LAUNCHPAD PRO

user
guide

novation

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Introduction

The Novation Launchpad Pro is a MIDI controller designed to inspire music making in Ableton Live and other software, whether on stage or in the studio.

While the Launchpad Pro can be used with a variety of software and hardware (outlined in the final chapters), this user guide primarily focuses on its interaction with Ableton Live. The following pages will show you where all the buttons and pads are and how they function, as well as tips and tricks that we have found to be effective. Ultimately, however, there is no one way to use this creative piece of kit—how you use the Launchpad Pro is up to you!

Please see our 'Getting Started Guide' if you have issues setting up the Launchpad Pro, or properly configuring Ableton Live.

The Launchpad Pro at a Glance

The following diagram shows the top of the Launchpad Pro, which has seven main areas:
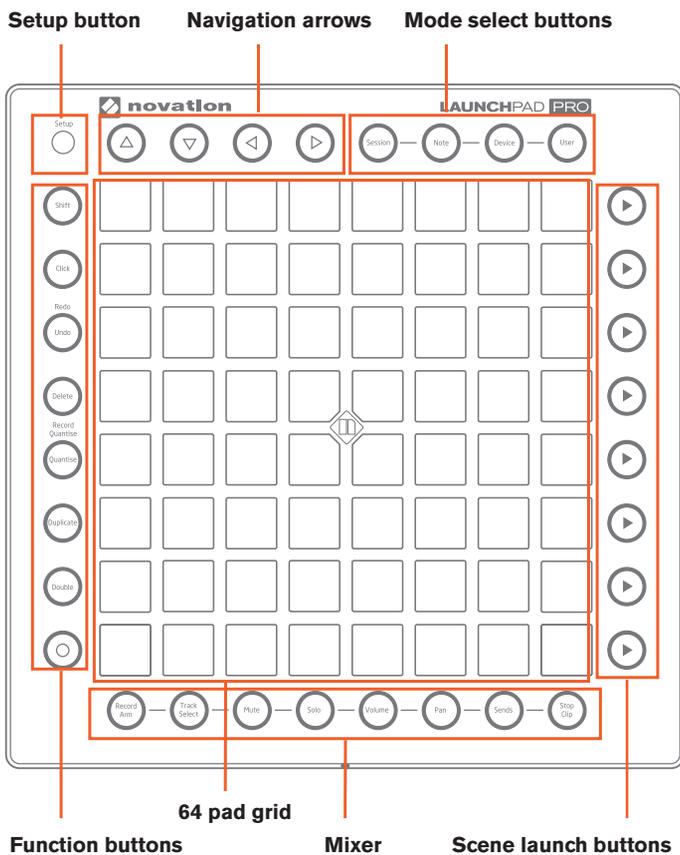
The above areas work together for a fun and creative musical experience, as explained throughout this guide.

Along the back of the Launchpad Pro are a number of other important places for connecting power, USB and MIDI cables.

Troubleshooting: If your Launchpad Pro is not working properly, it could be an issue with your USB Hub, computer's USB port, or even the USB cable you are using. Please use the USB cable included in the box. If this still does not fix your issue, connect the included 12V DC power supply.

With an understanding of where things lie on the Launchpad Pro, it's time to learn how to use it.

Setup in Ableton Live

When you load up Ableton Live with the Launchpad Pro connected to your computer, Launchpad Pro will automatically spring into life and connect to Ableton. However it is useful to understand the other options available in the MIDI sync tab which effect how Ableton Live and Launchpad Pro work together.

In Ableton Live, go to Preferences. From the list of tabs on the left, click the MIDI / Sync tab and you will see the following:
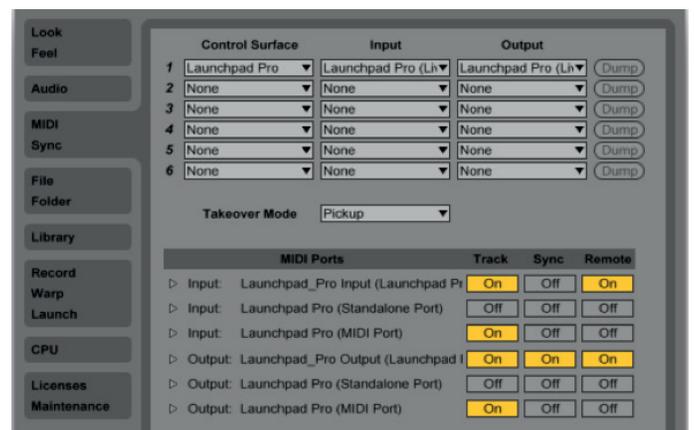
Track On sets the Launchpad Pro as an Input device to play MIDI tracks (instruments and drums) in Live, and as and Output device to see played and recorded notes fed-back to the pad LEDs.

Set Sync On for the Output of Launchpad Pro so that the pad LEDs pulse and flash in time with your project tempo.

Remote On for both Input and Output allows the Launchpad Pro to be manually mapped to parameters in Live, and to see feedback of that mapping.

Track On for Launchpad Pro MIDI Port allows Live to playback and record any device connected to the Launchpad's physical MIDI connectors.

If you find that features described later in this user guide are not working as expected, please re-check your MIDI port settings

Latch vs Momentary

Two important behaviours to keep in mind as you learn about the Launchpad Pro (the Mode Select and Mixer buttons in particular) are what we'll refer to as 'latch' and 'momentary'. Understanding these two behaviours will help you quickly move around the Launchpad Pro during live performance. Fortunately, the difference between latch and momentary is simple:

• Latch means that when a button (e.g., Session) is pressed and quickly released, the functions are available until the user navigates away (i.e., hits another button). Latch is best used when spending an indefinite time with Mode or Mixer parameters.

• Momentary describes the temporary access of Mode or Mixer functions. Press and hold a button (e.g., Volume), make adjustments with the RGB pads, then upon release of the button you will jump back to what you were previously viewing (e.g., Session). In other words, functionality is available as long as you hold the button. Momentary behaviour is great when performing and time is limited.

Session Mode
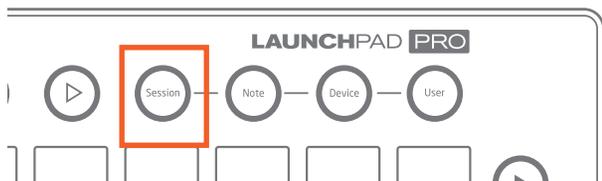
The first of the Mode Buttons (upper right-hand corner of the Launchpad Pro) is Session Mode. This may be the most important of the four mode buttons, since pressing it lets you physically control Live's Session View. If you're new to Ableton Live, the Session View is where you can launch, record or edit audio or MIDI 'clips' without ever stopping the music. In other words, this is where you can jam forever.

