

PX-8 PLUS

PEDAL SWITCHING SYSTEM

User's Manual

voodoolab.com

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OVERVIEW

The Voodoo Lab PX-8+ is a programmable 8-loop audio switcher that provides total control over guitar pedalboards. It's basic function as an exceptional quality true-bypass loop strip removes all unused cabling and connections from the signal path for noticeably improved tone and dynamics.

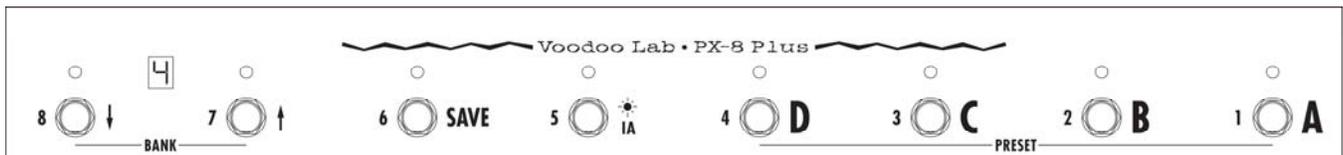
Simple and intuitive programming allows guitarists to create 36 preset combinations of effects for instant one-button recall. Each PX-8+ preset also sends a MIDI command to select programs on MIDI-capable effects, like digital delay and reverb. Adding the Voodoo Lab Control Switcher gives you control of amp functions, like channel switching, boost, EQ and more, to create a complete automation solution for most live rigs.

PX-8+ is also available integrated with Voodoo Lab's innovative and patent pending Dingbat PX Pedalboards. The unique mounting of these pedalboards puts PX-8+ and all its cabling underneath, leaving the valuable top surface area clear for more pedals.

The world leader in power and switching for guitar rigs, Voodoo Lab has produced electronics for professional musicians since 1986. All Voodoo Lab products are designed and manufactured to the highest standards in Santa Rosa, California.

DESCRIPTION

Top Panel



IA: Select between Preset and Intant Access modes.

SAVE: Press and hold to save preset.

Preset mode only (All LEDs green):

BANK ↓ and ↑: Select banks 1-9.

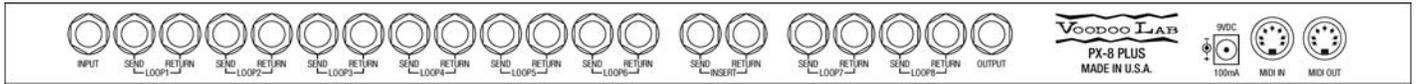
A, B, C, D: Recall presets.

Instant Access mode only (All LEDs red):

BANK ↓ and ↑: Sets instant access bank to Low (loops 1-4) or High (loops 5-8).

A, B, C, D: Toggle loops on and off.

Rear Panel



INPUT: Input to loop 1.

LOOP 1–8 SEND: Connect to pedal effect inputs.

LOOP 1–8 RETURN: Connect from pedal effect outputs.

INSERT SEND: Optional output from loop 6. Plugging into this jack breaks the internal connection between loops 6 and 7.

INSERT RETURN: Optional input to loop 7. Plugging into this jack breaks the internal connection between loops 6 and 7.

OUTPUT: Main output from loop 8.

POWER: Requires 9VDC at 100mA or more.

MIDI IN: Receives MIDI commands to recall presets or turn loops on/off. Also provides phantom power for Voodoo Lab Ground Control Pro foot controller.

MIDI OUT: Sends MIDI program change command with each preset. Also echoes commands received from MIDI IN.

CONNECTIONS

Power

Connect the PX-8+ power jack to any 9VDC output of a Voodoo Lab Pedal Power, using a standard barrel cable.

Most 9V power supplies intended for battery operated pedals are also acceptable. PX8+ requires 9VDC at 100mA (minimum) to a standard 5.5x2.1mm center negative barrel connector. This is the same power requirement as most pedal effects.

Audio Loops

PX8+ has 8 true-bypass audio loops. When a loop is off, the guitar signal is routed directly to the next loop, passing only through gold contacts sealed in nitrogen gas. This bypasses all unused cable and connections to preserve the best possible tone.

All loops are internally wired in series. This means the OUT of loop 1 goes to the IN of loop 2; the OUT of loop 2 goes to the IN of loop 3, and so on. There is also an insert

point where you can break the chain between loops 6 and 7. INSERT SEND connects to the output of loop 6. INSERT RETURN provides access to the input of loop 7.

For each PX-8+ loop, connect a patch cable from the loop SEND to your effect pedal's input. Connect another cable from your pedal's output back to the loop RETURN.

