



Varies a selectable target parameter according to the selected waveform.



## SPEED

Adjusts the rate of modulation from 0.06Hz (16 second sweep) to 12Hz (0.08 second sweep).

## DEPTH

Adjusts the amount of modulation. Modulation is off at the fully minimum position.\*

\*For **env**, modulation is off at noon. Sensitivity increases as the knob is rotated away from center. Rotate left for negative envelope response or right for positive.

## TARGET

Selects the process that modulation is applied.

**verb**: modulates the delay lines within the regenerating reverb core.

**pitch**: modulates the size (process rate) of the reverb core.

**filter**: modulates the HIGH CUT tone control position.

## SHAPE

Selects the modulating waveform.

**triangle**: rises and falls evenly.

**square**: jumps between two fixed values.

**ramp**: rises gradually and falls abruptly.

**saw**: falls gradually and rises abruptly.

**random**: jumps between random values.

**env**: modulation value responds to playing dynamics (sensitivity set by **DEPTH**), and returns at a rate set by **SPEED**.

Selects the reverb architecture and sets the tail characteristics.



## LENGTH

Adjusts the reverb decay time from less than one second to nearly infinite sustain. At long decay settings, decay time may be impacted by the **TONE** settings.

## SIZE / PITCH

Increases the size of the reverb core to create a larger “space” for reflections as the knob is turned clockwise which also allows for pitch variations during adjustment.

The pitch range is 2.5 octaves with **QUANTIZE** set to **smooth** and two octaves with **QUANTIZE** set to **half step** or **scale**.

## TEXTURE

Selects one of three different reverb types.

**sparse:** granular-sounding reverb that can create interesting effects with staccato inputs, or produce a clean reverb with sustained inputs.

**dense:** plate-like reverb with a fast response and dense reflections that can venture into ambient territory at high decay times.

**diffuse:** slow-building, atmospheric wash that excels at ambient, swell, and even reverse-like textures.

## QUANTIZE

Selects the response and range of the **SIZE/PITCH** knob.

**smooth:** **SIZE/PITCH** varies smoothly and continuously over a 2.5 octave pitch range.

**half step\*:** The **SIZE/PITCH** is quantized into half-step intervals over a two octave range.

**scale\*:** The **SIZE/PITCH** is quantized into selectable scales over a two octave range.

### \*NOTE

Range is as follows:

**12 o'clock** = middle of range.

**Minimum** = one octave up.

**Maximum** = one octave down.

Applies filtering equalization to the high and low frequency portions of the reverb.



## LOW CUT

Removes low end content both at the output and in the regenerating core portion of the reverb as the knob is turned clockwise.

## HIGH CUT

Removes high frequency content from the reverb with characteristics determined by the **FILTER** switch selection.

## FILTER

Selects the response of the **HIGH CUT** knob.

**regen:** removes high frequencies from the regenerating core, creating a reverb that gets darker as it decays.

**low pass:** applies a synth-style peaking low-pass filter to the reverb output to selectively shape the frequency content.



## MIX

Sets the output level of the dry and reverberated signals.

**REVERB:** sets the output level of the reverberated signal.

**DRY:** sets the output level of the unprocessed signal.

Adds pitch, harmonics, and distortion to the reverberated signal.



## INTERVAL

Selects the pitch interval of the shimmer effect from a number of musically useful and interesting intervals. See user manual for additional details.

## SHIMMER (knob)

Sets the amount of the shimmer effect. Shimmer effect is off when set to minimum.

## SHIMMER (button)

Selects the type of shimmer effect.

**input:** shimmer effect is applied to the input of the reverb core and does not regenerate.

**regen\*:** shimmer effect is applied within the reverb core and the effect is regenerative.

## GLIMMER

Creates a harmonically enhanced spectrum from the reverb output.

**high:** higher frequency harmonics are highlighted creating a washy, dreamy top end.

**low:** lower frequency harmonics are highlighted that add mysterious and synth-like textures.

**LED off:** Glimmer is disabled.

## DRIVE

Adds saturated overdriven harmonics to the reverb.

**pre:** applies drive to the signal before the reverb core.

**post:** applies drive after the reverb tank, allowing the reverb tail to dynamically go into and out of saturation as the reverb decays.

**LED off:** Drive is disabled.

### \*NOTE

Smaller **SIZE/PITCH** settings and higher **DECAY** settings will result in more intense pitch regeneration.

