

USER MANUAL



Read Before Using

This manual covers the feature set for Sunset pedals running version 1.2 firmware. To check if your Sunset is running version 1.2 firmware, follow the instructions in the note at the bottom of page 21.

The User Manual for Sunset version 1.0 is available here.

Sunset version 1.2 adds the ability to remotely control your Sunset via a MIDI connection.

If you wish to install the latest update, go to strymon.net/firmwareupdate and follow the directions.

Controls and Connections – Front Panel

Toggles between 3 different Drive circuits for the **A** effect.

Ge - A circuit combining the softer response of Germanium diodes with a parallel path that blends in the dry signal as the Drive is lowered. At higher gains the lower-mid-range frequencies are emphasized to create a tight, thick response.

• B

Toggles between 3 different Drive circuits for the **B** effect.



2stage - The
2stage overdrive
combines a softclipping stage
followed by a
hard-clipping
stage, creating a
complex overdrive
with a wide
range of gain.
Its EQ structure
preserves the low
end while adding
some muscle to

push your amp. This overdrive can easily take you from lightly clipped to beefy saturation.

Controls and Connections - Front Panel (cont.)

• A ······• B

texas - A single stage softclipper configuration that is

filtered before
and after the
gain stage to
create a smooth
and dynamic
overdrive. Perfect
for playing the
blues or just
fattening up your
sound with a
signature midrange bump.



treble - A clean boost that removes the low frequencies as the Tone knob is turned up. Great for tightening up an overdriven amp, or driving another gain pedal that's a bit looser on the low end. **hard** - A single-stage hardclipping circuit that has a ton

> of gain on tap, approaching fuzz territory with the Drive knob maxed. At lower gains, mildly clipped transparent tones are achieved.

JFET - A clean boost that subtly beefs up your signal with the

dynamics and response of a JFET front end. As you turn up the drive, the signal gets rounded and warmer.

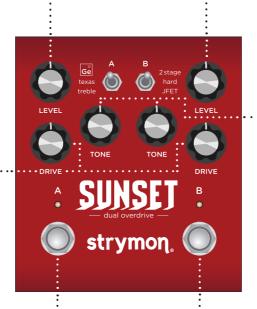
Controls and Connections - Front Panel (cont.)

IFVFI

Controls the output volume of each channel.

• DRIVE ···

Adjusts the amount of gain applied to each channel.



• TONE

Adjusts the treble frequencies for each channel.
The character and response of the control vary with the circuit type.

Engages and bypasses the A channel. **RED** LED on indicates that the effect is engaged. Press and Hold the A footswitch to save a preset that can be accessed with an external Favorite switch or via MIDI.

B (footswitch)

Engages and bypasses the **B** channel. **RED** LED on indicates that the effect is engaged.

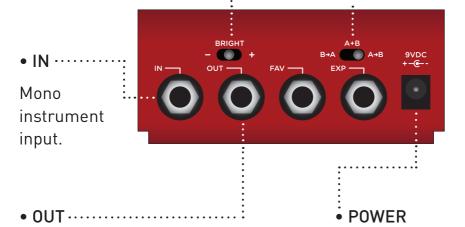
Controls and Connections - Rear Panel

BRIGHT switch …………

Tailors the highest frequencies of the output signal. Try the middle for a balanced sound with most setups. Try minus (-) for a smooth top end. Try plus (+) to cut through with a warm amp/ speaker setup.

···· • CONFIG switch

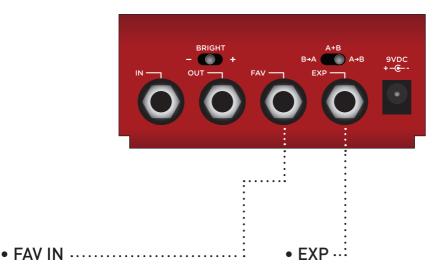
Selects the effect order for the 2 sides of Sunset. Selecting **A+B** will place the effects in a parallel signal chain.



