

USER MANUAL



**strymon** 

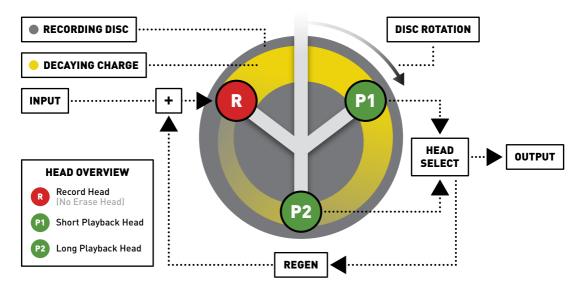


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#### **Overview**

Vintage oil can echo devices are electromechanical units that write a static charge onto a small rotating disk housed in a can partially filled with oil. The oil serves as a lubricant that helps retain the charge on the disk. The resultant delay signal is very band limited, creating a murky sounding echo. But that's not the only quality that gives the oil can echo its atmospheric magic.



Oil can echo configuration

The units have a record head and typically two playback heads, but generally no erase head, allowing some dissipating charge to remain as the can rotates. This contributes to two unique characteristics of these systems:

- First, it creates a regenerating repeat even when no feedback (REGEN) is applied from the playback heads. The static charge has its own decay time constant, so there are always "repeats" from the echo at all settings.
- Second, it creates an uneven cadence to the echoes, where the
  first echo occurs based on the distance from the record head to the
  playback head. But subsequent echoes occur at the rotational speed
  of the system as the dissipating signal comes back around on the
  can. The resultant off-kilter delay cadence is largely responsible
  for creating the sense of atmosphere without a strong "rhythmic"
  element.

By adding feedback (**REGEN**) from the playback heads, and/or combining the output of the two heads, the atmospheric nature of the echoes increases.



#### **Knobs and Switches**

#### Front Panel Controls

#### HEADS .....

The 3-way toggle switch selects the active play heads for different delay times and patterns:

**long:** (left) Positioned further from the record head, providing a longer delay time.

**short:** (middle) Positioned closer to the record head, providing a shorter delay time.

both: (right) Enables both heads for a multi-tap echo pattern.

#### TIME ·····

For a vintage oil can echo, the delay time is adjusted by changing the rotation speed of the can. **TIME** adjusts the virtual rotation speed. Delay time is also determined by the **HEADS** selection.

**Short head delay time:** 72ms - 290ms.

Long head delay time: 155ms - 620ms.

Disc rotation: 200ms - 800ms (residual static

repeats).

#### RATE .....

Controls the speed of the modulation applied to the echo repeats.

#### INTENSITY ·····

Adjusts the depth of the modulation. At minimum, modulation is off.\*

\*NOTE: Optionally, use a Strymon MultiSwitch Plus (see <u>page 22</u>) or MiniSwitch (see <u>page 20</u>) to remotely toggle Modulation, Infinite repeats, and more.





#### **Knobs and Switches**

#### Front Panel Controls

#### · · · LED INDICATOR

Blinks to indicate the delay time, which is set by the virtual rotation speed of the can. Use the **FOOTSWITCH** to engage and disengage the effect. Also lights or flashes additional colors when configuring Live Edit and Power Up Mode features (see page 9).



#### ... MIX

Controls the balance of dry and wet signals from 100% dry at minimum to 100% wet at maximum. A 50/50 mix is achieved at the 3 o'clock position when the **DRY SIGNAL** is set to its default **Digital** option.

(See page 12 for **DRY SIGNAL** selection.)

#### REGEN

Controls the amount of delay signal fed back from the selected head(s) to the input. At minimum, some echoes are still present from residual static charge on the can. At maximum, oscillation and endless repeats will occur.\*

#### **FOOTSWITCH**

Engages and disengages the effect. The RED LED on at the top of the pedal indicates that the effect is engaged. True Bypass is enabled by default, or Olivera can optionally set to Buffered Bypass (see page 10).

Push and hold the **FOOTSWITCH** while turning **REGEN** to adjust the **Live Edit - TONE** function (see page 9).

Push and hold the **FOOTSWITCH** for *2 seconds* to enter **SAVE/EXPRESSION** Mode (see page 31), or to configure Expression Pedal parameter assignments (see page 16).

\*NOTE: Runaway oscillation can get loud very quickly! Avoid using short echo TIME with high REGEN settings that can create runaway oscillation.



#### Rear Panel I/O and Control

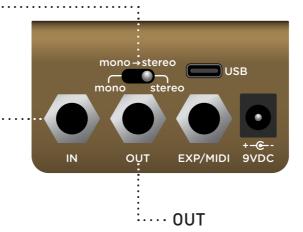
#### I/O MODE SELECTOR

**mono:** (left position) use with a mono input signal, such as a guitar. Output is mono. Defaults to True Bypass.

mono → stereo: (middle position) use with a mono input signal. Output is stereo.\* Bypass mode is Buffered Bypass.

**stereo:** (right position) use with a stereo input signal. When used with stereo cable connections to the OUT jack, output is true stereo.\* Bypass mode is Buffered Bypass.

\*Stereo I/O requires a TRS adapter or cable (see the following examples).



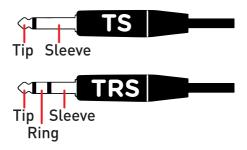
(TRS jack) High impedance, ultra low-noise, discrete Class A JFET stereo preamp.

