Disaster Area Designs DMC-3XL & DMC-4 Gen2 Quick Start Guide Rev 2.04 May 2015 Firmware v2.02c



Thank you for purchasing a DMC controller! The DMC-3XL Gen2 and DMC-4 Gen2 are super-compact MIDI controllers designed to help you get the most out of your existing equipment. The DMC offers a comprehensive setup mode that enables you to control many different types of MIDI devices. Throughout this manual, we will refer to the DMC-3XL Gen2 and the DMC-4 Gen2 interchangeably as "DMC." The controllers are identical other than the enclosure size and the extra button on the DMC-4 Gen2.

To connect your DMC to your MIDI device, you'll need a standard 5-pin MIDI cable. These are available from Disaster Area Designs and from many online and retail shops. You will also need an **isolated** 9V power supply capable of supplying 64mA. Disaster Area Designs tests all pedals using a Voodoo Labs Pedal Power 2+ power supply.

Connect the 9V power supply to the DMC, and connect the MIDI cable from the DMC MIDI port to the MIDI input of the device that you would like to control. The DMC may also be powered by its USB port, although you may experience noise or other interference when using this connection in combination with the MIDI port.

The Expression Input requires a TRS expression input, Sleeve = GND, Ring = 5V, Tip = 0-5V signal. If used with a footswitch, please use an SPST Momentary footswitch, normally open. The Disaster Area DMT-1 Micro Tap is an excellent choice.

The DMC USB port is a class-compliant MIDI device and may be used to control any USB host that can accept MIDI signals. The USB port is CoreMIDI compliant, and may be used with the Apple Camera Connection Kit with the iPad or iPhone models (iOS 4.2 or higher required.) The DMC may also be used with Ableton Live, Mainstage, Logic, and other audio applications / DAWs. If the DMC is connected to a host as a MIDI device, any commands sent to the Disaster MIDI interface from the computer or iPad will be transmitted to the MIDI output on the DMC. This means you can send messages, sync, clock, or other data from your computer to your MIDI devices using the DMC as a USB interface. Please visit our website for tips on updating your Strymon device firmware with the DMC as an interface.



The DMC-3XL Gen2 and DMC-4 Gen2 are available with an optional side roller that sends expression or other MIDI data. If a pedal or switch is plugged into the expression jack, the roller will be disabled.

Configuration:

In order to configure the DMC for your MIDI devices, please press and hold the center button on the controller (upper-right button on the DMC-4 Gen2) at boot. The display will scroll "5ELUP" and the pedal will enter setup mode. Once the controller has entered setup mode, the left button will cycle through the available menus, the right button will change the options in each menu. Press and hold the mode button to save and exit setup.

Holding the left button and the mode button at boot will factory-reset your controller. If installing v2.0 over v1.08 or lower, you will need to reset the controller before use.

