



# MIDICON PRO™

user manual

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## DOCUMENT VERSION

Please check [www.elationlighting.com](http://www.elationlighting.com) for the latest revision/update of this manual.

Date	Document Version	Software Version	Notes
3/2015	1	1.0	Initial release.
05/10/18	1.2	N/C	Updated Keypad MIDI Notes 66 and 70 on page 22.

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## GENERAL INFORMATION

### INTRODUCTION

The **MIDICON PRO** has been designed to perform reliably for years when the guidelines in this booklet are followed. Please read and understand the instructions in this manual carefully and thoroughly before attempting to operate this unit. These instructions contain important information regarding safety during use and maintenance.

### UNPACKING

Thank you for purchasing the **MIDICON PRO** by Elation Professional®. Every **MIDICON PRO** has been thoroughly tested and has been shipped in perfect operating condition. Carefully check the shipping carton for damage that may have occurred during shipping. If the carton appears to be damaged, carefully inspect your unit for damage and be sure all accessories necessary to operate the unit have arrived intact. In the event damage has been found or parts are missing, please contact our customer support team for further instructions. Please do not return this unit to your dealer without first contacting customer support at the number listed below. Please do not discard the shipping carton in the trash. Please recycle whenever possible.

### BOX CONTENTS

Power Cable

Manual & Warranty Card

## **CUSTOMER SUPPORT**

Elation Professional provides a customer support line, to provide set up help and to answer any question should you encounter problems during your set up or initial operation. You may also visit us on the web at [www.elationlighting.com](http://www.elationlighting.com) for any comments or suggestions. For service related issue please contact Elation Professional.

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## **WARRANTY REGISTRATION**

Please fill out the enclosed warranty card to validate your purchase. All returned service items whether under warranty or not, must be freight pre-paid and accompany a return authorization (R.A.) number. The R.A. number must be clearly written on the outside of the return package. A brief description of the problem as well as the R.A. number must also be written down on a piece of paper and included in the shipping container. If the unit is under warranty, you must provide a copy of your proof of purchase invoice. Items returned without a R.A. number clearly marked on the outside of the package will be refused and returned at customer's expense. You may obtain a R.A. number by contacting customer support at 323-582-3322.

## **IMPORTANT NOTICE!**

**There are no user serviceable parts inside this unit. Do not attempt any repairs yourself; doing so will void your manufactures warranty. Damages resulting from modifications to this fixture and/or the disregard of safety and general user instructions found in this user manual void the manufactures warranty and are not subject to any warranty claims and/or repairs.**

## LIMITED WARRANTY

A. Elation Professional hereby warrants, to the original purchaser, Elation Professional products to be free of manufacturing defects in material and workmanship for a period of two years (730 days), and Elation Professional product rechargeable batteries to be free of manufacturing defects in material and workmanship for a period of six months (180 days), from the original date of purchase. This warranty excludes discharge lamps and all product accessories. This warranty shall be valid only if the product is purchased within the United States of America, including possessions and territories. It is the owner's responsibility to establish the date and place of purchase by acceptable evidence, at the time service is sought.

B. For warranty service, send the product only to the Elation Professional factory. All shipping charges must be pre-paid. If the requested repairs or service (including parts replacement) are within the terms of this warranty, Elation Professional will pay return shipping charges only to a designated point within the United States. If any product is sent, it must be shipped in its original package and packaging material. No accessories should be shipped with the product. If any accessories are shipped with the product, Elation Professional shall have no liability what so ever for loss and/or or damage to any such accessories, nor for the safe return thereof.

C. This warranty is void if the product serial number and/or labels are altered or removed; if the product is modified in any manner which Elation Professional concludes, after inspection, affects the reliability of the product; if the product has been repaired or serviced by anyone other than the Elation Professional factory unless prior written authorization was issued to purchaser by Elation Professional; if the product is damaged because not properly maintained as set forth in the product instructions, guidelines and/or user manual.

D. This is not a service contract, and this warranty does not include any maintenance, cleaning or periodic check-up. During the periods as specified above, Elation Professional will replace defective parts at its expense, and will absorb all expenses for warranty service and repair labor by reason of defects in material or workmanship. The sole responsibility of Elation Professional under this warranty shall be limited to the repair of the product, or replacement thereof, including parts, at the sole discretion of Elation Professional. All products covered by this warranty were manufactured after January 1, 1990, and bare identifying marks to that effect.

E. Elation Professional reserves the right to make changes in design and/or performance improvements upon its products without any obligation to include these changes in any products theretofore manufactured.

F. No warranty, whether expressed or implied, is given or made with respect to any accessory supplied with the products described above. Except to the extent prohibited by applicable law, all implied warranties made by Elation Professional in connection with this product, including warranties of merchantability or fitness, are limited in duration to the warranty periods set forth above. And no warranties, whether expressed or implied, including warranties of merchantability or fitness, shall apply to this product after said periods have expired. The consumer's and/or dealer's sole remedy shall be such repair or replacement as is expressly provided above; and under no circumstances shall Elation Professional be liable for any loss and/or damage, direct and/or consequential, arising out of the use of, and/or the inability to use, this product.