Normal signal routing is to patch your guitar to the PX-8+ INPUT, and from OUTPUT to your amplifier.

MIDI

PX8+ will respond to MIDI commands to recall preset combinations of all 8 loops, or to turn individual loops on and off. You can use any device capable of sending MIDI program change or control change messages.

Connect a standard 5-pin MIDI cable from your controller's MIDI out to PX8+ MIDI IN. If you have additional MIDI devices, connect another MIDI cable from PX8+ MIDI OUT to the MIDI in of your next device.

OPERATION

The most common way to use PX-8+ is the Preset Method. This is the factory default setting. This method provides 36 preset effect combinations, plus an instant access mode to turn individual effects on and off.

Alternately, you can use the Loop Strip Method. This allows PX-8+ to operate as a simple true bypass loop strip. Buttons 1-8 directly toggle loops 1-8 on and off.

Refer to *SETUP: Select Preset or Loop Strip Method* (page 7) to change selection.

Preset Method

This method of operation includes two modes, Instant Access mode and Preset mode. Instant Access mode allows you to directly toggle individual loops on and off. Preset mode lets you recall preset effect combinations.

There are 36 user defined presets. They are organized in banks 1-9, with 4 presets in each bank. For each preset, you choose which effects are enabled.

Mode select

Use the IA button to select between Instant Access and Preset modes. The IA button's LED will glow red to show that you're in Instant Access mode. It will turn green to indicate Preset mode. All other illuminated LEDs will match the IA button red/green color, so that you can tell at a glance which mode is selected.

Instant Access mode

Use the bank buttons to select Low (1-4) or High (5-8). When the display shows L, then buttons A, B, C, D will control loops 1-4. Pressing either bank button changes the display to H, now buttons A, B, C, D will control loops 5-8.

Save preset

To save the currently active loops as a preset:

1. Press and hold the SAVE button until LEDs blink.
2. Select the bank using ↑ and ↓ buttons.
3. Press the desired preset location, button A, B, C or D, to save the preset.

At any time you can cancel the save operation by pressing the SAVE button again.

Recall preset

To recall a preset, select the bank using ↑ and ↓ buttons. Pressing A, B, C or D will recall the preset. The selected preset LED will briefly turn green, then LEDs 1-8 will light red to show which loops have been activated for that preset. Once you release the button, only the green LED corresponding to the selected preset will remain on.

Reveal

Once you have selected a preset, you can reveal which loops are active by pressing the currently selected preset button A-D. While the button is held down, LEDs 1-8 will light red to show which loops are currently active.

Loop Strip Method

With this method of operation, PX-8+ functions exactly like a simple true-bypass loop strip. Buttons 1-8 will toggle loops 1-8 on and off. When a loop is switched off, the signal is hardwired to the next loop with absolutely no tone degradation.

Presets using MIDI

Using the Loop Strip method, you can also save and recall 128 preset loop combinations. You will need a separate MIDI controller or effect pedal capable of sending MIDI program change messages.

To use this feature, see *SETUP: MIDI > Enable Message Types* (page 8) and enable program change. This allows PX-8+ to respond to MIDI program change messages on channel 1 (default).

Follow these steps to create and save a preset loop combination:

1. Send a MIDI program change message to PX-8+.
2. Use PX-8+ buttons 1-8 to set loops on or off for your preset.
3. Press buttons 1 and 6 at the same time to save. All LEDs will flash to confirm.

Sending the same MIDI program change message to PX-8+ will recall your preset.

Using Ground Control Pro

When connected via MIDI to the Voodoo Lab Ground Control Pro, PX-8+ will function exactly like the Voodoo Lab GCX Guitar Audio Switcher. You will create presets and control the loops from the Ground Control Pro. You can also directly toggle loops using buttons 1-8 on PX-8+.

Setup for Ground Control Pro

Select Loop Strip method as shown in *SETUP: Select Preset or Loop Strip Method*.

Both PC and CC must be disabled in *SETUP: MIDI > Enable Message Types* (page 8). This is the factory default setting.

SETUP

Select Preset or Loop Strip Method

There are two different operation methods for PX-8+. *Preset Method* allows you to directly control loops, as well as create and recall 36 preset combinations of loops. Using *Loop Strip Method*, buttons 1-8 simply toggle loops 1-8 on/off.

To select operation method:

- 1) Apply power while holding down button #5. The LEDs will flash until you release the button.
- 2) Use button #5 to select operation method. If LED #5 is GREEN, Preset Method is selected. If the LED is RED, Loop Strip Method is selected.
- 3) Remove power when finished.