Mono signal output.

Use an adapter with the following rating: 9VDC center negative. 250mA minimum.

Controls and Connections - Rear Panel (cont.)



Can be used in one of three ways:

FAV In mode – Connect a MiniSwitch to remotely toggle a Favorite preset. (See page 11 for more info.)

Expression Pedal Mode – Allows continuous control over any of the knobs with a standard TRS expression pedal. (See page 12 for more info.)

Volume Mode – Allows control of the output volume of the effect with a standard TRS expression pedal. (See page 14 for more info.) Can be used in one of three ways:

Expression Pedal Mode – Allows continuous control over any of the knobs with a standard TRS expression pedal. (See page 12 for more info.)

Volume Mode – Allows control of the output volume of the effect with a standard TRS expression pedal. (See page 14 for more info.)

MIDI Mode – Allows MIDI control of presets and parameters with a TRS cable connection. (See page 19 for more info.)

Live Edit Functions - Noise Gate Threshold

Sunset has a variable-threshold noise gate feature to tame hum and buzz when you're not playing. A downward expander with advanced signal detection techniques creates a seamless transition to noise gate silence with all types of input signal dynamics, including staccato bursts and slowly sustained notes.



Press and hold the Bfootswitch until the ALED blinks.

Release the **B** footswitch.

2 Turn the LEVEL knob on the A side past the 12 o'clock noon position to engage the noise gate.

The A LED will change from GREEN to AMBER to indicate the noise gate has been engaged. Turning LEVEL past 12 o'clock increases the noise gate threshold for louder and noisier setups. The A LED will change from AMBER to RED to indicate the increased noise gate threshold level.

Press the B footswitch to store the new noise gate setting to Sunset.

NOTE: The noise gate setting can be saved independently for both the Favorite and Manual settings of Sunset.

Power Up Modes – Bypass Mode Selection

Setting Sunset to Buffered Bypass mode preserves the high frequency response of your guitar signal through your pedal chain and long cable runs.

Press and hold the B footswitchwhile powering up the pedal.Once both LEDs flash, releasethe footswitch.



Press the A or B footswitch to store the Bypass mode and begin using Sunset.

NOTE: Power up modes are saved for all future power ups until they are changed again with the steps above.

2 Turn the LEVEL knob on the B side to select True Bypass or Buffered Bypass. The B LED will change from GREEN to RED to indicate the current status as the knob is turned.

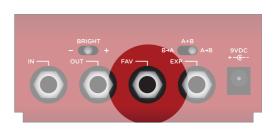
GREEN - True Bypass (default)

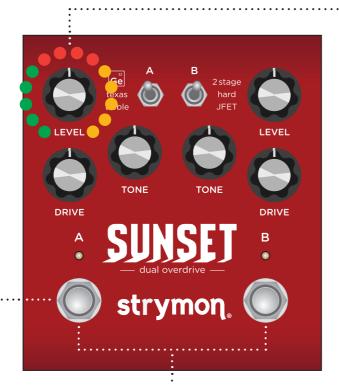
RED - Buffered
Bypass
A connected
expression pedal
will still work in
Volume Mode when
using Buffered
Bypass.

Power Up Modes - FAV Jack Options

Select what the FAV jack will do.

Press and hold the A
footswitch while powering
up the pedal.Once both LEDs
flash, release the footswitch.





2 Turn the LEVEL knob on the A side to set the FAV jack mode. The A LED will change color to indicate the selection as the knob is turned.

GREEN - Expression Mode (See page 12 for more info.)

RED - Volume Mode (See page 14 for more info.)

AMBER - FAV IN Mode (default) (See page 11 for more info.)

Press the A or B footswitch once again to store power up modes and begin using Sunset.

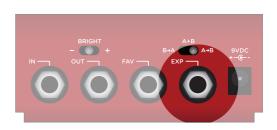
NOTE: Power up modes are saved for all future power ups until they are changed again with the steps above.