IN .....

(TRS jack) Low impedance stereo output.

#### Mono and Stereo I/O Cable Connections

The Olivera **IN** and **OUT** jacks can accept either TS or TRS type 1/4" cables for mono or stereo connections, respectively:



**NOTE:** With a TRS stereo connection, the **Tip** carries the **left** signal and the **Ring** carries the **right** signal.

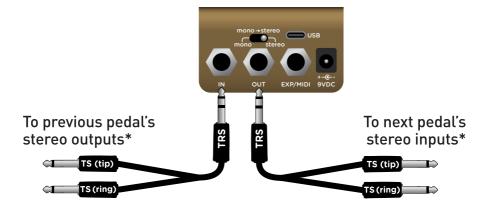
Mono In - Mono Out: To connect Olivera in a mono signal chain, use TS cables for both Olivera's IN and OUT. Set the I/O Selector switch to mono.



Mono In - Stereo Out: To feed a mono signal into Olivera, use a TS cable to Olivera's IN. Connect a TRS + dual TS cable to Olivera's OUT to route Olivera's stereo signal to a stereo pedal. Set the I/O Selector switch to mono → stereo.



**Stereo In - Stereo Out:** To connect Olivera in a stereo signal chain, use TRS + dual TS cables into both Olivera's **IN** and **OUT**. Set the **I/O Selector** switch to **stereo**.



\*NOTE: Alternatively, you can use a TRS - TRS cable when connecting a pedal with a TRS stereo input or output (such as connecting to the TRS stereo input of a Strymon Cloudburst stereo reverb pedal).



#### Rear Panel I/O and Control (continued)

USB-C®

Computer connection for MIDI I/O and firmware updates.

9VDC

Only use an adapter with the following rating:

- 2.1mm, center-negative
- 9VDC
- 250mA minimum

(Adapter sold separately.)



#### **EXP/MIDI**

Multifunction communication jack for external control of Olivera's features and functions. Can be set to operate in one of the following modes. (See "Configuring the EXP/MIDI Jack" on page 14 for details.)

Expression Pedal Mode (see page 16).

Favorite Mode (see page 17).

Mod Mode (see page 20).

Infinite Mode (see page 21).

MIDI Mode (see "Configuring Olivera for MultiSwitch Plus" on page 22 or "Saving Presets in MIDI Mode" on page 31).



#### **Live Edit - Tone Function**

Olivera includes an optional **TONE** control, which provides tone adjustment for the echo repeats. The Tone can be accessed in regular operation of the pedal (there is no need to power cycle).

Press and hold the **ON** footswitch, and *within one second* turn the **REGEN** (**TONE**) knob while holding the footswitch to smoothly adjust the echo tone, from dark at minimum to bright at maximum.\* By default, the **TONE** is set to 50% (flat).

**\*NOTE:** If the footswitch is held for 2.5 seconds without turning the **REGEN** knob, the pedal will enter **SAVE/EXPRESSION** mode.)



Release the **ON** footswitch once you've made your adjustment to exit and store your Tone setting.

**NOTE:** The Tone setting is saved per Favorite setting or MIDI preset.

# Power Up Modes

#### Bypass Mode for Mono I/O

With the rear **I/O Mode Selector** set to mono, the Olivera pedal is set for True Bypass as the default.\* Setting Olivera to Buffered Bypass Mode preserves the high frequency response of your instrument's signal through your pedal chain and long cable runs.

\*NOTE: Whenever the rear I/O Mode Selector set to mono → stereo or stereo, the bypass mode is automatically set to Buffered Bypass. (Additionally, whenever <u>"Spillover Mode"</u> is on, Buffered Bypass mode is engaged.)

1 Press and hold the FOOTSWITCH for at least 2 seconds while powering up Olivera. Once the LED flashes RED, release the footswitch.



- 2 Toggle the HEADS (BYPASS MODE) switch to choose between True or Buffered Bypass Modes. The LED will change color to indicate the current status as you toggle the switch.
  - True Bypass: set the switch to the long (left). The LED lights GREEN (default).
  - Buffered Bypass: set the switch to the both (right) position. The LED lights RED.

**NOTE:** short (middle) will always be the same as your last selected Bypass setting.

3 Press the FOOTSWITCH to store the Bypass Mode and begin using Olivera.

**NOTE:** The Bypass Mode setting persists across power cycles.

# **Power Up Modes**

#### Spillover Mode

Setting Olivera to Spillover Mode allows the wet echo signal of the currently selected preset to "spill" into bypass—or into the next loaded preset if you're using a Multiswitch Plus or MIDI for preset switching.

**NOTE:** Because of the buffer architecture, the current preset must be active for at least 5 seconds before Spillover between presets will be operational. Spillover is available immediately when bypassing the effect.

1 Press and hold the FOOTSWITCH for at least 2 seconds while powering up Olivera. Once the LED flashes RED, release the footswitch.



- 2 Turn the REGEN (SPILLOVER MODE) knob to set Spillover Mode on or off. The LED will change color to indicate the current status as you turn the knob.
  - Spillover Mode Off: AMBER (default, minimum)
  - Spillover Mode On: PURPLE (maximum)

**NOTE:** When Spillover is set to **On**, Bypass Mode is set to Buffered Bypass.

3 Press the **FOOTSWITCH** to store the Spillover Mode setting and begin using Olivera.

**NOTE:** The Spillover Mode setting persists across power cycles and is not saved per preset.



## **Power Up Modes**

#### **Dry Signal**

The Dry Signal can be set in one of three different modes.

