DPC-8EZ
Gen3

User Manual
v1.00d

Revision History:

v1.00 6/24/17
Initial Release

DPC-8EZ Gen3 Quick Start

Thanks for purchasing a Disaster Area Designs DPC-8EZ Gen3 controller. The DPC-8EZ Gen3 is a compact pedalboard switching system with MIDI capabilities, allowing you to control your entire signal chain with a single tap.

The DPC-8EZ Gen3 can bypass or engage up to eight effects, as well as controlling MIDI programs and sending tap tempo for up to two MIDI devices.

SELECTING A PRESET (PRESET MODE):

Hold the far left MODE button until its LED shows either RED, YELLOW, or VIOLET, indicating the preset banks. Tap one of the other buttons (A, B, C, or D) to load that preset.

CHANGING BANKS AND FOLDERS (PRESET MODE):

Each preset bank (RED, YELLOW, or VIOLET) stores four presets A, B, C and D. To change banks, tap the far left MODE button.

The DPC-8EZ has four preset folders, each of which contains three additional banks. The preset folder is indicated by the green LEDs above the A-D buttons. To change folders, hold down the B or C button to move to the previous or next folder.

TURNING PEDALS ON AND OFF (PEDAL MODE):

Hold the far left Mode button until its LED is either green or blue. Tap the Mode button to cycle between controlling loops 1-4 (BLUE) and 5-8 (GREEN.) Tap any button A-D to turn on its corresponding loop.

SENDING MIDI PROGRAMS (MIDI MODE):

Hold the far left Mode button until its LED is white. Tap buttons A or B to send MIDI programs on MIDI channel 1, tap buttons C or D to send MIDI programs on MIDI channel 2. Tap the far left Mode button to send tap tempo commands to one or both MIDI channels depending on how the DPC-8EZ is configured.

SENDING TAP TEMPO (MIDI MODE);

Tap the A button in MIDI mode to send tap tempo to your MIDI devices. Depending on how the MIDI mode is configured, MIDI messages will be sent on MIDI channel 1, 2 or both 1 and 2. The DPC-8EZ sends MIDI CC 93 with a value of 127. This command is compatible with Strymon, Chase Bliss, and Alexander pedals. Many other pedals such as the Eventide H9 and Factor series as well as the Source Audio Nemesis can "learn" MIDI commands for tap — please consult with the manufacturer of your MIDI devices for more information.
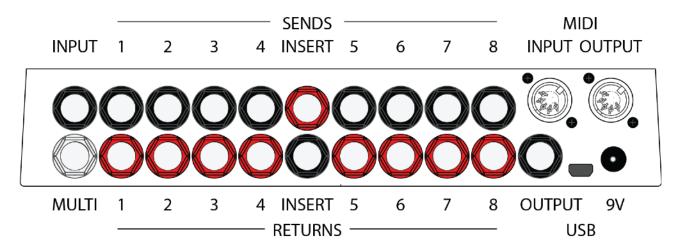
SAVING A PRESET (PRESET OR PEDAL MODE);

Hold the D button down while in either Preset or Pedal mode. The far left LED will flash to indicate the current preset bank and the green LEDs will show the current folder. Tap the Mode button to choose a different bank, or tap the B / C buttons to select a different folder. Hold the button A, B, C, or D corresponding to the location where you would like to save the current loop and MIDI settings as a preset.

TUNER MUTE (PRESET OR PEDAL MODE):

Hold the A button in either Preset or Pedal mode to mute the output. If you have enabled the MultiJack as the tuner output, it will remain active while muting to allow for silent tuning. Tap any button to cancel the mute and return to the previous mode.

Controls and Connections

INPUT: Main signal input to the DPC-8EZ Gen3. Connect your instrument here.

MULTI: Functions as either a tuner output jack or a MIDI input / output jack. Please consult the next section of this manual for details on how to set up the MultiJack. If the MultiJack is set to tuner mode then it will always send audio even when the DPC-8EZ main output is muted.

LOOPS 1-4: Connect your pedals here. The black jacks are the SENDS and should connect to the INPUTS of your pedals. The red jacks are RETURNS and should connect to the OUTPUTS of your pedals.

INSERT: This is a special loop that is always on. Any effect or pedal you place in this loop will always be active no matter what program or setting is loaded on the DPC-8EZ. This is usually the place where you put your volume pedal. The jack colors are reversed to show the insert position — connect the RED jack to the INPUT of your volume pedal, and the BLACK jack to the OUTPUT. Please review the Configuration section of this manual for details on how to move the insert position.

LOOPS 5-8: Connect your pedals here. The black jacks are the SENDS and should connect to the INPUTS of your pedals. The red jacks are RETURNS and should connect to the OUTPUTS of your pedals.

OUTPUT: Main signal output of the DPC-8EZ. Connect this to your amplifier or to any pedals you may have set outside the DPC-8EZ loops.

