

**Launchpad Mini [MK3]**  
**Programmer's reference manual**

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## About this Guide

This document provides all the information you need to be able to control Launchpad Mini [MK3].

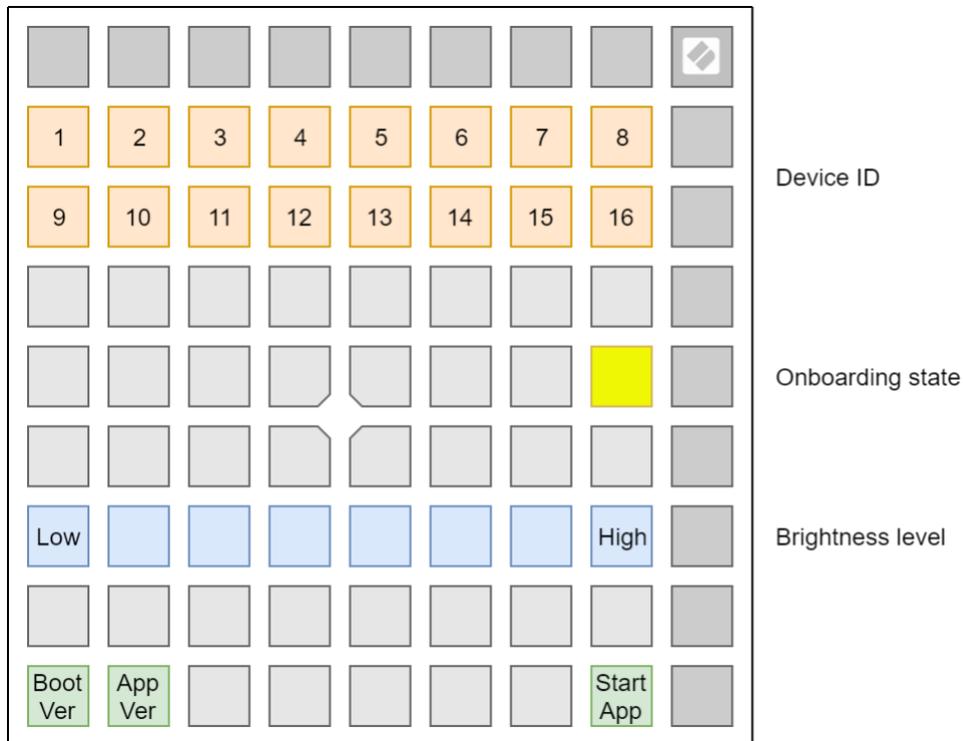
Launchpad Mini [MK3] communicates using MIDI over USB. This document describes the MIDI implementation for the device, which can be used to control LEDs and access Launchpad Mini [MK3]'s various features.

MIDI data is expressed in this manual in several different ways:

- A plain English description of the message.
- When we describe a musical note, middle C is deemed to be 'C3' or note 60. MIDI channel 1 is the lowest-numbered MIDI channel: channels range from 1 - 16.
- MIDI messages are also expressed in plain data, with decimal and hexadecimal equivalents. The hexadecimal number will always be followed by an 'h' and the decimal equivalent given in brackets. For example, a note on message on channel 1 is signified by the status byte 90h (144).

## Bootloader

Launchpad Mini [MK3] has a bootloader mode that allows the user to configure and save certain settings. The bootloader is accessed by holding the Capture MIDI button whilst plugging the device in.



The top two rows of pads can be used to set the USB device ID of the Launchpad Mini [MK3]. The device ID ranges from 1 to 16, the selected ID is represented by a brightly lit pad. The default ID from factory is 1. If more than one Launchpad Mini [MK3] is used on the same USB, each should have a different device ID selected.

The single yellow pad on the middle right can be used to toggle Onboarding. When Onboarding is ON, the Launchpad Mini [MK3] shows up as a Mass Storage Device to provide a more convenient first-time experience. You can turn this off once you are familiar with the device to disable this Mass Storage Device.

The blue row of pads can be used to adjust the Launchpad Mini [MK3]'s brightness level to something comfortable for the environment the device is used in. This control is also available on the Setup display when starting the Launchpad Mini [MK3] normally. Note that low brightness levels may be required for Launchpad Mini [MK3] to be powered on by certain devices.

The green pads on the bottom left can be used to display the version number of the Bootloader and the Application respectively.

The single green pad on the bottom right can be used to start the Application.

## MIDI on Launchpad Mini [MK3]

The Launchpad Mini [MK3] has two MIDI interfaces providing two pairs of MIDI inputs and outputs over USB. They are as follows:

- LPMiniMK3 DAW In / Out (or first interface on Windows): This interface is used by DAWs and similar software to interact with the Launchpad Mini [MK3]'s Session mode.
- LPMiniMK3 MIDI In / Out (or second interface on Windows): This interface is used to receive MIDI from Custom modes; and is used to provide external MIDI input or Light controls in Lighting Custom Modes and Programmer mode.

