



# MIDICON PRO MAPPER

## guide

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## DOCUMENT VERSION



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Date	Document Version	Software Version ≥	Notes
02/15/19	1.2	1.0	Initial release.

## OVERVIEW

There are two versions of this application; one for Windows and one for Mac OS X 10.9. Both versions operate the same way. The screen examples shown in this guide are from the Windows version.

This application connects to the MIDICON Pro and allows you to map MIDI commands to each of the buttons, faders and wheels so that you can customize the MIDICON Pro to work with your lighting software. The MIDICON Pro has its own internal default map from the factory and memory available for one additional user defined map. When you power on the MIDICON Pro for the first time, it will be configured with the default map. For most users, this map will work fine. With this application you will be able to create, save and upload your own user map. After you have uploaded a new map to the MIDICON Pro, it will be saved in the MIDICON Pro's memory and will be the map used on power up.

## CUSTOMER SUPPORT

Contact ELATION Service for any product related service and support needs. Also visit [forums.elationlighting.com](http://forums.elationlighting.com) with questions, comments or suggestions.

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## APPLICATION INSTALLATION

### Windows

Copy the files "MIDICON Pro Mapper.exe", "MIDICON Pro Mapper guide.pdf" and "midi.dll" to the same folder. You can launch the application from the folder by double clicking the .exe file or you can create a shortcut to it from the desktop.

### OS X

Copy MIDICON Pro Mapper.app to your applications folder. This version works with OS X 10.9. Earlier versions of OS X may not work properly with this application due to USB functions required to send messages to the MIDICON Pro. Version 10.6 does not work. Other versions have not been tested.

## **MENUS**

Along the top of the application window are four pull-down menus as described below. These menus are used to do things like save a map to disk or send a map to the MIDICON Pro. On OS X the menus are always at the top of the screen.

### **File**

#### **New**

This will fill the entire map with the default settings. The current map will be overwritten.

#### **Open**

Open a saved map file. The map files are MIDI system exclusive message files (\* .syx) that can also be opened by other MIDI applications.

#### **Save**

Save the current map as a MIDI system exclusive file.

#### **Save As**

Save the current map under a new name.

#### **Rename Map**

Change the name of the map as it appears at the top of the window.

#### **Quit**

Exit the program.

### **Connect**

#### **Upload Map to MIDICON Pro**

This will transmit the current MIDI map to the MIDICON Pro over USB. The MIDICON Pro uses MIDI system exclusive messages to transmit and receive a complete map. The new map will be stored in the MIDICON Pro's memory.

#### **Download Map from MIDICON Pro**

This will copy the active map in the MIDICON Pro memory to the mapper display for editing. This can be either the factory default map or the user map depending on which is currently being used.

#### **Turn On Default Map**

This will tell the MIDICON Pro to use the factory default map in memory on power up.

#### **Turn On User Map**

This will tell the MIDICON Pro to use the user map in memory (if one exists) on power up.

## View

### Map List

This will display a text listing of all of the mapped controls.

### Help

### Guide

Will launch this guide.

### About

Version and other info about this program.

## Creating a Map

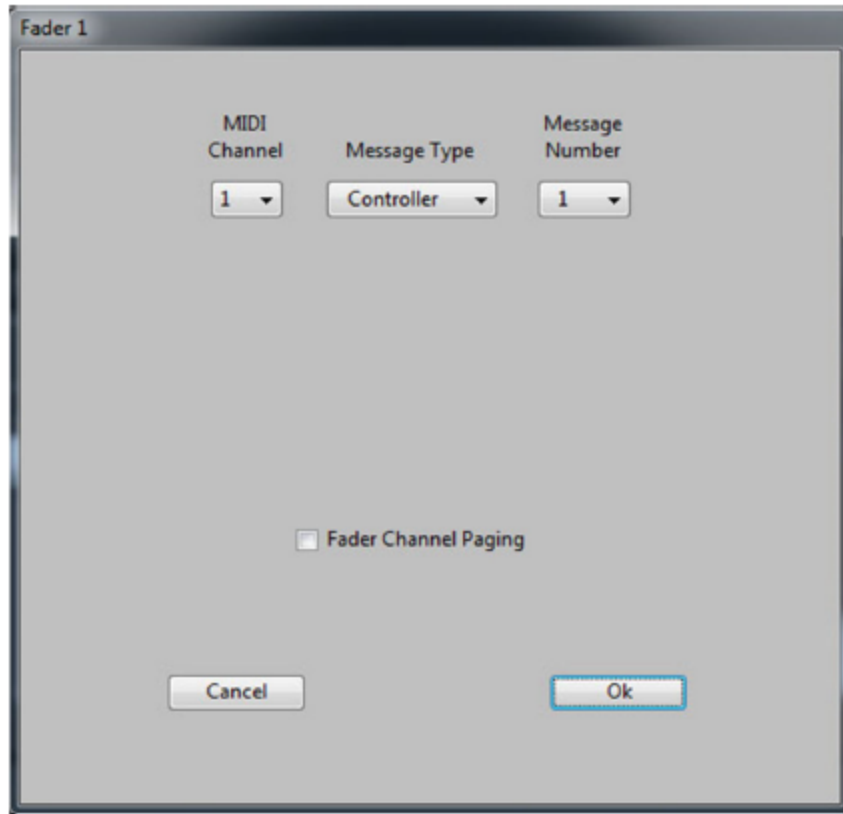
The main window of the application shows a rendering of the controls on the MIDICON Pro.