G. This warranty is the only written warranty applicable to Elation Professional products and supersedes all prior warranties and written descriptions of warranty terms and conditions heretofore published.

## SAFETY GUIDELINES



This device is an extremely sophisticated piece of electronic equipment. To guarantee a smooth operation, it is important to follow the guidelines in this manual. The manufacturer of this device will not accept responsibility for damages resulting from the misuse of this fixture due to the disregard of the information printed in this manual.



This device falls under **PROTECTION CLASS 1**. It's essential this device be grounded properly. Only qualified personnel should perform all electrical connections.



**C A U T I O N S**

**KEEP THIS DEVICE AWAY FROM RAIN AND MOISTURE!**



**UNPLUG POWER BEFORE SERVICING FIXTURE!**

For proper operation, follow the **Installation** guidelines described in this manual. Only qualified and certified personnel should perform installation of this device. Any modifications made to the device will void the original manufacturer's warranty and increase the risk of damage and/or personal injury. Always disconnect from main power source before performing any type of cleaning procedure.

Only handle the power cord by the plug end, never pull out the plug by tugging the wire portion of the cord.

**DO NOT** operate device if the power cord has become frayed, crimped, damaged and/or if any of the power cord connectors are damaged and do not insert into the device securely with ease. **NEVER** force a power cord connector into the device. If the power cord or any of its connectors are damaged, replace it immediately with a new one of similar power rating.

This device is designed for **INDOOR / DRY LOCATIONS ONLY**.

Please make sure there are **NO FLAMMABLE MATERIALS** close to the device while operating, to prevent any fire hazard.

**Minimum** distance of inflammable materials from the surface **1.6 feet (0.5m)**.

**DO NOT** attempt installation and/or operation without knowledge how to do so.

**DO NOT** allow operation by persons who are not qualified to operate this type of device. Most damages are the result of operations by nonprofessionals.

**DO NOT** shake device, avoid brute force when operating device.

Use the original packaging and materials to transport the device in for service.

## DEVICE OVERVIEW

The **MIDICON PRO** is a general-purpose MIDI control desk designed to work alongside the **Elation** lighting software packages or any lighting software that will accept MIDI control. Key features include:

**(9) Motorized Faders with Touch Sensitive Knobs**

**(4) Large Backlit Jog Wheels with Push-In Selection**

**(112) Backlit Keyboard Style Button Keys**

**(2) Standard MIDI 5pin Ports**

**(1) USB 2.0 “B” Type Port**

The USB interface is compatible with operating system class drivers so that no special driver is needed on the host PC or Mac. When you connect via USB for the first time, your PC will automatically assign the MIDI driver that is included with your operating system. It will work with both Windows and Apple. The **MIDICON PRO** uses standard MIDI messages to communicate with your software. At the end of this manual are tables showing the default MIDI messages assigned to the buttons and faders. You can also create your own MIDI map for the **MIDICON PRO** controls using mapping software available from **Elation**. Some lighting software programs will support the **MIDICON PRO** as plug and play without any need for special setup other than selecting the **MIDICON PRO** as the default MIDI controller. Consult your lighting software’s manual for more information.

The photo of the **MIDICON PRO** on the next page illustrates the controls broken down into sections.





**PLAYBACKS:** This includes most of the left side of the control panel; (8) touch sensitive and motorized playback faders with (3) buttons above each fader along with page select buttons and a page display.

**MASTER and BLACKOUT:** Next to the playback faders is a motorized master fader and a blackout button.

**NUMERIC KEYPAD:** In the middle is a standard lighting controller style numeric keypad along with some common function keys.

**SHORTCUTS:** Above the keypad are (16) general-purpose shortcut buttons labeled **S1-S16** and to the right of the keypad are (10) general-purpose shortcut buttons labeled **A-J**.

**MATRIX BUTTONS:** In the upper right are (32) buttons for recalling memories along with page select buttons and a display. To the left of the matrix are (4) buttons that can be used to select the context of the matrix or for general purpose.

**ENCODER WHEELS:** There are (4) wheels that can be used for data entry or direct control of lighting parameters. To the upper left of the wheels are (2) shift buttons that can be used to shift the wheel assignments (only if your software supports this feature). The wheels also have push buttons that allow you to press in on the wheel to send an additional button press message.

## MIDI MESSAGES OVERVIEW

MIDI is an acronym for musical instrument digital interface. MIDI has been in use since the 1980's and was intended as a means to interconnect musical instruments like keyboards and electronic sound producing devices. MIDI communicates digitally between devices by sending event messages like key presses. Many lighting control software programs allow MIDI messages to be used as event triggers. The **MIDICON PRO** makes use of MIDI messages to communicate with your lighting software either through MIDI over USB or "old style" MIDI using 5pin din connectors and cables. MIDI over USB is a newer and much faster way to use MIDI. Most software programs use USB but a few programs still use the older style MIDI interface.