If you wish to use Launchpad Mini [MK3] as a control surface for a DAW (Digital Audio Workstation), you will likely want to use the DAW interface (See [Software Interaction](#) chapter).

Otherwise, you may interact with the device using the MIDI interface.

The Launchpad Mini [MK3] sends Note On (90h – 9Fh) with velocity zero for Note Offs. It accepts either Note Offs (80h – 8Fh) or Note Ons (90h – 9Fh) with velocity zero for Note Off.

### Device Inquiry message

The Launchpad Mini [MK3] responds to the Universal Device Inquiry Sysex message, which can be used to identify the device. This exchange is as follows:

Host => Launchpad Mini [MK3]:

Hex: F0h 7Eh 7Fh 06h 01h F7h

Dec: 240 126 127 6 1 247

Launchpad Mini [MK3] => Host (Application):

Hex: F0h 7Eh 00h 06h 02h 00h 20h 29h 13h 01h 00h 00h <app\_version> F7h

Dec: 240 126 0 6 2 0 32 41 19 1 0 0 <app\_version> 247

Launchpad Mini [MK3] => Host (Bootloader):

Hex: F0h 7Eh 00h 06h 02h 00h 20h 29h 13h 11h 00h 00h <boot\_version> F7h

Dec: 240 126 0 6 2 0 32 41 19 17 0 0 <boot\_version> 247

The <app\_version> or <boot\_version> field is 4 bytes long, providing the Application or the Bootloader version respectively. The version is the same version which can be viewed using the lower left green pads on the Bootloader's surface, provided as four bytes, each byte corresponding to one digit, ranging from 0 – 9.

### SysEx message format used by the device

All SysEx messages begin with the following header regardless of direction (Host => Launchpad Mini [MK3] or Launchpad Mini [MK3] => Host):

Hex: F0h 00h 20h 29h 02h 0Dh

Dec: 240 0 32 41 2 13

After the header, a command byte follows, selecting the function to use.

Several of the messages have a readback variant which can be accessed in the following manner:

```
Host => Launchpad Mini [MK3]:  
Hex:   F0h 00h 20h 29h 02h 0Dh <command>   F7h  
Dec:   240 0   32  41  2   13 <command>   247
```

```
Launchpad Mini [MK3] => Host:  
Hex:   F0h 00h 20h 29h 02h 0Dh <command> <data> F7h  
Dec:   240 0   32  41  2   13 <command> <data> 247
```

Where the <data> is formatted in the same manner as normally it would be provided to the Launchpad Mini [MK3] after the command. These readback forms are described for each of the commands where available.

## Selecting layouts

The Launchpad Mini [MK3] has several layouts to choose from, which can be controlled by either the device's User Interface (see the User Guide for more details), or the following SysEx message:

```
Host => Launchpad Mini [MK3]:  
Hex:   F0h 00h 20h 29h 02h 0Dh 00h <layout> F7h  
Dec:   240 0   32  41  2   13  0  <layout> 247
```

Where the available layouts are:

- 00h (0): Session (only selectable in DAW mode)
- 04h (4): Custom mode 1 (Drum Rack by factory default)
- 05h (5): Custom mode 2 (Keys by factory default)
- 06h (6): Custom mode 3 (Lighting mode in Drum Rack layout by factory default)
- 0Dh (13): DAW Faders (only selectable in DAW mode)
- 7Fh (127): Programmer mode

Readback variant is available by the following SysEx message:

```
Host => Launchpad Mini [MK3]:  
Hex:   F0h 00h 20h 29h 02h 0Dh 00h F7h  
Dec:   240 0   32  41  2   13  0   247
```

When selecting Programmer mode using this SysEx message, the Setup entry (holding down Session for half a second) is disabled. To return the Launchpad Mini [MK3] to normal operation, use this SysEx message to select any other layout than Programmer mode.

## Programmer / Live mode switch

There is a dedicated SysEx message for Programmer / Live mode select:

```
Host => Launchpad Mini [MK3]:  
Hex:   F0h 00h 20h 29h 02h 0Dh 0Eh <mode>   F7h  
Dec:   240 0   32  41  2   13  14 <mode>   247
```

Where <mode> is 0 for Live mode, 1 for Programmer mode.

Readback variant is available by the following SysEx message:

Host => Launchpad Mini [MK3]:

Hex: F0h 00h 20h 29h 02h 0Dh 0Eh F7h

Dec: 240 0 32 41 2 13 14 247

When selecting Live mode with this message, Launchpad Mini [MK3] switches to Session layout, or Custom Mode 2 (Keys) when not in DAW mode.

When selecting Programmer mode using this SysEx message, the Setup entry (holding down Session for half a second) is disabled. To return the Launchpad Mini [MK3] to normal operation, use this SysEx message to switch back to Live mode.