NOTE: If version 1.0 firmware is installed, Expression and Volume modes are not available. Please refer to the Sunset version 1.0 manual at www.strymon.net/sunset.

Power Up Modes - EXP Jack Options

Select what the EXP jack will do.

Press and hold the Afootswitch while powering upthe pedal. Once both LEDsflash, release the footswitch.





2 Turn the LEVEL knob on the B side to set the EXP jack mode. The B LED will change color to indicate the selection as the knob is turned.

GREEN - Expression Mode (See page 12 for more info.)

RED - Volume Mode (default) (See page 14 for more info.)

BLUE - MIDI Mode (See page 19 for more info.)

Press the A or B footswitch once again to store power up modes and begin using Sunset.

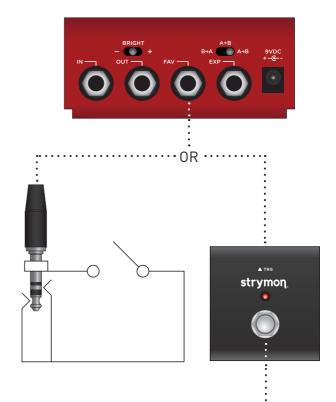
NOTE: Power up modes are saved for all future power ups until they are changed again with the steps above.

NOTE: If version 1.0 firmware is installed, MIDI mode is not available. Please refer to the Sunset version 1.0 manual at www.strymon.net/sunset.

External Control - FAV Switch Setup

Connect MiniSwitch or other external latching footswitch with a TRS cable to store and recall your Favorite setting.

- 1 Ensure that the FAV jack is configured for FAV IN. (See page 9 for more info.)
- Connect an external switch to the FAV jack of Sunset.
- 3 Dial in your desired sound on Sunset.
- Press and hold the A footswitch for 2 seconds to save this setting as a new Favorite sound.
- Step on the externalfootswitch to togglebetween your favoritesetting and the currentsetting on Sunset.



NOTE: Along with the knobs and toggle switches on the face of the pedal, the setting of the BRIGHT and CONFIG switches, the NOISE GATE and the bypass state of each side of Sunset is stored with the Favorite preset.

NOTE: Saving presets works differently when using MIDI. (See page 23 for more info about Saving Presets in MIDI mode.)

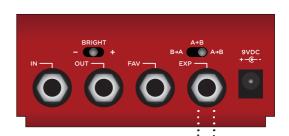
COMPARE MODE

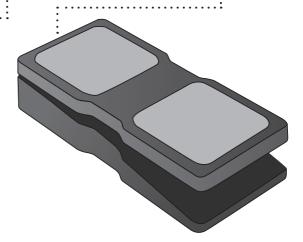
As knob and switch settings are adjusted with the FAVORITE engaged, the LED temporarily changes from **RED** to **GREEN** when the current position is identical to the saved favorite. $p_{g,11}$

External Control – Expression Mode

Use a TRS Expression pedal to control the knobs of Sunset.

- 1 Configure the EXP jack for Expression Mode. (See page 10 for details.)
- Connect the Expression pedalto the EXP jack of Sunsetusing a TRS cable.
- Press and hold both A and
 B footswitches for a few
 seconds until both LEDs
 begin blinking GREEN.







External Control – Expression Mode (cont.)

- Rock the expression pedal back to the HEEL position and only the A LED will blink **GREEN**.
- 5 Set the knobs the way you would like them to be in the HEEL position. The A LED will turn RED to indicate that the setting has changed.
- Rock the expression pedal forward to the TOE position and only the B LED will blink GREEN.
- Set the knobs you would like to control to the setting for the TOE position of the expression pedal. The B LED will turn red to indicate that the setting has changed.
- Press the A or B footswitch once to save the expression settings.

