SWITCH-TRACK™

BUFFERED & DUAL ISOLATED ABY SWITCHER

Owner's Manual

MESA ENGINEERING®
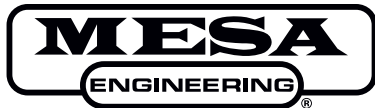
SAFETY PRECAUTIONS

- Read these instructions.

- Follow these instructions.

- Heed all notes and warnings.

- Do not use this device near water.

- Clean this device only with a dry cloth.

- Keep these instructions for future reference.

- Damage to this device by improperly connected and/or grounded equipment is not covered under warranty.

- This device contains no user-serviceable parts and includes components which are susceptible to damage by electrostatic discharge (ESD).

- Be sure to use only a properly rated "wall-wart" power adapter or universal pedalboard power supply, with extra attention paid to the correct polarity, voltage and current. Applying the wrong polarity, improper voltage or insufficient current to this device may cause poor and/or inconsistent tone, performance, and even damage! Refer to the CONTROLS & CONNECTIONS and SPECIFICATIONS sections for more information.

- Do not defeat, remove or "lift" an amplifier's safety ground, which is provided by the 3-prong AC power-cord plug! Doing so may not only be ILLEGAL, but it may also pose a SHOCK or ELECTROCUTION HAZARD.

OWNER'S MANUAL & OPERATING GUIDE

Congratulations on your choice of MESA/Boogie and welcome to the MESA Family! The same passion for excellence, commitment to quality and dedication to customer satisfaction is present in each and every product we make in our one-and-only shop in Petaluma, California, U.S.A. Rest assured that the very same people that hand-build the finest amplifiers in the world, also built your SWITCH-TRACK™ BUFFERED & DUAL ISOLATED ABY SWITCHER, and you have access to the same resources for help that all our customers do. Call on us anytime and enjoy!

OVERVIEW

The SWITCH-TRACK™ allows you to; connect two amplifiers and a tuner, switch between the amplifiers, run them both at the same time, or mute them for silent tuning and guitar changes. An input buffer presents the connected guitar or pedal with an ideal load that remains constant, resulting in a guitar tone that is consistent. The buffer also lowers the signal impedance and its susceptibility to noise, effortlessly drives the transformer isolated outputs and cable runs without skipping a beat, regardless of whether one or both amplifier outputs is active.

The two built-in stomp-buttons toggle between the two amplifiers, and both amplifiers on or muted at the same time, for silent tuning and guitar changes. To activate the mute, hold down the left stomp-button for about a second, and to turn it off simply press the button again. Four LEDs indicate when one or both amps are on or off.

The two transformer isolated amplifier outputs are complimented with a ground-lift switch and a phase-reverse push-button (which is also MIDI programmable and selectable), to safely prevent ground loop hum and noise, and to correct phase cancellation problems which can occur when running multiple amps - ensuring a wall of tone that is full, powerful and quiet. In addition to being transformer isolated, both outputs are capable of running balanced signals to a balanced receiver for greater noise immunity and signal integrity, when using cables runs longer than 30 feet.

MIDI control via Program Change or Control Change messages allows for MIDI system integration with up to 256 presets or instant access, respectively. The two built-in stomp-buttons and the phase reverse push-button can be used in real-time along with MIDI control.

CONTROLS & CONNECTIONS

It's always a good idea to make any audio connections with every piece of equipment in a guitar rig turned off, or at least the amplifier volume(s) turned down, to avoid loud bursts of sound from damaging speakers or other components. With some amplifiers, it may also be a good idea to wait approximately 15 seconds before switching between them, after being taken off standby. This will allow voltages between them and the SWITCH-TRACK™ to stabilize, eliminating louder than normal switching transients.

The factory power-on default setting for the two outputs is OUTA active/on and OUTB muted/off, which is MIDI preset or patch #1 — refer to the MIDI OPERATION section to change these settings.

LED A   When illuminated, this amber LED indicates OUTA is active/on, or that it will remain or become active when either the BOTH or MUTE function is turned off.