Clip Triggering and Colours

When the Session button is pressed, the Launchpad Pro's 8x8 grid of RGB LED pads gives you intuitive visual feedback on your clips as you launch, stop, edit or record them. Conversely, you can see the area covered by these 64 pads on your Live screen inside a coloured, 8x8 rectangular 'ring'. The colour of this ring changes depending on which Control Surface chooser you select in Live's Preferences (MIDI/Sync tab).

Pressing a pad on the Launchpad Pro triggers a clip if one exists in the corresponding slot in Live. Hitting an empty clip slot, however, on an unarmed track will stop clip playback on that track. If the track is armed, pressing a pad begins recording into an empty clip slot.

Clips that are playing (aka 'launched') on your Ableton Live screen appear as slowly pulsing green pads on your Launchpad Pro. The pad colours of non-playing clips, however, match the clip colours on your Live screen (e.g., a purple clip makes a purple RGB pad). Clips that have been triggered, but have not yet started to play, quickly flash green until launched.

Empty clip slots in Live show up as unlit pads on the Launchpad Pro. Hitting an unlit pad will either do nothing, or it will stop playing clips on that track. On a record-armed track, empty clips slots are lit dimly red, indicating that they are ready to become new audio or MIDI clips. When triggered, these pads will quickly flash red until they start recording.

Recording clips slowly pulse red. To stop recording a clip, press its pad again, or the Record Button (the bottom Function Button). With recording complete, the pad will pulse green.

QUICK TIP 1: It might be helpful to think of red pads on armed tracks as 'hot', since pushing them starts the recording of a new clip, and stops other clips on that track if they are playing.

Holding Shift (the topmost Function Button) and touching a pad selects the corresponding clip (or empty clip slot) without starting, re-launching, or stopping it. This action brings up the clip's content in Live's 'Detail View' (the bottom portion of the screen) and is a handy way to see a clip's audio or MIDI before launching it. This is also a quick way to move from clip to clip for editing.

QUICK TIP 2: How quickly your clips launch, stop, or begin recording depends on Live's 'Quantization Menu', located in the upper-left corner of the screen.

Live's 'Quantization Menu'

Scene Launch

Pressing the Scene Launch buttons on the right side of the Launchpad Pro will trigger horizontal rows of clips, aka 'scenes'. These buttons allow you to launch, stop, and/or record multiple clips with one button, and are fantastic for performance. Just like the 8x8 grid of pads, the Scene Launch buttons match the scene colours on your Live screen.

If you have more than 8 tracks the Scene Launch buttons will launch the whole scene, not just the eight clips you can see on the pads.

Workflow Tip: While everyone uses Live differently, scenes are often used to break up music into different sections. For example, you could trigger the verse, chorus and bridge of your song with just three Scene Launch buttons.

Session Navigation

The simplest way to navigate the Session View is with the Navigation Arrows, located at the top-left of the Launchpad Pro.

 As one might expect, the Up and Down arrow buttons move the Pro's 8x8-pad coverage up or down the Session View in 1-Scene increments. The Right and Left arrow buttons move pad coverage left or right, one track at a time. When you have gone as far as possible in a given direction the corresponding button will turn off.

With live performance in mind, you may have wondered how to quickly navigate hundreds, or even thousands of clips. To move around your Session View in big chunks, first switch to Session Mode, then press and hold the Session

button. You will now see solid red pads indicating 8x8 areas containing clips. (If an 8x8 area does not have at least one clip the pad will be unlit). Simply press one of these red pads, or use the Up/Down arrow buttons, to jump the Session View's focus in 8x8 blocks. If you jump into an 8x8 area where no clips are playing, areas with playing clips will be represented by solid green pads.

Mixer Buttons
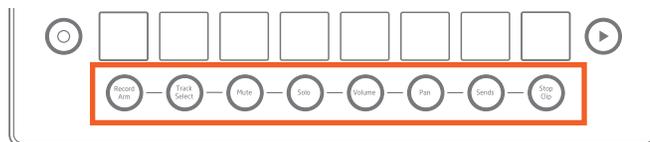
The Mixer's eight buttons lie along the very bottom of the Launchpad Pro, providing quick access to many functions of Ableton's Mixer section. Starting on the left, let's examine each one.

Record Arm
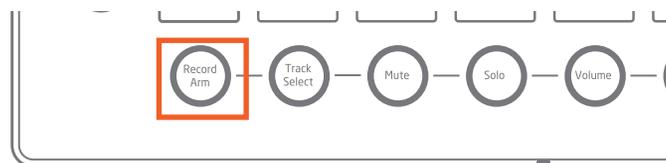
Press and hold Record Arm to momentarily display the Arm page, where you can arm or disarm a track by pressing its bottommost pad (or press and hold up to eight bottommost pads to arm multiple tracks). Upon release of Record Arm you will return to the previous page or mode. In Record Arm, all pads on the track(s) chosen for recording are dimly red.

Press and release of Record Arm 'latches' the page. Pressing Record Arm again brings you to Session Mode.

Reminder: Latching means that functions are available after the press and release of a button until you navigate away.

Note that on the Record Arm page the Session Mode is available on the top seven rows of pads, allowing for further clip launching/stopping/recording, and so on.

Track Select
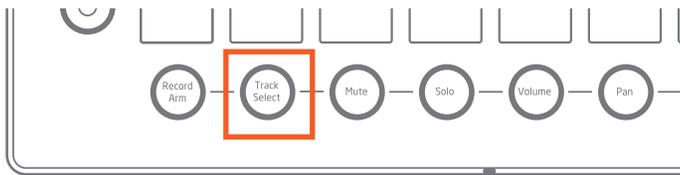
Track Select allows you to focus on a given track, without record arming it. All of the bottommost pads on this page are dimly blue but brighten when selected. Note that only one track can be selected at a time, and one track will always be selected.

Press and hold Track Select to momentarily make track selections—upon release you will return to the previous page or mode.

Press and release of the Track Select button latches the page, letting you spend more time perusing your tracks. In latch, pressing Track Select again brings you to Session Mode.