HOLD THE CENTER / UPPER RIGHT BUTTON TO SAVE SETUP

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Setup Menu:
Expression Jack or Roller Config
                  jack or roller sends expression MIDI CC to all connected pedals
         EXP
         LPR
                  jack or roller sends looper volume CC to looping-enabled pedals
         TAP
                  external switch sends tap tempo messages to all tap-enabled pedals
  E
         PRF
                  external switch sends freeze / performance CC to perf-enabled pedals
         LTC
                  external switch sends latching freeze / performance CC to perf-enabled pedals
         FAV
                  external switch selects / saves favorite preset
                  jack or roller sends expression CC to all devices in preset and looper modes, and to the
         SPL
         selected device only in A, B, C scrolling modes.
         MID
                  expression jack sends MIDI communication to Empress or Chase Bliss devices
EA:BC MODE - Assigns Expression Jack control to Devices A, B, C.
Looper Mode Configuration
                  Looper play / record mode enabled
         1
         2
                  L1 enabled, plus looper half / reverse enabled
         3
                  L2 enabled, plus looper volume enabled
                  Looper controls disabled
         OFF
Preset Mode Configuration
                           Preset modes enabled, number of presets available is displayed.
         6, 12, 18, 24
         OFF
                  Preset modes are disabled
Scrolling Mode Configuration
         A. B. C
                  Scrolling for A, B, C devices enabled. A zero (0) is shown for inactive devices.
                  Scrolling modes disabled
         000
Device Configuration for A, B, C devices
                  Strymon Timeline (tap) (perf) (looper)
         T1
                  Strymon Mobius (tap) (perf)
         Mo
         BS
                  Strymon BigSky (tap) (perf)
         Н9
                  Eventide H9 / Factor Series / Space (tap) (perf) (tuner) (looper)
         L5
                  Line 6 M5 (tap) (tuner)
         L9
                  Line 6 M9 (tap) (tuner) (looper)
         Cb
                  Chase Bliss Gravitas / Warped Vinyl / Wombtone (tap)
         E2
                  Pigtronix Echolution 2 / Deluxe (tap_
         Gm
                  General MIDI (tap)
Button 4 Configuration (DMC-4 Gen2 only, 3XL users set to TAP.)
         TAP
                  sends tap tempo to tap-enabled pedals
  4
         PRF
                  sends freeze / performance CC to perf-enabled devices
         LTC
                  sends latching freeze / performance CC to perf-enabled devices
         TUN
                  sends tuner CC to tuner-enabled devices
         FAV
                  selects / saves favorite preset
4A:BC MODE - Assigns 4th button control to Device A, B, C.
Looper Stop / Play Behavior:
         :STP
                  Pressing PLAY while playing a loop stops instantly
         :PLY
                  Pressing PLAY while playing a loop restarts the loop
Expression / Looper Display Enable
                  Display will not update when expression pedal is changed
         Off
                  Display shows expression or looper level value after pedal is moved
         On
Display Brightness
         10-100 Display and LED power range
  В
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Setting up your MIDI Devices:

The A device should be set to use MIDI Channel 1.

The B device should be set to use MIDI Channel 2.

The C device should be set to use MIDI Channel 3.

Strymon Timeline / Mobius / BigSky

Press and hold the Parameters encoder to enter the Globals menu. Set the Globals as indicated:

Timeline: Mobius: BigSky

BYPASS BUFBYP BYPASS BUFBYP

LPEXIT PLAY

MIDICH 1, 2, or 3
MIDICH 1, 2, or 3
MIDICT OFF
MIDICT OFF
MIDITH ON
MIDIPA OFF
MIDIPA OFF
MIDIPA OFF

Eventide Factor / Space / H9:

Enter the MIDI menu on the device or use H9 Control to set parameters. Set the MIDI channel to match the desired device (1, 2, or 3.) Set the OUTPUT mode to "THRU." Map the following commands in the MIDI menu (MIDI -> RECV CTL) or using the iOS / Mac / PC app (Assign MIDI CC to Device Functions)

HK or EXP / HotKnob CC 48 ACT / Activate the Pedal CC 42 TAP / Tap Tempo CC 44 TUN / Toggle Tuner CC46

PSW / Performance Switch CC46

PLY / Looper Play CC86 REC / Looper Record CC87 STP / Looper Stop CC85
OCT / Looper Octave CC95 DIR / Looper Direction CC94 MT / Looper Empty CC90

NOTE: Separate control of tuner and performance switch is not possible using the DMC. You must pick only one, set the unused control to OFF.

Line 6 M5 / M9:

Set the MIDI channel to match the desired device (1, 2, or 3) and disable Autosave in the MIDI menu. The DMC sends expression MIDI CC for PDL 1 only.

Chase Bliss:

The MkII Chase Bliss units (includes Gravitas Tremolo) will work on any scrolling device channel. Please consult your device manual for the MIDI channel selection procedure. The MkI units (black Warped Vinyl and bright red Wombtone) will only communicate on a dedicated MIDI channel. Warped Vinyl Mki must be the "B" device, Wombtone must be the "C" device. We recommend the use of the Empress MIDIBox to connect to one or more Chase Bliss devices. If using the expression port as a MIDI output with a TRS cable, you may encounter unwanted noise.

Electro-Harmonix HOG2

The HOG2 should be set to receive the correct MIDI channel (1, 2, or 3.) The procedure for mapping the HOG2 to a specific MIDI channel is detailed in the HOG menu. The DMC will load all 86 available presets on the HOG2, send expression, the expression switch, and bypass the HOG2. To save a preset on the HOG2, first send a program change using the DMC. Next, edit the sounds on the HOG2 using the sliders and buttons. Finally, press and hold the EXP. MODE button for two seconds until the EXP. MODE LEDs flash rapidly.