To select an item (button, fader, etc.) to program, click on that item and a dialog box will appear. From the dialog box you will be able to choose from dropdown lists of settings that are available for that control. The name of the selected control will appear at the top of the dialog.

## Fader

When you click on a fader, the fader dialog box looks like this:



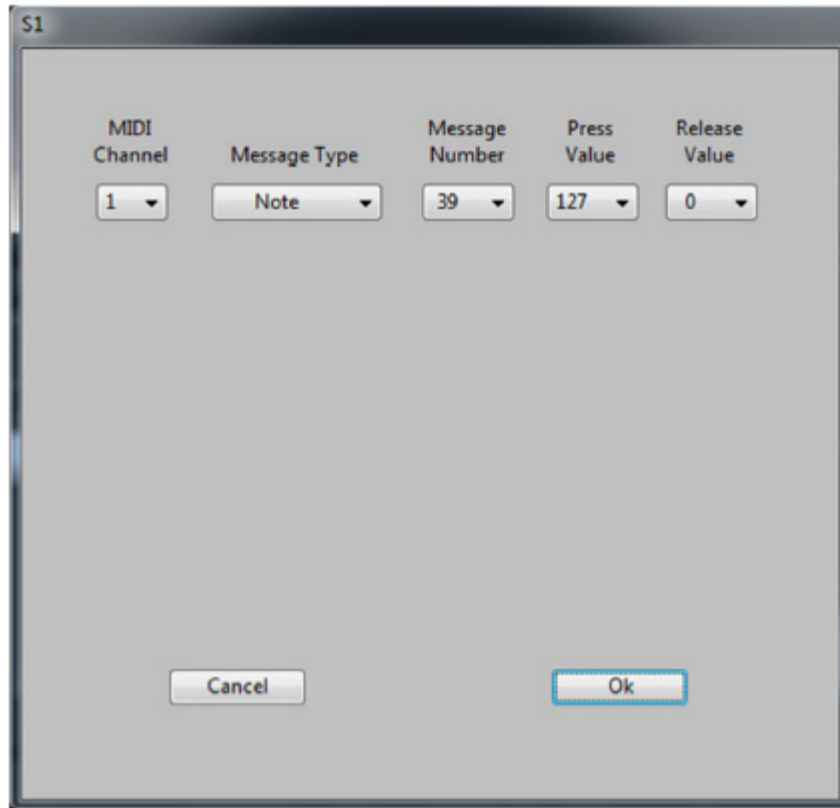
You can assign the MIDI channel, the MIDI message type and the message number to the selected fader. The message value (byte 3 of the MIDI message) will be determined by the position of the fader. The MIDICON Pro supports the three-byte MIDI message types: note, continuous controller and after touch. The MIDI message will be used by the fader to send position data to the lighting software and for the lighting software to position the moving fader. Typically, faders use continuous controller messages, shortened to “controller” on this application.

If you check the “Fader Channel Paging” box, the fader page will determine the MIDI channel of the message. The fader page display is directly above and to the right of the faders on the MIDICON Pro. This feature is used when the lighting software doesn’t support fader paging. This gives you 16 pages of fader messages where each page will cause the faders to send and receive messages on a different MIDI channel. You will notice that when the box is checked the MIDI channel selection is no longer available because the channel will be controlled by the page number. The “Master” fader is not included in channel paging.

