

Keith McMillen
INSTRUMENTS

QuNeo MPE Application Manual
V0.1.7

Application and Manual written by
Eric Bateman

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QuNeo Editor Preset

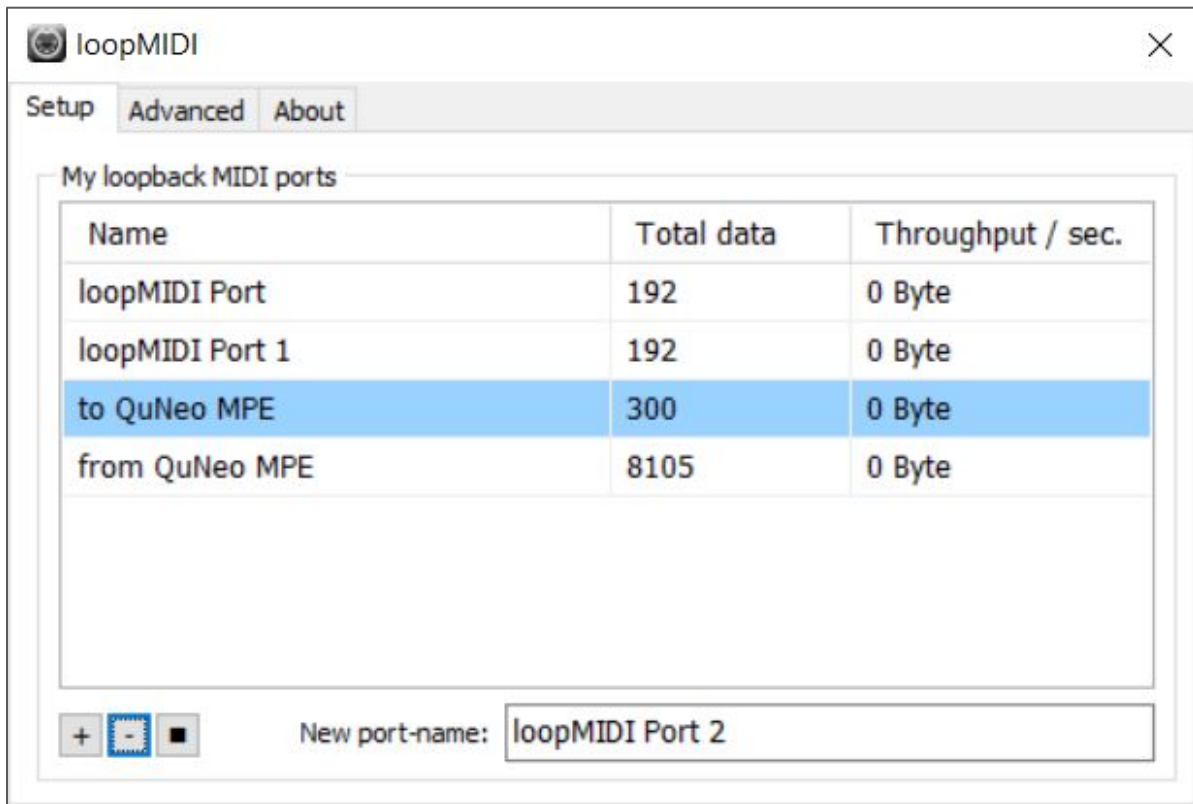


INSTALL

1. Select the preset slot that you wish to load the QuNeo MPE preset into.
2. Click any of the 16 pads, and then from the File menu choose “Import Preset”
3. Locate “QuNeo MPE.quneopreset” (included with the QuNeo MPE download) and import it. Click “Save Preset” and then “Update Preset”.
4. Select the preset on the QuNeo by pressing the blue circle (upper right of the QuNeo) and the corresponding QuNeo pad.
5. Close the QuNeo editor.

LoopMIDI Setup (Windows only)