## Controlling the Surface

This chapter describes the wide range of possibilities for controlling and lighting up the Launchpad Mini [MK3] surface. If you aim to light Launchpad Mini [MK3]'s surface, this chapter contains all the information you will likely need for it. You can also use these capabilities to realize surfaces for interacting with software, however for that purpose, using the DAW mode is preferable as it keeps the MIDI port free for playing and interacting with virtual instruments. See chapter [Software Interaction](#).

### Switching to Lighting modes

If you aim to control the Launchpad Mini [MK3] using scripts, the best option for lighting pads/buttons or creating an interactive surface is switching to Programmer mode. You can use the Programmer / Live mode switch message to achieve this or access it from the setup menu (hold Session, then press bottom Scene Launch button). Programmer Mode sends out a message for every pad or button that is pressed, and equally lights pads or buttons when the same message is received. Remember to switch the device back to Live mode once done.

Alternatively, you may use Lighting Custom Modes in the same way, but you are limited to interacting only with the 8x8 grid. On a Launchpad Mini [MK3] in its factory default state, Custom mode 3 (User) is set up for lighting pads. You can switch to either of these using the Launchpad Mini [MK3]'s User Interface. In Lighting Custom Modes, you may enable Ghost mode which allows the lighting area to expand beyond the 8x8 grid into the top and side button rows and logo. Access Ghost Mode by pressing the Session and Custom buttons (Drums, Keys and User) in rapid succession.

In a Lighting Custom Mode, Ghost mode is automatically enabled when:

- Sending any Control Change message on the MIDI interface (these can be used to light up the top row of buttons, the logo and the right-side buttons).
- Sending the LED lighting SysEx message.

## Programmer mode layout

CC 91	CC 92	CC 93	CC 94	CC 95	CC 96	CC 97	CC 98	CC 99
81	82	83	84	85	86	87	88	CC 89
71	72	73	74	75	76	77	78	CC 79
61	62	63	64	65	66	67	68	CC 69
51	52	53	54	55	56	57	58	CC 59
41	42	43	44	45	46	47	48	CC 49
31	32	33	34	35	36	37	38	CC 39
21	22	23	24	25	26	27	28	CC 29
11	12	13	14	15	16	17	18	CC 19

CC 5Bh	CC 5Ch	CC 5Dh	CC 5Eh	CC 5Fh	CC 60h	CC 61h	CC 62h	CC 63h
51h	52h	53h	54h	55h	56h	57h	58h	CC 59h
47h	48h	49h	4Ah	4Bh	4Ch	4Dh	4Eh	CC 4Fh
3Dh	3Eh	3Fh	40h	41h	42h	43h	44h	CC 45h
33h	34h	35h	36h	37h	38h	39h	3Ah	CC 3Bh
29h	2Ah	2Bh	2Ch	2Dh	2Eh	2Fh	30h	CC 31h
1Fh	20h	21h	22h	23h	24h	25h	26h	CC 27h
15h	16h	17h	18h	19h	1Ah	1Bh	1Ch	CC 1Dh
0Bh	0Ch	0Dh	0Eh	0Fh	10h	11h	12h	CC 13h

Note that in Programmer mode, all buttons and pads accept either Note or Control Change messages. The indicated type is which is sent by the device on the MIDI interface when the corresponding button or pad is pressed.

## Factory default Lighting Custom Mode layouts

Custom Mode 3 (User):

CC 91	CC 92	CC 93	CC 94	CC 95	CC 96	CC 97	CC 98	CC 99
64	65	66	67	96	97	98	99	CC 89
60	61	62	63	92	93	94	95	CC 79
56	57	58	59	88	89	90	91	CC 69
52	53	54	55	84	85	86	87	CC 59
48	49	50	51	80	81	82	83	CC 49
44	45	46	47	76	77	78	79	CC 39
40	41	42	43	72	73	74	75	CC 29
36	37	38	39	68	69	70	71	CC 19

CC 5Bh	CC 5Ch	CC 5Dh	CC 5Eh	CC 5Fh	CC 60h	CC 61h	CC 62h	CC 63h
40h	41h	42h	43h	60h	61h	62h	63h	CC 59h
3Ch	3Dh	3Eh	3Fh	5Ch	5Dh	5Eh	5Fh	CC 4Fh
38h	39h	3Ah	3Bh	58h	59h	5Ah	5Bh	CC 45h
34h	35h	36h	37h	54h	55h	56h	57h	CC 3Bh
30h	31h	32h	33h	50h	51h	52h	53h	CC 31h
2Ch	2Dh	2Eh	2Fh	4Ch	4Dh	4Eh	4Fh	CC 27h
28h	29h	2Ah	2Bh	48h	49h	4Ah	4Bh	CC 1Dh
24h	25h	26h	27h	44h	45h	46h	47h	CC 13h

## Colour palette

When providing colours by MIDI notes or control changes, the colours are chosen according to the following table, decimal:

