Fender® MOTION 16

16-Pad Production and Performance Controller

OWNER'S MANUAL

Version 1

Table of Contents

Introduction

Thank you for purchasing the Fender® Motion 16 production and performance pad controller! Fender Motion Controllers put expressive, professional-grade control in your hands, with unrivaled integration for Fender Studio Pro that keeps creativity flowing from first idea to final performance. Smart, context-aware pads adapt seamlessly between drums, melodies, and chords, while navigation arrows and illuminated encoders provide hands-on control over playback, editing, and mixing—eliminating the need to hunt through menus or reach for a mouse.

While Motion unlocks unique workflows for Fender Studio Pro users, its dynamic FATAR® pads deliver unmatched playability and touch responsiveness, and vibrant illuminated encoders elevate the experience for every creator. Like a true instrument, Motion invites you to improvise with intelligent scales, explore 30 iconic chord progressions, shape sound through expressive touch strips, and stay fully immersed in the creative flow. Built for musicians, beatmakers, and producers, Motion is a flexible MIDI controller for songwriting, beatmaking, finger drumming, sequencing, and more—empowering you to break through creative blocks and bring ideas to life.

About this manual: We suggest that you use this manual to familiarize yourself with the features of your Motion 16 before trying to connect it to your computer. This will help you to get better performances and faster results.

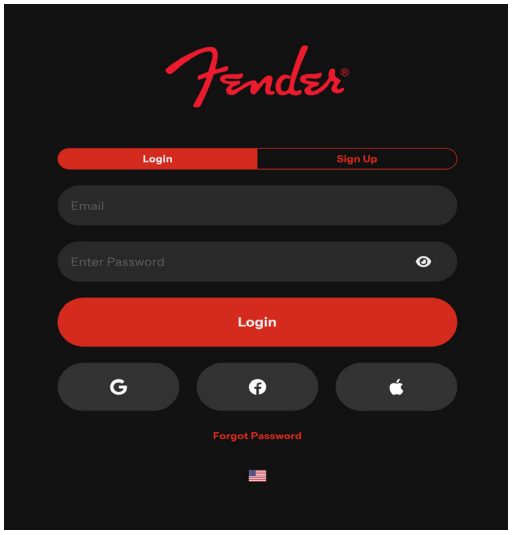
Getting Started

To ensure you've regisitered your device, connected to Universal Control and taken advantage of all of the MyFender downloads, please follow the steps detailed in the sections below.

Product Registration

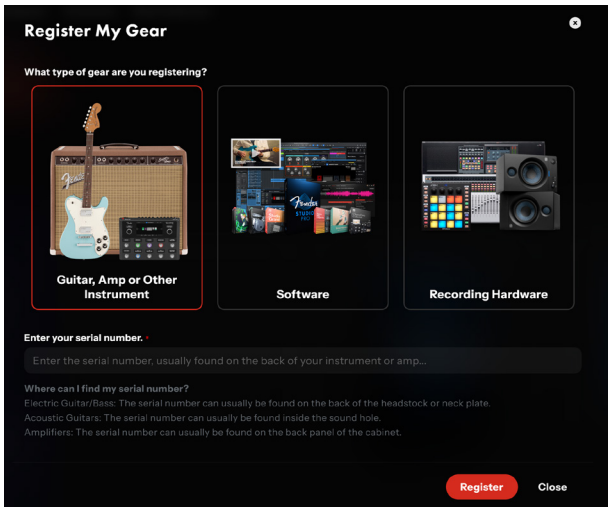
Before connecting to a computer, please visit my.fender.com and follow these steps to register your Motion:

1. Visit *http://my.fender.com* and create or log into your user account.



2. At the top of your MyFender homepage, click onto the "Register Products" button:

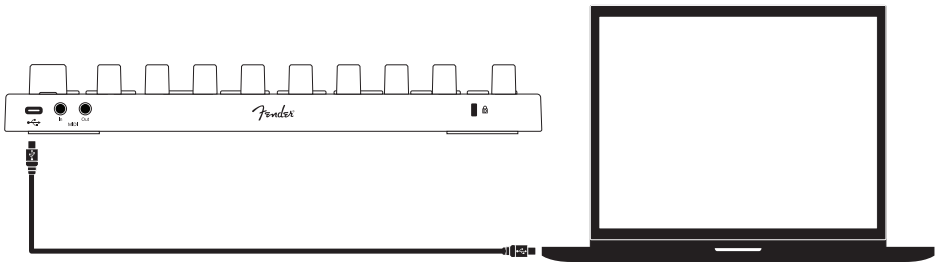
3. After clicking, a dialog window will appear. From the dialog window, specify the date you purchased your Motion 16 and the serial number on your device. After you're done, click "Register":