INSTALL

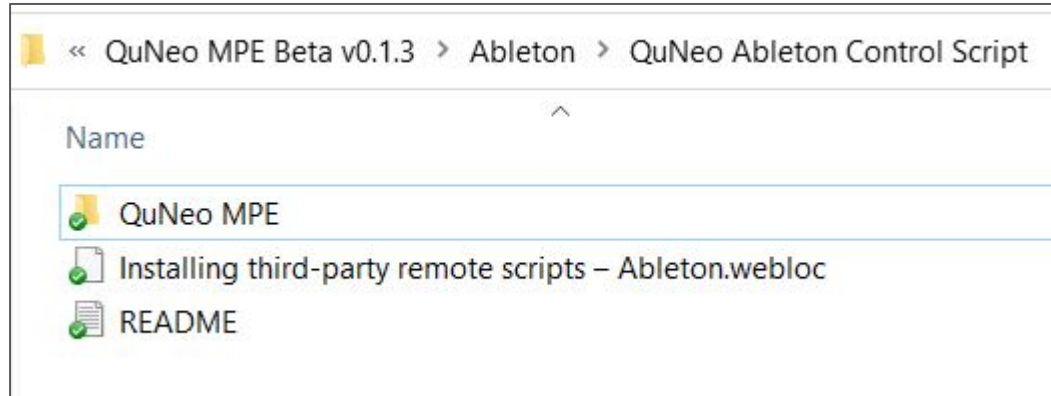


The QuNeo app requires virtual MIDI ports if you wish to control a DAW or soft synth. Unlike MacOS, Windows does not support these natively. For Windows, you must first install a third-party virtual loopback MIDI port solution such as LoopMIDI.

1. [Download LoopMIDI from here](#) and install it.
2. Create two ports called “to QuNeo MPE” and “from QuNeo MPE” as shown on the left.

Ableton Live 11 - Control Script

INSTALL



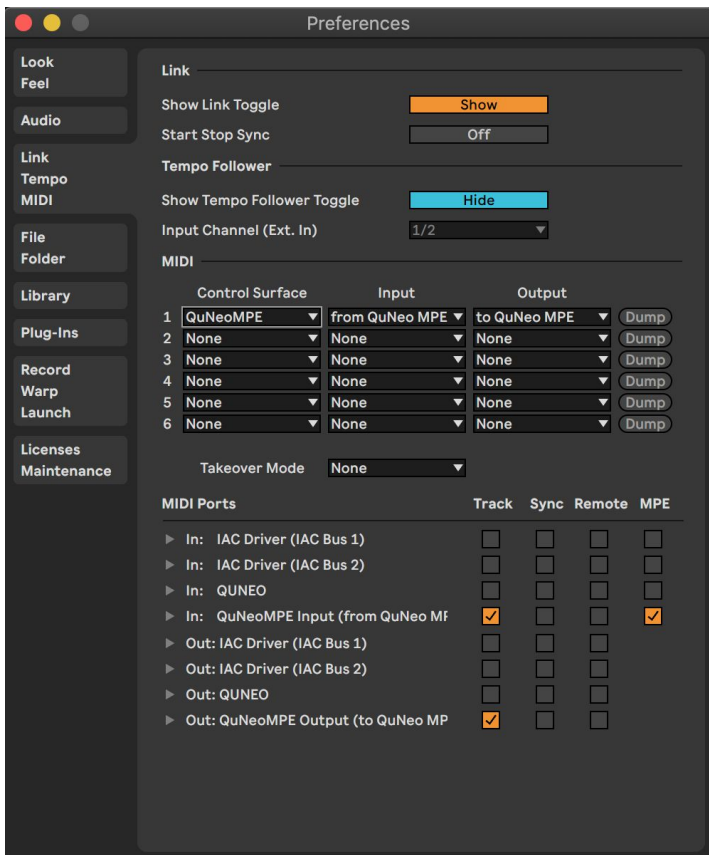
Included with this installation is a basic control script for Ableton Live. Move the "QuNeo MPE" folder shown above into the Ableton "User Remote Scripts" folder, which itself is stored in Live's Preferences folder:

Mac: `HD:/Users/[Username]/Library/Preferences/Ableton/Live x.x.x/User Remote Scripts`

Windows: `C:\Users\[Username]\AppData\Roaming\Ableton\Live x.x.x\Preferences\User Remote Scripts`