- **Digital Mode** uses the converted dry signal and allows the **MIX** knob to dial out the dry signal when turned past the 3 o'clock position.
- Analog Mode keeps the dry signal in analog.
- Kill Dry Mode mutes the analog dry path signal, allowing the MIX knob to strictly control the "wet" effect output level. This is often preferable if using Olivera within an amp's parallel effects loop or a mixer's aux or effects send.
- 1 Press and hold the **FOOTSWITCH** for at least 2 seconds while powering up Olivera. Once the LED flashes **RED**, release the footswitch.



- 2 Turn the INTENSITY (DRY SIGNAL) knob to select one of the three Dry Signal options. The LED will change color to indicate the current status as you turn the knob.
  - Digital Mode: GREEN (default, minimum knob position)
  - Analog Mode: RED (50% knob position)
  - Kill Dry Mode: BLUE (maximum knob position)
- 3 Press the FOOTSWITCH to store the Dry Signal setting and begin using Olivera.

**NOTE:** The Dry Signal setting persists across power cycles and is not saved per preset.



#### **LED Brightness**

You can adjust the brightness of Olivera's LED to optimize visibility in any environment or lighting conditions.

1 Press and hold the FOOTSWITCH for at least 2 seconds while powering up Olivera. Once the LED flashes RED, release the footswitch.



- 2 Press and hold the FOOTSWITCH again and turn the REGEN (LED BRIGHTNESS) knob to adjust the brightness of the LED from low to high (the default). Release the FOOTSWITCH when your adjustment is complete.
- 3 Press and release the FOOTSWITCH to store the LED Brightness setting and begin using Olivera.

**NOTE:** The LED Brightness setting persists across power cycles and is not saved per preset.



#### Configuring the EXP/MIDI Jack

1 Press and hold the FOOTSWITCH for at least 2 seconds while powering up Olivera. Once the LED flashes RED, release the footswitch.



- 2 Turn the MIX (EXP/MIDI JACK) knob to select the function of the rear panel's EXP/MIDI jack. The LED will change color to indicate the current status as you turn the knob.
  - Expression Pedal Mode: GREEN (default, minimum) Using a standard TRS expression pedal, allows continuous control over any of the knobs. (See page 16 for details.)
  - Favorite Mode: AMBER (11 o'clock) Using a Strymon MiniSwitch, allows you to recall a Favorite setting. (See page 17 for details.)
  - Mod Mode: RED (12 o'clock) Using a Strymon MiniSwitch, allows you to toggle the modulation on/off. (The modulation is adjustable via the INTENSITY and RATE knobs.)
  - Infinite Mode: PURPLE (2 o'clock) Using a Strymon MiniSwitch allows for infinite echo repeats of the input signal when the switch is held—essentially the same as turning the REGEN knob to maximum. (See page 21 for configuration details.)



#### Configuring the EXP/MIDI Jack (continued)

- MIDI Mode: BLUE Allows for the use of a Strymon MultiSwitch Plus or an external MIDI controller:
  - MultiSwitch Plus A MultiSwitch Plus device can be set to PRESET Mode to access three presets or to CUSTOM Mode, where its switches control MOD, FAVORITE, and INFINITE. (Also, see "Configuring Olivera for MultiSwitch Plus" on page 22.)
  - MIDI Full MIDI functionality is available by sending MIDI Program
     Change messages via 1/4" TRS MIDI connection using a <u>Strymon</u>
     <u>Conduit</u> or MIDI EXP cable. Up to 300 presets are available via
     MIDI. (See "Saving Presets in MIDI Mode" on page 31.)



3 Press the FOOTSWITCH to store the selected EXP/MIDI Jack Mode and begin using Olivera.

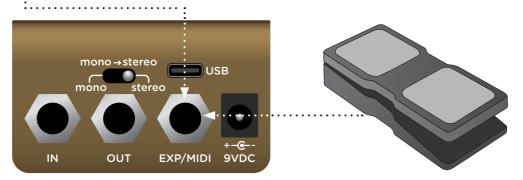
**NOTE:** The EXP/MIDI jack setting persists across power cycles and is not saved per preset.



#### **Expression Pedal Setup**

Use a TRS expression pedal to remotely control the knobs of Olivera. By default, Olivera is configured so that an expression pedal controls the **MIX** knob.

- 1 Configure the **EXP/MIDI** jack for Expression Mode. (See <u>page 14</u> for configuration instructions.)
- Connect an expression pedal to the EXP/MIDI jack of Olivera using a TRS cable.



- 3 Press and hold the FOOTSWITCH for at least 3 seconds, until the LED blinks GREEN.
- 4 Rock your expression pedal to the HEEL position. The GREEN LED will stop blinking and remain lit.
- 5 Set the knob(s) you would like to control to the desired settings for the HEEL position of the expression pedal.
- 6 Rock the expression pedal to the TOE position. The LED will turn RED.
- 7 Set the knob(s) you would like to control to the desired settings for the TOE position of the expression pedal.
- 8 Press and release the Olivera FOOTSWITCH to exit and store your expression pedal setup.