Note that on the Track Select page the Session Mode is also available on the top seven rows of pads, allowing for further clip launching/stopping/recording, and so on. Hitting a Session Mode pad will also select the corresponding track.
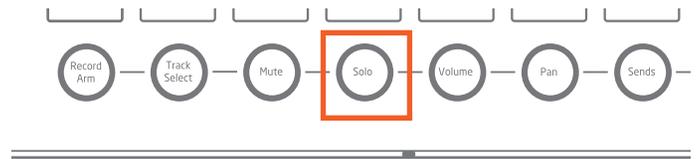
Mute
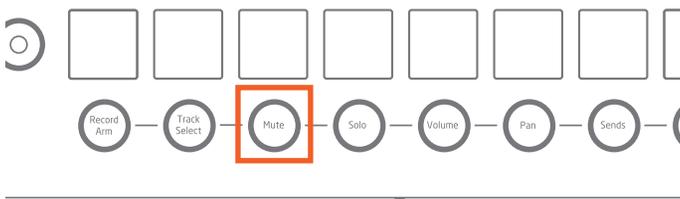
Mute allows you to quickly 'kill' all sound from one or more tracks.

Press and hold the Mute button to momentarily display the Mute page—upon release you will return to the previous page or mode. Touching the bottommost pad on a track toggles its 'Track Activators' on/off (effectively muting or un-muting it). The bottommost pad of muted tracks will show as dim yellow.

Press and release of the Mute button latches the page. Pressing Mute again brings you to Session Mode.

Note that on the Mute page the Session Mode is also available on the top seven rows of pads, allowing for further clip launching/stopping/recording, and so on.

Solo

The Solo page allows you to isolate the audio signal of one or more tracks. This is great for close listening in the studio or as a performance technique.
Press and hold Solo to momentarily display the Solo page—upon release you will return to the previous page or mode. Touching the bottommost pad on a track solos the track, turning the pad bright blue (or press and hold up to eight bottommost pads to solo multiple tracks). The bottommost pads of un-soloed tracks are lit dimly blue.

Press and release of the Solo button latches the mode. Pressing Solo again exits the mode, returning to Session. While on the Solo page, the Session Mode is available on the top seven rows of pads, allowing for further clip launching/stopping/recording, and so on.

Volume
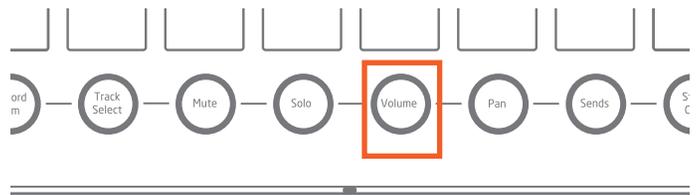
The volume page turns each 8-pad column into a volume 'fader': volume levels for up to 8 tracks at a time are represented as green pads. Simply hit an empty pad to move Live's Track Volume slider.

Press and hold the Volume button to momentarily display the Volume page, where track volumes can be quickly adjusted. Upon release you will return to the previous mode or page.

Press and release of Volume latches the page. Pressing Volume again brings you to Session Mode.

The Volume page takes advantage of the Pro's velocity-sensitive pads: the softer you hit a pad the slower volume will change. Conversely, the more force applied to a pad the faster volume with increase or decrease.

Please note that Session Mode capabilities, such as scene and clip launching, are not available on the Volume page.

Pan
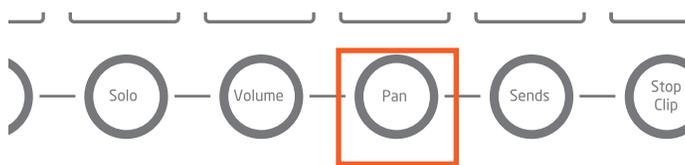
The Pan button lets you move a track's audio signal around the stereo field.

Press and hold Pan to momentarily display the Pan page—upon release you will return to the previous page or mode. In Pan, tracks can be panned left to right in varying degrees. Pan values for the 8 tracks are shown in orange. With the middle two pads lit the track will be centred; touch unlit pads to move the pan knob left or right.

Press and release of the Pan button latches the mode. Pressing Pan again brings you to Session Mode

Like with Volume, Pan view takes advantage of the Pro's velocity-sensitive pads: the softer you hit a pad the slower a track's pan value moves. Conversely, the more force applied to a pad the faster panning will occur.

Please note that Session Mode capabilities, such as scene and clip launching, are not available on the Pan page.

Sends

The Sends page lets you send audio from your tracks to as many as eight return tracks. This page turns each 8-pad column into a virtual effect-send knob: simply hit an unlit pad to move a track's send knob up or down. The send knob you are controlling is selected with the scene launch buttons: the topmost button selects Send A, the second one down selects Send B, and so on.
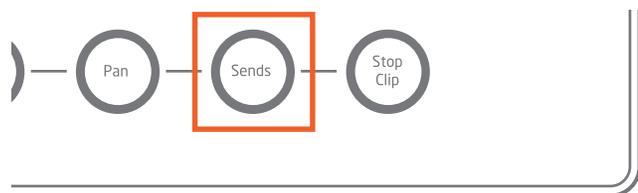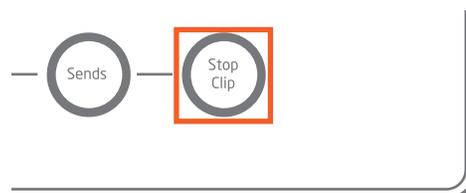
Press and hold the Sends button to momentarily display the Sends page—upon release you will return to the previous page or mode. Press and release of the Send button latches the page. Pressing Send again brings you to Session Mode.

Like with Volume and Pan, the Sends page uses the Pro's velocity-sensitive pads: the softer you hit a pad the slower a track's send value will change. Conversely, the more force applied to a pad the faster the send value changes.

It's worth mentioning that although the full version of Ableton Live allows for twelve Sends, only the first eight sends are accessible on the Launchpad Pro. Also note that Session Mode capabilities, such as scene and clip launching, are not available on the Sends page.

Production Tip: The most common effects to put on Return Tracks are reverbs and delays. Luckily, Ableton comes with a great reverb, and various delays. Make sure they are set to 100% wet and send away.

Stop Clip

The last mixer button is Stop Clip. Press and hold this button to momentarily display the Stop Clip page, where you can stop clips on a per track basis, or stop all clips at once. Upon release you will return to the previous page or mode. The bottommost pads of tracks with playing clips are lit red, but dim when pressed, stopping the clip on that track. Hitting the top seven Scene Launch buttons will stop all playing clips in those scenes, while hitting the bottommost Scene Launch button will stop all clips in your Set.

Press and release of the Stop Clip button latches the page. Pressing Stop Clip again brings you to Session Mode.

Note that on the Stop Clip page the Session Mode is also available in the top seven rows of pads, including clip launching/stopping/recording, and so on.

Function Buttons

The far left column contains circular-buttons called the Function Buttons, which greatly assist clip creation and editing.