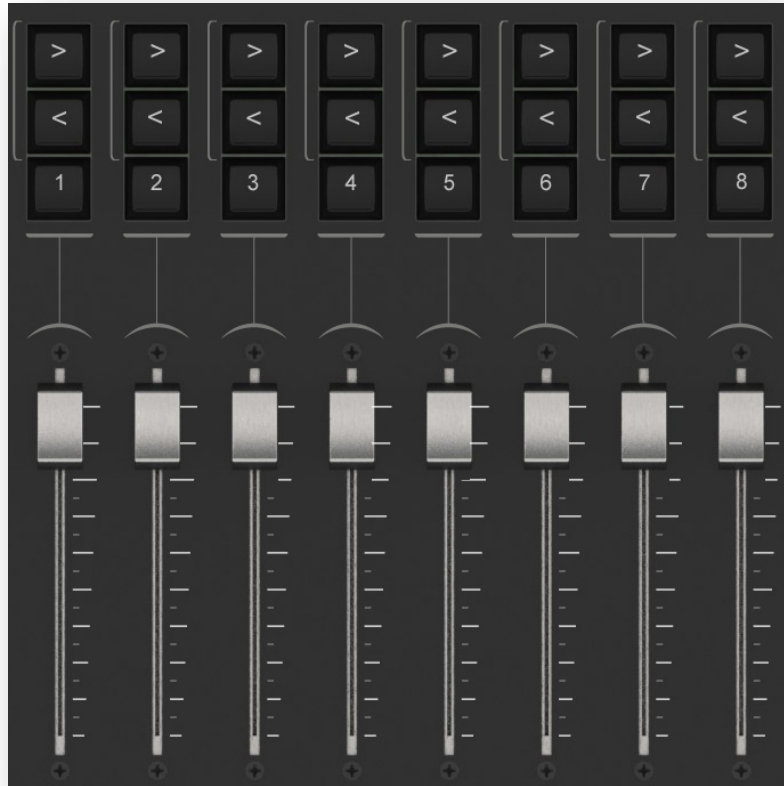
This user manual does not try to explain the technical details of how MIDI works. If your lighting control software allows you to select the **MIDICON PRO** from its setup menu as a plug and play device no special programming of the **MIDICON PRO** will be required. The **MIDICON PRO** can be customized to fit any lighting software if needed. Some knowledge of how MIDI works is helpful in that case.

The **MIDICON PRO** has a default MIDI map that assigns specific MIDI messages to each control button, fader, wheel, etc. For software programs that support the **MIDICON PRO** as plug and play, the default MIDI map will work with your software as soon as you select the **MIDICON PRO** as your controller from the lighting software's setup menu. For most other programs, the default map should also work. For those programs that require a custom MIDI map, you can create your own map using the **MIDICON PRO Mapper** software. Please refer to the **CUSTOM MIDI Maps** section for more details.

With the factory default MIDI map, the **MIDICON PRO** sends MIDI note messages to your software whenever buttons are pressed or when the data wheels are turned. When a button is pressed a MIDI "Note ON" message is sent and when a button is released a MIDI "Note OFF" message is sent. This will let you to control momentary events. The **MIDICON PRO** sends MIDI continuous controller messages when you touch or move the faders.

The **MIDICON PRO** can also receive matching MIDI messages for the buttons and faders to control the LEDs, page displays and fader positions. This will allow your software to take control of the **MIDICON PRO** so that it will be in sync with your lighting software. At the end of this manual is a list of all of the default MIDI messages used by the **MIDICON PRO**.

## PLAYBACKS



The playback section was designed to take advantage of the playback features in most lighting software programs where a playback fader and some associated buttons are used. There are **FORWARD**, **REVERSE** and **BUMP** buttons above each playback fader. The function of each button will vary depending on the software that you are using. The playback faders are touch sensitive and motorized.

A fader will typically send MIDI continuous controller messages to your software, giving each fader a resolution of (128) steps. The fader will send a MIDI message when it is touched and/or moved. Touching the fader knob will also override the motor so that it can't move with your finger on the knob.

Your lighting software can control the position of the faders by sending back the same MIDI continuous controller messages. If your software supports moving faders and paging, it will keep track of and reposition the faders whenever a new playback page is selected. If your software does not support moving faders, the **MIDICON PRO** can handle this for you. Please refer to the **PAGE CONTROLS** section for more details.

## PAGE CONTROLS



There are (2) separate page controls, one for the playbacks and another for the matrix buttons. Paging essentially gives you additional sets of faders and matrix buttons to work with. Paging can be controlled by either your lighting software or the **MIDICON PRO**. If your software can control the paging you can have up to (99) pages to work with.