USB MIDI: The DPC-8EZ firmware allows the USB port to function as a MIDI interface for your compatible PC, Mac, or iPad (using the Apple Camera Connection Kit). The DPC-8EZ will receive and send MIDI messages over USB for device control.
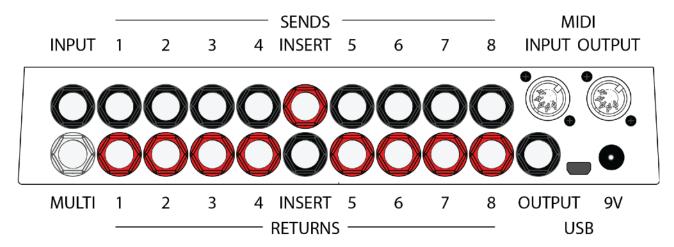
MIDI INPUT: Standard 5-pin MIDI input, connects to your MIDI controller. The MIDI input allows the DPC-8EZ Gen3 to accept incoming MIDI messages and merge them in with its own data stream. Any messages received by the DPC-8EZ will be passed to devices "downstream."

MIDI OUTPUT: Standard 5-pin MIDI output, connects to your first MIDI pedal input.

DC 9V: Standard DC power supply input, 9V center negative. The DPC-8EZ requires approximately 80mA.

Connecting the DPC-8EZ Gen3

The DPC-8EZ has a whole lot of jacks on the back, we know! It seems like a complicated job to hook it all up but if you take your time it's pretty simple.

The DPC-8EZ has eight effects loops plus one insert loop. The black jacks on the loops are the SENDS, and should connect to your pedals INPUTS. The red jacks are RETURNS and should connect to your pedals OUTPUTS. The Insert jack colors are reversed, so connect the RED jack to the INPUT and the BLACK jack to the OUTPUT of any pedals you have in the Insert.

1. Standard 1-8 Pedal Setup

    This is the most common use case for the DPC-8EZ Gen3. Connect your guitar to the main input, connect up to eight pedals to the loops, and then connect the main output to your amplifier or to any pedals you have that follow the 8EZ in your chain. You can use the Insert connection to run a pedal that you want to be always on, such as a volume pedal.

2. 4-Pedal Stereo Setup

    Set the DPC-8EZ to Stereo Link mode by following the directions in "Setting Up the DPC-8EZ Gen3" below. Set the MultiJack DIP switches to "Tuner," then connect a patch cable from the MultiJack to the Insert Return (lower jack). Connect your instrument to the main input. Connect the LEFT input and output of your pedals to loops 1-4, and the RIGHT inputs and outputs to loops 5-8. Use the Insert Send as the LEFT output and the Main Output as the RIGHT output to your amplifiers.

3. 2-8 Pedal 4-Cable Setup / Amplifier Effects Loop

    Connect your instrument to the main input, then place any pedals you want to send to your amplifier's preamp in the loops that are before the insert (usually loops 1-4). Connect the Insert Send to your amplifier's main input, and connect the Insert Return to your amplifier's Effects Loop Send. Place your remaining pedals in the rest of the loops on the DPC-8EZ, they will be assigned to the amplifier's effects loop. Connect the DPC-8EZ main output to your amplifier's Effects Loop Return.

Please note that not all amplifiers Effects Loops are created equal. We recommend using the DPC-8EZ with series effects loops that are at pedal level or have a variable send and return control.

Setting Up the DPC-8EZ Gen3

The DPC-8EZ has several configuration options to let each user set it up the way he or she prefers. These setup options are accessed by holding down the DPC-8EZ buttons at power-on.
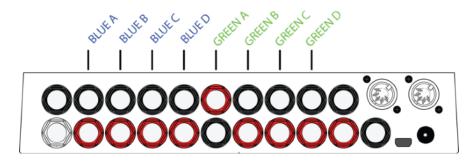
MIDI INPUT CHANNEL
Hold the A button at power-on to enter MIDI learn mode. The green LED above the A button will flash to indicate that the DPC-8EZ is listening for an incoming MIDI message. Send a MIDI program change message to the DPC-8EZ to set its MIDI input channel. The DPC-8EZ will exit MIDI learn mode when a valid message is received (blue A LED flashes) or 30 seconds passes.

LED BRIGHTNESS
Hold the B button at power-on to enter LED Brightness setup. All of the LEDs will light up. Tap the A or B buttons to increase or reduce the LED brightness. When you have set the LEDs at your desired brightness, hold the D (SAVE) button to save the settings.

INSERT POSITION SELECT / STEREO LINK MODE
Hold the C button at power-on to enter Insert Position select. The LEDs will blink to indicate the current insert position as shown below:

The insert position is set to the center pair of jacks from the factory, which allows for four loops before the insert and four loops after. If you wish to have more or fewer loops before the insert, then tap the A or B buttons to move the insert position. Hold the D (SAVE) button to save the current setting.

When all four of the green LEDs are flashing the DPC-8EZ is set to Stereo Link mode. In this mode, loops 1-4 handle the left audio channel and loops 5-8 control the right audio channel. Connect your instrument to the main input and set the MultiJack mode to Tuner. Connect a patch cable from the MultiJack to the Insert Return (lower jack). The left channel output connects to the Insert Send (upper jack) and the right channel output will connect to the Main Output.