Activation of the Delete, Quantise, Duplicate and Double functions depends on your location on the Launchpad Pro:

• In Session Mode, you must hold down one of these buttons then touch the pad you want to affect. For example, while holding Delete, hit the pad whose clip you want to erase.

• With a clip selected and playing in Note or Device Modes simply hit Delete, Quantise, Duplicate or Double to perform their respective actions.

Shift

The top Function Button is Shift. When pressed and held this button gives you access to secondary functions, much like Shift on a computer keyboard. Below are descriptions of these functions:

• Clip Selection and Viewing: While in Session Mode, press and hold shift, then touch a pad to see a clip's audio or MIDI content in Live's 'Clip View' (bottom of the screen). This will not arm the track, or trigger the clip in anyway. Rather, this is a great way to see a clip's audio or MIDI before deciding what to do with it. You might, for example, decide to edit the clip with some of the other Function buttons described below.

• Drum Rack Pad Selection: While viewing a Drum Rack in Note Mode press and hold shift. Then touch a pad corresponding to a Drum Rack Pad. This will reveal the pad's instruments or effects in Live's 'Device View' (bottom of the screen). In live performance, this is a fast way to select a sound and then start mangling it in Device Mode.

• Redo: hold shift and hit the Undo button to perform a standard 'Redo'.

• Quantise: holding shift and hitting the Quantise button toggles Record quantise on/off. (See below for more information on the Quantise button).

Click

Perhaps the simplest button on the Launchpad Pro, Click turns Live's Metronome on/off when pressed and released. When engaged, Click lights up green. In all Live modes or pages (except User) you can press Click to reference the global pulse.

Tip: Use this blue knob on screen to adjust to adjust the Metronome volume if it is too loud or too soft.
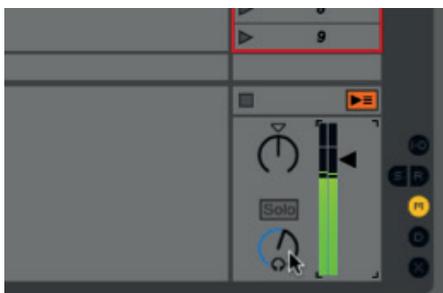
Undo

The Undo button does exactly what one would expect. Press it once to go backward one step (undoing one action of your Undo history), twice to go back two steps (undoing two actions), and so forth.

As mentioned before, hitting Undo while holding Shift will perform a standard 'Redo' action.

Delete

The Delete button allows you to clear clips and Drum Rack notes in various ways.

• In Session Mode, press and hold Delete, and then touch a pad to delete its clip.

• Viewing a Drum Rack in Note Mode, press and hold Delete then touch a Drum Rack pad to delete all occurrences of that note in the clip. This only works with Drum Racks and will not work in chromatic Note Mode (i.e., with other MIDI instruments).

• With a clip selected and playing in Note or Device Mode, one press of Delete will erase the clip.

Quantise

The Quantise button lets you correct the timing of your performances while recording or afterward.

Press and hold Shift to see the state of record quantisation: if active, the Quantise button will be lit bright white; if inactive it will be dim white. Continue to hold shift and hit Quantise to toggle record quantise on/off. When off, the first press of this button sets record quantisation to Sixteenth Notes. To change the quantise value go to Live's Edit menu and scroll to 'Record Quantization'. Choose a different quantise value here.
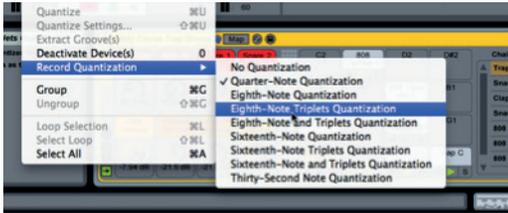
You can always quantise clips after recording as well. With the Session Mode visible, press and hold Quantise, then hit a pad to snap its MIDI or audio to the selected quantisation value. This can be done regardless of whether the clip is playing.

If a clip is selected and playing in either Note or Device Mode, one press of Quantise will quantise its audio or MIDI.

Duplicate

The Duplicate button allows you to copy a clip into the clip slot directly below. Be aware if there is already a clip in the slot below, the duplicated clip will erase the existing clip.

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• In Session Mode press and hold Duplicate, then touch a pad to Duplicate its clip.

• If Live's Transport is running, after duplication the new clip will launch.

• If a clip is selected and playing in either Note or Device Mode, one press of this button will duplicate the clip.

Duplicate can also be used to duplicate a whole scene. Press and hold the Duplicate button in Session Mode, then hit a scene launch button. Instead of overwriting existing clips, this will copy and insert the scene, causing any other clips or scenes to slide down the page.

Double

Pressing this Function button doubles clip length. For example, a 2-bar clip becomes 4 bars; an 8-bar clip becomes 16 bars, and so on.

• With a clip selected in Session Mode, press and hold Double, then touch its pad to double the clip length.

• If a clip is selected and playing in either Note or Device Mode, one press of this button will double clip length.

Note that Double works for MIDI clips only.

Musical Tip: If your loops are feeling too repetitive try using Double to lengthen them, and then add variation.
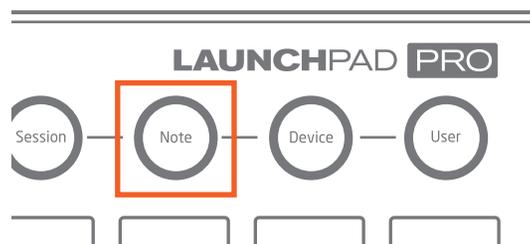
Record

Using the Record button is the most straightforward way to create new clips, or overdub into exiting ones. It can be used in a variety of ways:

• On an armed but empty track, hitting Record begins the recording of a new clip into the selected slot.

• On an armed track with clips, the Shift button can be used to select an empty clip slot, at which point the Record button can be pressed to begin recording there.

• On an armed track with at least one clip, pressing Record will begin overdubbing into the last played or selected clip if no other slot is chosen.

• With playing clips on armed tracks, Record can be used to punch in and out of overdub record. Note that for audio clips, only automation can be overdubbed.

• If no tracks are armed, pressing Record can be used as a quick way to start Live's transport without recording anything.

Note Mode

Note Mode lets you play the Launchpad Pro like an instrument in order to create your own percussive and melodic ideas. In other words, the Note page is where you can record, overdub and edit MIDI clips with MIDI instruments or Live's Drum Racks. Before looking at the differences in how Note Mode handles Drum Racks vs other MIDI instruments it is worth explaining some general functionality.