**NOTE:** Your expression pedal assignment is saved per Favorite setting or MIDI preset.

**NOTE:** If Olivera is set to respond to MIDI EXPRESSION and the EXP/MIDI jack is set to MIDI Mode, you can send MIDI CC# 100 with values 0 (heel) to 127 (toe) to perform the expression pedal setup.



#### Favorite Switch Setup and Compare Mode

Connect MiniSwitch or other external latching footswitch to store and recall your Favorite setting.

**NOTE:** Your Strymon MiniSwitch's internal jumper switch must be set to the factory-default **FAV/BOOST Mode** setting for Favorite Switch functionality. If you've changed the setting of this jumper switch, you'll need to change it back to **FAV/BOOST Mode**—see page 19.

- 1 Configure the **EXP/MIDI** jack for Favorite Mode. (See <u>page 14</u> for more info.)
- 2 Connect your MiniSwitch (or, optionally, an external latching switch with a TRS cable) to the **EXP/MIDI** jack.



- 3 Dial in your desired sound.
- To save your sound as the new Favorite setting, press and hold the Olivera footswitch for at least 3 seconds, until the LED blinks **GREEN**. Then, press and hold the Olivera footswitch until the LED lights **BLUE** to save the Favorite setting.

Step on the external footswitch to toggle between your current and Favorite settings on Olivera.



#### Favorite Switch Setup and Compare Mode (continued)

#### Compare Mode

With the Favorite or MIDI preset recalled, as a knob or switch is adjusted, the LED flashes **GREEN** when the current knob or toggle switch position matches the setting of the preset.

**NOTE:** Power Up Mode settings are applied globally and not stored individually per preset.

**NOTE:** Saving presets works differently when using MIDI. (See <u>page 31</u> for details.)

**NOTE:** The Favorite setting is stored at MIDI Program Change location 0.



#### Modulation and Infinite Mode Jumper Switch Configuration

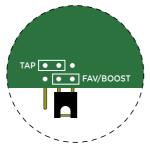
Use a <u>Strymon MiniSwitch</u> (sold separately) or a 3rd-party external switch to access Olivera's Modulation and Infinite Mode features.

- Toggle Modulation on/off using a press-release action with either a latching or non-latching (momentary) type switch.
- Enable Infinite Mode by using a press-hold action on a non-latching type switch.

The Strymon MiniSwitch includes an internal jumper switch with options for latching (FAV/BOOST Mode, the factory default setting) or non-latching (TAP Mode). This jumper must be changed to the TAP Mode setting to work for Olivera's Infinite feature, as described below.

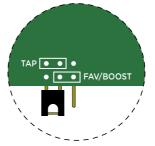
- 1 Unscrew the four screws on the bottom of the MiniSwitch chassis.
- 2 Once opened, locate the small jumper underneath the circuit board and change it from the center and right pins (FAV/BOOST) to the center and left pins (TAP).

Close-up view of the MiniSwitch circuit board jumper switch



FAV/BOOST Mode - for Olivera's Mod switching.

Place the jumper on the two RIGHT pins (FAV/BOOST). This is how MiniSwitch is configured from the factory.



TAP Mode - For Olivera's Mod or Infinite switching.

Place the jumper on the two LEFT pins (TAP).

3 Once the jumper configuration is complete, secure the cover back on your MiniSwitch. See the following External Control - Mod and Infinite Mode setups to configure your external footswitch.



#### Modulation Mode Switch Setup

Connect a MiniSwitch or other external latching or non-latching type footswitch with a TRS cable to toggle Olivera's Modulation. (Use Olivera's RATE and INTENSITY to adjust the speed and depth of the Modulation.)

- 1 Configure the EXP/MIDI jack for Mod Mode. (See <u>page 14 f</u>or more info.)
- 2 Connect an external switch with a TRS cable to the EXP/MIDI jack.



3 Press and release the switch to toggle Modulation on/off.

**NOTE:** Olivera's **INTENSITY** knob must be set to greater than minimum for modulation to be enabled.



#### Infinite Mode Switch Setup

Connect a MiniSwitch or other external non-latching (momentary) type footswitch with a TRS cable to provide infinite delay repeats on demand, whenever the switch is held.

**NOTE:** Your Strymon MiniSwitch's internal jumper switch must be changed from the factory-default **FAV/BOOST Mode** to the **TAP Mode** setting for Infinite mode switch functionality—see <u>page 19</u>.

- 1 Configure the EXP/MIDI jack for Infinite mode. (See <u>page 14 for</u> more info.)
- 2 Connect an external, non-latching type switch with a TRS cable to the EXP/MIDI jack.



**3** To Engage Infinite Mode: Press and hold to engage infinite repeats while the switch is held. Release the footswitch to disengage Infinite mode.



#### Configuring Olivera for MultiSwitch Plus

Configure Olivera and a Strymon MultiSwitch Plus (sold separately) for additional external control.

- 1 Press and hold the Olivera FOOTSWITCH while connecting power to the pedal. Hold for at least 2 seconds, until the LED blinks RED.
- 2 Turn the TIME knob all the way counter-clockwise to set the MIDI CHANNEL to Channel 1. The LED should be GREEN.
- 3 Turn the RATE knob to select either one of the following MIDI OUT options:
  - Send MIDI CC and Other Data: GREEN
  - Send Other Data: AMBER
- 4 Turn the MIX knob all the way clockwise to set the EXP/MIDI jack to MIDI Mode. The LED should be BLUE.
- 5 Press the Olivera FOOTSWITCH to exit and store these settings.