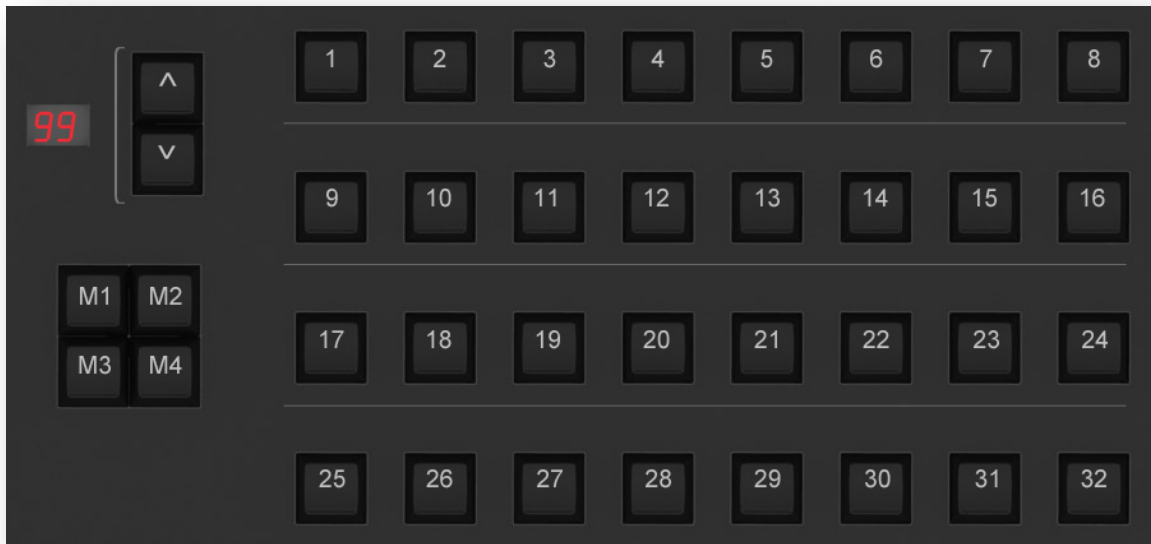
When the **MIDICON PRO** is set up to control the paging, it will give you (16) pages to work with by transmitting and receiving messages on (16) MIDI channels. By changing the MIDI channel when the page is changed, your lighting software will essentially treat each page as a separate set of controls. The current page number will set the MIDI channel that is currently in use for the playbacks or the matrix buttons. It will also keep track of the fader positions for each fader page as well as the LED states for the buttons on both matrix and fader pages so that when you change the page the faders will move to the last positions used on that page.

To enable (or disable) paging on the **MIDICON PRO**, simply toggle paging ON or OFF by pressing **Wheel #4** while powering the device ON. You will only need to do this once as it will be saved in memory for the next time you power ON. You will know paging is enabled when **"01"** is displayed after powering ON.

**NOTE:** The paging feature only works when using the factory default MIDI map. When creating your own MIDI map, you can enable paging from the mapping software. Please refer to the CUSTOM MIDI Maps section for more details.

**NOTE:** The fader positions are not saved during power down.

## MATRIX BUTTONS



These (32) buttons are used to call lighting effects, scenes, colors, etc. If your lighting software does not directly support the **MIDICON PRO** you will have to link each button to a function using the setup menu in your lighting software. Please refer to your lighting software's manual for instructions, as this will be different for each program.

These (32) buttons can be paged using the page controls to the upper left. Paging can be handled by your lighting software or by the **MIDICON PRO**. Please refer to the previous section on the **PAGE CONTROLS** for more details.

## MATRIX CONTEXT BUTTONS



These (4) buttons are intended to select the current function or context of the (32) matrix buttons. An example would be to have **M1** select from (32) fixtures, **M2** select from (32) colors, **M3** select gobos, and **M4** select effects, etc. If your lighting software supports this feature it will be taken care of automatically when you select the **MIDICON PRO** as your controller from your lighting software's setup menu. If your lighting software does not support this feature and you would like to have it, you can create your own MIDI map using the **MIDICON PRO Mapper** software and tell it to enable the MATRIX CONTEXT buttons. This will let you send and receive (4) different sets of MIDI messages from the (32) MATRIX buttons, one set for each MATRIX CONTEXT button when selected. When combined with paging you will be able to have (2048) different button messages from the (32) MATRIX buttons. Please refer to the **CUSTOM MIDI Maps** section for more details.

These (4) buttons also send MIDI Note ON/OFF messages like any other button so that they can be used for any purpose. Please refer the **MIDI MESSAGES** section at the end of this manual for each button's default MIDI Note message.

## NUMERIC KEYPAD



In the middle of the panel is a lighting control style numeric keypad for data entry. Your lighting software will determine the behavior of these keys if it supports the **MIDICON PRO** directly, otherwise you will have to link each button to a function using the setup menu in your lighting software. Please refer to the **MIDI MESSAGES** section at the end of this manual for each button's default MIDI Note message.