General Functionality

With a MIDI device (Drum Rack or other) on a record-armed track pressing the Note button enters Note Mode. How LED feedback appears on this page depends on whether the track contains a Drum Rack, or any other MIDI instrument. These 'other MIDI instruments' can be Ableton's (e.g., Operator), VST or Audio Unit plug-ins. If an audio track is selected, entering Note Mode displays nothing and has no functionality.

Live's Clip View (left) and Device View (right).

Press and release the Note button to latch Note Mode. Further hits of the Note button toggle the Clip View and Device View on your screen. This allows you to see your MIDI notes in one view (Clip View), and your instruments and effects in another (Device View). You might use Clip View to see existing MIDI notes as you overdub others— or you might want to see the notes move when you hit Quantise. Likewise, Device View can be handy to watch as you make device adjustments, especially when recording those adjustments as automation.

Note Mode can also be accessed momentarily from other pages by pressing and holding the Note button. Upon release you will return to the previous page or mode.

Notice how the Delete, Quantise, Duplicate and Double functions are easily used in Note Mode: simply press and release these buttons to affect the currently playing clip on the last armed track. Remember, you can always hit Undo if you make a mistake.

Another attractive feature of Note Mode is that the scene launch buttons have no default functionality. This means that they are freely assignable via MIDI mapping. Furthermore, whatever MIDI mappings you create are unique to Note Mode and independent of all other modes.

Custom MIDI Mapping: Create your own MIDI mappings for the scene launch buttons by first clicking the MIDI Map Mode Switch in Live. Next, hit a parameter, such as a device on/off switch. Then hit a scene launch button. Finally, click the MIDI Map Mode Switch again to exit.

Finally, here are a couple general rules to be aware of:

• Pressing the Note button enters Note Mode for the record-armed track, potentially overriding the current track selection. In other words, whatever track is armed becomes auto-selected for Note Mode.

• If multiple tracks are armed, the last track to be armed is used on the Note page.

• If no track is record armed, selecting a track and pressing Note will show its Note page. MIDI data, however, will not be sent until the track is armed.

MIDI Instruments

With any MIDI instrument on a track other than a Drum Rack (e.g. Ableton Operator or Novation V Station plugin) pressing the Note Mode button will display the Note page, aka 'note grid'. Here, the pad grid serves as a chromatic MIDI controller perfect for melody, chord or bassline creation. The pads rise from left to right in semitone (aka half step) intervals (e.g., C, C#, D, etc), and from bottom to top in perfect fourth intervals (e.g., C, F, Bb, etc).

The note grid displays both lit and unlit pads: the lit pads outline the white notes on a piano keyboard (i.e. a C major scale), while the unlit pads fill in the non-diatonic, chromatic notes. The tonic notes of the scale you choose (see below) are pink, and the other diatonic notes are blue. Pads turn green, however, when played manually or during playback.
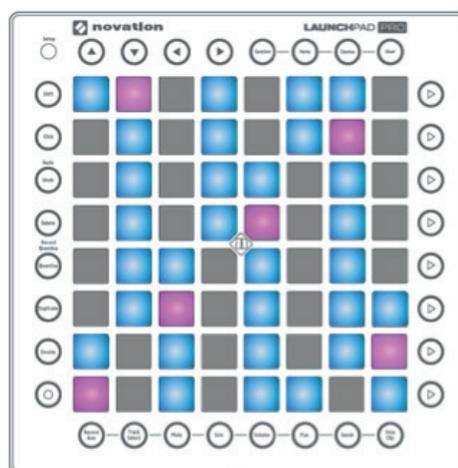
By default, the pad in the lower-left corner of the 8x8 note grid plays the note C1—the blue and pink pads therefore outline a C major scale. You can transpose this layout up or down in semitones by hitting the Left or Right arrow buttons across one octave in each direction. Press the Up or Down arrows to shift the scale by octaves. You can go as low as C-2 and as high as G8, beyond which the pads will be lit red and will not send MIDI data.

As you push the Left or Right arrow buttons purple pads scroll in semitone steps, reflecting how far you are from C. For example, if the purple pad is three-pads away from the

lower-left pad then the blue and pink pads are outlining the Eb major scale.

Tip: Press the Up and Down arrow buttons simultaneously to return the lower-left corner pad to C1. Press the Left and Right arrow buttons simultaneously to return the scale's root note to C, staying in the current octave.

Whatever tonic you choose becomes global. If you set the note grid to begin on F#, for example, the outlined scale for your other MIDI instruments will also be F# major (until you change it). This global functionality makes it easy to stay harmonically consistent across multiple MIDI instruments, but you can always change the global settings as you record or perform.

Drum Racks

For a track containing a Drum Rack, pressing the Note button automatically configures the Launchpad Pro to work with Live's Drum Racks, an instrument designed for playing drums, percussion and one-shot samples.

By default, the lower-left corner pad of the 8x8 pad grid triggers C1 on a Drum Rack. The default first 16 Drum Rack pads (C1 to D#2) are therefore playable in the lower-left quarter (4x4) of the Launchpad Pro, as illustrated below:
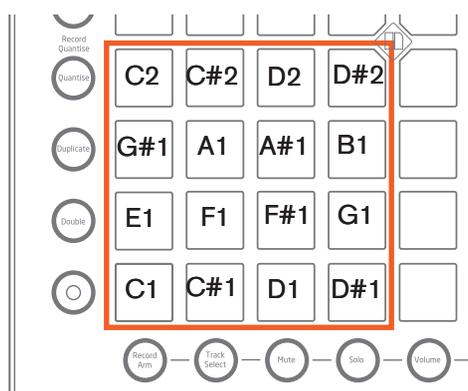
E2 to G3 are then playable in the 4x4 area directly above C1 to D#2. Meanwhile, G#3 to B4 continues in the lower-right 4x4 area, and C5 to D#6 are playable in the upper-right 4x4 area of the pad grid. The following diagram illustrates this:
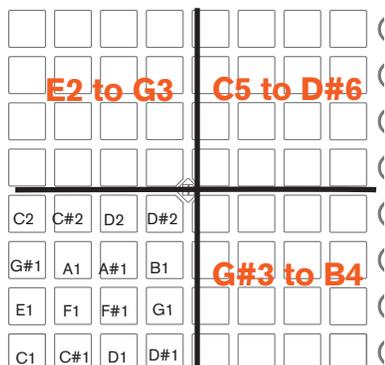
You may notice later that User Mode's pad layout is identical to the above diagram, but without LED feedback. (See the

"Creating LED Light Shows" tutorial for information on how to light up User Mode).