#### Configuring MultiSwitch Plus for Olivera

Configure MultiSwitch Plus for use with Olivera for either **PRESET Mode** for preset selection or **CUSTOM Mode** for MOD - FAVORITE - INFINITE control.

1 Connect a TRS cable to Olivera's EXP/MIDI jack. Power on Olivera.



**2** For PRESET Mode - Press and hold the A footswitch on MultiSwitch Plus while connecting the other end of the TRS cable to any one of the three jacks. The three LEDs on MultiSwitch Plus will blink **GREEN** when you release the A footswitch. See page 24.



For CUSTOM Mode - Press and hold the C footswitch on MultiSwitch Plus while connecting the other end of the TRS cable into any one of the three jacks. The three LEDs on MultiSwitch Plus will blink GREEN when you release the C footswitch. See page 25.



#### Using MultiSwitch Plus in Preset Mode

When using Olivera with MultiSwitch Plus in Preset Mode, the three footswitches provide access to Presets 1, 2, and 3.



**NOTE:** Footswitches **A**, **B**, and **C** on MultiSwitch Plus correspond to MIDI Program Changes 1, 2, and 3.

- 1 Step on a switch that is not illuminated to recall the corresponding preset.
- 2 Step on an illuminated switch to bypass Olivera.

#### Saving Olivera Presets with MultiSwitch Plus:

- 1 Dial in the sound that you would like to save as your preset on Olivera.
- 2 Press and hold the Olivera FOOTSWITCH for at least 3 seconds, until its LED blinks GREEN.
- 3 Press the A, B, or C MultiSwitch Plus footswitch to save the current state of the pedal to the desired location.

#### Using MultiSwitch Plus in Custom Mode

When using Olivera with MultiSwitch Plus in Custom Mode, the three footswitches provide access to Modulation, Favorite Preset selection, and Infinite Repeats.



- Press and release footswitch A to toggle MODULATION on and off. Use Olivera's RATE and INTENSITY to adjust the modulation speed and depth. (INTENSITY must be set great than minimum to enable modulation.)
- Press and release footswitch B to load your designated FAVORITE preset (see below).
- Press and hold footswitch C for INFINITE echo repeats while the footswitch is held.

#### Saving an Olivera Favorite Preset with MultiSwitch Plus:

- 1 Dial in the sound that you would like to save as your Favorite on Olivera.
- 2 Press and hold the Olivera footswitch for 3 seconds until its LED blinks GREEN, then release the footswitch.
- 3 Press and release the B MultiSwitch Plus footswitch to save the current state of the pedal as your Favorite preset to this location.

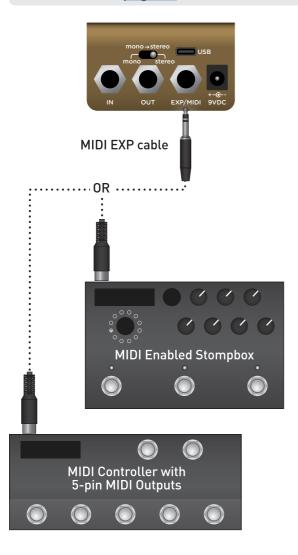


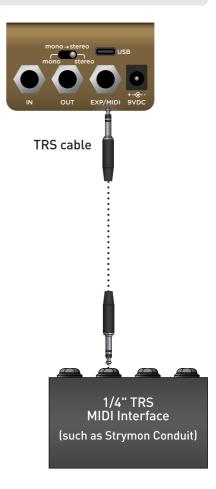
# **MIDI Functionality**

#### Configuring Olivera to Use MIDI

Using MIDI unlocks a set of tools that can be used to load any of Olivera's 300 preset locations using a suitable MIDI controller or interface connected to the Olivera **EXP/MIDI** jack. This requires a Strymon MIDI EXP cable or a MIDI controller/interface, such as <u>Strymon Conduit</u>, with at least one quarter-inch output.

**NOTE:** When using a Strymon MIDI EXP Cable, the MIDI OUT Mode must be set to Off. (See page 30 for details.)







#### Configuring Olivera to Use MIDI (continued)

#### STEP 1 - SET EXP/MIDI JACK TO MIDI MODE

1 Press and hold the FOOTSWITCH for at least 2 seconds while powering on Olivera. Once the LED flashes RED, release the footswitch.



2 Turn the MIX (EXP/MIDI JACK) knob clockwise until the LED is BLUE (maximum) to select MIDI Mode.

**NOTE:** MIDI data is received on the **TIP** of the TRS connection of the **EXP/ MIDI** jack.



#### Configuring Olivera to Use MIDI (continued)

#### STEP 2 - SET MIDI CHANNEL



- 3 Turn the TIME (MIDI CHANNEL) knob to set the MIDI communication channel. The LED indicates status. Your knob selections are as follows:
  - Channel 1: GREEN (default, minimum)
  - Channel 2: AMBER (10 o'clock)
  - Channel 3: RED (12 o'clock)
  - Channel 4-16: BLUE (maximum) set by next received MIDI Program Change message, requires 1/4" MIDI connection

    Once the LED turns BLUE, it will blink until the pedal receives a MIDI Program Change message. Once a message is received, the pedal will be set to the MIDI channel that carried the message and exits the Power Up Mode to allow you to begin using Olivera. (If you've successfully configured MIDI Channel 4-16, you can skip item 4 on the next page.)