LED B   When illuminated, this green/yellow LED indicates OUTB is active/on, or that it will remain or become active when either the BOTH or MUTE function is turned off.

Note: When LED B is off, and either the PHASE button setting is changed, or a MIDI message changes the phase, or any valid MIDI message is received, LED B will illuminate for 1sec, in the appropriate color — green for 0deg or yellow for 180deg, indicating the current phase.

LED BOTH   When illuminated, this blue LED indicates the BOTH function is on, and both OUTA and OUTB are active/on,

or that the two outputs will become active when the MUTE function is turned off.

LED MUTE When illuminated, this red LED indicates the MUTE function is on, and both OUTA and OUTB are muted/off.

Note: The four LEDs will flash once in response to receiving certain MIDI messages — refer to the MIDI OPERATION section for more information.

STOMP A/B This push-button toggles between OUTA or OUTB, as indicated by the LED A and LED B.

STOMP A+B When pressed and released, this dual-function push-button toggles the BOTH function on and off. Holding this push-button for about-a-second turns the MUTE function on, which also turns off LED A or LED B, providing an unobstructed indication that the outputs are muted/off; and when the push-button is released, the LED A or LED B will turn on again, but both outputs will remain muted/off. Pressing this push-button again turns the MUTE function off, the SWITCH-TRACK™ and both outputs will return to the state as indicated by LED A, LED B and LED BOTH.

INPUT This 1/4" phono jack is an input and accepts the signal from a guitar or pedal, and feeds the SWITCH-TRACK™ input buffer circuit.

OUTA This 1/4" phono jack is an output and provides a transformer isolated signal. Connect it to either the input of an amplifier or pedal, using a shielded 1/4" TS instrument cable, or to the input of a CLEARLINK™ CONVERTER/ISO TRANSFORMER using a 1/4" TRS balanced cable, for greater noise immunity and signal integrity, when using cables runs longer than 30 feet.

OUTB This 1/4" phono jack is an output and provides a transformer isolated signal. Connect it to either the input of an amplifier or pedal, using a shielded 1/4" TS instrument cable, or to the input of a CLEARLINK™ CONVERTER/ISO TRANSFORMER using a 1/4" TRS balanced cable, for greater noise immunity and signal integrity, when using cables runs longer than 30 feet.

Note: When using shielded 1/4" TS (tip & sleeve) instrument cables, always aim for the best quality and shortest length possible.

TUNER   This 1/4" phono jack is an output, it's always on, and provides a buffered low-impedance signal from the SWITCH-TRACK™ buffer circuit. Connect this jack to the input of a tuner — keeping it out of the signal chain.

⏚ [GROUND] This push-button safely lifts (and isolates) the ground connection between the OUTA jack and the SWITCH-TRACK™ to eliminate a ground loop and its hum/noise. When the button is in the "IN" position, the grounds are connected, and when it's in the "OUT" position, the ground connection is lifted. There is an internal switch which provides the same function for OUTB, which is always lifted, so the most common position for this switch will be the "IN" position. If a strange and unexpected ground loop hum/noise occurs, try both positions of this switch, and use the setting which results in the least amount of hum and noise.

Note: Any device that contains an audio isolation transformer is susceptible to hum from the magnetic field generated by a power transformer, such as those found in an amplifier, effect processor, "wall-wart" power adapter or universal pedalboard power supply. Even with adequate shielding of the audio transformer and the device itself, there can still be a potential for un-expected hum. So if an unusual hum does occur, which cannot be eliminated by either position of the GROUND push-button, try re-locating the SWITCH-TRACK™. Typically it would only require being moved a short distance in a particular direction to resolve this type of hum.

∅ [PHASE] This push-button inverts the phase of the OUTB signal in relation to the INPUT and OUTA signals. When the button is in the "IN" position, the signals are in-phase (0deg), and when it's in the "OUT" position, the signals are inverted (180deg). Running multiple amplifiers at once can sometimes lead to a phase cancellation problem, which results in a sound that can be described as hollow, thin, not as loud, lacking low end or fullness… The best way to test and fix this is to try and set the amplifiers to the same volume level, individually. Then activate the amplifiers simultaneously and listen with this button in both positions — the best, correct setting will result in a sound that can be described as fuller or slightly louder.