## SHORTCUT BUTTONS

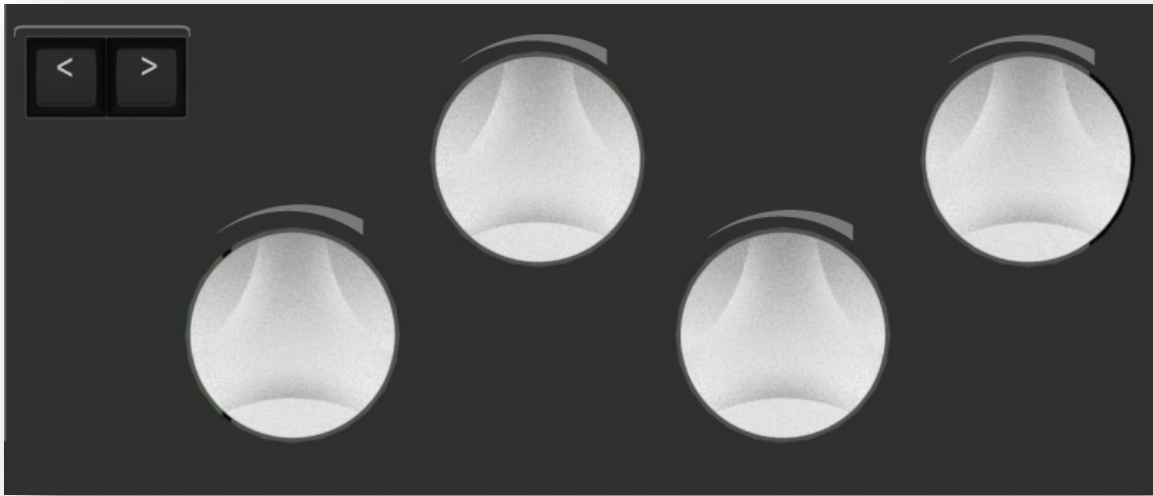


These (26) buttons are intended for frequently used functions in your lighting software. If your controller does not directly support the **MIDICON PRO** you will have to link each button to a function using the setup menu in your lighting software. Please refer to your software manual for instructions, as this will be different for each program. Please refer to the **MIDI MESSAGES** section at the end of this manual for each button's default MIDI Note message.

**Elation** intends to offer custom keycaps for these keys for the most widely used lighting software programs. Contact Elation service for more information.



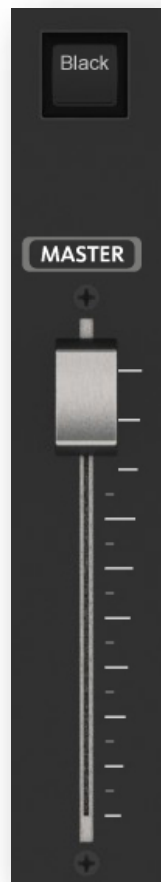
## ENCODER WHEELS



The data encoder wheels send MIDI messages for increment (turn right one step) and decrement (turn left one step). You can also press down on a wheel for an additional button press and release message. For some software programs that support the **MIDICON PRO** directly, the encoder wheels are pre-programmed to match the context of the current programming screen. They can be used to adjust channel values, color mixing, fade times, etc. The shift buttons to the left can be used to shift the wheels to additional sets of functions. Please refer to your lighting software's instructions. The factory default settings will send separate MIDI Note messages for each rotational step left or right. They are freewheeling and send (48) steps per revolution.

With the **MIDICON PRO Mapper** software, these can be programmed to send other types of MIDI messages besides MIDI Notes.

## MASTER FADER



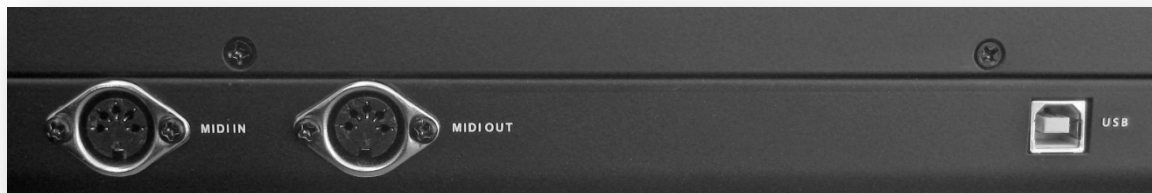
The master fader is generally used to control the overall level of the stage lights but can also be used to control other things like speed or as another playback. This fader is also touch sensitive and motorized like the playback faders but it is not tied to the **PAGE CONTROLS**.

Above the master fader is the blackout button. If your lighting software directly supports the **MIDICON PRO**, its function will be handled for you otherwise you will need to link its MIDI message to your lighting software's blackout function.

## REAR CONNECTIONS



On the back of the **MIDICON PRO** you will find the AC mains connector with fuse (1A slow blow) and the power ON/OFF switch. The power supply is compatible with both USA and Europe (100-240V).



There are (2) standard 5pin MIDI IN and OUT connectors and a USB 2.0 "B" type connector for MIDI over USB.

► **There is also a Kensington slot in the center for an anti-theft cable.**

## MIDI MESSAGES SENT

The following is a list of MIDI messages used by the default MIDI Map. These are sent to your lighting software from the **MIDICON PRO** for each button press, wheel or fader movement. A “**Note ON**” message is sent for a button press and a “**Note OFF**” message for a button release.