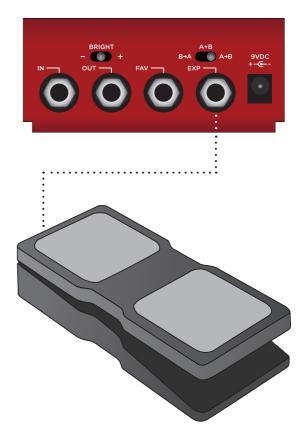
NOTE: Expression pedal settings are saved and recalled as part of the on-board Favorite setting and MIDI accessible presets.

NOTE: If you are using the **EXP** jack for MIDI communication, it is possible to connect the pedal to the **FAV** jack instead to use an expression pedal. (See page 10 for details on configuring the **FAV** jack for Expression mode.)

External Control - Volume Mode

Use a TRS Expression pedal to control the output volume.

Connect the Expression pedal to the EXP jack of Sunset using a TRS cable.



NOTE: When Sunset is in Buffered Bypass mode and the Expression jack is configured for Volume mode, the pedal will still function as a Volume pedal whether the effect is bypassed or engaged.

NOTE: The default assignment for the **EXP** jack is Volume mode. If this has been changed, the **EXP** jack assignment must be changed back to Volume mode. (See page 10 for details on configuring the **EXP** jack to Volume mode.)

NOTE: If you are using the **EXP** jack for MIDI communication, it is possible to connect the pedal to the **FAV** jack instead to control the volume. (See page 9 for details on configuring the **FAV** jack for Volume mode.)

Factory Reset

Restore the pedal to factory power up modes and secondary functions.



- Press andhold the Bfootswitchduring powerup. Both LEDswill blink.
- 2 Release the footswitch and turn the A channel DRIVE knob from 0-100% and back two (2) times. The A channel LED will change to AMBER at the extremes of the knob range and blink RED to indicate that the reset is taking place.

Once the A channel LED stops blinking **RED**, the reset is complete and Sunset is ready for use.

FACTORY SETTINGS

- EXP Input Jack: Assigned to work in VOLUME PEDAL mode.
- FAV Input Jack: Assigned to work in FAV IN mode.
- Expression Pedal Mode Assignment: Assigned to control both DRIVE knobs simultaneously.
- Noise Gate: OFF
- Bypass Mode: True Bypass
- MIDI channel: 1
- MIDI Expression On/Off: On
- MIDI Output Mode: Off

Features

- Two independent effects that can be configured and controlled separately or blended together as a single effect
- The ability to run the two effects in series (in either direction) or parallel
- Six hand crafted circuit algorithms provide a wide range of drive from clean to heavy distortion
- Bright Switch tailors the sound for use with all amplifiers from dark to bright
- Expression pedal input provides seamless morphing between different sounds (Expression mode), or smooth volume control with logarithmic taper (Volume mode)
- Optional external Favorite switch toggles between a saved favorite setting and the current settings on the pedal
- MIDI accessible via EXP Jack for remote parameter control and access to 300 preset locations
- Selectable noise gate minimizes buzz and hum
- Premium analog front end and output section
- Ultra Low Noise, high performance A/D and D/A Converters
- High Performance DSP
- Rugged & Lightweight Anodized Aluminum Chassis
- True Bypass
- Selectable high-quality, transparent analog buffered bypass

Specifications

Input Impedance 500k Ohm

Output Impedance 100 Ohm

A/D & D/A 24-bit 96kHz

Max Input Level +8dBu

Frequency Response 20Hz to 20kHz

DSP performance 1585 MegaFLOPS

Bypass Switching True Bypass (electromechanical relay

switching)

Dimensions 4.5" deep x 4" wide x 1.75" tall

(11.4 cm deep x 10.2 cm wide x 4.4 cm tall)

Power Adapter Requirements

Use an adapter with the following rating: 9VDC center negative; 250mA minimum.