4. After clicking Register, another dialog window will appear where you can initiate your Fender Studio Pro downloads.
5. To download Universal Control, navigate to the Motion 16 product page from your MyFender homepage. The Universal Control download link will be located directly underneath the Motion 16 product picture.

Universal Control Installation

Connect your Motion to an available USB-C port and launch the installer.



The Universal Control installer will take you through each step of the installation process. Please read each message carefully. It is recommended that you quit all applications before you start the installation. Universal Control installs any necessary firmware updates, so it is highly recommended that you install this application.

Note for macOS users: When the installation is complete, you will find the Universal Control application in your Applications folder. It is recommended that you place this in your Dock for easy access.

What's in your MyFender Account

Once you register your Motion 16, you will be able to download the following:

Fender Studio Pro recording software and content

Universal Control (necessary for firmware updates)

Firmware Updates

Fender is committed to constant product improvement. As part of this commitment, we offer periodic firmware updates that add features, improve functionality, and resolve issues that are discovered in the field. Because of this, it is highly recommended that you download Universal Control from your MyFender account after registering your Motion 16.

At the time of this manual's publication, **a firmware update is required for full functionality of your Motion 16**. You must download and install Universal Control and run the firmware update on your unit. During installation, you will be given the option to install various Fender audio drivers. No driver installation is required to use the Motion 16.

Once installed, connect your Motion 16 to your computer. Your Motion 16 is entirely bus powered.

Universal Control will alert you if there is new firmware available for your Motion 16. Clicking on the "Update Firmware" button will begin the update process. When the firmware update is complete, your Motion 16 will reboot automatically.

Hardware Features

The following section provides an overview of the top and back panel connections and controls for the Fender Motion 16.

Note: Motion controllers are deeply integrated with Fender Studio Pro. Some of these integrations will be mentioned in this Owner's Manual, but if you would like a deeper dive into how you can best use the Fender Motion 16 in Studio Pro, **please refer to the "Motion 16 Studio Pro Integration User Manual."**

Top Panel

Volume Encoder

This single encoder (far-left) is independent of the 8 control encoders. When used with Studio Pro, it adjusts the volume of whichever track is currently selected. When used without Studio Pro, the encoder can be assigned in your DAW.

Control Encoders

The Motion 16 has eight, capacitive touch encoders with light halos. Each Control Encoder is used to change an assigned hardware or software parameter's value and position.

Control Encoders 1 - 8 send a MIDI CC message with a value range of 0-127 dependent on the "position" of the encoder. The default position is 0 (first time out of the box), or the minimum value. As an encoder is turned clockwise, the value increases in steps to a maximum value of 127. When turned counterclockwise the value decreases in steps to a minimum value of 0.

The position of the encoders as well as the associated MIDI CC number is shown on the screen when the screen is in Control focus mode:

Minimum ***Halfway*** ***Maximum***

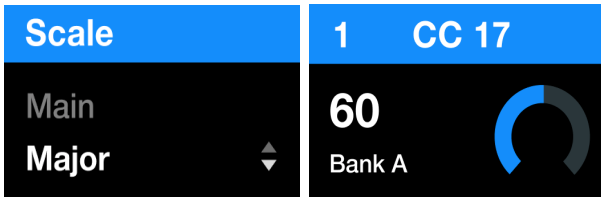
When an encoder is touched but not turned, that encoder is "selected" and the screen will switch to show the position of the encoder being touched.

Encoder 1 Selected:

Encoder 2 Selected:

If a different screen mode, such as Scale or Chord is active, simply touching a Control Encoder will temporarily change the screen to display the Inspect screen for the Control Encoder. This allows quick access to "inspect" encoder assignments and positions when in different menus.