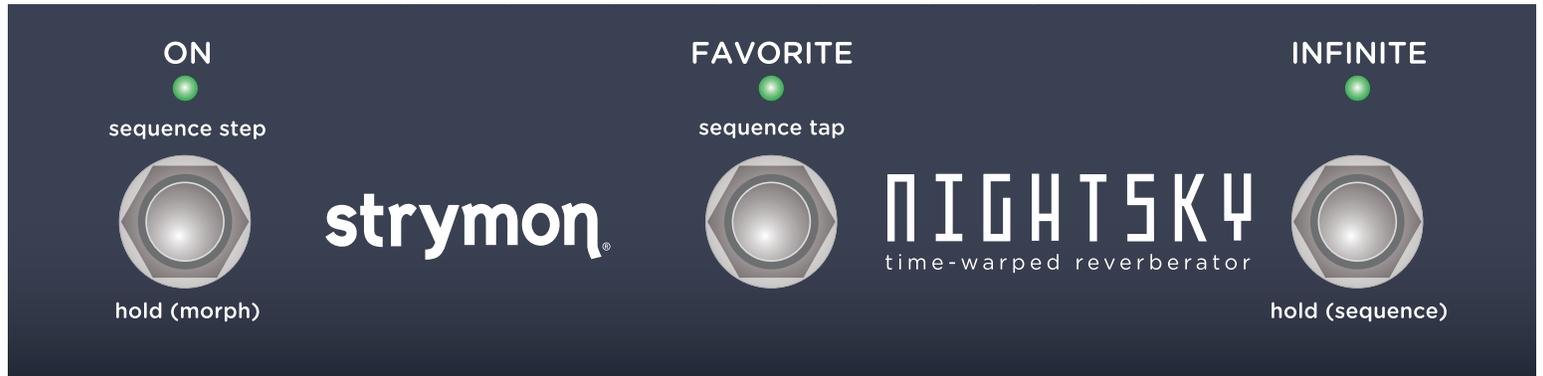
# FOOTSWITCHES & PRESET BUTTONS

## ON

Turns the effect ON or OFF.

**morph:** press and hold sweeps between the current sound and a set of “morph” knob settings.

*See user manual for details on programming morph setting.*



## FAVORITE

Toggles between the active onboard preset and the current state of the knobs and switches. **GREEN LED** indicates that the preset is engaged.

**save favorite:** Press and hold until the **FAVORITE LED** blinks **BLUE**. To save in the current preset location, press **FAVORITE** once again. To save in a new preset location, press one of the 8 preset buttons and press **FAVORITE** once again to save.

Press the same preset button twice before pressing the **FAVORITE** footswitch again to save to a different preset bank.

## INFINITE

Holds the input to the reverb tank while also allowing new audio to be processed by the reverb on top of the “frozen” audio.

Press and hold switches into sequence mode.



## PRESET BUTTONS 1-8

Selects the corresponding preset and enables **FAVORITE** footswitch if not already enabled. Press a lit **PRESET BUTTON** to switch between two banks. **GREEN LED** indicates presets 1-8, **AMBER** indicates presets 9-16.

# REAR CONTROLS AND CONNECTIONS

## INPUTS

Stereo high impedance ultra low-noise discrete Class A JFET preamp inputs. Use **LEFT IN** for mono input.

## USB

Use for connecting to a computer for controlling via MIDI and updating firmware.



## OUTPUTS

Low impedance stereo outputs. Use **LEFT OUT** for mono output. See user manual for additional details.

## MIDI IN / OUT

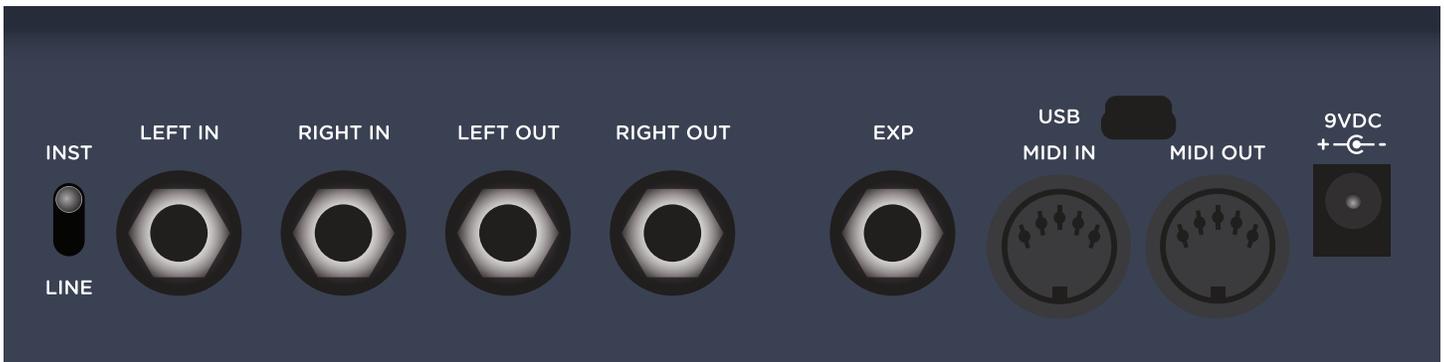
Full featured MIDI input and output supporting MIDI CCs, program changes, etc. See user manual for additional details.

