# EFFECTS

*Microcosm offers 11 distinct effects organized into 4 categories:*

### MICRO LOOP
Layers of short loops, played back at various speeds, combine to form new rhythmic phrases and tonal colors.

### GRANULES
Fragments of sound create giant atmospheres and subtle textural effects.

### GLITCH
Real-time rearrangements of your playing play back at random or controlled intervals.

### MULTIDELAY
A delay line with a selectable number of taps creates a wide variety of rhythmic and textural effects.

**HOLOGRAM**

**MICROCOSM**

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## EFFECT CONTROLS

**ACTIVITY:** Controls the density of effects. Turn clockwise to add complexity and variety. Activity function varies preset to preset.

**REPEATS:** Determines effect duration or frequency. Works in tandem with Activity knob. Repeats function varies preset to preset.
*Secondary function: sets Pitch Modulation depth.*

**SHAPE**: Applies a contour to the volume or filter characteristics of the effect.
*Secondary function: sets Pitch Modulation rate*

**SPACE**: Mixes in reverberation and delay. When fully clockwise, mix is 100% wet.
*Secondary function: selects 1 of 4 reverb modes, arranged from shortest time to longest time L -> R.*

**FILTER:** Scuplts the effect's tone with the Low-pass Filter.
*Secondary function: adjusts filter resonance.*

**MIX:** Sets the balance between input signal and effect. Fully clockwise = 100% effected signal.
*Secondary function: adjusts effect master volume.*

**LOOP LEVEL:** Sets playback volume of Phrase Looper. *Secondary function: sets loop fade time.*

**TIME:** Controls either Time Subdivision or Global Tempo.
*Secondary function: sets loop playback speed (see Phrase Looper).*

*Subdiv* - Determines the musical subdivision of the effect..

*Tempo* - As an alternative to TAP tempo, sweep the Time Knob to set the overall global tempo. In this mode, effect subdivision is always set to quarter notes.

## SELECT / SHIFT

**SELECT:** Pressing this button toggles the Time mode selection.
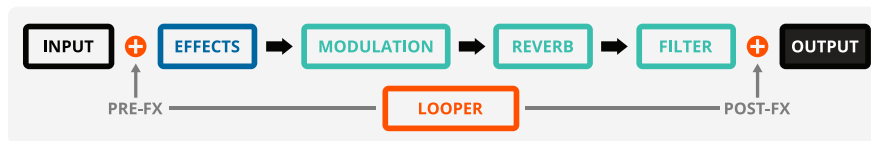
**SHIFT:** Holding this button lets you access secondary controls (labeled in gray text beneath the corresponding knob).

*Hold the Shift and Phrase Looper buttons to enter Global Configuration Mode.*
*For more details, see "Global Configuration" in the User Manual.*

## LEFT FOOTSWITCH

**TAP:** Tap the left footswitch to set the effect tempo.
**REC/PLAY/DUB:** Press to record, play, and overdub loops. Hold to erase all overdubs.

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INPUT → EFFECTS → MODULATION → REVERB → FILTER → OUTPUT

PRE-FX ——— LOOPER ——— POST-FX

**MICRO LOOP**
- MOSAIC
- SEQ
- GLIDE

FWD/REV

**GRANULES**
- HAZE
- TUNNEL
- STRUM

**GLITCH**
- BLOCKS
- INTERRUPT
- ARP

SAVE

**MULTIDELAY**
- PATTERN
- WARP
- USER

**PHRASE LOOPER**
- PRE-FX
- LOOPER ONLY
- BURST
- QUANTIZE
- REVERSE

ACTIVITY   SHAPE   FILTER   MIX
TAP        MOD FREQ  RESONANCE  EFFECT VOLUME

TIME   REPEATS   SPACE   LOOP LEVEL
       MOD DEPTH  REVERB TIME  FADE TIME

SELECT / SHIFT

SUBDIV   TEMPO

HOLOGRAM

TAP
REC/PLAY/DUB

MICROCOSM

HOLD
STOP/ERASE

## BYPASS FOOTSWITCH
Engage or disengage Microcosm.

## INDICATOR LIGHTS
The 4 lights found at the center of the pedal work as a menu system for selecting effects and configurations. Each effect contains 4 presets (A-D).

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## PRESET SELECTOR
360° rotary encoder for menu navigation and preset selection.

**FWD/REV** - Press down on the Preset Selector to reverse effect playback. Indicator Lights animate to reflect playback direction.

**SAVE** - Press & hold the Preset Selector to copy current settings and active loop. Navigate to a User preset slot and hold again to save.

*To cancel and return to normal operation, press the Preset Selector.*

## PHRASE LOOPER
Use the Phrase Looper to record and play back up to 60 seconds of a performance. You can immediately record to the Overdub Layer upon loop playback. Clear all overdubs and return to the initial phrase with the undo feature. Loops can be saved and recalled within User Presets. Customize the looper to your preference with any combination of configuration options.

**PRE-FX:** Routes the looper before the effects.

**BURST:** Uses momentary footswitch operation for rapid loop creation.

**LOOPER ONLY:** Bypasses Tempo-based effects and uses the pedal like a traditional looper. The signal can still be affected by the Space, Filter, and Modulation parameters.

**QUANTIZE:** Syncs the Phrase Looper with the effect tempo for layers of effects in time with one another.

**ON/OFF:** Press the center button to activate/deactivate the phrase looper. The button will glow when the looper is engaged, and the footswitch functions will change accordingly.