No Touch ***Touch (Inspect)***



If two encoders are touched at the same time, the last touched encoder will be shown on screen.

When turning more than one control encoder, the inspect screen will not show but changes to encoder position will take place.

Control Encoder Banks

Control Encoders (1-8) have two separate banks, A and B.

To change to either Bank A or B:

1. Turn the screen encoder counterclockwise for Bank A (blue encoders)
2. Turn the screen encoder clockwise for Bank B (green encoders)

Control Display

When Control mode is selected, the display will show information about the currently selected encoder:

- **Control Encoder Number:** Shows the encoder number associated with the assignment (1 - 8).
- **Control Encoder Assignment:** Shows the name of a Control Encoder's MIDI CC assignment.
- **Control Encoder MIDI Value:** Shows the current encoder MIDI CC value.
- **Control Encoder Position Ring:** Shows the current encoder position for a specified MIDI CC parameter.
- **Control Encoder Bank:** Shows the current bank of encoders (Banks A or B).

Touch Strips

The Motion 16 has one touch strip. This strip allows you to control hardware or software parameters like Pitch Bend or Modulation with touch gestures instead of having to use a wheel, fader, or knob.

The position of the touch strip is indicated by where or how many LEDs are illuminated.

When using pitch bend on the touch strip:

1. Pitch bend's starting position is always center (LED in center).
2. Slide left or right from center to affect pitch up or down (the LEDs will follow your finger).
3. Jump to a new pitch position by touching a point to the left or right of center (the LEDs will jump to your finger).
4. Pitch bend will always return to center on release.

Center ***Pitch Up*** ***Pitch Down***

Secondary Assignments

The Touch Strip also has a secondary assignment when the Shift button is held (momentary). When the Shift button is held, the Pitch Bend touch strip changes to the MIDI Modulation parameter. The LEDs will change to green reflecting the active parameter's position.

When using modulation on the touch strip:

1. Modulation's starting position is always the far left LED (minimum).
2. Slide right or left to modulate up or down (the LEDs will follow your finger).
3. Jump to a new modulation position by touching a point to the right of the left LED (the LEDs will jump to your finger).
4. Modulation will stay at the last position your finger was in.

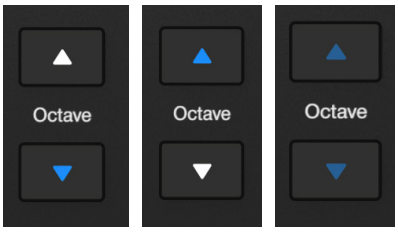
No Modulation (default) ***Max Modulation***

Octave Up & Down

These two buttons will transpose all pads either up or down by 1 musical octave (12 MIDI steps) globally and also affects some Scale and Chord modes.

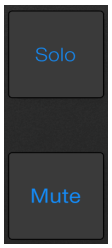
When there is no change to octave, the up and down arrows are blue. If there is a change, then the change is reflected in the color of the arrow that is pressed.

Oct Up ***Oct Down*** ***N/A***



When either octave button is pressed, the screen will temporarily display the change then go back to the previous screen.

Solo & Mute Buttons



These two buttons are used to Solo and Mute selected tracks in Studio Pro. When Solo is active, the button will be illuminated yellow. When Mute is active, the button will be illuminated red.

When not in Studio Pro, each button sends its own MIDI CC message that can be used for different hardware or software functions.

16-Velocity Button

16-velocity mode takes a single note and copies it across all pads, each with a different but fixed velocity. This is useful when recording hi-hats or snare drums and you want to "accent" a note every once in a while.

To use 16-velocity:

1. Select a pad from any bank by striking it.
2. Press the 16-Velocity button:

3. The selected note will now be copied to all pads, each with a fixed velocity value:

4. The most dim pad (Pad 1) is the softest sound and the most bright pad (Pad 16) is the loudest.
5. To select a different note, press 16 again to return to pad banks / notes and strike a new pad or press an A - H button to jump to that bank then select a note.

Exiting 16-velocity mode will return to the last known pad note layout with normal velocities.