Click “OK” to save the selection or “Cancel” to exit without saving.

## Buttons

When you click on a button the dialog looks like this:



The image shows a dialog box titled "S1" with a light gray background. It contains five dropdown menus arranged horizontally. The first dropdown is labeled "MIDI Channel" and has "1" selected. The second is labeled "Message Type" and has "Note" selected. The third is labeled "Message Number" and has "39" selected. The fourth is labeled "Press Value" and has "127" selected. The fifth is labeled "Release Value" and has "0" selected. At the bottom of the dialog, there are two buttons: "Cancel" on the left and "Ok" on the right. The "Ok" button is highlighted with a blue border.

MIDI Channel	Message Type	Message Number	Press Value	Release Value
1	Note	39	127	0

Cancel Ok

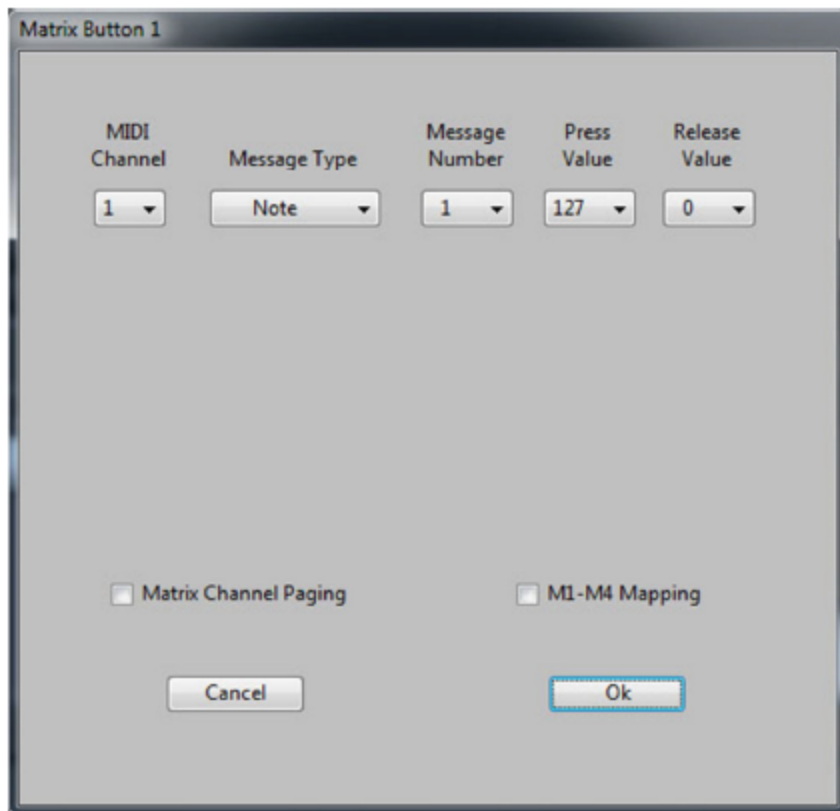
This is the dialog for all buttons except for the matrix (1-32) buttons. Matrix buttons have additional features as explained later.

You can assign the MIDI channel, the MIDI message type, the message number, press and release values to the selected button. The MIDICON Pro supports the three byte MIDI message types: note, continuous controller and after touch messages. The MIDI message is what will be sent to the lighting software when the button is pressed or released. Typically buttons use note on and off messages with a value of 127 for on (press) and 0 for off (release). In addition, this message will be used by the lighting software to highlight the LED of the button. When received, the press value will turn the LED to full brightness and the release value will return the LED to the ambient backlight level.

Click "OK" to save the selection or "Cancel" to exit without saving.

## Matrix Buttons

The matrix buttons dialog looks like this:



It is similar to the other button dialog except that there are two checkboxes; "Matrix Channel Paging" and "M1-M4 Mapping".

Channel paging works the same as with the faders, where the matrix page controls the MIDI channel of the 32 matrix buttons. This feature will allow you to send 16 pages of button messages on 16 different MIDI channels. Configure the MIDI message the same as with a regular button. You will notice that the MIDI channel selection will be disabled if the paging box is checked. LED control from the lighting software will use this same MIDI message to highlight each button.