Ableton Live 11 - MIDI Settings

INSTALL



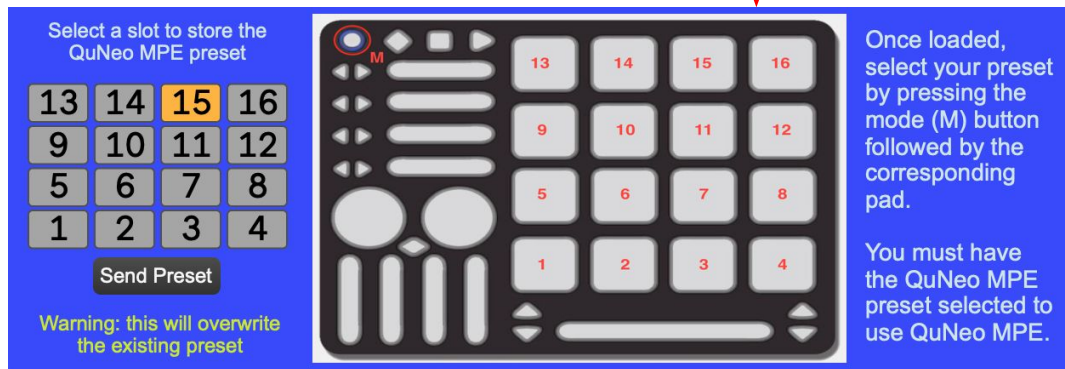
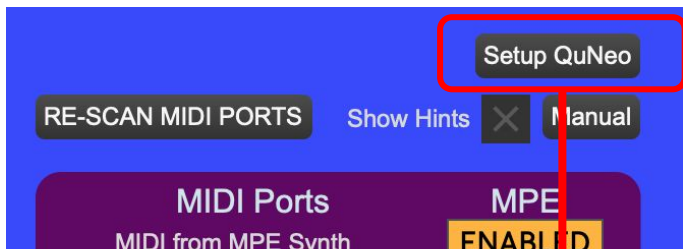
Configure Ableton preferences with the following settings:

1. Under “Control Surface” select “QuNeoMPE” and set the input and output ports as shown to the left.
2. Under “MIDI Ports” select “Track” for the QuNeoMPE input and output, and select “MPE” for the QuNeoMPE input.

LEAVE THE “QUNEO” PORTS UNCHECKED.

QuNeo Setup

INSTALL



The first time that you run the QuNeo MPE app, you will need to load the QuNeo MPE preset into the QuNeo.

1. Click the “Setup QuNeo” button
2. Select a preset slot and press “Send Preset”

You should only have to load the preset once, but you will need to make sure it is selected every time you load the QuNeo MPE app.

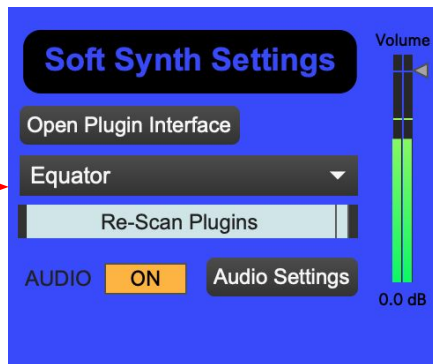
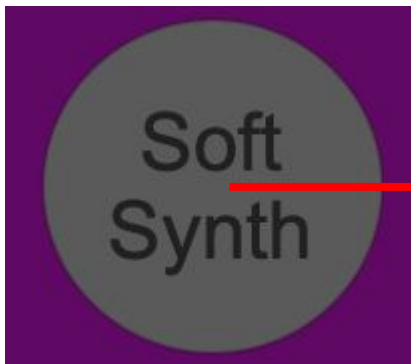
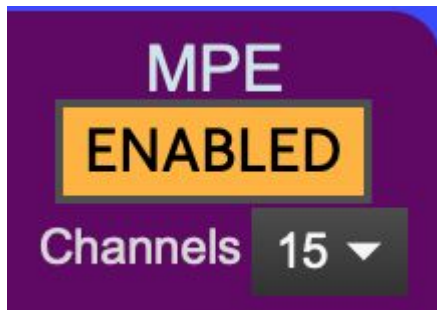
MIDI Setup

USING THE APP

The screenshot displays the QuNeo MPE application interface. At the top left is the logo 'QuNeo MPE v 0.1.4'. Below it is a grid of colored buttons with the text 'CLICK FOR VISUALIZER'. To the right of the grid is a 'MIDI Ports' section, which is highlighted with a red box. This section contains two dropdown menus: 'MIDI from MPE Synth' and 'MIDI to MPE Synth', both currently set to 'None'. Below these is a checkbox for 'Send Transport CCs'. To the right of the MIDI Ports section is an 'MPE' section with a yellow 'ENABLED' button, a 'Channels' dropdown set to '15', and a 'Soft Synth' button. Above the MIDI Ports section are buttons for 'RE-SCAN MIDI PORTS', 'Show Hints', and 'Manual'. Below the MIDI Ports section are several other panels: 'CC/Parameter Names' with 'Edit', 'Import', and 'Update Drop Downs' buttons; 'X Curve' with 'Linear', 'Narrow', and 'Wide' options and a graph; 'Pitch Bend Range' with 'Synth' and 'QuNeo' dropdowns; 'Presets' with a 'Default' dropdown and 'Set Presets Folder' and 'Save As' buttons; and 'Grid Root: E3' with a 'hint' button and 'Scale' options.