Appendix 1 MIDI Functionality

MIDI - Configuring Sunset to Use MIDI

Using MIDI unlocks a set of tools that can be used to load any of Sunset's 300 preset locations and automate knob changes using a suitable MIDI controller or interface connected to Sunset's **EXP** jack. This requires a MIDI controller/interface with at least one quarter-inch output or a Strymon MIDI EXP cable. (Check strymon. net/support/sunset for a list of compatible devices.)

Step 1 – Set EXP jack to MIDI Mode

(See page 10 for an illustrated guide to configuring the **EXP** jack for MIDI communication. Steps reprinted here.)

- Press and hold the A footswitch while powering up the pedal.
- Turn the LEVEL knob on the B side until the B LED turns BLUE to set the EXP jack mode to MIDI Mode.
- Press either footswitch to store the EXP jack assignment.

MIDI - Configuring Sunset to Use MIDI (cont.)

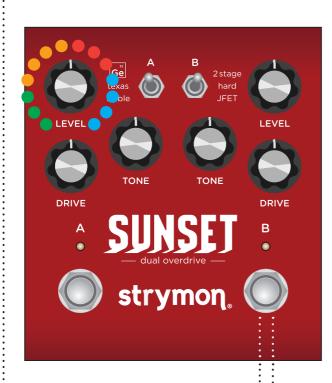
Step 2 - Set MIDI Channel

This determines which MIDI channel Sunset will use to send and receive MIDI data. See the illustrated guide below for complete instructions.

NOTE: To select channel 4-16, you will need to connect Sunset to a MIDI device.

Press and hold the B
footswitch while powering
up the pedal. Once both
LEDs flash, release the
footswitch.

2 Turn the **LEVEL** knob on the **A** side to set the MIDI communication channel. The **A** LED will change color as the MIDI channel is changed.



GREEN - Channel 1 (default)

AMBER - Channel 2

RED - Channel 3

BLUE - Channel 4-16
(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 the
LED will stop blinking.

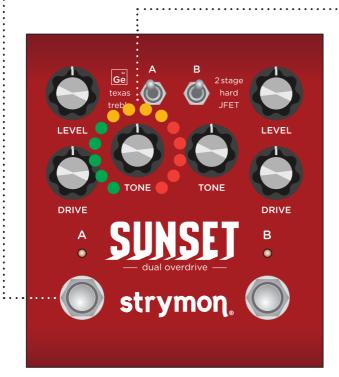
3 Press the B footswitch again to store the MIDI channel and begin.

MIDI - Configuring Sunset to Use MIDI (cont.)

This determines what kind of MIDI data is sent out by Sunset. Note that if you are only sending MIDI data to Sunset – the most common configuration – the MIDI Output mode must be set to OFF.

Step 3 - Set MIDI Output Mode

Press and hold the A footswitch while powering up thepedal. Once both LEDs flash, release the footswitch.



2 Turn the TONE knob on the A side to select what kind of MIDI data is sent from Sunset to other MIDI devices. Both LEDs will flash momentarily as the mode is changed.

GREEN - ON

Using Sunset's knobs and switches generates MIDI messages that are sent out of Sunset.

AMBER - THROUGH

Incoming MIDI messages are sent out of Sunset without any additional MIDI messages generated by Sunset.

RED - OFF (default)

No MIDI messages are sent out of Sunset.

TIP: A simple way to check that communication is working is to send CC #10 with a value of 127 when the $\bf A$ footswitch is off. This will turn the $\bf A$ footswitch on if MIDI is properly connected and configured.

MIDI - Expression On/Off

This setting selects whether Sunset will respond to incoming MIDI Expression messages. If your rig uses MIDI Expression messages with multiple pedals that are set to the same MIDI Channel, this setting can be used to determine which pedal(s) will respond to expression messages for a given preset.

Press and hold the B footswitchuntil both LEDs blink. Releasethe B footswitch.



Turn the DRIVE

B knob to select

whether Sunset will

respond to incoming

MIDI Expression

messages (CC

#100).