Echolution 2 / Deluxe

No special setup is required. Please contact Pigtronix for more information regarding MIDI device selection. **General MIDI:**

The General MIDI device is designed to work with a wide variety of MIDI gear. When this device is selected, the DMC sends program changes 0-127 in scrolling mode. Bypassing the DMC in scrolling mode sends program change 0 (may be displayed on the device as "1.") For devices that do not support a bypass via MIDI, the user may edit the preset in location 0 / 1 to serve as a bypass (mix at zero or minimum, etc.) Some devices such as the TC Nova Drive support saving presets in the bypass state, so the user may be able to set up preset 0 as a bypass in this way.

The receiving device should be set to MIDI Channel 1, 2, or 3 to suit the desired scrolling mode. The DMC sends MIDI CC 64 for tap tempo, MIDI CC 4 for the performance switch and MIDI CC 7 for the expression pedal. If your devices support mapping MIDI parameters to device controls, you may use these values to get additional control of your devices.

Operation:

The DMC has several available modes, which are accessed by tapping the mode button (center button on DMC-3XL Gen2, upper-right on DMC-4 Gen2.) The functions in each mode are as follows:

Preset Mode

Button 1 (Left)

Tap: Preset Down

 $Hold:\ Enter\ /\ Exit\ Search\ Mode\ (display\ flashes.)\ Search\ Mode\ allows\ the\ user\ to\ select\ a\ preset$

without activating the "in-between" sounds.

Button 2 (Right)

Tap: Preset Up

Hold: Bypass / Engage preset

Mode Button:

Tap: Next mode / Exit without saving Hold: Enter Save Mode, Save Preset

Scrolling Modes - A, B, C

Button 1 (Left)

Tap: Program down for currently selected device.

Hold: Fast scrolling down for currently selected device.

Button 2 (Right)

Tap: Program up for currently selected device.

Hold: Fast scrolling up for currently selected device.

Mode Button:

Tap: Next Mode.

Hold: Bypass current device.

Looper Mode 1 (Transport)

Button 1 (Left)

Tap: Record / Overdub.

Button 2 (Right)

Tap: Play / Stop (sends Play only if "PLAY" is selected in setup mode.)

Hold: Stop (if "PLAY" is selected in setup mode.)

Mode Button

Tap: Next Mode. Hold: Undo / Redo.

Looper Mode 2 (Looper FX)

Button 1 (Left)

Tap: Looper half-speed

Button 2 (Right)

Tap: Looper reverse

Looper Mode 3 (Looper Level)

Button 1 (Left)

Tap: Looper level down Hold: Fade looper level

Button 2 (Right)

Tap: Looper level up Hold: Swell looper level

Mode Button:

Tap: Next Mode.

Hold: Looper Pre / Post.

Button 4 (DMC-4 Gen2 only)

Button 4 is assignable in the Setup Menu. Please consult the Setup Menu section of this manual for more information. The function of this control will depend on the assignment of this control. The 4A:BC setup option assigns the fourth button controls to the A, B, C MIDI devices. The default setting is ABC, meaning that the fourth button will control all three connected devices. When a zero is displayed in the A, B, or C location, the fourth button control to that device is disabled.

Tap Tempo: Sends tap tempo to all connected devices that are enabled for tap (shown as "tap" in the device selection section above.)

Performance Feature: Sends a MIDI command to all connected devices that are enabled for the performance feature (shown as "perf" in the device selection section above.) Sends "freeze" to BigSky if connected. Also used for H9 performance switch, Pitchfactor flex, etc. *If "latching" performance feature is selected, tapping Button 3 once will engage the freeze or other feature, tapping again cancels.*

Favorite Preset (requires Program Mode to be activated) Hold to save the currently selected program numbers to the favorite preset location. Tap to recall favorite preset or to return to the previously loaded program numbers.

Tuner: Tap to send MIDI CC to all connected devices that are enabled for tuner (shown as "tuner" in the device selection section above.)

Expression Options:

The EA:BC setup option assigns the expression controls to the A, B, C MIDI devices. The default setting is ABC, meaning that the expression jack will control all three connected devices. When a zero is displayed in the A, B, or C location, the expression input control to that device is disabled.