1. Connect your QuNeo to your computer and open the QuNeo MPE application.
2. The app automatically transmits and receives MIDI on the “to QuNeo MPE” and “from QuNeo MPE” virtual MIDI ports. You can use these ports with a DAW or external MIDI application without having to change any MIDI settings within the QuNeo MPE app.
3. Another set of MIDI input and output ports can be selected to control an external MPE device such as a USB MIDI interface or a hardware synthesizer that has USB MIDI.
4. “Send Transport CCs” is useful when your device or DAW doesn’t support standard MIDI transport commands without also receiving clock (such as Ableton).

MPE and Soft Synth Setup



USING THE APP

1. When MPE is enabled you can select how many member channels are part of the MPE Zone. This is useful for synths that have limited voices, such as the OB-6 and Deckard's Dream.
2. When MPE is disabled, you can select what MIDI channel the QuNeo MPE app uses.

Note: per-note pitch bend, modulation, and aftertouch messages from the 4x4 pad grid will all be merged, and you may have unexpected results.

3. Use the Soft Synth utility to load a VST or AU soft synth into the app. You will need to scan for installed plug-ins and make sure audio is turned "ON" before you can load and activate a plug-in. Use the "Audio Settings" dialog to select drivers and adjust buffer settings. On Windows it is recommended that you use ASIO or ASIO4ALL drivers.

Presets and Parameters

USING THE APP

The screenshot displays the QuNeo MPE app interface with several panels:

- Top Left:** QuNeo MPE logo and version 0.1.4.
- Top Right:** Setup QuNeo button, RE-SCAN MIDI PORTS button, Show Hints button, and Manual button.
- Center Left:** A grid of 16 colored buttons with the text "CLICK FOR VISUALIZER".
- Center Right:** MIDI Ports panel with "MIDI from MPE Synth" set to "None", "MIDI to MPE Synth" set to "None", and "Send Transport CCs" checked. The MPE section is "ENABLED" with 15 channels and a "Soft Synth" button.
- Bottom Left (Red Box):** CC/Parameter Names panel with "Edit", "Import", and "Update Drop Downs" buttons. It includes instructions: "No spaces in parameter names, (use _ underscores)".
- Bottom Center:** X Curve panel with "Linear", "Narrow", and "Wide" options and a graph.
- Bottom Right:** Pitch Bend Range panel with "Synth" set to 48 and "QuNeo" set to 12.
- Bottom Far Right:** Grid Root: E3 and Scale: E Major panel with "Shift +1" and "Amount +4" options.

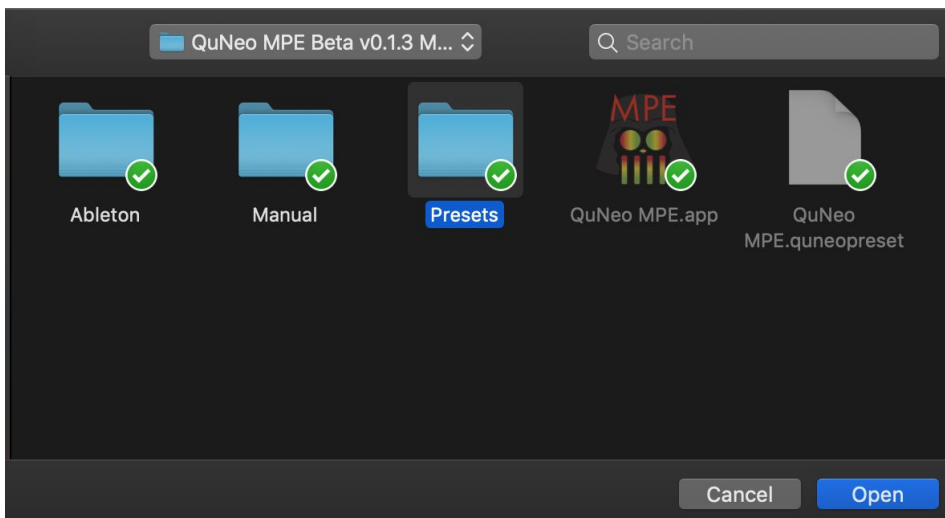
The QuNeo MPE app can store and recall presets for different MPE devices. These presets can store the names of MIDI CCs and allow quick recall of different mappings for the QuNeo controls.