MIDI MODE and MULTIJACK
Hold the D button at power-on to enter MIDI Mode setup. Tap the D button to choose between the following options for MIDI Mode:

      D Blue on: MIDI mode active, tap tempo sends to channel 1
      D Green on: MIDI mode active, tap tempo sends to channel 2
      D Blue AND Green on: MIDI mode active, tap tempo sends to channels 1 and 2
      D Blue AND Green off: MIDI mode disabled

      We recommend D Blue on for connecting a Timeline and BigSky, so that the DPC-8EZ doesn't send taps to the reverb pedal.

Tap the B button to set the MultiJack MIDI mode.

      B Blue off: MultiJack TIP = MIDI input, RING = MIDI output (default.)
      B Blue on: MultiJack TIP = MIDI output, RING = MIDI output

Hold the D (SAVE) button to save the current settings.

AUTOMATIC NOISE REDUCTION / POP STOP
The DPC-8EZ can briefly mute the main output while switching to reduce or eliminate pops from your pedals. If you find this small muting to be annoying you can disable it. Hold the BANK button at power on to switch between muting active (RED LED) or disabled (NO LED.)

MIDI Input and Output

While the DPC-8EZ can generate MIDI program change messages on its own, it can also function as part of a larger MIDI system thanks to its MIDI input and USB MIDI ports.

To use the DPC-8EZ with a Disaster Area or other MIDI controller, you must first set the DPC-8EZ to receive on the correct MIDI channel to work with your device.

The DPC-8EZ is set to listen to MIDI channel 16 from the factory, which should function with all Disaster Area controllers Gen3 and above.

Setting the MIDI Channel

To set the DPC-8EZ to work with a different MIDI channel, connect its MIDI input or MultiJack to the MIDI output of your controller and then power the DPC-8EZ on while holding button A (far right). The LED above button A will blink to indicate that the DPC-8EZ is listening for a MIDI message.

Send a program change message from your controller on the channel you would like to use. The DPC-8EZ will set its input channel to match, and the A LED will flash rapidly to indicate that the setting has been saved.

If you are using a Disaster Area controller, you can set the MIDI channel using our Autoconfig option. Connect the DPC-8EZ MIDI IN to your Disaster Area Gen2 or Gen3 controller MIDI OUT and power both devices off. Power on the DPc-8EZ while holding the A button and then power on the Disaster Area MIDI controller. The master controller will send out a special message that will set the DPC-8EZ to the correct channel.
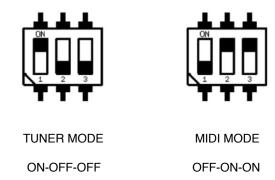
MIDI Commands

The DPC-8EZ responds to the following MIDI messages:

Program Change 0-127:   Change preset 0-127
Continuous Controller 50-57:   (value 0-63) Bypass loops 1-8, (value 64-127) Engage loops 1-8
Continuous Controller 102:   (value 0-63) Bypass DPC-8EZ, (value 64-127) Engage DPC-8EZ
Continuous Controller 58:   (value 0-63) Un-mute main output, (value 64-127) Mute main output

MultiJack Setup

The white jack underneath the main input is our astounding MultiJack. The DPC-8EZ Gen3 uses the MutliJack as either a buffered tuner output or a MIDI interface. There are three DIP switches inside the DPC-8EZ that control the functions of this jack. Remove the bottom lid to access these switches.
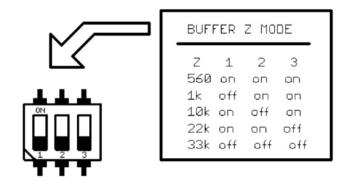
TUNER MODE

ON-OFF-OFF

MIDI MODE

OFF-ON-ON

To use the MultiJack as a tuner output , set the MutliJack DIP switches to ON-OFF-OFF as shown.

To use the MultiJack as a MIDI input or output, set the MultiJack DIP switches to OFF-ON-ON.

Z-Mode Buffer

The DPC-8EZ buffer uses our exclusive Z-Mode technology to preserve your clean tone while also presenting your impedance-sensitive pedals with the right kind of input. The input impedance of the DPC-8EZ is always a tone-friendly 1M ohms, but the output impedance of the buffer is selectable from 560 ohms up to 33K ohms. Higher settings will sound darker. We recommend the stock setting of 560 ohms unless you are using sensitive pedals such as germanium fuzz in the loops. Increase the Z mode one step at a time until your fuzz or other pedals sound best. We recommend a setting of 10k for most fuzz pedals.

To change the Z-Mode, open the DPC-8EZ by removing the lower lid. Adjust the Z-Mode by changing the DIP switches inside labeled "BUFFER Z MODE."

BUFFER Z MODE

Z	1	2	3
560	on	on	on
1k	off	on	on
10k	on	off	on
22k	on	on	off
33k	off	off	off

Follow the indications on the DPC-8EZ main board to set the Z-Mode.