0	1	2	3	4	5	6	7	64	65	66	67	68	69	70	71
8	9	10	11	12	13	14	15	72	73	74	75	76	77	78	79
16	17	18	19	20	21	22	23	80	81	82	83	84	85	86	87
24	25	26	27	28	29	30	31	88	89	90	91	92	93	94	95
32	33	34	35	36	37	38	39	96	97	98	99	100	101	102	103
40	41	42	43	44	45	46	47	104	105	106	107	108	109	110	111
48	49	50	51	52	53	54	55	112	113	114	115	116	117	118	119
56	57	58	59	60	61	62	63	120	121	122	123	124	125	126	127

The same table with hexadecimal indexing:

00	01	02	03	04	05	06	07	40	41	42	43	44	45	46	47
08	09	0A	0B	0C	0D	0E	0F	48	49	4A	4B	4C	4D	4E	4F
10	11	12	13	14	15	16	17	50	51	52	53	54	55	56	57
18	19	1A	1B	1C	1D	1E	1F	58	59	5A	5B	5C	5D	5E	5F
20	21	22	23	24	25	26	27	60	61	62	63	64	65	66	67
28	29	2A	2B	2C	2D	2E	2F	68	69	6A	6B	6C	6D	6E	6F
30	31	32	33	34	35	36	37	70	71	72	73	74	75	76	77
38	39	3A	3B	3C	3D	3E	3F	78	79	7A	7B	7C	7D	7E	7F

## Sending colours by MIDI events

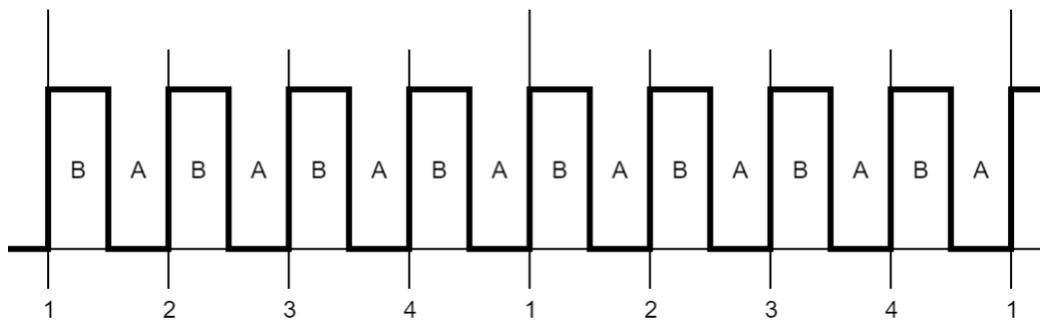
In Lighting Custom Modes (and Programmer mode) the Launchpad Mini [MK3] accepts colours through the MIDI interface. Channels are used as follows:

- Channel 1, Notes: 90h (144), Control Changes: B0h (176): Static colour.
- Channel 2, Notes: 91h (145), Control Changes: B1h (177): Flashing colour.
- Channel 3, Notes: 92h (146), Control Changes: B2h (178): Pulsing colour.

The Note number selects the pad to control (as shown on the layout mappings) and the velocity the colour to use (as shown on the [colour palette](#)). Similarly, for Control Changes the CC number selects the pad to control and the value the colour to use.

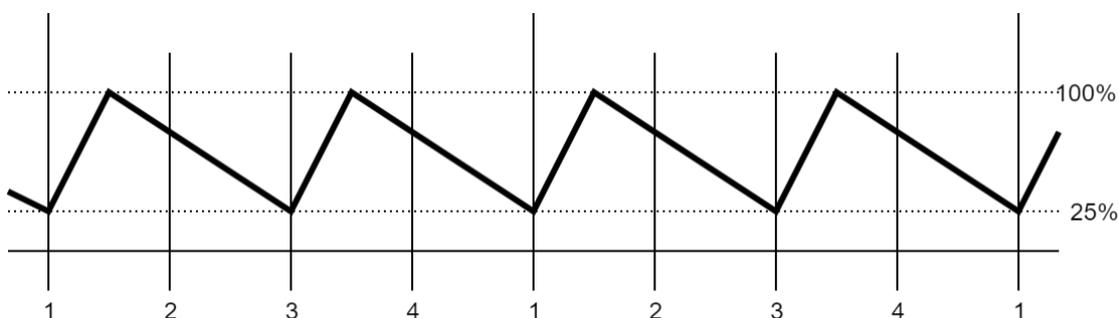
### Flashing colour

When sending Flashing colour, the colour flashes between that set as Static or Pulsing colour (A), and that contained in the MIDI event setting flashing (B), at 50% duty cycle, synchronized to the MIDI beat clock (or 120bpm or the last clock if no clock is provided). One period is one beat long.



### Pulsing colour

The colour pulses between dark and full intensity synchronized to the MIDI beat clock (or 120bpm or the last clock if no clock is provided). One period is two beats long, using the following waveform:



## Examples

For these examples, switch the Launchpad into Programmer Mode.