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Note: If LED B is off and the PHASE button setting is changed, LED B will illuminate for 1sec, in the appropriate color — green for 0deg or yellow for 180deg, indicating the change in phase.

9VDC This standard female DC receptacle is the external power supply jack and accepts a 2.1mm x 5.5mm male barrel connector from a standard 9Volt DC "wall-wart" power adapter or universal pedalboard power supply, with a NEGATIVE CENTER polarity plug. Refer to the SPECIFICATIONS section for additional information.

Note: An external DC "wall-wart" power adapter is not included.

WARNING: To avoid immediate damage to this device and voiding the warranty, do NOT connect an AC-Voltage, or ANY other DC-Voltage power supply to this jack, other than that specified above and in the SPECIFICATIONS section!

�___ [SAVE] This push-button is used to save a MIDI preset or patch, or to send a SysEx Data Dump message. Refer to the MIDI OPERATION section for more information.

Note: Pressing the SAVE button within about-a-second of pressing the STOMP A+B button will be ignored.

Note: Pressing the SAVE button within about-a-second of pressing the PHASE button, when LED B is off, will be ignored.

MIDI IN This standard 5-pin DIN jack is a MIDI input and accepts incoming MIDI messages for the micro controller to interpret and process. The SWITCH-TRACK™ can respond to MIDI Program Change, Control Change and SysEx Data Dump messages. Refer to the MIDI OPERATION section for more information.

MIDI THRU This standard 5-pin DIN jack is a MIDI output which passes any MIDI messages received at the MIDI input, unchanged, onto other MIDI devices. It also acts as a MIDI output for MIDI Program Change and SysEx Data Dump messages which originate from the SWITCH-TRACK™. Refer to the MIDI OPERATION section for more information.

SPECIFICATIONS

- Minimum Operating Voltage: 9VDC

- Nominal Operating Voltage: 9.6VDC

- Maximum Operating Voltage: 12VDC

- Typical Current Draw: 100mA @ 9VDC

- DC Adapter (Optional): 2.1 x 5.5mm Barrel Plug, Negative Center

- Weight: 1.00lbs (454g)

- Dimensions (W x D x H): 4.75 x 3.75 x 1.90inch (121 x 96 x 49mm)

- Switch Height (not included in the above "H" value): 0.68inch (18mm)

Note: Device specifications are subject to change without notice.

FAQ & HELPFUL HINTS

1. Can I use the SWITCH-TRACK™ for my bass?

   Yes you can!

2. Why does my tone sound weird when both amps are on?

   Running multiple amplifiers at once can sometimes lead to a phase cancellation problem, which results in a sound that can be described as hollow, thin, not as loud, lacking low end or fullness... The best way to test and fix this is to try and set the amplifiers to the same volume level, individually. Then activate the amplifiers simultaneously and listen with the PHASE push-button in both positions — the best, correct setting will result in a sound that can be described as fuller or slightly louder.

3. One or both of my amps has a buzz or hum, how can I get rid of it?

   First, make sure that both amplifiers are properly grounded, with a 3-prong AC power-cord plug! Older amplifiers with 2-prong AC power-cord plugs should be checked for proper grounding, and serviced before using them in a modern day guitar rig. Do not defeat, remove or "lift" an amplifier's safety ground, which is provided by the 3-prong AC power-cord plug! Doing so may not only be ILLEGAL, but it may also pose a SHOCK or ELECTROCUTION HAZARD. That said, the most common cause of buzz, hum, and noise, when connecting two or more amplifiers in the same rig, is a ground loop. OUTB is transformer isolated and ground lifted via an internal switch, which should prevent most ground loops. If an unexpected buzz, hum or noise does occur, the transformer isolated OUTA and the GROUND push-button, when in the "OUT" position, also work together to safely break a ground loop. So, if in doubt, try both positions of the GROUND push-button and use the setting which results in the least amount of buzz, hum and noise.