1. By default presets are stored in a “Presets” folder in the QuNeo MPE application directory. You can change this directory using the “Set Presets Folder” button.
2. To create a new preset, choose any preset (i.e. “Default”) and click “Save As”. Enter a name for the new preset, and the current preset settings will be used to create it.
3. Presets are updated as you change settings.
4. Edit the parameter names assigned to each CC by pressing “Edit”. Parameter names can’t use spaces, so we recommend underscores “_” instead.
5. When finished, close/validate your changes and then click “Update Drop Downs”.

Presets and Parameters

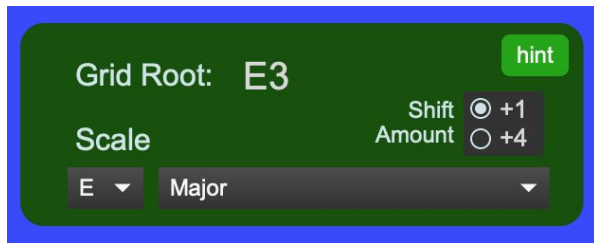
USING THE APP

If the QuNeo MPE App cannot find the preset directory, it will prompt you to locate it when you open the app.



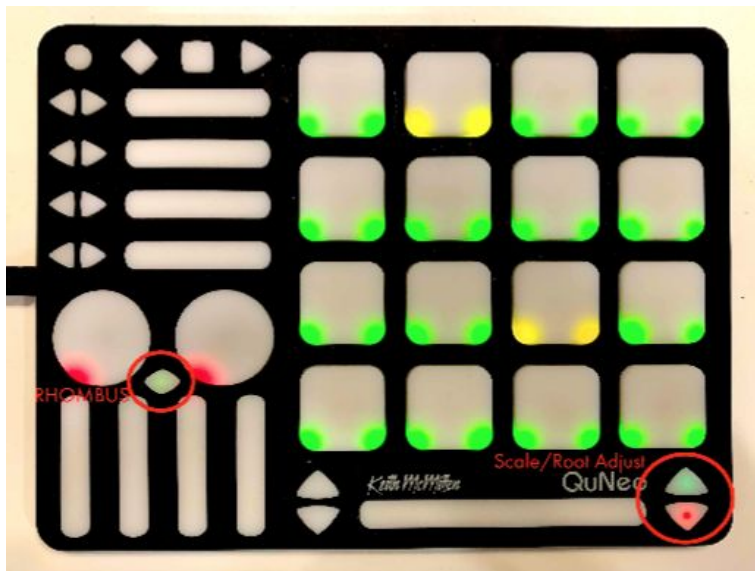
The 4x4 Grid

USING THE APP



The 4x4 grid is used to play MPE notes. Each pad senses note, velocity, and position: X (pitch), Y (slide/modulation), and Z (pressure or aftertouch). The grid can play different scales with root notes shown in yellow. Scale settings are stored in the current preset.

1. Use the lower right UP/DOWN arrows to transpose the 4x4 grid up and down within the current scale.
2. Hold down the RHOMBUS and press the lower right UP button to enter "Scale Root Adjust" mode. Use the lower right UP/DOWN buttons to change the root note of the scale. Press the RHOMBUS button to exit.
3. Hold down the RHOMBUS and press the lower right DOWN button to enter "Scale Type Adjust" mode. Use the lower right UP/DOWN buttons to change the current scale (chromatic, major, minor, etc.) Press the RHOMBUS button to exit.



Pitch Bend Range

MPE DEVICE CONFIG



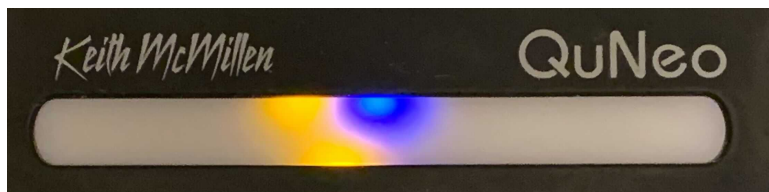
The QuNeo long slider at bottom right adjusts the range of pitch bend that is applied when you “bend” the 4x4 pads side to side. X-Curve adjusts the width of the “safe” spot where no pitch bend is applied.

Most MPE synths and DAWs have pitch bend range settings that are usually shown in semitones and often default to a setting that spans many octaves.