Lighting the lower left pad static red:

```
Host => Launchpad Mini [MK3]:  
Hex:   90h 0Bh 05h  
Dec:   144 11 5
```

This is Note On, Channel 1, Note number 0Bh (11), with Velocity 05h (5). The Channel specifies the lighting mode (static), the Note number the pad to light (which is the lower left one in Programmer mode), the Velocity the colour (which is Red, see [Colour Palette](#)).

Flashing the upper left pad green:

```
Host => Launchpad Mini [MK3]:  
Hex:   91h 51h 13h  
Dec:   145 81 19
```

This is Note On, Channel 2, Note number 51h (81), with Velocity 13h (19). The Channel specifies the lighting mode (flashing), the Note number the pad to light (which is the upper left one in Programmer mode), the Velocity the colour (which is Green, see [Colour Palette](#)).

Pulsing the lower right pad blue:

```
Host => Launchpad Mini [MK3]:  
Hex:   92h 12h 2Dh  
Dec:   146 18 45
```

This is Note On, Channel 3, Note number 12h (18), with Velocity 2Dh (45). The Channel specifies the lighting mode (pulsing), the Note number the pad to light (which is the lower right one in Programmer mode), the Velocity the colour (which is Blue, see [Colour Palette](#)).

Turning a colour off:

```
Host => Launchpad Mini [MK3]:  
Hex:   90h 12h 00h  
Dec:   144 18 0
```

This is Note Off (Note On with Velocity of zero), Channel 1, Note number 12h (18), with Velocity 00h (0). The Channel specifies the lighting mode (static), the Note number the pad to light (which is the lower right one in Programmer mode), the Velocity the colour (which is blank, see [Colour Palette](#)). If the Pulsing colour was set up there with the previous message, this would turn it off. Alternatively, a Midi Note Off message can also be used for the same effect:

```
Host => Launchpad Mini [MK3]:  
Hex:   80h 12h 00h  
Dec:   128 18 0
```

## LED lighting SysEx message

This message can be sent to Lighting Custom Modes and the Programmer mode to light up LEDs. The LED indices used always correspond to those of Programmer mode, regardless of the layout selected:

Host => Launchpad Mini [MK3]:

Hex: F0h 00h 20h 29h 02h 0Dh 03h <colourspec> [<colourspec> [...]] F7h

Dec: 240 0 32 41 2 13 3 <colourspec> [<colourspec> [...]] 247

The <colourspec> is structured as follows:

- Lighting type (1 byte)
- LED index (1 byte)
- Lighting data (1 – 3 bytes)

Lighting types:

- 0: Static colour from [palette](#), Lighting data is 1 byte specifying palette entry.
- 1: Flashing colour, Lighting data is 2 bytes specifying Colour B and Colour A.
- 2: Pulsing colour, Lighting data is 1 byte specifying palette entry.
- 3: RGB colour, Lighting data is 3 bytes for Red, Green and Blue (127: Max, 0: Min).

The message may contain up to 81 <colourspec> entries to light up the entire Launchpad Mini [MK3] surface.

Example:

Host => Launchpad Mini [MK3]:

Hex: F0h 00h 20h 29h 02h 0Dh 03h 00h 0Bh 0Dh 01h 0Ch 15h 17h 02h 0Dh 25h F7h

Dec: 240 0 32 41 2 13 3 0 11 13 1 12 21 23 2 13 37 247

Sending this message to the Launchpad Mini [MK3] in Programmer layout sets up the bottom left pad to static yellow, the pad next to it to flashing green (between dim and bright green), and the pad next to that pulsing turquoise.

## Software Interaction

This chapter describes the means to interact with the Launchpad Mini [MK3] by DAW (Digital Audio Workstation) or DAW like software. This mostly involves interacting with the Session layout to realize surfaces through which the DAW may provide its user interface.

### Enabling / disabling DAW mode

Launchpad Mini [MK3] must be switched into DAW mode before software may interact with it. When DAW mode is enabled, the Session button will light and become available to press.

When the DAW/software exits, it should send SysEx to revert the device to Standalone mode. Doing this ensures that all the state is cleared, and the device remains useful as a standalone device once the DAW is done using it (without power cycling to restore it).

When entering DAW mode, all DAW states start cleared.

The SysEx message is as follows:

```
Host => Launchpad Mini [MK3]:  
Hex:   F0h 00h 20h 29h 02h 0Dh 10h <mode> F7h  
Dec:   240 0 32 41 2 13 16 <mode> 247
```

Where <mode> is 0 for Standalone, 1 for DAW (Session / DAW Fader layouts enabled).