# REAR CONTROLS AND CONNECTIONS

## INPUT MODE

Use **INST** for guitars or instruments with lower output.

Setting to **LINE** adds 10dB of clean headroom for use with synthesizers, or when placing NightSky in the effects loop of an amplifier or mixer, or for guitar rigs with high output levels if more clean headroom is desired.



## EXP

Can be set to work in one of the following modes. See user manual for additional details.

**Expression Pedal Mode:** Allows continuous control over knobs with expression pedal.

**MIDI Mode:** Access to three presets using MultiSwitch Plus or 300 presets via MIDI.

**Preset Up/Down Mode:** Scroll through the 16 onboard presets and engage or bypass the preset you have selected with MultiSwitch Plus.

**MOD/TONE/VOICE Bypass Mode:** Engage or bypass the individual sections of NightSky with MultiSwitch Plus.

## 9VDC

Use the included power supply or an adapter with the following rating: 9VDC center negative. 300mA minimum.

# SEQUENCE MODE

Varies the **Size/Pitch** parameter as programmed at regular or stepped time intervals.

Press and hold **INFINITE** (sequence) to enter Sequence mode. The **ON** LED will turn **RED**.

Use the presets 1-8 to set independent **SIZE/PITCH** settings for up to 8 steps to be played in sequence.

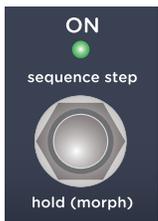
Press a **PRESET BUTTON** to enable/disable the step for the sequence.

Press and hold a **PRESET BUTTON** button and turn the **SIZE/PITCH** knob to set the value for each step.



Press turns step ON or OFF.

Press, hold, and turn **SIZE/PITCH** - adjusts pitch of the step and automatically enables step if not already enabled.



## sequence step:

Advances the sequence to the next step on each press. If a sequence is playing, pressing the step footswitch once will stop the sequence from playing and return to the first step.



## sequence tap:

Sets the rate of the sequencer through two taps. Resets the sequencer to Step 1 on single tap.



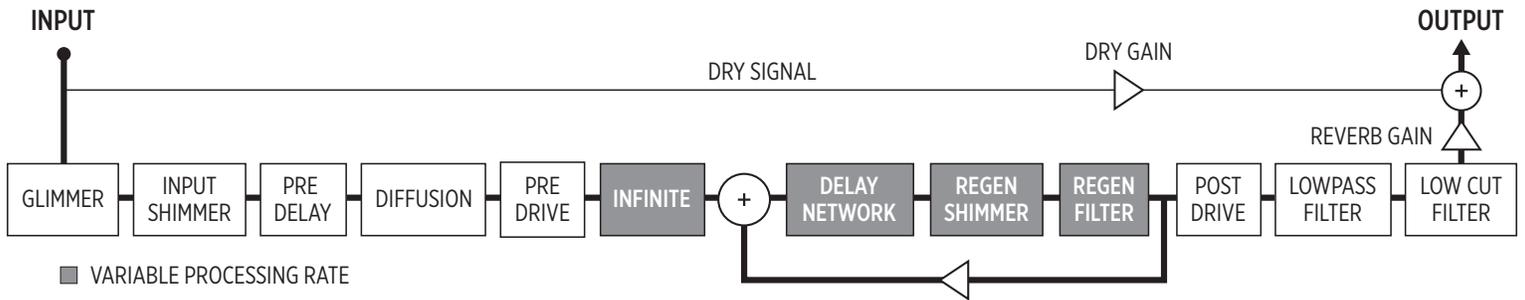
## infinite:

Holds the input to the reverb core in the same manner as in normal mode. Press and hold switches out of sequence mode.

# SIGNAL FLOW

This diagram shows the complete routing of audio through NightSky.

Keep in mind that **DRIVE**, **FILTER**, and **SHIMMER** can be located in only one of the shown locations.



## FACTORY RESET

Press and hold the **ON** footswitch while powering on the unit. Sweep the **LENGTH** knob from left to right twice. The **FAVORITE** LED will turn **AMBER** when full left and **RED** when full right. All three LEDs will flash **RED** when the unit resets.

**NOTE:** This will replace all presets with the factory defaults.