1. Enter your synth’s pitch bend range setting into the “Synth” number box in the QuNeo MPE app
2. Select the maximum pitch bend range of the QuNeo long slider in either the QuNeo MPE app main page or the Visualizer.



“Quantize” is enabled by default. This setting lets you select whole semitones when adjusting the long slider. Turn Quantize off to “emancipate your tonality”.



The screenshot shows the 'MPE' settings menu with a table of parameters.

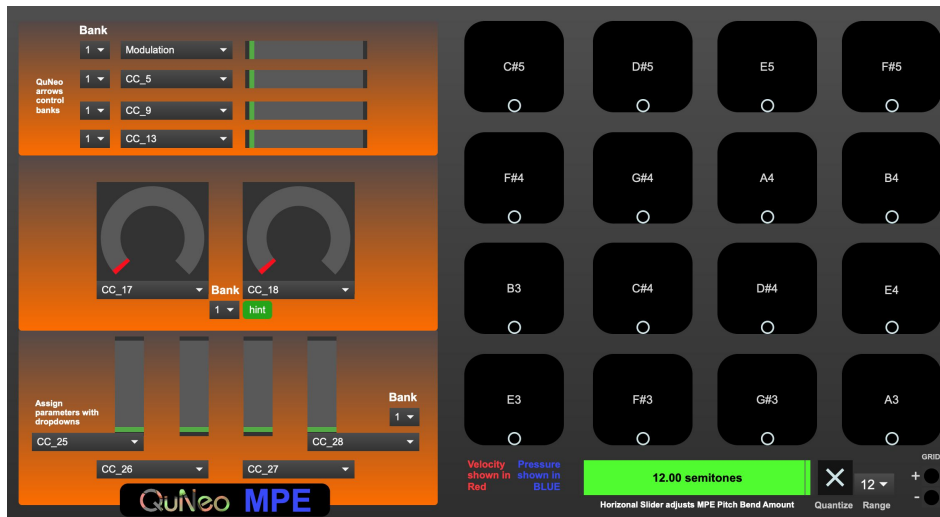
Target	Vel	Note PB	Slide	Press
Amp	50			
Pitch		48		
Osc 1 Pos			100	
Osc 1 Warp				10



Visualizer and Parameter Mapping

USING THE APP

The Visualizer provides visual feedback from the QuNeo, and allows you to assign CC parameters to banks of sliders. The CC parameter assignments are stored in the current preset, and you can rename parameters using the main page of the QuNeo MPE Interface.



Hint: on the QuNeo, hold down the rhombus and press a slider or encoder, and the name of the parameter will be displayed.

- Horizontal sliders - each slider has four assignable banks, selected with the LEFT/RIGHT arrows to the left of the parameter/slider.
- Encoders - parameters are assigned to both encoders in four banks. Cycle through the banks by pressing the RHOMBUS between the encoders.

Note: the encoders are pressure sensitive. You can make fine adjustments by making light “steering wheel” circles around the edges of an encoder, or make coarse adjustments by pressing down harder as you move your finger.

- Vertical sliders - these sliders are grouped together into four banks, selectable with the UP/DOWN arrows to the left of the long horizontal slider.

Bugs and Feedback

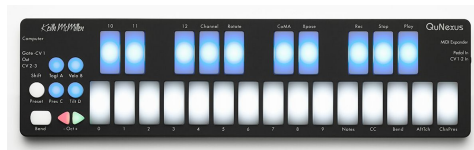
~ FIN ~

This application is currently in BETA. Your feedback is invaluable to us; please email contact@keithmcmillen.com if you have any bugs, feature requests, or kudos to share.

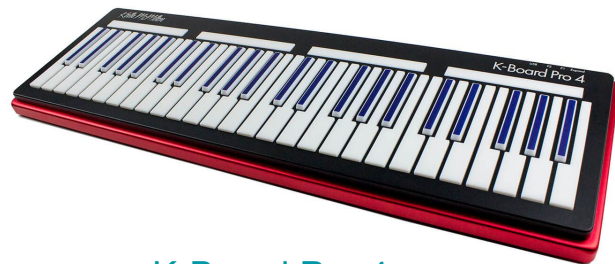
Make sure to check out our other MPE-capable controllers:



[BopPad](#)
[4 zone channels with Pressure and Radius](#)



[QuNexus](#)
[Per-note Tilt \(Y\) and Pressure \(Z\)](#)



[K-Board Pro 4](#)
[Per note pitch bend \(X\), slide \(Y\), and pressure \(Z\)](#)