Quiet Switching

PX8 includes a number of unique features to make switching as quiet as possible. Even so, the relays can still produce a small click in your audio path, especially when using very high gain. To eliminate this click, PX8 will optionally disable the main output for a few milliseconds while the loops are switching.

The Quiet Switching (QS) interval is extremely short so that you won't hear any dropout. You can select a slightly longer interval in case you still have some audible artifact. Or you can choose not to use QS at all.

The default is to have QS enabled, with the short interval. To change this:

- 1) Apply power while holding down button #4. The LEDs will flash until you release the button.

2) Use buttons #1 and #2 to set QS function:

QS Enabled	Interval	LED #2	LED #1
No	None	OFF	OFF
Yes	Short	OFF	ON
Yes	Long	ON	ON

3) Remove power when finished.

MIDI > Enable Message Types

You can select whether the PX8+ responds to MIDI Program Change (PC), Control Change (CC), both message types, or none.

NOTE: When using with Voodoo Lab Ground Control Pro, you must disable both PC and CC.

The default is both PC and CC are disabled.

1) Apply power while holding down button #1. The LEDs will flash until you release the button.

2) Press buttons #1 and #2 to select message types:

MIDI Message Type	LED #2	LED #1
None*	OFF	OFF
PC only	OFF	ON
CC only	ON	OFF
Both PC and CC	ON	ON

*None is the correct setting for Voodoo Lab controllers only.

3) Remove power when finished.

MIDI > Set Channel

MIDI Program Change and Control Change messages include a channel number, 1-16. PX8+ will only respond to messages received on its specified channel.

The default MIDI channel is 1.

NOTE: When PX8+ is being controlled by a Voodoo Lab Ground Control Pro, the MIDI channel setting is ignored.

1) Apply power while holding down button #2. The LEDs will flash until you release the button.

2) Press buttons #1 through #4 to select the MIDI channel:

MIDI Channel	LED #4	LED #3	LED #2	LED #1
1	OFF	OFF	OFF	OFF
2	OFF	OFF	OFF	ON
3	OFF	OFF	ON	OFF
4	OFF	OFF	ON	ON
5	OFF	ON	OFF	OFF
6	OFF	ON	OFF	ON
7	OFF	ON	ON	OFF
8	OFF	ON	ON	ON
9	ON	OFF	OFF	OFF
10	ON	OFF	OFF	ON
11	ON	OFF	ON	OFF
12	ON	OFF	ON	ON
13	ON	ON	OFF	OFF
14	ON	ON	OFF	ON
15	ON	ON	ON	OFF
16	ON	ON	ON	ON

3) Remove power when finished.

MIDI > Control Change Number

Each MIDI Control Change (CC) message includes a controller number, which specifies which PX8+ loop to turn on or off. You can select from four different groups of CC numbers.

The default group is CC numbers 80-87, which means that 80 controls loop #1, 81 controls loop #2, 82 controls loop #3, 83 controls loop #4, 84 controls loop #5, 85 controls loop #6, 86 controls loop #7, and 87 controls loop #8.

Here's how you select which CC numbers the PX8+ will respond to:

1) Apply power while holding down button #3. The LEDs will flash until you release the button.

2) Press buttons #1 through #4 to select the number group:

CC Group	LED #4	LED #3	LED #2	LED #1
80-87	OFF	OFF	OFF	ON
88-95	OFF	OFF	ON	OFF
64-71	OFF	ON	OFF	OFF
56-63	ON	OFF	OFF	OFF

3) Remove power when finished.

Factory Reset

You can restore the factory default settings and clear any saved presets.

- 1) Apply power while holding down both buttons #2 and #3. The LEDs will flash until you release the buttons.
- 2) LED #1 will be on. Press button #1.
- 3) Press buttons #2 through #8 as each LED comes on.
- 4) The LEDs blink three times and then stay off when finished. Remove power.

WARRANTY

North America Only

Voodoo Lab warrants this product against any defects that are due to faulty material or workmanship for a period of five years from the date of original retail purchase. This warranty does not include damage to the product resulting from accident or misuse.

If the product should become defective within the warranty period, Voodoo Lab will repair it or replace it free of charge, provided it is returned freight prepaid to Voodoo Lab with a valid RMA (return material authorization) number. Return shipping will be paid by Voodoo Lab within the U.S. only.

This warranty shall not apply to any goods that have been repaired or altered by anyone other than the manufacturer. There are no warranties which extend beyond the terms described herein.

Should you experience any difficulty with this Voodoo Lab product, contact us as described below. If it is determined that the product must be returned to the factory for repair, you will be issued an RMA and given shipping and packaging instructions.

Outside North America

Regions outside North America please contact your country's distributor for warranty information.

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