4. Can I connect and feed a third amp instead of a tuner?

   Yes you can, but remember that the TUNER output is always on and cannot be switched or muted, and it is not trans-

former isolated. So, it would be necessary to use the GROUND button to break the ground loop that would otherwise occur (resulting in hum and noise).

5. Can I connect and feed a mixer/recorder instead of two amps?

    Yes, you can use OUTA for your amplifier and OUTB for your mixer/recorder — which must have an input impedance of at least 10Kohm.

6. Can I connect pedals before and after the SWITCH-TRACK™ input and outputs?

    Yes you can, but just remember that a few vintage fuzz pedals will function and sound differently when connected directly to the guitar because they are meant to be fed with a high-impedance signal source, as opposed to a low-impedance signal source, which is why you may prefer to use those pedals before the input of the SWITCH-TRACK™.

7. My amp has separate inputs for each channel, can I use the SWITCH-TRACK™ to switch between them?

    Usually the answer is yes, but you should check with the amplifier's manufacturer, just to be sure. If they answer with a yes, then you can use OUTA for one channel and OUTB for the other.

8. Can I use the built-in stomp switches and MIDI at the same time?

    Yes, you can use either MIDI Control Change or Program Change messages, and the built-in stomp buttons at the same time, to control the SWITCH-TRACK™.

9. What is "galvanic isolation" and does the SWITCH-TRACK™ have it?

    Galvanic isolation is another term used to describe two circuits that are electrically and physically separated from one another, in order to prevent a ground loop from occurring, which results in hum and noise. All audio isolation transformers have/provide it; some manufacturers choose to use the term and others don't, and just go with "isolated" or "isolation". So, it's all the same, and yes the SWITCH-TRACK™ has "galvanic isolation".

10. I'm using a switched-mode power adapter/supply (SMPS) and hear a high pitch "whine" or other noise, why is that?

Some of these SMPS adapters are noisier than others, especially those that aren't from a reputable or brand name MI manufacturer. Another reason could be that you're trying to run too many devices from a single adapter. Though many of them have a high current output and tout being able to power many devices, doing so can result in the development and/or increase of noise. If this is happening, we recommend either trying another adapter, or better yet — using a universal pedalboard power supply with enough isolated outputs to power every device on your pedalboard individually; better power = less noise = more tone!
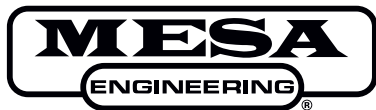
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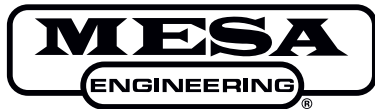
BUFFERED & DUAL ISOLATED ABY SWITCHER

MIDI Operation

MESA ENGINEERING®

MIDI OPERATION

MIDI CONFIGURATION

MIDI OPERATION

Power-On & Defaults

The factory power-on default setting for the two outputs is OUTA active/on and OUTB muted/off. This can be customized by editing MIDI preset or patch #1. All 4 LEDs will flash for 1sec as soon as power is applied, with none of the buttons pressed. The following two setup modes can only be accessed during power-on and are detailed in the MIDI CONFIGURATION section.

EDIT MIDI CHANNEL   Apply power with the SAVE button pressed

FACTORY RESTORE   Apply power with the SAVE and STOMP A+B buttons pressed, and the PHASE button set to the "IN" position (0deg)

MIDI Messages Overview

The factory default MIDI Channel on which the SWITCH-TRACK™ will respond to MIDI Program Change and Control Change messages is MIDI Channel #1.

Whenever a valid MIDI message is received, the following LEDs will flash once, indicating reception.

LED A   Indicates a MIDI Preset Bank Selection message (CC#0) was received (see below)

LED B   Indicates the phase of OUTB when a MIDI message is received (only if LED B is off)

LED BOTH   Indicates a MIDI Control Change Number was received on the correct MIDI Channel

LED MUTE   Indicates a MIDI Program Change Number was received on the correct MIDI Channel

Program Change & Presets

Up to 256 presets or patches can be saved and recalled with MIDI Program Change Numbers 1 through 128, in two banks. Each preset stores the individual state of amplifier OUTA, amplifier OUTB and its phase, and if both outputs are active/on or muted/off. When a MIDI Program Change Number is received on the same MIDI Channel as the SWITCH-TRACK™, the saved settings for the received number will be recalled.