### **PLAYBACK FADERS** (MIDI Channel set by page if paging enabled)

Playback Fader 1 – Continuous Controller 1  
Playback Fader 2 – Continuous Controller 2  
Playback Fader 3 – Continuous Controller 3  
Playback Fader 4 – Continuous Controller 4  
Playback Fader 5 – Continuous Controller 5  
Playback Fader 6 – Continuous Controller 6  
Playback Fader 7 – Continuous Controller 7  
Playback Fader 8 – Continuous Controller 8

**MASTER FADER** – Continuous Controller 9 (MIDI Channel 1)

**BLACKOUT BUTTON** – Note 110

### **PLAYBACK BUTTONS** (MIDI Channel set by page if paging enabled)

Playback 1 Button > – Note 86  
Playback 1 Button < – Note 94  
Playback 1 Button 1 – Note 102  
Playback 2 Button > – Note 87  
Playback 2 Button < – Note 95  
Playback 2 Button 2 – Note 103  
Playback 3 Button > – Note 88  
Playback 3 Button < – Note 96  
Playback 3 Button 3 – Note 104  
Playback 4 Button > – Note 89  
Playback 4 Button < – Note 97  
Playback 4 Button 4 – Note 105  
Playback 5 Button > – Note 90  
Playback 5 Button < – Note 98  
Playback 5 Button 5 – Note 106  
Playback 6 Button > – Note 91  
Playback 6 Button < – Note 99  
Playback 6 Button 6 – Note 107  
Playback 7 Button > – Note 92  
Playback 7 Button < – Note 100  
Playback 7 Button 7 – Note 108  
Playback 8 Button > – Note 93  
Playback 8 Button < – Note 101  
Playback 8 Button 8 – Note 109

## **MIDI MESSAGES SENT (continued)**

### **PLAYBACK PAGE BUTTONS** (Always MIDI Channel 1)

Page Up – Note 111

Page Down – Note 112

### **SHORTCUT BUTTONS** (Always MIDI Channel 1)

S1 – Note 39

S2 – Note 40

S3 – Note 41

S4 – Note 42

S5 – Note 43

S6 – Note 44

S7 – Note 45

S8 – Note 46

S9 – Note 47

S10 – Note 48

S11 – Note 49

S12 – Note 50

S13 – Note 51

S14 – Note 52

S15 – Note 53

S16 – Note 54

A – Note 74

B – Note 75

C – Note 76

D – Note 77

E – Note 78

F – Note 79

G – Note 80

H – Note 81

I – Note 82

J – Note 83

## **MIDI MESSAGES SENT (continued)**

### **KEYPAD** (Always MIDI channel 1)

1 – Note 67  
2 – Note 68  
3 – Note 69  
4 – Note 63  
5 – Note 64  
6 – Note 65  
7 – Note 59  
8 – Note 60  
9 – Note 61  
0 – Note 71  
“.” – Note 72  
Enter – Note 73  
Thru – Note 62  
@ – Note 70  
Full – Note 66  
Bkspc – Note 55  
All – Note 56  
“-” - Note 57  
“+” - Note 58

### **WHEELS** (Always MIDI Channel 1)

Wheel 1 Turn RIGHT 1 click – Note 113  
Wheel 1 Turn LEFT 1 click – Note 114  
Wheel 1 Press IN – Note 121  
Wheel 2 Turn RIGHT 1 click – Note 115  
Wheel 2 Turn LEFT 1 click – Note 116  
Wheel 2 Press IN – Note 122  
Wheel 3 Turn RIGHT 1 click – Note 117  
Wheel 3 Turn LEFT 1 click – Note 118  
Wheel 3 Press IN – Note 123  
Wheel 4 Turn RIGHT 1 click – Note 119  
Wheel 4 Turn LEFT 1 click – Note 120  
Wheel 4 Press IN – Note 124

**WHEEL SHIFT < Button** - Note 84

**WHEEL SHIFT > Button** - Note 85

## **MIDI MESSAGES SENT (continued)**

### **MATRIX BUTTONS** (MIDI Channel set by page if paging enabled)

Button 1 – Note 1  
Button 2 – Note 2  
Button 3 – Note 3  
Button 4 – Note 4  
Button 5 – Note 5  
Button 6 – Note 6  
Button 7 – Note 7  
Button 8 – Note 8  
Button 9 – Note 9  
Button 10 – Note 10  
Button 11 – Note 11  
Button 12 – Note 12  
Button 13 – Note 13  
Button 14 – Note 14  
Button 15 – Note 15  
Button 16 – Note 16  
Button 17 – Note 17  
Button 18 – Note 18  
Button 19 – Note 19  
Button 20 – Note 20  
Button 21 – Note 21  
Button 22 – Note 22  
Button 23 – Note 23  
Button 24 – Note 24  
Button 25 – Note 25  
Button 26 – Note 26  
Button 27 – Note 27  
Button 28 – Note 28  
Button 29 – Note 29  
Button 30 – Note 30  
Button 31 – Note 31  
Button 32 – Note 32

### **MATRIX CONTEXT BUTTONS** (Always MIDI Channel 1)

M1 – Note 35  
M2 – Note 36  
M3 – Note 37  
M4 – Note 38

### **MATRIX PAGE BUTTONS** (Always MIDI Channel 1)

Page up – Note 33  
Page down – Note 34

## **MIDI MESSAGES SENT (continued)**

### **PLAYBACK PAGE DISPLAY** – Continuous Controller 10

This MIDI message is sent when the **MIDICON PRO's** paging feature is enabled and the playback page is changed. The MIDI channel for the message (Channel 0-15) will reflect the new MIDI channel being used by the playbacks and the message value will indicate the page number shown (1-16).