Readback variant is available by the following SysEx message:

```
Host => Launchpad Mini [MK3]:  
Hex:   F0h 00h 20h 29h 02h 0Dh 10h F7h  
Dec:   240 0 32 41 2 13 16 247
```

### The DAW In/Out interface

The DAW should interact with the Launchpad Mini [MK3] through the USB DAW In/Out interface. MIDI events sent on this interface control the DAW state within the Launchpad Mini [MK3] as follows:

- Channel 1, Notes: 90h (144), Control Changes: B0h (176): Static colour on Session layout.
- Channel 2, Notes: 91h (145), Control Changes: B1h (177): Flashing colour on Session layout.
- Channel 3, Notes: 92h (146), Control Changes: B2h (178): Pulsing colour on Session layout.
- Channel 5, Control Changes: B4h (180): DAW Fader position sets.
- Channel 6, Control Changes: B5h (181): DAW Fader colour sets.
- Channel 16, Notes: 9Fh (159): External note injection on all External MIDI channels.

The Launchpad Mini [MK3] sends button and pad events to the DAW as follows:

- Channel 1, Notes: 90h (144), Control Changes: B0h (176): Session layout activities.
- Channel 5, Control Changes: B4h (180): DAW fader activities.

For the available colours, see the [colour palettes](#) in the Controlling the Surface chapter.

Note that Aftertouch (either as key aftertouch or channel pressure depending on configuration) is also sent on the appropriate channels (Channel 1 for Session).

These interactions are all available regardless of which layout is selected on the Launchpad Mini [MK3], and the state set up by the MIDI events is preserved even when it is not visible (the Launchpad Mini [MK3] is not on the corresponding layout).

Text scrolling can also be used in DAW mode as desired to display information, the text scroll overlaying on top of the surface without affecting it.

## DAW state clear

This message can be used as a shortcut to clear DAW state, instead of sending out all the corresponding MIDI events with a data value of zero:

Host => Launchpad Mini [MK3]:

Hex: F0h 00h 20h 29h 02h 0Dh 12h <session> 00h <controlchanges> F7h

Dec: 240 0 32 41 2 13 18 <session> 0 <controlchanges> 247

Each of <session> and <controlchange> can be either 0 to keep the corresponding state intact or 1 to clear it. Clearing is equivalent of sending 128 MIDI events with value of zero as follows:

- <session>: 90h (144) (Session layout Note states)
- <controlchange>: B0h (176) (Control Change states)

Example:

Host => Launchpad Mini [MK3]:

Hex: F0h 00h 20h 29h 02h 0Dh 12h 01h 00h 00h F7h

Dec: 240 0 32 41 2 13 18 1 0 0 247

This message clears the Session layout Note states without affecting the Control Change states.

## Session mode

Session mode is selectable by the Session button, it is the surface on which most interactions should take place. Its layout is as follows:

CC 91	CC 92	CC 93	CC 94	CC 95	CC 96	CC 97	CC 98	CC 99
81	82	83	84	85	86	87	88	CC 89
71	72	73	74	75	76	77	78	CC 79
61	62	63	64	65	66	67	68	CC 69
51	52	53	54	55	56	57	58	CC 59
41	42	43	44	45	46	47	48	CC 49
31	32	33	34	35	36	37	38	CC 39
21	22	23	24	25	26	27	28	CC 29
11	12	13	14	15	16	17	18	CC 19

CC 5Bh	CC 5Ch	CC 5Dh	CC 5Eh	CC 5Fh	CC 60h	CC 61h	CC 62h	CC 63h
51h	52h	53h	54h	55h	56h	57h	58h	CC 59h
47h	48h	49h	4Ah	4Bh	4Ch	4Dh	4Eh	CC 4Fh
3Dh	3Eh	3Fh	40h	41h	42h	43h	44h	CC 45h
33h	34h	35h	36h	37h	38h	39h	3Ah	CC 3Bh
29h	2Ah	2Bh	2Ch	2Dh	2Eh	2Fh	30h	CC 31h
1Fh	20h	21h	22h	23h	24h	25h	26h	CC 27h
15h	16h	17h	18h	19h	1Ah	1Bh	1Ch	CC 1Dh
0Bh	0Ch	0Dh	0Eh	0Fh	10h	11h	12h	CC 13h

The top row's Session and Custom buttons are not available for control by the DAW, however they still send the corresponding CC messages on interaction, allowing the DAW to catch relevant events as the user interacts with the device (layout changes). All the other pads and buttons (as well as the logo) are available, and reflect the state set up by the corresponding MIDI events.

## DAW Faders

The DAW can use the DAW Fader layout to set up banks of faders. There are up to 8 faders on a fader bank, which all share orientation (either horizontal or vertical), however each may be configured individually to be either unipolar or bipolar.