To use MIDI, simply connect a MIDI foot-controller to the MIDI IN jack of the SWITCH-TRACK™. It is set for MIDI Channel #1 at the factory, so either make sure the MIDI foot-controller is also configured to send MIDI Program Change Numbers on MIDI Channel #1, or refer to the EDIT MIDI CHANNEL section (below) and change the MIDI Channel that the SWITCH-TRACK™

responds to, so it matches the MIDI foot-controller.

Select, edit and save a preset, as follows;

1. Using the MIDI foot-controller, select a MIDI Program Change Number — LED MUTE will flash!

2. Using the two SWITCH-TRACK™ stomp-buttons, turn amplifier OUTA and OUTB on or off, either individually or together, and select the phase of OUTB as desired.

3. Press the SAVE button, all four LEDs will flash, indicating the preset has been saved!

That's it! Repeat those three simple steps for any of the other MIDI Program Change Numbers.

Note: If LED MUTE did not flash in step #1 and/or the four LEDs did not flash in step #3, it indicates that the SWITCH-TRACK™ either didn't receive the MIDI Program Change Number or another MIDI message, such as a MIDI Control Change, has prevented saving the preset. Check and make sure that; (1) the MIDI cable is connected properly and that it's not damaged in any way (2) confirm that the MIDI foot-controller is set to the correct MIDI Channel (3) confirm that the MIDI foot-controller is not transmitting MIDI Control Change Numbers on the same MIDI Channel as the MIDI Program Change Numbers — this can also be verified by making sure LED BOTH does not flash during step #1.

Note: Presets save the on/off status of OUTA and OUTB individually, along with the phase of OUTB, but they do not save the status of the BOTH or MUTE functions. Instead, the SWITCH-TRACK™ uses the individual status of both outputs to determine when the BOTH or MUTE function should be activated. So, when a preset is selected which has both outputs on or off, the BOTH or MUTE function is activated automatically, and its LED is illuminated. As such, if the BOTH function is active and a newly read preset has the MUTE function active, it does not change the state of LED BOTH. But if the MUTE function is active and a newly read preset has the BOTH function active, it does turn off LED MUTE. LED A and LED B are not affected when a preset is selected that has both outputs on or off. This allows the stomp buttons to function normally while also using

MIDI and presets to control the SWITCH-TRACK™.

Preset Bank Selection

As mentioned above, 128 presets can be saved in two banks, for a total of 256 presets.

BANK 1   Is the power-on default, MIDI Program Change Numbers will recall presets in this bank

BANK 2   Is accessible via a MIDI Bank Select message, which is MIDI Control Change Number #0

Sending the SWITCH-TRACK™ MIDI Control Change Number #0, with Control Value 0 selects Bank 1, and with Control Value 1, or greater, selects Bank 2. LED A will flash when a Preset Bank Selection message is received on the same MIDI Channel as the SWITCH-TRACK™.

Note: Preset Bank Selection is semi-permanent, meaning subsequent MIDI Program Change messages will recall a preset in the selected bank. For example; after selecting Bank 2, all subsequent MIDI Program Change messages will recall presets in Bank 2, which are 129 through 256. And after selecting Bank 1, all subsequent MIDI Program Change messages will recall presets in Bank 1, which are 1 through 128.

Control Change & Instant Access

In addition to supporting MIDI Program Change Numbers, the SWITCH-TRACK™ also responds to MIDI Control Change Numbers, which are also called CC messages or MIDI Continuous Controllers.

When using a MIDI foot-controller capable of sending MIDI Control Change Numbers, buttons on the foot-controller can be assigned for instant-access or direct-control of the button functions on the SWITCH-TRACK™.

WARNING: Typically either MIDI Control Change or MIDI Program Change Numbers would be used control a device, not both, doing so may result in odd or unexpected behavior.