### **MATRIX PAGE DISPLAY** – Continuous Controller 11

This MIDI message is sent when the **MIDICON PRO's** paging feature is enabled and the matrix page is changed. The MIDI channel for the message (Channel 0-15) will reflect the new MIDI channel being used by the matrix buttons and the message value will indicate the page number on the display (1-16).



## MIDI MESSAGES RECEIVED

### LED BACKLIGHTING CONTROL

There are small white LEDs behind each button and wheel on the **MIDICON PRO** to provide backlighting for the symbols on the button caps and the wheels. You can adjust the LED backlighting brightness level for both the buttons and wheels using **“MIDI Continuous Controller 12”**. The backlighting brightness level for both the buttons and the wheels are adjusted together when using the MIDI message. The backlighting brightness level can also be adjusted manually. Hold down both the **“<”** and **“>”** buttons (next to the wheels) while turning **Wheel #1** to adjust the brightness level for the buttons and turning **Wheel #2** to adjust the brightness level for the wheels.

Your lighting software can highlight any button by sending back the same MIDI message used by that button. Highlighting will cause the LED behind a button to go to full brightness in order to indicate the button’s state in the lighting software. If the internal paging feature is enabled on the **MIDICON PRO**, the LED state will be remembered for the current page and then recalled when the page is selected. This only applies to the playback and matrix buttons that use the paging feature.

If you are using the default MIDI map, the button’s MIDI **“Note ON”** message will highlight the LED and the **“Note OFF”** message will return it to the backlit level.

**PLAYBACK PAGE DISPLAY** – Your lighting software can use **“MIDI Continuous Controller 10”** to control the page display. The value byte will set the page number to (0-99). Values above (99) will turn the display off. If the **MIDICON PRO’s** paging feature is enabled, **“Continuous Controller 10”** will also set the MIDI channel for the playbacks as long as the value of the message is (1-16). The playback LED states will also be recalled as well as the fader positions that are stored for that page.

**MATRIX PAGE DISPLAY** – Your lighting software can use **“MIDI Continuous Controller 11”** to control the page display. The value byte will set the page number to (0-99). Values above (99) will turn the display off. If the **MIDICON PRO’s** paging feature is enabled, **“Continuous Controller 11”** will also set the MIDI channel for the matrix buttons as long as the value of the message is (1-16). The matrix LED states will also be recalled for that page.

## MOTOR FADER CONTROL

The (8) playback faders and the master fader can be positioned by your lighting software by returning the same MIDI message that the faders send when touched or moved. The faders typically are assigned **7bit MIDI Continuous Controller** messages with position values from 0 (bottom) to 127 (top).

## CUSTOM MIDI MAPS

The **MIDICON PRO** comes ready to use with a default MIDI map as described in the previous section. This will work for most applications. If you need to make your own custom MIDI map, you can download the **MIDICON PRO Mapper** software from the **Elation** web site. After you install the software consult the help file on how to create and upload your custom MIDI map. There is enough memory in the **MIDICON PRO** to store (2) maps, one custom user MIDI map and the default MIDI map. After you load a custom map, it will become the active map. You can also use the mapper software to switch between the default map and the user map. The mapper software uses **MIDI SYSEX** messages to send and receive maps and to switch between the two maps. The following is a summary of the **MIDI SYSEX** messages used. Messages are shown as hexadecimal numbers.

 **NOTE: MIDI SYSEX** messages are only supported with USB MIDI, not the 5pin MIDI jacks.

The following message requests the current MIDI map from the **MIDICON PRO**:

**f0 00 00 19 0a 00 f7**

The following message contains the MIDI map data:

**f0 00 00 19 0a 01 xx xx xx ..... f7** where xx is the map data (approx. 2k bytes). This is the response to the previous message and also what is sent to the **MIDICON PRO** to install a new user MIDI map.

The following message switches the **MIDICON PRO** to the default factory MIDI map:

**f0 00 00 19 0a 02 f7**

The following message switches the **MIDICON PRO** to the user MIDI map:

**f0 00 00 19 0a 03 f7**

## FIRMWARE UPDATES

The **MIDICON PRO** firmware may need to be updated from time to time as more features are added. The **MIDICON PRO** firmware revision is displayed for 2 seconds in the page displays during power up. For example “v1” “00” is displayed for firmware version **1.00**.