Note:

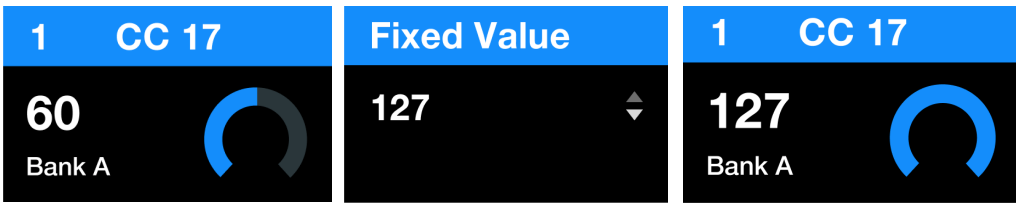
- 16- and Fixed-velocity modes cannot be used at the same time.
- 16-velocity mode is not available while in scale or chord modes.

Fixed Button

When active (red), striking a pad will only send a fixed MIDI velocity value such as 127. This is useful when a pad has a loop or other musical sample assigned to it and it needs to be played back at full volume.

If the button is continuously held, the Screen will display the current Fixed Value. Turning the Screen Encoder will allow the Fixed value to be changed. When the button is released, the new Fixed Value will be saved.

Fixed On or Off ***Fixed Held*** ***Release***



Preset Up & Down Buttons

These two buttons are used exclusively in Studio Pro to navigate Instrument, Note FX, or FX presets. These buttons have no function when not connected to Studio Pro.

Pads Button

The Pad button illuminates white when selected and focuses the A-H buttons on changing to different Pad Banks. Bank A is always selected by default when your Motion is powered on.

Repeat Button

This button is used exclusively in Studio Pro and has no function when not connected to Studio Pro.

Clips Button

This button is used exclusively in Studio Pro and has no function when not connected to Studio Pro.

Scenes Button

This button is used exclusively in Studio Pro and has no function when not connected to Studio Pro.

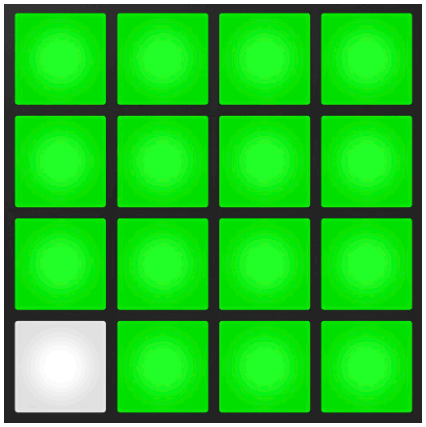
A-H Buttons

Drum Bank

The A - H buttons select which drum bank is represented on the pads.

To change banks:

1. Press an A - H button to select a new bank.
2. The selected pad bank button (B in the example below) will turn white:



Pads

Motion pads respond to both strikes (velocity) and pressure (aftertouch, mono- or poly-). The pads can change colors which can be used to quickly identify pad banks, scales, and other pad layouts "at-a-glance."

Pad Commands

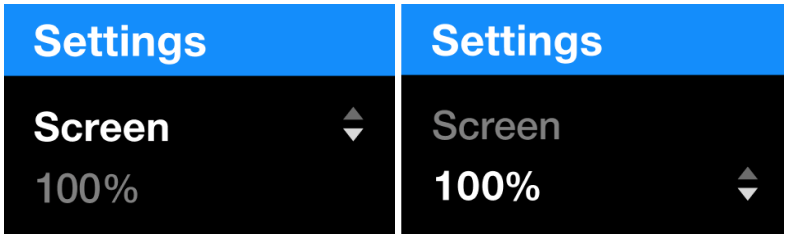
Commands written on the pads (ex., Copy, Paste, Redo, etc.) are used in Studio Pro exclusively.

Global Settings Button

Pressing the Settings buttons takes you to the Motion's global settings screen immediately, regardless of which Motion mode you are in.

Turn the navigation encoder to select a different setting. Press the encoder to switch focus to a value for editing (press again to return to navigation).