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The SWITCH-TRACK™ is capable of responding to two different groups of MIDI Control Change Numbers, they should not be intermixed, otherwise odd or unexpected behavior may occur.

GROUP 1   Is better suited if MIDI Control Change Numbers and the built-in stomp-buttons will be used to control the SWITCH-TRACK™ functions, and utilizes all four LEDs for indication.

GROUP 2   Is better suited if only MIDI Control Change Numbers are going to be used to control the SWITCH-TRACK™ functions, and utilizes only the LED A and LED B for indication.

Whenever a MIDI Control Change Number is received on the correct MIDI Channel, LED BOTH will flash once to indicate a valid MIDI Control Change Number as been received. If LED MUTE also blinks, it indicates that MIDI Program Change Numbers are also still being received, which is not recommended (see warning above).

MIDI CONTROL CHANGE NUMBERS (GROUP 1)

MIDI CONTROL CHANGE NUMBER	CONTROL VALUE	FUNCTION / COMMENTS
#20	0 - 63 64 - 127	OUTA active/on, OUTB muted/off OUTB active/on, OUTA muted/off
#21	0 - 63 64 - 127	BOTH function is off BOTH function is on
#22	0 - 63 64 - 127	MUTE function is off MUTE function is on
#23	0 - 63 64 - 127	OUTB phase is normal (0deg) OUTB phase is inverted (180deg)

MIDI CONTROL CHANGE NUMBERS (GROUP 2)

MIDI CONTROL CHANGE NUMBER	CONTROL VALUE	FUNCTION / COMMENTS
#24	0 - 63 64 - 127	OUTA muted/off OUTA active/on
#25	0 - 63 64 - 127	OUTB muted/off OUTB active/on
#26	0 - 63 64 - 127	OUTB phase is normal (0deg) OUTB phase is inverted (180deg)
#27	0 - 63 64 - 127	OUTB muted/off, phase is normal (0deg) OUTB active/on, phase is normal (0deg)
#28	0 - 63 64 - 127	OUTB muted/off, phase is inverted (180deg) OUTB active/on, phase is inverted (180deg)
#29	0 - 63 64 - 127	OUTA & OUTB muted/off, phase is normal (0deg) OUTA & OUTB active/on, phase is normal (0deg)
#30	0 - 63 64 - 127	OUTA & OUTB muted/off, phase is inverted (180deg) OUTA & OUTB active/on, phase is inverted (180deg)

SysEx Data Dump/Load

A SysEx Data Dump is a MIDI System Exclusive message or file with the SWITCH-TRACK™ user presets (all 256 of them), MIDI Channel setting, and CRC (Cyclic Redundancy Check) bytes for error detection. It can be sent or "dumped" to either a computer and saved as a backup, or "loaded" into another SWITCH-TRACK™, creating an exact duplicate.

In order to send the SysEx Data Dump to a computer, a MIDI/USB Interface and MIDI app/utility capable of sending and receiving MIDI SysEx files (there are many free ones available, we recommend SysEx Librarian by www.snoize.com for Mac users and for Windows users, MIDI-OX via www.midiox.com) will be necessary.

The SWITCH-TRACK™ can transmit a SysEx Data Dump message after it's first turned on, and prior to receiving any MIDI messages.

SysEx Data Dump messages can be sent or "dumped" as follows;

1. Connect the SWITCH-TRACK™ MIDI THRU jack to the MIDI input of a MIDI/USB Interface or to the MIDI IN of another SWITCH-TRACK™.

2. Press and hold the SAVE button for 1sec, all four LEDs will illuminate and the SysEx Data Dump message will be sent out the MIDI THRU jack — it should only take a couple of seconds to complete.

SysEx Data Dump messages can be received or "loaded" anytime, at full MIDI speeds, as follows;

1. Connect the SWITCH-TRACK™ MIDI IN jack to the MIDI output of a MIDI/USB Interface or to the MIDI THRU of another SWITCH-TRACK™.

2. Send the SysEx Data Dump message, all four LEDs will illuminate as soon as reception starts — it should only take a couple of seconds to complete.

After successfully receiving a SysEx Data Dump message, the SWITCH-TRACK™ will restart automatically with Preset #1.