If a pedal is connected:

Expression: Sends expression to all connected devices enabled for expression ("exp") Looper Level: Sends looper level to Timeline only

Split Expression: Sends expression to all connected devices in preset and looper modes, and to the selected device only in scrolling modes A, B, C.

If a momentary footswitch is connected:

Tap Tempo: Sends tap tempo to all connected devices (except for BigSky.)

Performance Feature: Sends a MIDI command to all connected devices that are enabled for the performance feature (shown as "perf" in the device selection section above.) Sends "freeze" to BigSky if connected. Also used for H9 performance switch, Pitchfactor flex, etc. If "latching" performance feature is selected, tapping Button 3 once will engage the freeze or other feature, tapping again cancels.

Favorite Preset (requires Program Mode to be activated) Hold to save the currently selected program numbers to the favorite preset location. Tap to recall favorite preset or to return to the previously loaded program numbers.

MIDI (requires TRS cable, Chase Bliss cable, or DMC-XM MIDI cable) Sends MIDI data through the expression pedal port. The data sent is a 1:1 copy of the data sent from the main MIDI port; this is useful for connecting several devices that are MIDI "dead ends" (MIDI in but not out / thru jacks.)

Working With Presets:

The DMC-3XL Gen2 / DMC-4 Gen2 v2.0 firmware adds the Preset Mode, which allows the user to set and recall up to 24 presets that change all connected devices to a new preset at the same time. These presets may be used to simplify tone changes in a live setting, so you can have sounds for every song in your set or worship service.

To load a preset, simply tap the left or right buttons in the Preset Mode (labeled P on the DMC display.) The display will change to reflect the current preset and the new sounds will load if the DMC is engaged. Tapping the right or left buttons while the DMC is engaged will load each preset in turn.

To engage or bypass a preset, press and hold the right button for half a second. The blue and green LEDs will light to show that the preset is engaged.

To navigate to a new preset *without* loading the sounds in between the start and destination, hold the left button to enter Search Mode. The display will begin flashing; tap the left or right buttons to select the new preset. When the desired preset is reached, press and hold the left button again to load the new preset and exit Search Mode.

To edit or save a preset, enter scrolling mode and select the sounds you would like to save. The DMC will remember if the individual devices are bypassed or engaged, so make sure they are in the desired state before saving. Once the sounds are selected on all your devices, return to preset mode. Press and hold the mode button to enter the save dialog – the display will begin flashing with the current preset number. Tap the left or right buttons to select the destination preset, and then hold the mode button to save. If you would like to exit save mode without saving, tap the mode button instead.

Looping with the DMC:

The DMC has several looper control modes designed to simplify using the loop recorder functions of the Strymon Timeline, Eventide H9 / Timefactor, or the Line 6 M9. The DMC will use the looper on the *highest numbered* loop-capable device. Example: If device A is set up as a Timeline and device B is an M9, the DMC will use the M9 for looping. If you wish the "A" or "B" device to be used as the looper make sure that all of the higher channels are set to non-looping devices such as General MIDI.

The looper setup allows the user to select only the looper modes that are desired. Looper mode L1 has basic looper transport controls – overdub / record, play / stop, undo / redo. Mode L2 has controls for looper reverse and half-speed. Mode L3 has controls for looper volume up / down and pre / post.

The looper setup also allows the player to set the behavior of the looper Play button. LSTP means that pressing the Play button while a loop is playing sends the Stop command. LPLY means that pressing the Play button while playing a loop restarts the loop. To stop, hold the Play button.

When looping in LPLY, the recommended procedure for starting the loop is to record using only the Record button. Press Record to start recording, then press Record again to set the loop length and begin overdubbing. If Play is used to set the loop length, a small delay will be introduced into the loop. Looping with only the Record button, or when the DMC is set to LSTP will not have this delay.

M9 users will need to adjust some settings in order to use the L3 mode for setting looper level. Enter the system menu, then proceed to the Tempo / Exp Pedals page. Set LPR to PDL2, and make sure PDL2 is not selected for FX1-FX3. Next, move to the Looper: Levels and EQ page. Use the right button on the DMC to raise the looper volume to 127. Adjust the PLAY level on the M9 to maximum. Next, use the left button on the DMC to lower the looper volume to 0, and then adjust the PLAY level on the M9 to minimum. The DMC should now be able to control the looper level on the M9.

The L3 mode and looper level controls are not active if the H9 / Timefactor is used.