The "M1-M4 Mapping" checkbox enables the four matrix context buttons; M1, M2, M3, M4 that are to the left of the matrix buttons. This feature will allow you to assign an additional four sets of MIDI messages to the matrix buttons. A different message set will be activated by a context button. During operation, pressing a context button will highlight the button to show which set of messages are being used. For example, M1 could be used to select colors, M2 for beam settings, etc. The lighting software will have to be programmed to respond to each set of messages accordingly.



When the “M1-M4 Mapping” checkbox is enabled the dialog will look like this:

The screenshot shows a dialog box titled "Matrix Button 1". It contains a table with five columns: "MIDI Channel", "Message Type", "Message Number", "Press Value", and "Release Value". There are four rows for buttons M1, M2, M3, and M4. Each row has dropdown menus for each column. Below the table, there are two checkboxes: "Matrix Channel Paging" (unchecked) and "M1-M4 Mapping" (checked). At the bottom are "Cancel" and "Ok" buttons.

MIDI Channel	Message Type	Message Number	Press Value	Release Value
M1				
1	Aftertouch	0	127	0
M2				
1	Aftertouch	32	127	0
M3				
1	Aftertouch	64	127	0
M4				
1	Aftertouch	96	127	0

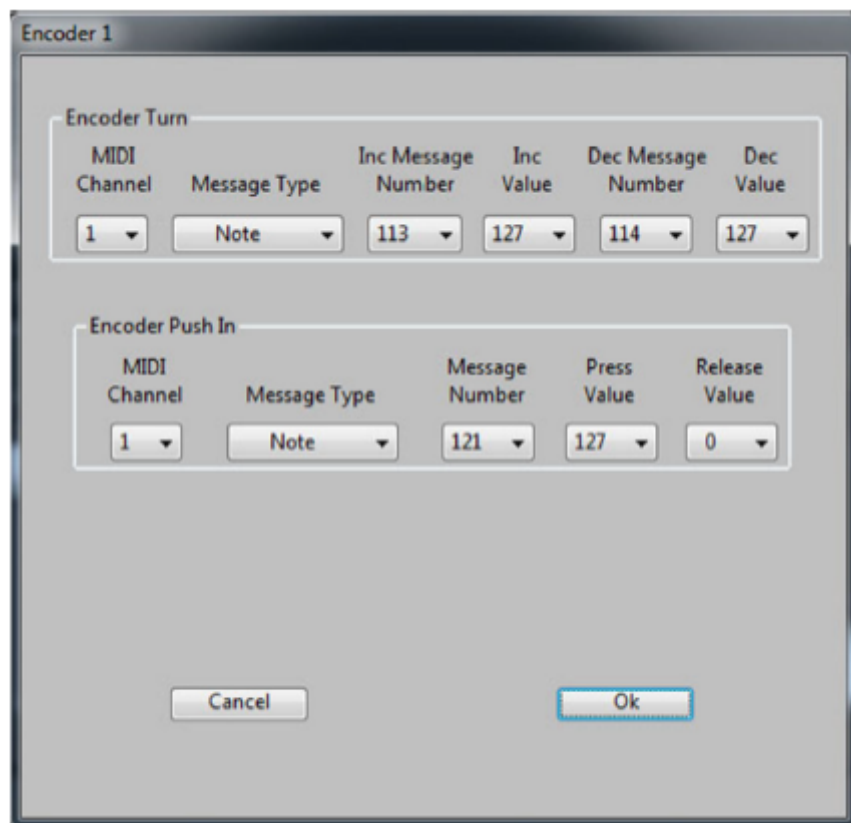
☐ Matrix Channel Paging      ☒ M1-M4 Mapping

Cancel      Ok

You will be able to assign a separate MIDI message for each context. You can also enable channel paging to get 16 pages of 4 X 32 messages for the matrix buttons. That's 2048 MIDI messages. This feature is helpful when the lighting software you are using does not handle paging in the software. The lighting software can use these same MIDI messages to highlight each button LED.

## Encoder Wheels

When you click on a wheel the dialog looks like this:



The dialog box is titled "Encoder 1". It contains two sections: "Encoder Turn" and "Encoder Push In".