At any given moment, the Launchpad Pro can only display 64 of a Drum Rack's potential 128 pads. Accessing all of a Drum Rack's pads, therefore, relies on the Navigation Arrows, which light up green. The Up and Down arrow buttons move Drum Rack coverage up and down in 4 row increments (blocks of 16 pads). The Left and Right arrow buttons move Drum Rack coverage up and down one row of pads at a time.

Colour-wise, Drum Rack pads containing a sample are lit yellow, while a pad with no sample stays unlit. Purple pads show that a Drum Rack sample is soloed; orange pads mean a sample is muted.

Pads turn green when played manually or during playback. To select a Drum Rack pad simply hit its corresponding pad, which will trigger the sample and turn the pad light blue. To select a Drum Rack pad without triggering it, hold Shift and touch the corresponding pad. Be aware that the Show/Hide Devices selector needs to be engaged on a Drum Rack for this to work.

Drum Racks' Show/Hide Devices Selector.

With a pad selected, you will likely want Device Mode (described later) to help you adjust its parameters. You can also press and hold Delete then touch a Drum Rack pad to delete all occurrences of its note in a clip. This handy workflow is specific to Drum Racks, and will not work with other instruments.

Recording Shortcut: Momentarily enter the Record Arm page then press a pad. This will automatically arm that track (if it isn't already) and begin recording or overdubbing in that clip slot–highly recommended for live performance.

Device Mode
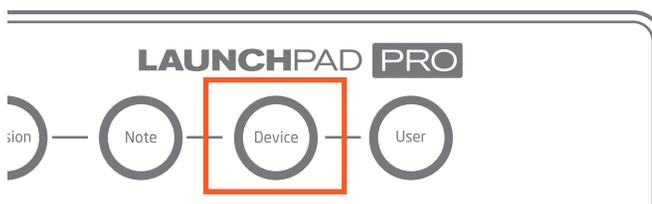
Device Mode lets you control your MIDI instruments and

effects without a mouse–a tremendous asset, especially on stage.

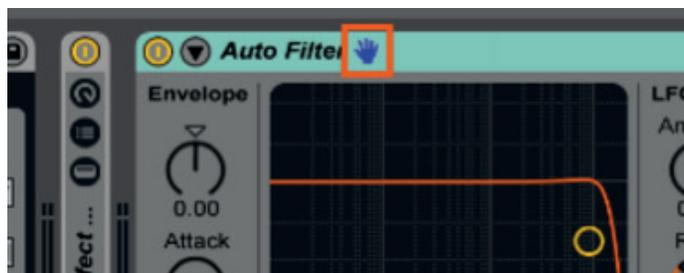To effectively use Device Mode, first press and release the Device button, entering the Device page. Next, engage Track Select momentarily and choose a track by hitting one of the bottom pads. You can now control the last selected device on this track with the vertical columns of pads, which act as virtual 'faders' for up to eight parameters.

Live's 'Blue Hand' reminds you that you are controlling a device remotely.

Once in Device Mode use the Left and Right arrow buttons to move horizontally in the Device View (bottom portion of Live), selecting whatever instruments and/or effects (MIDI or audio) you desire. (Note that the Up and Down arrow buttons do nothing in Device Mode). To control devices on another track, simply choose the track with Track Select button.

The 8 'Faders'

Like with the Volume page, Device Mode turns each 8-pad column into a 'fader'. The faders in Device Mode, however, are capable of moving one or more knobs or sliders on a device. Device Mode also uses the velocity-sensitive pads for precise movements: the softer you hit a pad the slower a parameter changes; the harder you hit a pad the faster a change will occur.

For most native Ableton instruments and effects, eight parameters have been pre-mapped for every device and will automatically display across the pad grid. You can override these mappings by entering 'MIDI Map Mode' and assigning the pad columns to new parameters. We advise against doing this, however, because this will override the mapping of that pad column for all other devices in your set!

Instead, Macro Controls are a great way to customize your Device Mode experience. (See 'How to Create Macros' below). Once your Macros are created, select the Instrument, Audio Effect or Drum Rack containing the Macros and they will lie perfectly across the 8-pad columns, leaving the built-in mappings intact.

How to Create Macros

Creating your own Macros in Live is easy: right-click (PC) or control-click (Mac) on any Ableton instrument or effect parameter and choose 'Map to Macro (#)' from the context menu. The parameter is now controllable as a Macro Control. You can even assign multiple parameters to one Macro.

With third-party plug-ins, as seen in the picture above, there are some extra steps. You first need to hit the 'Configure' button on the instrument's title bar, then open the plug-in and click on parameters that you would like to control. When these parameters appear as sliders in the device (like 'Morph' and 'Weird' above) you can assign them to Macro Controls using the normal procedure.

Automation

As previously mentioned, accessing a track's Device page is done by pressing Track Select (in the Mixer) and selecting a track. By default, however, in order to record automation in a clip its track must be armed. This is due to Live's Preference of 'Record Session automation in: Armed Tracks', as seen below:
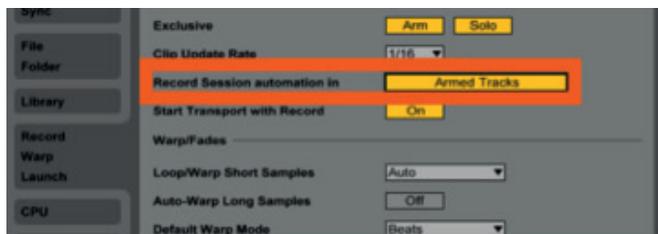
The 'Record Session automation in' preference, found under the Record/Warp/Launch tab in Live's Preferences.

Alternatively, you may want to change this to 'All Tracks' so you can record automation in Device Mode regardless of which track is armed. Note that you must still press the Record button (Function column) to record automation.
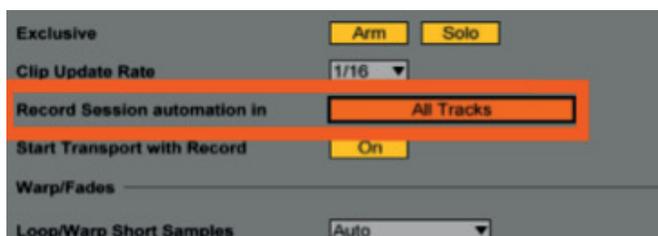
The 'Record Session In' Preference set to 'All Tracks'.

