
RANGE / DEPTH

Set various effect parameters
Range: decay / feedback / cutoff
Depth: size / length / resonance

Engines

Pulse	Wave
Sharp edged waveforms	Low resolution waveforms
Square, pulses, alternative pulses, PWM ...	Chiptune sine, triangle, sawtooth, organ waves ...
FM	Noise
Softer 2 operator FM waves	Various LP / HP filtered and Linear phase modulation
Bass, piano, marimba ...	colored noises at variable sampling rates

Don't forget our planet!



Feel free to write us at: support@fredslab.net

Buzzy! module - quickstart manual
V1.0 09.09.19

Dump / receive sounds

Buzzy! uses simplified **SYSEX messages** to import, export, manage and archive **multis (or sounds)** and **global parameters**. The use of a MIDI sysex software is required. More information is to be found in the user manual.

Dump requests

Globals

F0 00 00 F7
no options available.

Multis

F0 01 mm F7
mm is the desired **multi** from 0 to 15, 127 corresponds to the edit buffer.

Dump messages

Globals

F0 10 00 ... F7
received sysex is 12 bytes long.

Multis

F0 11 mm ... F7
received sysex is 324 bytes long.

Sysex contents and formats as well as the complete **MIDI implementation** can be found in the **Buzzy! user manual** available to download at:
<http://fredslab.net>

Legal mentions

This product has been carefully designed following strict quality criteria and meet all applicable Europe CE, Canada and USA FCC requirements.

Designed, assembled and tested in Germany by **Fred's Lab** and its industry partners.



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First setup

- 1 Connect the **Buzzy!** to a suitable **power source** using a **USB cable**
- 2 Attach the **line outputs** to a mixing desk, active speakers or use headphones
- 3 Connect a **MIDI keyboard** or controller to the **MIDI DIN** input or use MIDI over USB
- 4 Adjust the **part volume** to a satisfactory sound level * using the **LEVEL** knob
- 5 Get ready for the jam!

Requirements

To play the **Buzzy!** you need:
- a MIDI controller (keyboard)
- a stereo audio system or a pair of headphones

Create original sounds

First, select the **desired engine**, using **ALT** + the **WAVE** knob. Then, set the **wave variation** turning the same knob alone. Finally, adjust the **volume envelope** using **ATTACK**

Refine your sound by adding **one or more effects**. To store your multi, press **STORE** until the selected slot blinks. Et voilà!

Assign MIDI channels

Enable **MIDI learning mode** to set the channel of a specific part. With **ALT** pressed, push the **PART** switch until the led blinks. The MIDI channel of the **first note** received will be attributed to this part.

ARP parameters

Arp special parameters are printed in *italic* on the **Buzzy!** frontpanel. They are modified turning the respective knobs while maintaining the **ARP** switch depressed.



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