Setting Selected ***Value Selected to Edit***



Global Settings include the following:

- **Screen:** Adjusts the overall brightness of the screen from a maximum of 100% to a minimum of 1%.
- **LEDs:** Adjusts the overall brightness of all LEDs from a maximum of 100% to off (0%).
- **DAW Mode:** Changes the transport to work with some third party DAWs.
- **Pressure:** Changes the type of pressure (aftertouch) message sent after the initial strike.
- **Pressure Feel:** Switches between Drum (default), where the initial aftertouch value matches the strike velocity, and Piano, where it starts at zero and rises with added pressure.
- **Pad Curve:** Changes how pads interpret pad strikes.
- **Encoder Curve:** Changes how much of a multiplier is applied to control encoders when turned.
- **Reset Settings:** To reset all global settings to factory defaults, press the encoder to select Press & Hold, then hold the encoder to reset.
- **Current Firmware:** Displays the current firmware version installed on the device. Useful when troubleshooting alongside the Support team.

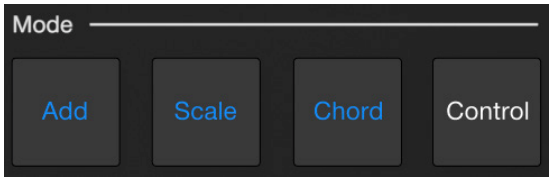
Note:

- *All changes to settings are saved when exiting Global Settings by pressing the Global Settings button again.*
- *Press and hold the Global Settings button to enter sleep mode.*

Replace and Load Buttons

These buttons are used exclusively in Studio Pro and have no function when not connected to Studio Pro.

Mode Buttons



Add Button

This button is used exclusively in Studio Pro and has no function when not connected to Studio Pro.

Scale Button

Scale mode makes it easy to explore melodies in a set key without “wrong” notes. When the Scale button is active (white), the 16 pads can be "locked" to a specific type of scale as well as start on different root notes (keys).

To change the Main scale:

1. Make sure that Main is selected in the top row.
2. Press the screen encoder to change its focus to the bottom row.
3. Turn the screen encoder to select a new scale (changes are made instantly).

To change the Mode scale:

1. Make sure that Modes is selected in the top row.
2. Press the screen encoder to change its focus to the bottom row.
3. Turn the screen encoder to select a new scale (changes are made instantly).

To change the Key, or root note of a scale:

1. Make sure that Key is selected in the top row.
2. Press the screen encoder to change its focus to the bottom row.
3. Turn the screen encoder to select a new key (changes are made instantly).

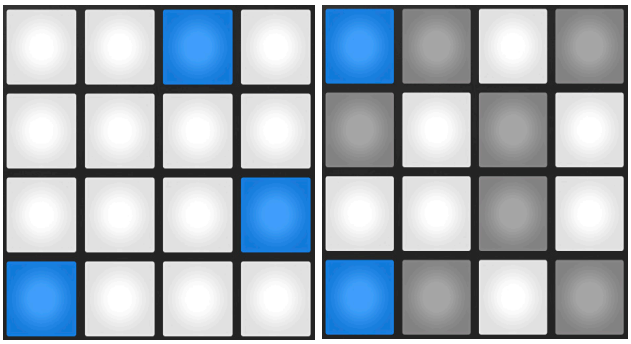
To change how a scale is mapped to pads:

1. Make sure that Layout is selected in the top row.
2. Press the screen encoder to change its focus to the bottom row.
3. Turn the screen encoder to select a different layout (changes are made instantly).

Locked: Only allows notes that are in the key of the current Scale Type (no wrong, out of scale notes).

Guide: Allows all notes (full piano) but provides a guide, or suggests, the correct notes in a scale. In scale notes will be bright white and the root note will be blue. Any notes not in scale will be dim white.