Another Preference worth mentioning is 'Select on Launch', also located within the Record/Warp/Launch tab. By default, this is set to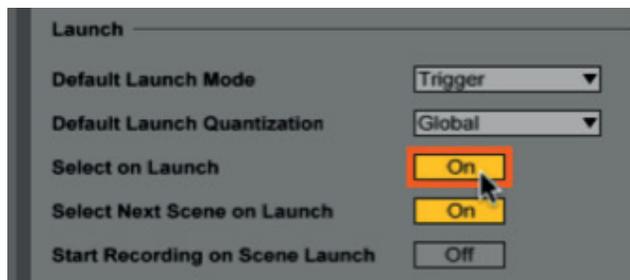 'On' meaning that launching a clip will select it. This means that the faders in Device Mode will automatically apply to whatever instruments and/or effects are on that clip's track.

Live's 'Select on Launch' Preference.

You may prefer, however, to turn 'Select on Launch' to 'Off' so that launching a clip will not automatically select its track for Device Mode duties. This might be useful, especially in live performance, if you use Session Mode to trigger clips, but you want to always return to another clip or track that you are adjusting in Device Mode.

General Notes on Device Mode

As per usual, press and release the Device button to latch Device Mode. Further presses of the Device button toggle the Clip View and Device View on your screen, allowing you to see your MIDI notes or instrument and effects, respectively.

Device Mode can also be accessed momentarily from other pages by pressing and holding the Device button. Upon release you will return to the previous page or mode.

Like in Note Mode, the Delete, Quantise, Duplicate and Double functions are easily used in Device Mode: simply press and release these buttons to affect the currently playing clip on the selected track. Remember, you can always hit Undo if you make a mistake.

Finally, just like in Note Mode, Device Mode's scene launch buttons have no default functionality. This means that they are freely assignable via MIDI mapping. Furthermore, whatever MIDI mappings you create are unique to Device Mode and independent of all other modes.

User Mode
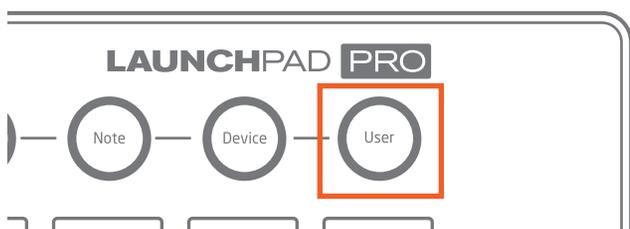
User Mode could be thought of as 'blank slate mode' as it is reserved for users to create their own MIDI mappings. For those familiar with the original Launchpad, this mode is identical to the infamous User 1 Mode. It is also an ideal canvas for potential Max For Live creations, such as step sequencers, LED VU meters, and so on.

As such, one of User Mode's intended uses is controlling Live's Drum Racks exactly as in Note Mode, but with no LED feedback. This gives users doing Drum Rack LED light shows a blank space on which to build (see 'Creating LED Light Shows').

Creating LED Light Shows

LED light shows can add an awesome visual component to your Launchpad performances. Let's look at the basics.

First, you will need to press and release the User button to enter User Mode. Then, add a Drum Rack to a MIDI track, and fill it with samples. These samples are often sections of fully completed songs, but they could be anything.

Next, create another MIDI Track—this track will be triggering the light show. Set it to receive MIDI from your Drum Rack, and make sure to set the monitoring section to 'In'.


Finally, in the 'MIDI To' choosers select Launchpad Pro Output in the top, and Ch. 6 (User Mode's default channel) on the bottom.

You should now see the pads light up when pressed.

It is now time to get creative. A common approach is to set up multiple chains of MIDI Effects in a MIDI Effect Rack, and then use the Rack's 'Key Zone Editor' (the yellow switch below) to give every pad a different LED feedback pattern.
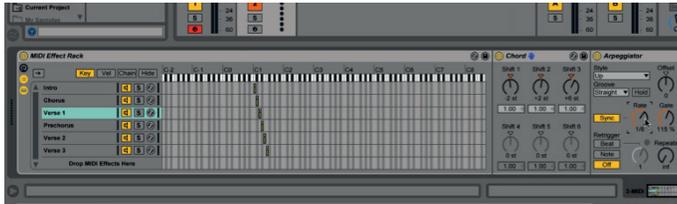

That's just the tip of the iceberg for Launchpad light shows–browse online and you'll surely find more advanced techniques. Good luck!

Like Note Mode, the scene launch buttons do nothing in User Mode (i.e., they have no default functionality). This means, of course, that they are freely assignable via MIDI mapping. Furthermore, whatever MIDI mappings you create are unique to Device Mode and independent of all other modes. In fact, all buttons in User Mode are free to be MIDI mapped, with the exception of Session, Note, Device and User Mode buttons.

Pro Tip: User Mode operates on MIDI channel 6 by default. Pressing the Setup Button (see below) allows a different MIDI channel of User Mode to be selected. This means if you are using multiple Launchpad Pros (up to six) in User Mode you can set the MIDI channel for each unit's User Mode separately, or you can switch MIDI channel on the same unit allowing for up to 6 'pages' of User mode.