RED - Sunset will not respond to MIDI Expression messages.

BLUE - (default)
Sunset will respond
to MIDI Expression
messages.

Press the B footswitch to store the setting to Sunset.

Saving Presets in MIDI Mode



- When in MIDI mode, the currently loaded settings can be saved to any of Sunset's 300 preset locations at any time.
- To enter SAVE mode, press and hold the **A** footswitch.

 The LED will illuminate in **BLUE**.
 - Send the unit a patch change message from the connected MIDI device. The LED will flash and Sunset will save the settings to that preset location.
 - To save the preset to the currently loaded preset location, press the A footswitch.

NOTE: An easy way to check if your Sunset is running version 1.0 or version 1.2 firmware is to try setting the MIDI Expression functionality. If you are running version 1.0 firmware, the **B** LED will not change as you turn the **DRIVE** knob.

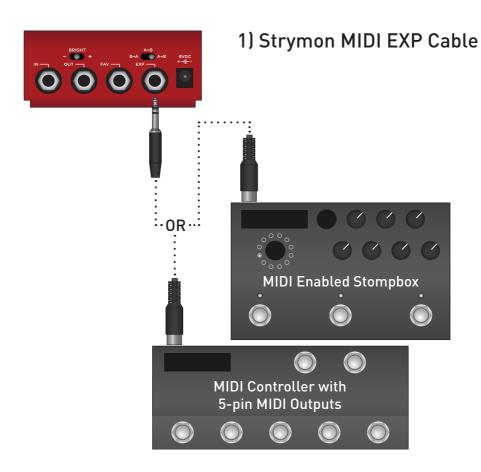
MIDI – Controlling Sunset With an External Device

To begin using Sunset with an external MIDI device, connect the MIDI out jack from a pedal, controller or computer interface to the **EXP** jack on Sunset. The following can be used to do this:

- Strymon MIDI EXP cable
- Compatible 5-pin MIDI to 1/4" MIDI Interface (check strymon.net/support/sunset for a list of compatible devices)

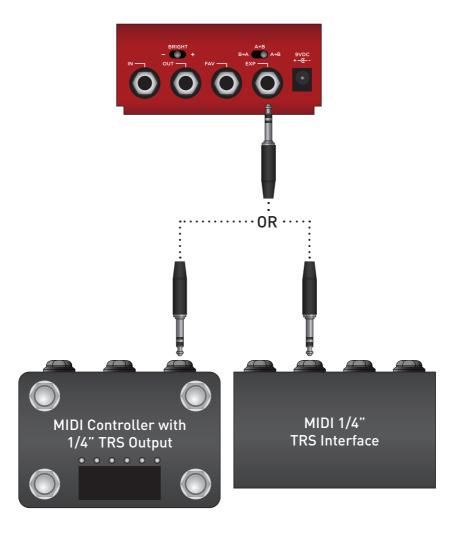
Once you have connected Sunset to a MIDI source, choose a channel for MIDI communication with Sunset. Sunset is set to MIDI channel 1 by default. (See page 20 for detailed instructions for changing the MIDI channel.)

Refer to Sunset's MIDI Specification on page 26 for additional details about the specific parameters that can be controlled via MIDI.



MIDI – Controlling Sunset With an External Device (cont.)

2) Standard 1/4" TRS Cable



NOTE: If you are only sending data to Sunset – the most common configuration – the MIDI Output mode must be set to OFF. (See page 21 for details on configuring the MIDI Output Mode.)

MIDI - Specifications

MIDI Patch Changes

Sunset 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

Sunset 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 bank 0, patch 127 will put Sunset into Manual mode. In this mode, the pedal will be set to the current knob and switch settings. No preset data can be stored at this preset location.

MIDI - Specifications (cont.)