CC 91	CC 92	CC 93	CC 94	CC 95	CC 96	CC 97	CC 98	CC 99
127	127	7Fh	7Fh	127	127	7Fh	7Fh	CC 89
108	108	6Ch	6Ch	106	106	6Ah	6Ah	CC 79
89	89	59h	59h	85	85	55h	55h	CC 69
70	70	46h	46h	64	64	40h	40h	CC 59
52	52	34h	34h	63	63	3Fh	3Fh	CC 49
34	34	22h	22h	42	42	2Ah	2Ah	CC 39
17	17	11h	11h	21	21	15h	15h	CC 29
0	0	00h	00h	0	0	00h	00h	CC 19

CC 5Bh	CC 5Ch	CC 5Dh	CC 5Eh	CC 5Fh	CC 60h	CC 61h	CC 62h	CC 63h
0	17	34	52	70	89	108	127	CC 59h
0	17	34	52	70	89	108	127	CC 4Fh
00h	11h	22h	34h	46h	59h	6Ch	7Fh	CC 45h
00h	11h	22h	34h	46h	59h	6Ch	7Fh	CC 3Bh
0	21	42	63	64	85	106	127	CC 31h
0	21	42	63	64	85	106	127	CC 27h
00h	15h	2Ah	3Fh	40h	55h	6Ah	7Fh	CC 1Dh
00h	15h	2Ah	3Fh	40h	55h	6Ah	7Fh	CC 13h

## DAW Fader bank set-up

The DAW Fader bank can be set up using the following SysEx message:

```
Host => Launchpad Mini [MK3]:  
Hex:   F0h 00h 20h 29h 02h 0Dh 01h 00h <orientation> <fader> [<fader> [...]] F7h  
Dec:   240 0 32 41 2 13 1 0 <orientation> <fader> [<fader> [...]] 247
```

The <orientation> byte can be 0 for Vertical faders or 1 for Horizontal faders.

The <fader> entry specifies the configuration of one fader as follows:

- Fader index (1 byte), 0 – 7, left to right (vertical) or top to bottom (horizontal).
- Fader type (1 byte), 0: Unipolar, 1: Bipolar.
- Control Change associated (1 byte).
- Fader's colour (1 byte), a [palette](#) entry.

The fader's colour can be set to 0, this may be used to disable the fader (as it will not show on the surface then).

The message may contain up to 8 <fader> entries to set up the entire DAW Fader bank.

Readback variant is available by the following SysEx message:

```
Host => Launchpad Mini [MK3]:  
Hex:   F0h 00h 20h 29h 02h 0Dh 01h F7h  
Dec:   240 0 32 41 2 13 1 247
```

Example:

```
Host => Launchpad Mini [MK3]:  
Hex:   F0h 00h 20h 29h 02h 0Dh 01h 00h 00h 00h 00h 07h 25h 01h 01h 08h 15h F7h  
Dec:   240 0 32 41 2 13 1 0 0 0 0 7 37 1 1 8 21 247
```

```
Host => Launchpad Mini [MK3]:  
Hex:   F0h 00h 20h 29h 02h 0Dh 00h 0Dh F7h  
Dec:   240 0 32 41 2 13 0 13 247
```

The first message populates a DAW Fader bank with:

- Vertical orientation
- A turquoise unipolar fader on the leftmost column set to CC 7
- A green bipolar fader in the next column along set to CC 8

The second message switches to the fader layout (blank by default). DAW Mode must be enabled for these messages to work. Keep in mind that the state of the fader layout persists even when switching away from it, so it is recommended to set up the faders first and switch to the layout afterwards when a new fader layout is to be set up to prevent the previous state momentarily showing up when switching from a different layout.

## DAW Session button colour set

This message can be used to change the active and inactive colours of the Session button:

```
Host => Launchpad Mini [MK3]:  
Hex:   F0h 00h 20h 29h 02h 0Dh 14h <active> <inactive> F7h  
Dec:   240 0 32 41 2 13 20 <active> <inactive> 247
```

Each of <active> and <inactive> is a [palette](#) entry. Setting <active> to zero reverts to the default colours. When entering DAW mode, the Session button always has the default colouring.

Readback variant is available by the following SysEx message:

```
Host => Launchpad Mini [MK3]:  
Hex:   F0h 00h 20h 29h 02h 0Dh 14h F7h  
Dec:   240 0 32 41 2 13 20 247
```

## Miscellaneous surface control

### Text scrolling

The Launchpad Mini [MK3] can display scrolling text across the pads and the right-side buttons. The top row buttons and the logo is not affected by the scroll, and any lighting covered by the scroll is retained (will return once the scroll is stopped or completed).

Host => Launchpad Mini [MK3]:

Hex: F0h 00h 20h 29h 02h 0Dh 07h [<loop> [<speed> [<colourspec> [<text>]]]] F7h

Dec: 240 0 32 41 2 13 7 [<loop> [<speed> [<colourspec> [<text>]]]] 247

- <loop> (1 byte) specifies whether the text should loop, 0: don't loop, 1: loop.
- <speed> (1 byte) is the scrolling speed expressed in pads / second units.
- <colourspec> (2 – 4 bytes) is a colour specification.
- <text> is the text to display.

The colour specification <colourspec>:

- If first byte is 0, then the next byte is colour from [palette](#), 2 bytes total.
- If first byte is 1, then Red, Green and Blue follows (127: Max, 0: Min), 4 bytes total.