Locked On ***Guide On***



Note: *Octave up / down as well as the Range option on the A - H buttons work while in Scale mode.*

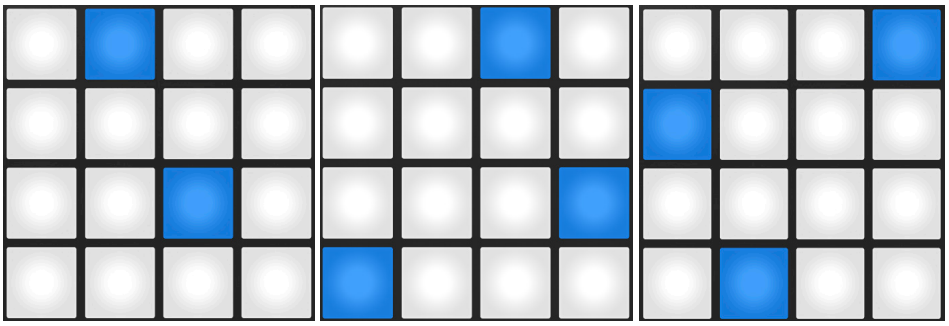
Drum Pad Range

In Scale or Simple Chord modes, the A - H buttons move the musical root note right or left on the piano.

To change where the root note is located on the piano:

1. Bank "E" will be selected and Pad 1 will be assigned as the root note.
2. To move the root note farther to the right on the piano, use the Bank F, G, and H buttons.
3. To move root note farther to the left on the piano, use the Bank D, C, B, and A buttons.

Drum D Button (-1 to Left) ***Bank E Button (default)*** ***Bank F Button (+1 to Right)***



Chord Button

Chord mode makes it easy to play a chord with the press of a single pad. When the Chord button is active (white), pressing a single pad will trigger a 2-, 3-, or 4-note chord.

Note: *Chord and Scale modes cannot be active at the same time.*

When Chord mode is active, the Octave Up and Down buttons (octave, transpose, or range) are not available for use in famous mode and are limited in use in simple mode (see Simple mode below).

Famous Chord

Famous Chord mode takes chord progressions from famous songs and maps them to pads.

The main voicing (notes) for the progression will be on pads 1 (blue), 5 (yellow), 9 (green), and 13 (magenta) with each group having it's own color. Alternate voicing (chord inversions) are mapped to the next pads in the group (ex., 1 = main, 2 = 1st inversion, 3 = 2nd inversion, 4 = root inversion an octave higher).

To change the chord progression:

1. Make sure that Type is selected (white) in the top row.
2. Press the screen encoder to change its focus to the bottom row (white).
3. Turn the screen encoder to select a new chord progression (changes are made instantly).

To change whether the chord progressions are in major or minor keys:

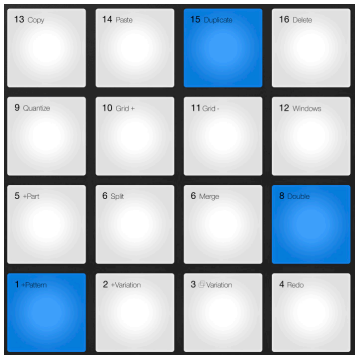
1. Make sure that Quality is selected (white) in the top row.
2. Press the screen encoder to change its focus to the bottom row (white).
3. Turn the screen encoder to select major or minor (changes are made instantly).

To change the key the chord progression is in:

1. Make sure that Key is selected (white) in the top row.
2. Press the screen encoder to change its focus to the bottom row (white).
3. Turn the screen encoder to select a new key (changes are made instantly).

Simple Chord

In Simple mode, chords follow a selected scale type (major, minor, etc.) and key (also known as diatonic chords). Each chord type is locked to whichever Key and Scale are selected (diatonic).



To change from Famous to Simple chord mode:

1. Make sure that Mode is selected in the top row.
2. Press the screen encoder to change its focus to the bottom row.
3. Turn the screen encoder to select Simple (changes are made instantly).

To change the type of chord or interval:

1. Make sure that Type is selected in the top row.
2. Press the screen encoder to change its focus to the bottom row.
3. Turn the screen encoder to select a type of chord or interval (changes are made instantly).

To change the scale the chords are locked to:

1. Make sure that Scale is selected in the top row.
2. Press the screen encoder to change its focus to the bottom row.
3. Turn the screen encoder to select Major, H. Minor (Harmonic Minor), or N. Minor (Natural Minor). Changes are made instantly.

To change the key the chords are in:

1. Make sure that Key is selected in the top row.
2. Press the screen encoder to change its focus to the bottom row.
3. Turn the screen encoder to select a new key (changes are made instantly).