#### STEP 2 - SET MIDI CHANNEL (CONTINUED)



4 Press the footswitch to exit and store your MIDI Channel setting and begin using Olivera.

**NOTE:** A simple way to check that communication is working is to send CC #102 with a value of 127 when the footswitch is bypassed. This will enable the footswitch (and the LED will light RED) if MIDI is properly connected and configured.

**NOTE:** If you are only sending data to Olivera using the Strymon MIDI EXP cable, the MIDI OUT Mode must be set to **OFF**. (See <u>page 30</u> for details on configuring the MIDI OUT Mode.)

**NOTE:** MIDI Channel assignment is not saved per Favorite setting or MIDI preset.



#### Configuring Olivera to Use MIDI (continued)

#### STEP 3 - SET MIDI OUT MODE

1 Press and hold the footswitch for at least 2 seconds while powering up Olivera. Once the LED flashes RED, release the footswitch.



- 2 Turn the RATE (MIDI OUT) knob to select what kind of MIDI data is sent from Olivera to other MIDI devices. The LED will flash momentarily to indicate your selection.
  - OFF: RED (default, minimum) No MIDI messages are sent out of Olivera.
  - THRU: BLUE (11 o'clock) Incoming MIDI messages are sent to the MIDI Out without any additional MIDI messages generated by Olivera.
  - SEND CC, OTHER: GREEN (1 o'clock) MIDI CC and Sysex messages generated by Olivera are sent to the MIDI Out.
  - **SEND OTHER: AMBER** (maximum) Sysex messages generated by Olivera are sent to the MIDI Out.
- **3** Press the **F00TSWITCH** to store the MIDI Out Mode and exit.

**NOTE:** MIDI data is sent from the **RING** of the TRS connection of the **EXP/ MIDI** jack.



## MIDI Functionality (continued)

#### Saving Presets in MIDI Mode

When in MIDI Mode, the currently loaded settings can be saved to any of Olivera's 300 preset locations at any time.

1 To enter Save Mode, press and hold the FOOTSWITCH for at least 3 seconds, until the LED blinks GREEN to indicate that Olivera is waiting to receive a MIDI Program Change message.



2 To save the current state of the pedal to the currently loaded preset location, press and hold the footswitch for at least 3 seconds until the LED lights BLUE.



To save the current state of the pedal to any preset location, send the unit a MIDI Program Change on Olivera's currently selected MIDI channel. For example:

- Send MIDI Program Change #10 to save the preset to the corresponding memory location on the pedal.
- To recall this preset, send MIDI Program Change #10 from your MIDI controller or sequencer.

# **MIDI Specifications**

#### **MIDI Program Changes**

Your Olivera pedal contains 300 preset locations, numbered sequentially from 0-299. Because MIDI Program Change messages have a maximum number of 128 (0-127), the presets are grouped into three MIDI patch banks.

MIDI BANK 0 = PRESETS 0-127 MIDI BANK 1 = PRESETS 128-255 MIDI BANK 2 = PRESETS 256-299

MIDI PROGRAM Favorite setting (accessible via MiniSwitch)

CHANGE 0 See page 17 for details.

MIDI PROGRAM MultiSwitch Plus - footswitch 1

**CHANGE 1** 

MIDI PROGRAM MultiSwitch Plus - footswitch 2

**CHANGE 2** 

MIDI PROGRAM MultiSwitch Plus - footswitch 3

**CHANGE 3** 

MIDI PROGRAM Manual Mode ("knobs")

**CHANGE 127** 

**NOTE:** Some MIDI applications and controllers start with MIDI Program Change 1 instead of 0. In these setups, increment the MIDI Program Change locations above by one.

The Olivera pedal always powers up in MIDI Patch Bank 0, so if you plan to stay within the first 127 presets, simply send a standard MIDI Program Change message to load a preset.

If you will be using MIDI Banks 1 and/or 2, it is advisable to send a standard MIDI Bank Change message (MIDI CC# 0 with a value equal to the MIDI Bank#) before each MIDI Program Change.

Selecting Program Change 127 within **any** MIDI Bank 0, 1, or 2 will put Olivera into Manual Mode. In this mode, Olivera will be set to the current knob and switch settings. No preset data can be stored at this preset location.



# MIDI Specifications (continued)

#### MIDI CCs

CC#	PARAMETER	RANGE	ENUMERATION
0	Bank Select	0-2	(0=Bank 1, 1=Bank 2, 3=Bank 3)
11	Heads	1-3	(1=long, 2=short, 3=both)
12	Time	0-127	
13	Rate	0-127	
14	Intensity	0-127	
15	Regen	0-127	
16	Mix	0-127	
17	Tone	0-127	
27	Footswitch	0, 127	(0=release, 1-127=press)
60	MIDI Expression Off/On	0, 127	(0=off, 1-127=on)
96	Mod	0, 127	(0=off, 1-127=on)
97	Infinite	0, 127	(0=release, 1-127=hold)
100	Expression Pedal	0-127	(0=heel, 127=toe)
102	Bypass/Engage	0, 127	(0=bypass, 1-127=engage)

**NOTE:** All on/off parameters are implemented with 0=off and any other value (1-127)=on. They are documented as "0" and "127" because many MIDI controllers send out 0 and 127 for on/off switches.