When the message is empty:

Host => Launchpad Mini [MK3]:

Hex: F0h 00h 20h 29h 02h 0Dh 07h F7h

Dec: 240 0 32 41 2 13 7 247

Any text scroll which was ongoing is terminated.

Omitting <text> results in changing the currently scrolling text's configuration (looping, speed or colour). Turning off looping for a text scroll which was looping results in ending the scroll after the text completely scrolled out of the surface.

If <speed> is 40h or above, it is interpreted as a negative number, formed by subtracting 80h from it (text scrolls from left to right).

Example:

Host => Launchpad Mini [MK3]:

Hex: F0h 00h 20h 29h 02h 0Dh 07h 01h 07h 00h 25h 48h 65h 6Ch 6Ch 6Fh 20h 57h 6Fh 72h 6Ch 64h F7h

Dec: 240 0 32 41 2 13 7 1 7 0 37 72 101 104 104 111 32 87 111 114 104 100 247

This message will make the Launchpad displaying "Hello World" scrolling across its surface.

- Yellow: Sets Looping to enabled.
- Green: Sets Speed to 7 pads / seconds.
- Turquoise: Sets the colour of the text to turquoise.
- Grey: The text to display, it is the ASCII codes of the string "Hello World".

## Power management

This chapter contains messages used for accessing power management features of the Launchpad Mini [MK3].

### Sleep SysEx message

The Sleep message can be used to turn off all lights until turning them back on with this message or interacting with the device:

```
Host => Launchpad Mini [MK3]:  
Hex:   F0h 00h 20h 29h 02h 0Dh 09h <mode> F7h  
Dec:   240 0 32 41 2 13 9 <mode> 247
```

Where <mode> is 0 to turn the LEDs Off, 1 to turn them back On.

Readback variant is available by the following SysEx message:

```
Host => Launchpad Mini [MK3]:  
Hex:   F0h 00h 20h 29h 02h 0Dh 09h F7h  
Dec:   240 0 32 41 2 13 9 247
```

## Configuration messages

The messages described further can be used to change various settings of the Launchpad Mini [MK3].

### Brightness level

This message sets the Launchpad Mini [MK3]'s brightness level on a 0 – 127 scale. Value 0 corresponds to the lowest brightness level, 127 to the highest. This setting is normally available on the LED view of the Setup menu, where 8 brightness levels can be set.

```
Host => Launchpad Mini [MK3]:  
Hex:   F0h 00h 20h 29h 02h 0Dh 08h <brightness>F7h  
Dec:   240 0 32 41 2 13 8 <brightness>247
```

Readback variant is available by the following SysEx message:

```
Host => Launchpad Mini [MK3]:  
Hex:   F0h 00h 20h 29h 02h 0Dh 08h F7h  
Dec:   240 0 32 41 2 13 8 247
```

### LED Feedbacks

This message sets the Internal and External Feedbacks, which are normally available on the LED view of the Setup menu:

- Internal Feedback: Whether notes played, or controls activated should light up.
- External Feedback: Whether MIDI notes coming from the MIDI In / Out interface should light up corresponding pads.

```
Host => Launchpad Mini [MK3]:  
Hex:   F0h 00h 20h 29h 02h 0Dh 0Ah <internal> <external> F7h  
Dec:   240 0 32 41 2 13 10 <internal> <external> 247
```

For both <internal> and <external>, 0 corresponds to inactive, 1 to active.

Readback variant is available by the following SysEx message:

```
Host => Launchpad Mini [MK3]:  
Hex:   F0h 00h 20h 29h 02h 0Dh 0Ah F7h  
Dec:   240 0 32 41 2 13 10 247
```

## SysEx command summary

The following table summarizes the SysEx messages occurring in this document for a quick reference.

Parameter Name	Command Code	Value 1	Value 2	Value 3	Value 4	Repeatable?	Read back
<a href="#">Select Layout</a>	00h (0)	<layout>	-	-	-	-	Yes
<a href="#">DAW Fader Setup</a>	01h (1)	00h (0)	<orientation>	<fader>	-	<fader> only	Yes
<a href="#">LED Lighting</a>	03h (3)	<colourspec>	-	-	-	<colourspec>	No
<a href="#">Text Scrolling</a>	07h (7)	<loop>	<speed>	<colour spec>	<text>	-	No
<a href="#">Brightness Level</a>	08h (8)	<brightness>	-	-	-	-	Yes
<a href="#">LED Sleep</a>	09h (9)	<mode>	-	-	-	-	Yes
<a href="#">LED Feedback</a>	0Ah (10)	<internal>	<external>	-	-	-	Yes
<a href="#">Programmer/Live Toggle</a>	0Eh (14)	<mode>	-	-	-	-	Yes
<a href="#">DAW / Standalone</a>	10h (16)	<mode>	-	-	-	-	Yes
<a href="#">Clear DAW state</a>	12h (18)	<session>	<unused>	<control changes>	-	-	No
<a href="#">Session Colour</a>	14h (20)	<active>	<inactive>	-	-	-	Yes