**REVERSE:** Changes the playback direction of the recorded phrase.

**PLAYBACK SPEED:** Hold shift and turn Time knob to change looper playback speed.

## RIGHT FOOTSWITCH
**HOLD:** Press the right footswitch to freeze a recent piece of your playing into a continuous playback cycle.
**STOP/ERASE:** Press to stop loop playback. Hold to erase loop.

**MOSAIC :** Overlapping loops play back at different speeds.

*Activity:* determines the number of active samplers

| | |
|---|---|
| **A** | Micro loops play back at normal and double speed for octave up harmonies |
| **B** | Loops play back at normal and half speed for an effect one octave below your input |
| **C** | All loops play back at double speed |
| **D** | Loops play back at half, normal, double, and quad speed. Sounds range from one octave below your input to 2 octaves higher. |

**SEQ :** Short looping samples are rearranged into new rhythmic sequences.

| | |
|---|---|
| **A** | Live samples are filtered and shuffled into random rhythms<br>*\*Activity*: introduces filter variations |
| **B** | Sequenced samples alternate between normal and half speed playback<br>*\*Activity*: determines bounce between the two playback speeds. A sustainer layer is introduced when then knob fully clockwise—allowing for soft pads to sit under the sequence |
| **C** | Overlapping layers of samples with filter sweeps<br>*\*Activity*: adds layers of samples |
| **D** | Interlocking layers of rhythmic samples and bitcrushing<br>*\*Activity*: adds layers of rhythmic elements. Bitcrushed sub octave samples are introduced when fully clockwise |

**GLIDE :** Short overlapping loops shift in pitch over time.

*Activity:* controls the rate of pitch-shifting | *Shape:* determines shape of Glide pattern

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|---|---|
| **A** | Glides between half speed and normal speed |
| **B** | Glides between double speed and half speed |
| **C** | Glides between normal speed and double speed |
| **D** | Overlapping samples glide in both directions at the same time |

**BLOCKS :** Incoming audio triggers predictable glitches or random bursts of notes.

*Activity:* controls the amount of variation and sample manipulation

| | |
|---|---|
| **A** | Rearranges your playing and adds bursts of sequenced runs of recent notes |
| **B** | Rearranges and pitch-shifts incoming signal |
| **C** | Filtered samples overlap and fade out resulting in a softer, less angular glitch sound |
| **D** | Rearranges the incoming signal using pitch-shifts and bit crushing |

**INTERRUPT:** Glitches interrupt dry signal with pitch-shifted bursts, micro-montages, and other modifiers.

*Activity:* controls variation & sample manipulation | *Repeats:* determines how often glitches are triggered

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|---|---|
| **A** | Glitches and rearranged versions of your playing interrupt live signal |
| **B** | Interruptions include various pitch-shifted samples |
| **C** | Interruptions include filter sweeps and delay |
| **D** | Introduces bitcrushing and more drastic sample manipulations |

**ARP:** Sequences samples of recent note onsets into arpeggios

*Activity Parameters:* determines the number of steps in the arpeggio

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|---|---|
| **A** | Basic arpeggios created out of the most recent samples of your playing |
| **B** | Arpeggios include various playback speeds resulting in a pitch-shifted pattern |
| **C** | Each sample in the arpeggio is assigned a random filter value |
| **D** | Introduces bitcrushing to the arpeggios for a complex sound |

**HAZE:** Clusters of grains create a wash of sound.

*Activity:* controls grain density and spread

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|---|---|
| **A** | Short, diffuse effect created from stretching overlapping samples |
| **B** | Many simultaneous randomized grains create diffused textural effects |
| **C** | A mixture of normal speed and double speed grains creates a diffused texture |
| **D** | A mixture of normal speed and half-speed grains creates a diffused texture |

**TUNNEL:** Cyclical micro-loops generate hypnotic drones with unique modifiers.

*Activity:* determines the depth of each modifier

| | |
|---|---|
| **A** | Drone sample length compresses and lengthens |
| **B** | Sub octave drone with filter sweeps |
| **C** | Drone samples have resonant bandpass filters |
| **D** | Envelope-triggered compressing and lengthening of drone sample length |

**STRUM:** Rhythmic chains of recent note onsets create pointillistic textures

*Activity:* controls density of pattern

| | |
|---|---|
| **A** | Repeats the most recent note continuously |
| **B** | Many copies of the most recent note onset overlap to create phasing effects |
| **C** | Cascading chains of recent note onsets |
| **D** | Cascading chains of recent note onsets and double speed grains |

**PATTERN:** Delay taps are arranged into four different rhythmic patterns.

*Activity:* controls the number of active delay taps

| | |
|---|---|
| **A** | Rhythmic pattern 1 - classic, linear delay |
| **B** | Rhythmic pattern 2 |
| **C** | Rhythmic pattern 3 |
| **D** | Rhythmic pattern 4 |

**WARP:** Delay taps are manipulated using filters and pitch shifting to create spacious textural effects.

*Activity:* controls the number of active delay taps

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|---|---|
| **A** | Envelope Controlled Filter on each delay tap |
| **B** | Resonant bandpass filter on each delay tap |
| **C** | Adds pitch shifting to delay taps |
| **D** | Delay taps cross-fade with double speed grains |

**USER PRESETS:** All loops, overdubs, and settings can be saved and recalled later using the pedal's 16 user presets. These 16 slots are organized into 4 User Banks (Red, Yellow, Green, Blue).

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|---|---|
| 🟥 | User presets 1-4 |
| 🟧 | User presets 5-8 |
| 🟩 | User presets 9-12 |
| 🟦 | User presets 13-16 |