

Bass Synth

Turn your bass into a filthy funk machine with the MXR Bass Synth. It serves up intergalactic grooves and vintage analog-style vibes with a range of monophonic synth tones that call back to hits from Stevie Wonder, Michael Jackson, Parliament Funkadelic, and more. Designed with low-end professor and tone connoisseur lan Martin Allison, this powerhouse of a pedal offers thunderous sub-octave, expressive envelope, and lush modulation effects with killer tracking and sustain.

Basic Operation



Power

The MXR® Bass Synth requires a 9-volt (330 mA) center-negative power supply and can be powered by the Dunlop ECB003 9-volt adapter or the MXR® Iso-Brick™ Pro, and the Iso-Brick™ Mini Power Supplies. This pedal cannot be powered by a battery.

Controls

- 1 VOICE button adds additional oscillators harmonically tuned for more complex tones
- 2 CUTOFF knob sets the 4-pole resonant low-pass filter's cutoff frequency
- 3 MIX knob sets the mix between dry and synth signals
- 4 SUB MIX knob sets mix between the main synth and sub signals

5 JACKS

Input: Mono

Output: TRS jack; allows for stereo output CTR: Expression/tap input or right-channel output Power: The power jack requires 9 VDC, center negative at 330 mA

6 FOOTSWITCH

Engage/bypass effect: Tap the footswitch Scroll presets: Hold footswitch. Tap footswitch to advance through presets. To exit, hold footswitch again or simply wait for timeout

6 FOOTSWITCH (cont.)

Freeze current note: To configure freeze functionality, hold the footswitch down and rotate the RESONANCE knob to its max position. After configuring, holding the footswitch will hold or freeze the current synth note. To revert to preset scroll mode, hold the footswitch and rotate the RESONANCE knob to its min position

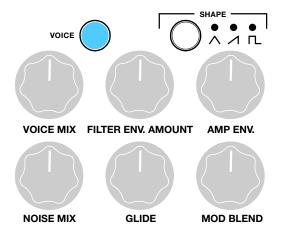
7 SHAPE button selects oscillator waveform:

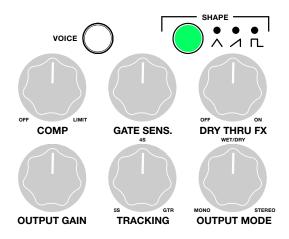
Triangle: Subtle and smooth Sawtooth: Rich and aggressive Square: Fat, rubbery punch

- 8 ENVELOPE knob controls the attack/decay times of the filter envelope—lower settings give a fast, plucky response, while higher settings create a slow, sweeping effect. When fully counterclockwise, the envelope filter is off
- 9 MOD knob sets the amount of modulation
- **10 RESONANCE** knob boosts gain at cutoff frequency, adding a sharper, more expressive effect at higher settings
- 11 PRESETS button selects one of 8 different presets

Secondary Parameters

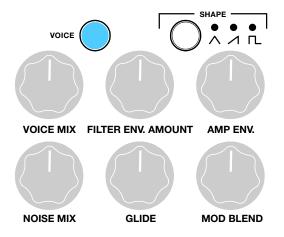
Press and hold either the VOICE or SHAPE buttons while changing another control to access an alternate set of options. Parameters under the VOICE menu affect the sound of the synth patch. Each can be saved with a preset and controlled with an expression pedal. Parameters under the SHAPE menu are more utility settings than effects. None can be controlled by an expression pedal. Some of them are global, affecting all presets.

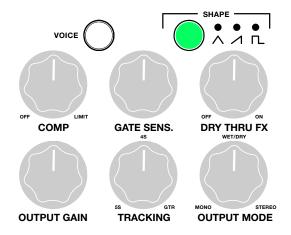




KNOB	VOICE	SHAPE
MIX	VOICE MIX Sets the mix between the main oscillator and oscillators added when VOICE button is engaged. At the minimum setting, voice oscillators are removed from the signal.	COMPRESSION Sets the amount of compression, from none to tight, punchy limiting. Affects how the synth responds to your playing intensity.
SUB MIX	NOISE MIX Sets the mix between the oscillators and the noise generator.	OUTPUT GAIN Adjusts the output gain +/- 18 dB, with 0 dB at noon.
CUTOFF	FILTER ENVELOPE AMOUNT Sets the direction and width of the filter envelope (set by the ENVELOPE knob). Above noon, the envelope opens the filter; and below noon closes the filter for a ducking effect.	GATE SENSITIVITY (GLOBAL) As you play, the pedal automatically determines your average signal level. This setting sets how responsive the pedal is when the input signal is lower than this level. The default sensitivity setting is designed for most playing situations, but dynamic or legato playing may fare better with higher sensitivity settings. Note: the sustain of a note is independent of sensitivity setting. A sounding note will sustain for about as long as it's ringing out on your instrument.

Secondary Parameters (cont.)