If a SysEx Data Dump message is not received successfully, due to a CRC error, the SWITCH-TRACK™ will wait for reception of another SysEx Data Dump message, and;

LED MUTE will blink and LED OUTB yellow (180deg) will illuminate indicating a CRC error!

Note: When receiving a SysEx Data Dump message, it is first saved into a RAM buffer, and does NOT overwrite the existing user data saved in the non-volatile EEPROM memory. Existing user data will ONLY be overwritten after the entire SysEx Data Dump message has been completely and successfully received, without CRC errors!

Note: Both OUTA and OUTB are muted/off, when sending and receiving SysEx Data Dump messages, and the MIDI IN and MIDI THRU jacks will ignore all incoming and non-originating outgoing MIDI messages, respectively.

SysEx Software Version

Every SysEx Data Dump message transmitted by the SWITCH-TRACK™ is followed by another short MIDI SysEx message containing its software version number. This message is ignored when a SysEx Data Dump message is being received or "loaded".

To capture and view this message on a computer while receiving a SysEx Data Dump message, simply select "Record Many" or "Receive Many" as an option within the MIDI SysEx Librarian app/utility being used.

MIDI SysEx Software Version message format: F0 00 01 4B 06 68 x y F7

Where   x y   is the software version, for example 3.1 would be shown as   03 01

Send Program Change Messages

The SWITCH-TRACK™ can also act as a super-simple 4-preset MIDI foot-controller for other devices.

When no MIDI messages have been received by the SWITCH-TRACK™, it will transmit the following MIDI Program Change messages (on the same MIDI Channel it's set to receive MIDI messages on) to other MIDI devices via the MIDI THRU jack.

Selecting; OUTA (LED A on) transmits MIDI Program Change Number #1

OUTB (LED B on) transmits MIDI Program Change Number #2

BOTH (LED BOTH on) transmits MIDI Program Change Number #3

MUTE (LED MUTE on) transmits MIDI Program Change Number #4

MIDI CONFIGURATION

Edit MIDI Channel

The factory default is MIDI Channel #1, and it's used by the SWITCH-TRACK™ for sending and receiving MIDI messages.

Change the MIDI Channel as follows;

1. Press and hold the SAVE button while applying power to the SWITCH-TRACK™.

2. When LED BOTH and LED MUTE illuminate, release the SAVE button.

3. The current MIDI Channel will be displayed after LED BOTH and LED MUTE turn off.

4. To edit or change, and automatically save a new MIDI Channel, use; the STOMP A/B button to increase and the STOMP A+B to decrease the displayed MIDI Channel.

MIDI CHANNEL

MIDI CHANNEL	LED MUTE	LED BOTH	LED A	LED B
#1	x	x	x	x
#2	x	x	x	on
#3	x	x	on	x
#4	x	x	on	on
#5	x	on	x	x
#6	x	on	x	on
#7	x	on	on	x
#8	x	on	on	on
#9	on	x	x	x
#10	on	x	x	on
#11	on	x	on	x
#12	on	x	on	on
#13	on	on	x	x

#14	on	on	x	on
#15	on	on	on	x
#16	on	on	on	on

5. Press the PHASE button to exit, and automatically restart the SWITCH-TRACK™.

Note: Both OUTA and OUTB are muted/off, while editing or changing the MIDI Channel, and the MIDI IN and MIDI THRU jacks will ignore all incoming and outgoing MIDI messages, respectively.

Factory Restore

The factory default settings are MIDI Channel #1, and 8 different presets, repeated 32x, totaling 256 presets, as shown in the table below.

Perform a Factory Restore as follows;

1. With the PHASE button set to the "IN" position, press and hold the SAVE and STOMP A+B buttons, while applying power to the SWITCH-TRACK™.

2. When LED A and LED B illuminate, release only the STOMP A+B button.

3. To abort the Factory Restore, and continue using the current settings and presets, release the SAVE button.

4. To confirm and perform the Factory Restore, change the PHASE button to the "OUT" position, then release the SAVE button.