**NOTE:** Some MIDI applications and controllers start their MIDI enumeration with 1 instead of 0. In these setups, increment the numbers above by one.

# **Factory Reset**

Performing a Factory Reset restores the pedal to its factory default Power Up functions, and replaces all stored presets with their factory default settings.

1 Press and hold the FOOTSWITCH for at least 2 seconds while powering up Olivera. Once the LED flashes RED, release the footswitch.



- Press and hold the FOOTSWITCH again, and while still holding it down, sweep the RATE (FACTORY RESET) knob from minimum to maximum and back twice. The LED will change colors at the extremes of the knob range and flash RED to indicate when the reset is taking place.
  - TURN 1, from minimum to maximum: AMBER
  - TURN 2, from maximum to minimum: RED
  - TURN 3, from minimum to maximum: AMBER
  - TURN 4, from maximum to minimum and release the FOOTSWITCH immediately: The LED flashes RED, Olivera resets and restarts



# Factory Reset (continued)

# **Factory Default Settings**

FEATURE	FACTORY DEFAULT SETTING
Bypass Mode:	True Bypass
Spillover Mode:	Off
Dry Signal Mode:	Digital
Tone:	50% (flat)
LED Brightness:	Maximum
EXP/MIDI Jack:	Assigned to Expression Mode and configured to control the <b>MIX</b> knob
MIDI Channel:	1
MIDI OUT Mode:	Off
MIDI Expression:	On



#### **Features**

- Delay time adjustment of the virtual rotation speed of the can
- Selection for enabling long, short, or both play heads for delay time or multi-tap echoes
- Modulation of the repeats with controls for Rate and Intensity, with optional remote switch
- Regeneration provides control over the amount of echo fed back into the input for a range of repeat amounts and textures
- Infinite repeats can be triggered via optional remote switch
- Tone adjustment of echo repeats
- Full mix control of wet and dry signals
- Analog dry path option for a zero-latency dry signal that is never converted to digital
- Kill Dry mode to optionally mute the dry signal, providing control for the wet signal only
- Spillover option to allow repeats to remain audible beyond effect bypass and preset changes
- Stereo input & stereo output with true stereo throughput (if interfacing with non-TRS gear, requires "TRS to dual TS" adapter or cable for each jack, sold separately)
- True Bypass (electromechanical relay switching)
- Expression pedal input allows the connection of a TRS expression pedal, Strymon MiniSwitch or MultiSwitch Plus, or TRS MIDI connection
- High impedance and ultra-low noise discrete Class A JFET, TRS stereo preamp input
- Full-featured MIDI capability (bi-directional Continuous Controller & Program Change messages and 300 presets)
- USB-C jack for performing firmware updates
- +10dBu maximum input level easily handles instrument and line level signals
- High performance 520MHz ARM Superscalar processor
- 32-bit floating point processing
- Super low noise, high performance A/D and D/A converters
- Strong and lightweight anodized aluminum chassis
- Designed and built in the USA



# **Specifications**

FEATURE	SPECIFICATION VALUE
Input Impedance:	1 Meg Ohm
Output Impedance:	100 Ohm
A/D & D/A:	24-bit 96kHz
Max Input Level:	+10 dBu
Signal/Noise:	116 dB typical
Bypass Switching:	True Bypass (electromechanical relay switching)
Dimensions:	4.5" deep x 2.7" wide x 2.2" tall

# **Power Adapter Requirements**

Use an adapter with the following rating: 9VDC, center negative, 250mA minimum. (Adapter sold separately.)

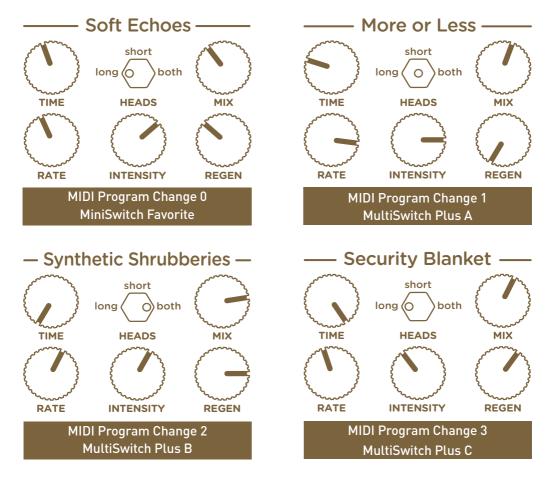


# **Appendix 1: Sample Settings**



# **Sample Settings**

To follow are sample settings to get you started. These are also saved as factory presets, accessible via MIDI Program Change or MultiSwitch Plus, as indicated.



**NOTE:** These Factory Presets are all saved with the Live Edit Tone Function at its default setting (see page 9).



# Appendix 2: Power Up Modes Quick Reference

# **Power Up Modes - Quick Reference**

Global parameters and functions can be accessed via a power up procedure. All power up functions persist through power cycles.