KNOB	VOICE	SHAPE
RESONANCE	GLIDE Sets the time it takes to get from one note to another for a blurred, legato effect.	TRACKING (GLOBAL) Determines how the synth signal responds to your instrument's range of frequencies to ensure accurate note tracking.
		5-STRING BASS: Default, fully counterclockwise. Tracks low B to high C on a 24-fret 6-string bass.
		4-STRING BASS: 12 o'clock. Has a faster response compared to 5 String Bass mode, but it only tracks down to a low E.
		GUITAR: Fully clockwise. Tracks the range of a 24-fret guitar in standard tuning.
ENVELOPE	AMP ENVELOPE Sets the fade-in time (or attack time) of each note.	DRY THRU FX When on (fully clockwise), the dry signal is sent through filter, chorus, compression, and gate along with the synth signal. This blends the dry and synth signals together more fully, allowing the natural articulation of your instrument to come through when using the MIX knob.
MOD	MOD BLEND Sets the mix of chorus and filter LFO modulation.	OUTPUT MODE (GLOBAL) Selects how the pedal's output signal is routed to your amp or interface.
		MONO: Default, fully counterclockwise. True bypass.
		WET/DRY: 12 o'clock. In this mode, the wet signal is on the left channel (tip) and dry on the right channel (ring). Buffered bypass.
		STEREO: Fully clockwise. In this mode, the pedal creates a stereo field by panning the voice oscillators and engaging a stereo filter and chorus effect. Buffered bypass.

Presets

This pedal features eight different presets (four green, four red) plus a live mode, which is indicated when all preset LEDs are off. Live mode represents current knob settings and automatically saves switch and secondary parameter states. When a preset is changed from its saved state, its LED will softly flash.

GREEN PRESETS

THRILLENGANES	Inspired by Greg Phillinganes' amazing ARP 2600 work on Michael Jackson's "Thriller," this timeless octave-down sound is equally suited to pumping out '80s hits or contemporary bangers.
WONDERFUL	Based on Stevie Wonder's incredible left hand work on the TONTO synth, this sound gives you that short, funky resonant drop up and down the neck.
LIZARD SYNTH	Modeled on Herbie Hancock's use of the classic ARP Odyssey on his famous tune "Chameleon," this sound cranks up the resonance and hits that funky '70s sweet spot.
SYNTHADELIC	Based on Bernie Worrell's incredible Minimoog tone on "Flashlight," this octave-down sound is wide open and room filling.

RED PRESETS

SLEDGE	Inspired by Tony Levin's incredible bass tone on Peter Gabriel's
<u> </u>	"Sledgehammer," this sound gives you that classic analog octave
	sound with a generous helping of compression and chorus. Play with a pick for maximum effect.
ARMY OF SYNTH	Modeled after the iconic synth bass line on Bjork's "Army of Me." Use an expression pedal for added intensity.
NINE INCH SYNTH	Based on Trent Reznor's incredible synth programming and tone on "Head Like a Hole," this sound is equally at home in a rock or dance music context.
SYNTHMAU5	Inspired by the sidechaining technique used in electronic music production, this preset draws you into a dark atmospheric zone akin to that often used by producer deadmau5. Try playing right on the beat with a quarter note bass drum pulse, and feel the kick almost trigger your bass notes.

Presets (cont.)

Scrolling Through Presets

You can scroll through presets using the onboard preset button, an external switch such as the MXR Split + Tap connected via the CTR jack, or the built-in footswitch.

When using an external switch, a "press" will forward scroll, while a "hold" will reverse scroll.

To use the built-in footswitch, hold the switch until the main LED soft flashes. Now, the footswitch will scroll to the next preset when tapped. The SHAPE LED will flash to display the current preset. Hold the switch again to exit preset scrolling or wait for the scroll menu to timeout.

Saving a Preset

To save current settings into a preset, you must first copy the settings by holding down the preset button for 2 seconds. The preset LEDs will hard flash to confirm. Next, navigate to the preset bank you would like to save the settings to. Hold the preset button again for 2 seconds to save the copied settings to that bank. The preset LEDs will stop flashing.

To exit the copy/save menu without saving, simply alter the current preset. The menu will also eventually time out.

Note: You cannot save a preset into live mode.

Resetting a Preset to Default Setting

To reset a preset to its default setting, first navigate to the preset you would like to reset. Then, hold the footswitch and preset button together for 5 seconds. The preset LED will quickly hard flash to confirm reset. In live mode, all preset LEDs will flash green after a reset.

Resetting to Factory Default

Hold both the VOICE and SHAPE buttons simultaneously for 5 seconds while powering the pedal to perform a factory reset. A successful factory reset is indicated by the Bypass LED flashing quickly several times.

Expression

Live mode and each preset can store its own expression state. To set a preset's expression behavior, set all parameters at both the heel and toe positions to your desired settings. Then, sweep the expression pedal to confirm desired behavior. Once expression settings are verified, follow the steps under Saving a Preset. Note that the heel down state is also the preset's state when no expression pedal is connected.

In live mode, expression states are saved automatically and retained while the expression pedal is connected. If the pedal is powered on without an expression pedal connected, the next time expression is connected, the heel position will be set to the current state of live mode.

Note that every time you enter live mode, the current knob settings are represented until you sweep the expression pedal. Changes to the live mode expression state will not be registered until the expression pedal is physically swept after entering live mode.

CTR Jack

Expression/Tap Input

Place the CTR side switch in the TAP/EXP position (towards the OUT jack) to use the CTR jack with an expression pedal via a TRS cable or external switch via a standard patch cable for preset scrolling. See Scrolling Through Presets for more information.

Audio Output

Place the CTR side switch in the AUDIO position (towards the CTR jack) to use the CTR jack as output jack for the audio's right channel.

In this configuration, stereo output uses two TS cables at the OUT and CTR jacks instead of one TRS cable at the OUT jack.

See Output Mode for more information.

Specifications

Input Impedance	1ΜΩ
Output Impedance	100 Ω
Maximum Input Level	+5 dBV
Noise Floor	-97 dBV
Current Draw	330 mA
Power Supply	9 volts DC

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