To change where the scale root is located on the piano:

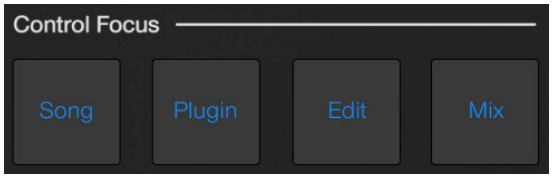
1. “E” will be selected and Pad 1 will be assigned the scale root.
2. To move the scale root farther to the right on the piano, use the F, G, and H buttons.
3. To move the scale root farther to the left on the piano, use the D, C, B, and A buttons.

While in Simple mode, all pads can be transposed up or down by 3 octaves by using the Octave Up or Down buttons.

Control Button

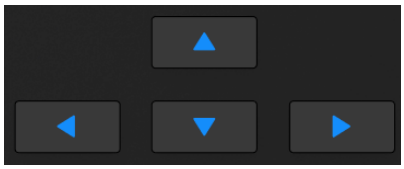
When selected, the Screen and Navigation Encoder will be focused on all options related to the Control Encoders.

Control Focus Buttons



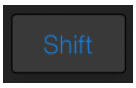
All of the Control Focus buttons are used exclusively in Studio Pro and have no function when not connected to Studio Pro. If you would like more information, please see the "Motion 16 Studio Pro Integration User Manual."

Navigation Arrows



These four buttons can be used to navigate tracks when in Studio Pro. When not in Studio Pro, each button sends its own MIDI CC message that can be used for different hardware or software functions.

Shift Button



Press and hold the Shift button to temporarily change a control's assignment to its secondary function.

Press and hold Shift to change the touch strips momentarily to their secondary functions (see Touch Strips above).

Command Buttons

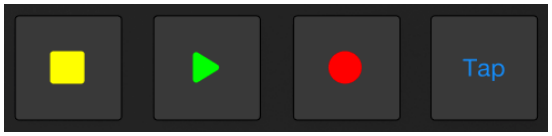
Undo, Loop, Retro, Click

- **Undo:** Undo the last command or action.
- **Loop:** Turns Loop (Cycle) on or off.
- **Retro:** Saves the current Song.
- **Click:** Turns the click (metronome) on or off.

These four buttons are used as commands in Studio Pro.

When NOT in Studio Pro, each button sends its own MIDI CC message that can be used for different hardware or software functions.

Transport Controls



These four buttons can be used to control Studio Pro's transport or any other supported application's transport when a DAW is selected in Settings (navigate to "DAW Mode").

- **Stop Icon:** Stops the transport. Illuminated yellow when the transport is stopped (dimmed transport is playing).
- **Play Icon:** Starts playback from the current position. Illuminated green when transport is playing (dimmed when the transport is stopped).
- **Record Icon:** Starts recording from the current playback position. Illuminated red when recording (dimmed when not recording).
- **TAP (when a DAW mode is selected):** Turns the click (metronome) on or off. Illuminates blue when the Metronome is On (dimmed when Off).

When **not** in Studio Pro and a DAW Mode is not selected in Settings, each button sends its own MIDI CC message that can be used for different hardware or software functions.

Note: *A second MIDI port is used to connect to the DAW as a Mackie Control Device. If not using Studio Pro, refer to your DAW's guide on how to setup a Mackie Control controller in order for DAW Mode to connect properly.*

Back Panel

USB Type-C Port

Motion uses a USB-C cable (1.5M C to C cable provided) to directly connect to a computer (bus powered). Alternatively, you can connect your Motion controller to a USB-C phone or tablet so long as they supply sufficient power.

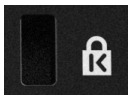
Motion can also be powered using a USB-C cable with a 5V power brick (not provided) plugged into an outlet or battery, for use when performing with analog hardware (MIDI Out).

Note: Please refer to your mobile device's guide on using external hardware as powered hubs or other connection kits may be necessary to work with your device.

MIDI I/O

There are two, 3.5 mm, Type-B MIDI ports (adapter not included) on the back of Motion. The In port receives MIDI data and the Out port sends MIDI data.

Kensington Lock



Allows Motion controllers to be secured to a desk or other anchor point.

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