- 1 Press and hold the Olivera FOOTSWITCH for at least 2 seconds while powering up Olivera. Once the LED flashes RED, release the FOOTSWITCH.
- 2 Adjust the desired functions with the controls noted below.
- 3 Press the FOOTSWITCH to store your changes and exit Power Up Mode.

POWER UP MODE	OPTIONS
BYPASS MODE FOR MONO I/O See page 10 for an illustrated description.	<ul> <li>Set the HEADS switch - status shown on the LED</li> <li>True Bypass: switch in the long (left) or short (middle) position - LED GREEN (default)</li> <li>Buffered Bypass: switch in the both (right) position - LED RED</li> </ul>
SPILLOVER MODE See page 11 for an illustrated description.	Turn the REGEN knob - status shown momentarily on the LED  • Off: AMBER (default, minimum knob position)  • ON: PURPLE (maximum knob position)
DRY SIGNAL See page 12 for an illustrated description.	Turn the INTENSITY knob - status shown momentarily on the LED  • Digital: GREEN (default, minimum knob position)  • Analog: RED (50% knob position)  • Kill Dry: BLUE (maximum knob position)
LED BRIGHTNESS See page 13 for an illustrated description.	Press and hold the footswitch again and turn the <b>REGEN</b> knob to adjust the brightness of the LED.
EXP/MIDI JACK	Turn the MIX knob - status shown on the LED

# MODE Expression: GREEN (default, minimum knob position)\* Favorite: AMBER (11 o'clock knob position) Mod: RED (12 o'clock knob position) Infinite: PURPLE (2 o'clock knob position) MIDI: BLUE (maximum knob position)

\*NOTE: Also see <u>"Expression Pedal Setup" on page 16</u> to configure your pedal functionality per preset.



# Power Up Modes - Quick Reference (continued)

POWER UP MODE	OPTIONS
MIDI CHANNEL See page 28 for an illustrated description.	<ul> <li>Turn the TIME knob - status shown on the LED</li> <li>1: GREEN (default, minimum knob position)</li> <li>2: AMBER (10 o'clock knob position)</li> <li>3: RED (12 o'clock knob position)</li> <li>4-16: BLUE (maximum knob position) - channel set by next received MIDI Program Change message</li> </ul>
MIDI OUT MODE See page 30 for an illustrated description.	Turn the RATE knob - status shown momentarily on the LED  • OFF: RED (default, minimum knob position)  • THRU: BLUE (11 o'clock knob position)  • ON CC, OTHER: GREEN (1 o'clock knob position)  • ON OTHER: AMBER (maximum knob position)
FACTORY RESET See page 34 for an illustrated description.	While holding down the footswitch, turn the <b>RATE</b> knob from 0% to 100% and back two times - status shown on the LED



# Appendix 3: Live Edit Function Quick Reference



#### **Live Edit Tone Function - Quick Reference**

Olivera provides a way to adjust the Tone of the echo repeats (also, see <u>"Live Edit - Tone Function" on page 9</u>). This settings is saved per Favorite or MIDI preset.

- 1 Press and hold the **ON** footswitch, and within one second turn the **REGEN** knob for the Live Edit Tone function while holding the footswitch. (If the switch is held for 2.5 seconds without turning the knob, the pedal will enter **SAVE/EXPRESSION** mode.)
- 2 Release the footswitch once you've made your selection to return to using Olivera.

FUNCTION	DESCRIPTION
TONE	Turn the <b>REGEN</b> knob to smoothly adjust the echo tone,
See <u>page 9</u> for an illustrated description.	from dark at minimum to bright at maximum. By default, the <b>TONE</b> is set to 50% (flat).



# **Strymon Non-Transferable Limited Warranty**

#### Warranty

Strymon warranties the product to be free from defects in material and workmanship for a period of two (2) years from the original date of purchase when bought new from an authorized dealer in the United States of America or Canada. If the product fails within the warranty period, Strymon will repair or, at our discretion, replace the product at no cost to the original purchaser. Please contact your dealer for information on warranty and service outside of the USA and Canada.

#### **Exclusions**

This warranty covers defects in manufacturing discovered while using this product as recommended by Strymon. This warranty does not cover loss or theft, nor does the coverage extend to damage caused by misuse, abuse, unauthorized modification, improper storage, lightning, or natural disasters.

#### Limits of Liability

In the case of malfunction, the purchaser's sole recourse shall be repair or replacement, as described in the preceding paragraphs. Strymon will not be held liable to any party for damages that result from the failure of this product. Damages excluded include, but are not limited to, the following: lost profits, lost savings, damage to other equipment, and incidental or consequential damages arising from the use, or inability to use this product. In no event will Strymon be liable for more than the amount of the purchase price, not to exceed the current retail price of the product. Strymon disclaims any other warranties, expressed or implied. By using the product, the user accepts all terms herein.

#### How to Obtain Service Under this Warranty

For North American customers: Contact Strymon through our website at <a href="mailto:strymon.net/support">strymon.net/support</a> for Return Authorization and information. Proof of original ownership may be required in the form of a purchase receipt.

For International Customers: Contact the Strymon dealer from which the product was purchased from in order to arrange warranty repair service.

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#### **Safety and Compliance Information**

This equipment has been tested and found to comply with the limits for a class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- 1) Reorient or relocate the receiving antenna.
- 2) Increase the separation between the equipment and receiver.
- 3) Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- 4) Consult the dealer or an experienced radio/TV technician for help.



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