5. The Factory Restore begins when LED A turns off, and LED B changes from green, to a slightly brighter green and

yellow color.

6. After the Factory Restore is complete, the SWITCH-TRACK™ will restart automatically with its new factory settings and presets.

Note: If LED MUTE (red) begins to blink on and off, and the other three LEDs remain off, after step #5, it indicates that the integrity of at least one memory location is becoming, or has become, compromised. The Factory Restore has still been performed and completed, but the SWITCH-TRACK™ must be powered-down, and powered-on again, in order to be used.
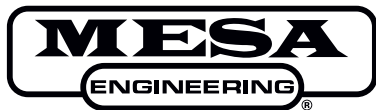
Note: Both OUTA and OUTB are muted/off, during a Factory Restore, and the MIDI IN and MIDI THRU jacks will ignore all incoming and outgoing MIDI messages, respectively.

Note: Presets save the on/off status of OUTA and OUTB individually, along with the phase of OUTB, but they do not save the status of the BOTH or MUTE functions. Instead, the SWITCH-TRACK™ uses the individual status of both outputs to determine when the BOTH or MUTE function should be activated. So, when a preset is selected which has both outputs on or off, the BOTH or MUTE function is activated automatically, and its LED is illuminated. As such, if the BOTH function is active and a newly read preset has the MUTE function active, it does not change the state of LED BOTH. But if the MUTE function is active and a newly read preset has the BOTH function active, it does turn off LED MUTE. LED A and LED B are not affected when a preset is selected that has both outputs on or off. This allows the stomp buttons to function normally while also using MIDI and presets to control the SWITCH-TRACK™.

FACTORY PRESETS

USER MEMORY / PRESET NUMBER	MUTE	BOTH	OUTA	OUTB	PHASE
1, 9, 17, 25, 33, 41, 49, 57, 65, 73, 81, 89, 97, 105, 113, 121, 129, 137, 145, 153, 161, 169, 177, 185, 193, 201, 209, 217, 225, 233, 241, 249	off	off	active/on	muted/off	normal (0deg)
2, 10, 18, 26, 34, 42, 50, 58, 66, 74, 82, 90, 98, 106, 114, 122, 130, 138, 146, 154, 162, 170, 178, 186, 194, 202, 210, 218, 226, 234, 242, 250	off	off	active/on	muted/off	inverted (180deg)
3, 11, 19, 27, 35, 43, 51, 59, 67, 75, 83, 91, 99, 107, 115, 123, 131, 139, 147, 155, 163, 171, 179, 187, 195, 203, 211, 219, 227, 235, 243, 251	off	off	muted/off	active/on	normal (0deg)
4, 12, 20, 28, 36, 44, 52, 60, 68, 76, 84, 92, 100, 108, 116, 124, 132, 140, 148, 156, 164, 172, 180, 188, 196, 204, 212, 220, 228, 236, 244, 252	off	off	muted/off	active/on	inverted (180deg)

5, 13, 21, 29, 37, 45, 53, 61, 69, 77, 85, 93, 101, 109, 117, 125, 133, 141, 149, 157, 165, 173, 181, 189, 197, 205, 213, 221, 229, 237, 245, 253	off	on	active/on	active/on	normal (0deg)
6, 14, 22, 30, 38, 46, 54, 62, 70, 78, 86, 94, 102, 110, 118, 126, 134, 142, 150, 158, 166, 174, 182, 190, 198, 206, 214, 222, 230, 238, 246, 254	off	on	active/on	active/on	inverted (180deg)
7, 15, 23, 31, 39, 47, 55, 63, 71, 79, 87, 95, 103, 111, 119, 127, 135, 143, 151, 159, 167, 175, 183, 191, 199, 207, 215, 223, 231, 239, 247, 255	on	off	muted/off	muted/off	normal (0deg)
8, 16, 24, 32, 40, 48, 56, 64, 72, 80, 88, 96, 104, 112, 120, 128, 136, 144, 152, 160, 168, 176, 184, 192, 200, 208, 216, 224, 232, 240, 248, 256	on	off	muted/off	muted/off	inverted (180deg)