MIDI CC Numbers

A PARAMETERS A Bypass/On Circuit Select A Level A Drive A Tone A	CC# 10 11 12 13 14	RANGE 0-127 1-3 0-127 0-127 0-127	NOTES (0=bypass, 1-127=0n) (1=treble, 2=Ge, 3=texas)
B PARAMETERS	CC#	RANGE	NOTES
B Bypass/On	15	0-127	(0=bypass, 1-127=0n)
Circuit Select B	16	1-3	(1=JFET, 2=2stage, 3=hard)
Level B	17	0-127	
Drive B	18	0-127	
Tone B	19	0-127	
COMMON PARAMETERS	CC#	RANGE	NOTES
Config (A/B)	20	0-127	(1=A>B, 2=B>A, 3=A+B)
Bright	21	1-3	(1=+, 2= -, 3=middle)
Noise Gate	22	0-127	(0=off)
Bypass/On A and B	33	0,127	(0=bypass, 127=on)
MIDI Patch Bank	0	0-2	
Volume Pedal	7	0-127	
MIDI Expression Off/On	60	0,127	(0=off, 127=on)
Expression Pedal	100	0-127	

Appendix 2 Live Edit Functions and Powerup Modes

Live Edit Functions

Below is a list that details how to access all secondary parameters that are adjustable from Sunset's interface that do not have dedicated knobs or switches. All secondary control parameters are saved per-preset.

Press and Hold the **B** footswitch during normal use until both LEDs start blinking to enter Live Edit mode. Release and use knobs as described below.

Press B again to store your changes and exit Live Edit mode.

NOISE GATE THRESHOLD

(Separate for Preset/Man)
(See page 7 for an illustrated description)

MIDI EXPRESSION ON/OFF

(See page 22 for an illustrated description)

Turn LEVEL knob (A) - status shown on A LED

Off = GREEN

Engaged = AMBER

Extreme = RED

Turn **DRIVE** knob (**B**) - status shown on **B** LED

Off = RED LED

On = BLUE LED

Power Up Modes

Below is a list of global parameters and functions that are accessed via a power up procedure. All power up functions persist through power cycles.

GENERAL SETTINGS

Press and Hold the **B** footswitch at power up until the LEDs flash. Release and use knobs as described below. Press any footswitch to store settings & exit.

BYPASS MODE

(See page 8 for an illustrated description)

Turn LEVEL knob (B) - status shown on B LED

True Bypass = GREEN (default)

Buffered Bypass = RED

SET MIDI CHANNEL

(See page 19 for an illustrated description)

Turn LEVEL knob (A) - status shown on A LED

1 = GREEN (default)

2 = AMBER

3 = RED

4-16 = **BLUE** (channel set by next MIDI

Program Change message)

FACTORY RESET

(See page 15 for an illustrated description)

Sweep **DRIVE** knob (**A**) twice to RESET - status shown on **A** LED

Turn 1 = AMBER

Turn 2 = RED

Turn 3 = AMBER

Turn 4 = Both LEDs flash RED, pedal resets

& power cycles

Power Up Modes (cont.)

Below is a list of global parameters and functions that are accessed via a power up procedure. All power up functions persist through power cycles.

JACK OPTIONS

Press and Hold the A footswitch at power up until the LEDs flash. Release and use knobs as described below. Press any footswitch to store settings & exit.

EXP

(See page 10 for an illustrated description)

Turn LEVEL knob (B) - status shown on B

LED

Expression = GREEN
Volume = RED (default)

Digital = BLUE

FAV

(See page 9 for an illustrated description)

Turn LEVEL knob (A) - status shown on A

LED

Expression = **GREEN**

Volume = RED

Favorite In = AMBER (default)

MIDI OUT MODE

(See page 21 for an illustrated description)

Turn **TONE** knob (A) - both LEDs show status momentarily

On = GREEN

Through = AMBER

Off = RED (default)

Appendix 3 **Sample Settings**

Sample Settings







Sample Settings (cont.)



Strymon Non-Transferrable 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 strymon.net/support 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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