**Encoder Turn**

MIDI Channel	Message Type	Inc Message Number	Inc Value	Dec Message Number	Dec Value
1	Note	113	127	114	127

**Encoder Push In**

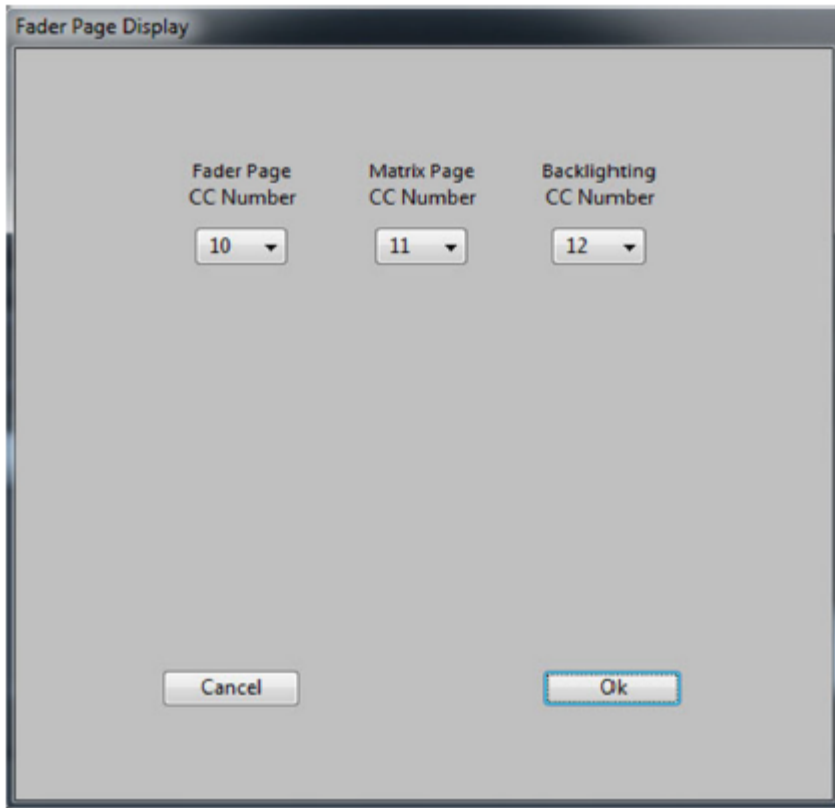
MIDI Channel	Message Type	Message Number	Press Value	Release Value
1	Note	121	127	0

At the bottom of the dialog are two buttons: "Cancel" and "Ok".

The encoder wheels can generate MIDI messages three ways; clockwise turning (inc), counterclockwise turning (dec) and push in. Turn messages share the same message type and channel but can use a different message number or value for inc or dec. When turning, the wheels will send 48 messages per revolution. Pushing in on the encoder is similar to a button press and release.

## Page Displays

When you click on a page display the dialog looks like this:



This dialog lets you select the MIDI continuous controller messages that the page displays will respond to. This message will also be sent to your lighting software by the MIDICON Pro whenever the page is changed when channel paging is enabled. The message will always use MIDI channel 1. There is a separate selection for the fader page and the matrix page as well as the backlight control. The backlight control will allow you to set the backlight level of the buttons from a MIDI command. You can also set the backlight level for the MIDICON Pro buttons manually by holding down the encoder "<" and ">" buttons together and turning encoder wheel 1. Turning encoder wheel 2 sets the backlight level for the wheels.

### **Saving and Sending a Map**

After you have created a new MIDI map, you can save it as a file. Use the “Save As” or “Save” selections from the “File” pull-down menu. The files are saved as .syx files that are compatible with other MIDI applications.

Maps can be sent to or read from a MIDICON Pro from the “Connect” pull-down menu. The MIDICON Pro must be connected to your computer via USB. Choose "Upload Map to MIDICON Pro" to send the new map. This is the map currently displayed in the application and will be stored in the MIDICON Pro internal user map memory. It will replace any previous user map stored there and will be the map used on power up.

Choose "Download Map from MIDICON Pro" from the “Connect” pull-down to copy the current map in the MIDICON Pro to the mapper application.

Choose "Turn On Default Map" to tell the MIDICON Pro to switch to its internal factory default MIDI map.

Choose "Turn On User Map" to tell the MIDICON Pro to switch from its internal map to the user installed map in memory if it exists.

### **View the Map List**

From the “View” pull-down menu you can see a text listing of the entire map currently being edited in this application.