To perform a firmware update you will have to first install the boot-loader program on your Windows PC. Firmware updates are done over the USB connection. Power up the **MIDICON PRO** while pressing in and holding down **Wheel #1**, this will put the it in “update mode”. The LEDs behind the wheels will flash to indicate “update mode”. Run the boot-loader utility. If it finds the **MIDICON PRO**, the word “**connected**” will appear at the bottom of the boot-loader dialog. Click on “**Load**” to select the new firmware file (**.cyacd file**) then click “**program**”. A progress bar will appear to show when the file is finished loading. The **MIDICON PRO** will automatically reboot and begin using the new updated firmware version.

For more information on updating the firmware, please contact **Elation Support**.

**ELATION SERVICE USA - Monday - Friday 8:00am to 5:00pm PST**

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E-mail: [support@elationlighting.com](mailto:support@elationlighting.com)

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## **T E C H N I C A L   S P E C I F I C A T I O N S**

### **CONTROL / CONNECTIONS**

- (1) Touch Sensitive Motorized Master Fader
- (1) Blackout Button
- (2) Page Control Keys
- (8) Touch Sensitive Motorized Playback Faders with Forward, Reverse, and Bump Keys Above Each
- (4) Aluminum Encoder Wheels with Push-In Selection
- (19) Key Numeric Keypad
- (26) Shortcut Keys
- (32) Matrix Effect Keys
- (4) Matrix Context Keys
- 5pin MIDI In/Out Ports
- USB 2.0 Type "B" Port

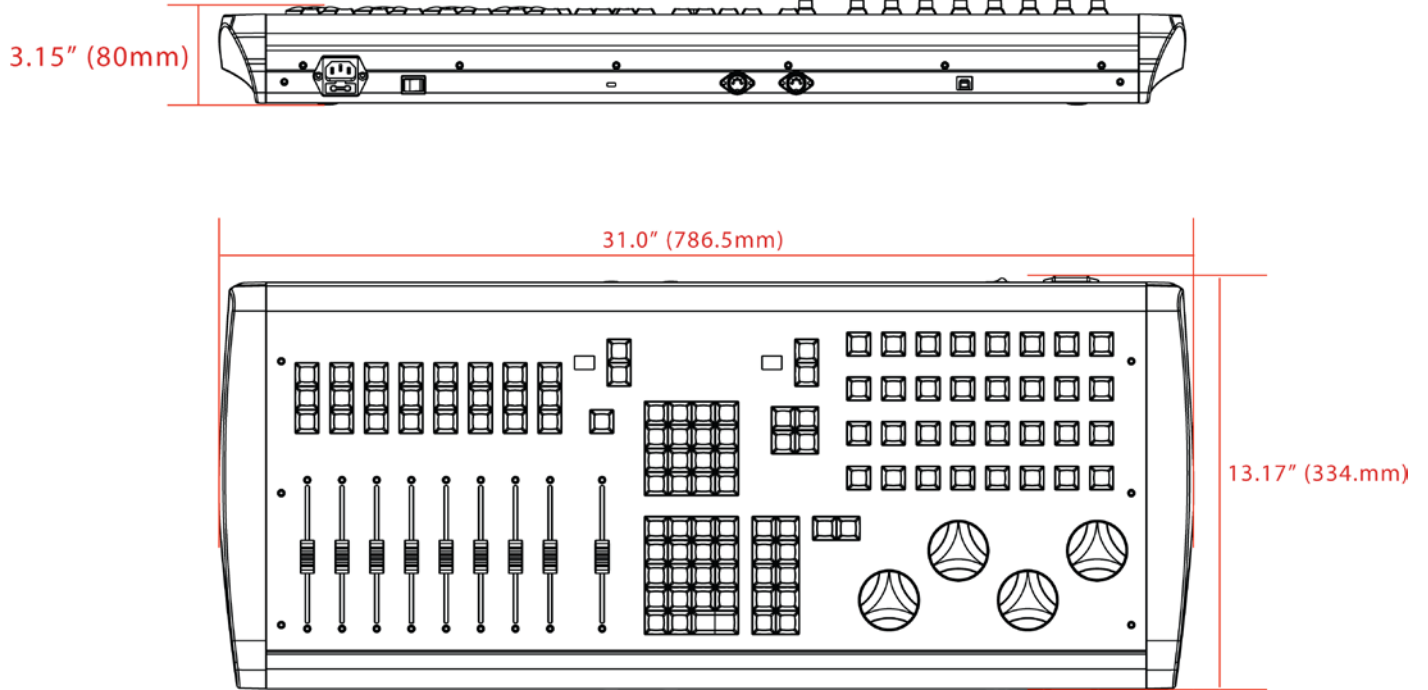
### **SIZE / WEIGHT**

- Length: 30.96" (786.5mm)
- Width: 13.17" (334.5mm)
- Vertical Height: 3.15" (80mm)
- Weight: 17 lbs. (7.7kg)

### **ELECTRICAL / THERMAL**

- AC 100-240V - 50/60Hz
- Fuse: 1A-250V slow blow, 5 x 20 mm
- 35W Max Power Consumption

## DIMENSIONAL DRAWINGS



Please Note: Specifications and improvements in the design of this unit and this manual are subject to change without any prior written notice.