Setup Button
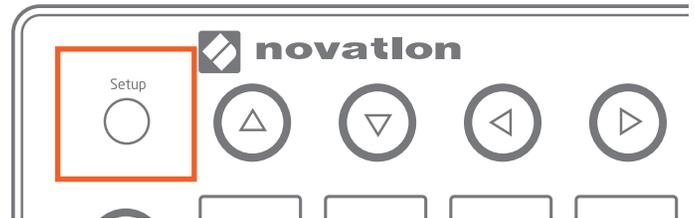
Sitting inconspicuously in the upper-left corner of the Launchpad Pro is the Setup button. Pressing and holding this button reveals the Setup page (illustrated below), where you can switch the Launchpad Pro's functionality between Live and 'standalone' layouts, setting your preferred velocity, aftertouch, pad lighting, and MIDI channel options along the way.
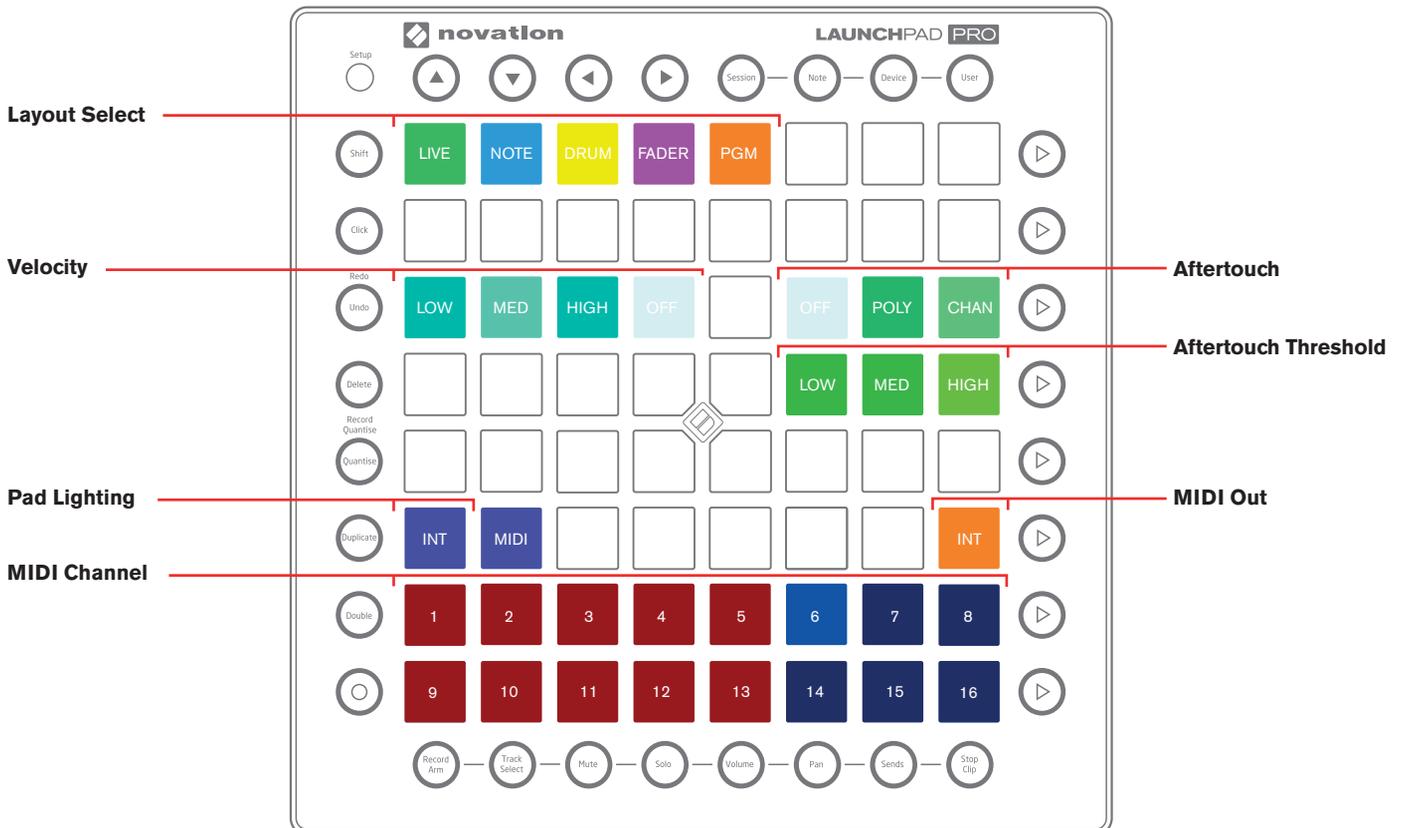
In short, the Setup page is for advanced users who want to specify how the Launchpad Pro's MIDI interacts with Ableton Live, other software, or hardware. This is also where you can assign different playing styles to your Note grid, Drum Rack, Device Modes, and standalone layouts. Let's begin at the top row of pads and discuss their functionality.

Layout Select

The top row of pads contains five pads that allow you to switch the 'layout' of the Launchpad Pro's operation between 'Live', or one of four standalones ('Note', 'Drum', 'Fader' and 'Programmer'). The pad representing the layout you are currently using will glow brighter than the others—when you select another layout and release the Setup button the name of the new layout will scroll across the Launchpad Pro in big letters. (Press any button or pad to skip this scrolling text if it takes too long for your needs.)

Although switching between layouts is fairly simple, the reasons for choosing them deserve some explanation.

The Live Layout

If you are using the Launchpad Pro with Ableton Live (even in conjunction with external hardware) we recommend—in the majority of cases—staying in the Live layout. This is because when Ableton Live detects that it is connected to the Launchpad Pro the Live layout (the green pad) is automatically selected. (FYI: when Live is quit, the Launchpad Pro defaults to the standalone Note layout.)

The Live layout actually contains the Session, Note, Device and User Modes covered in the previous sections of this guide. However, the Setup page is also where you can modify certain MIDI-related aspects of these modes' behaviors. To customize these modes simply enter them as explained earlier (e.g. press the Device Mode button). Then, while holding down the Setup button choose your preferred velocity, aftertouch, or aftertouch threshold settings by pressing the corresponding pad(s). You can then repeat the procedure for the other modes in order to customize each one to your taste.

Note, Drum, Fader and Programmer Layouts

If you want to use the Launchpad Pro as a 'standalone' MIDI controller (i.e., when not using Ableton Live), or if you want to program your own configuration of the Launchpad Pro you will need to choose either the Note (blue), Drum (yellow), Fader (pink) or Programmer (orange) layout. Examples of how Note, Drum and Fader layouts are used will be explained in the remaining sections of this guide, while endeavouring programmers should refer to our <Programmer's Reference Guide>.

*Note Layout–*Enter this layout by pressing and holding Setup and touching the blue Note pad. This layout is nearly the same as the Note Mode found within the Live layout: a note grid rising from left to right in semitone (aka half step) intervals, and from the bottom up in perfect fourth intervals. As expected, the lit pads outline the white notes on a piano keyboard, which can be transposed in octaves or semitones with the Up/Down or Left/Right buttons, respectively.

Being an 8x8 pad grid, this layout is ideal for playing tonal, chromatic MIDI instruments in other software programs (e.g., Retro Synth in Logic X). It is also perfect for sending MIDI to, and receiving MIDI from, hardware synthesizers that you wish to play chromatically. Simply use the included MIDI lead and connect the Launchpad Pro's MIDI Out to your hardware's MIDI In–to receive MIDI back from your hardware connect your hardware's MIDI Out to the Launchpad Pro's MIDI In.

*Drum Layout–*Enter this layout by pressing and holding Setup and touching the yellow Drum pad. The Drum layout resembles Drum Mode in many respects: the 8x8 pad grid is divided into 4 sections of 4x4 pads, beginning in the lower-left corner on C1. C1 to D#2 are therefore playable in the lower-left quarter of the Launchpad Pro, followed by E2 to G3 above it. MIDI notes G#3 to B4 occupy the lower-right 4x4 area, with C5 to D#6 playable in the upper-right corner of the pad grid.

One noticeable difference between Drum Layout and Drum Mode is the colouring. C1 to D#2 are colored yellow, E2 to G3 are light pink, G#3 to B4 are light blue, and C5 to D#6 are light green. In fact, scrolling up or down with the Navigation Arrows shows that each 4x4 area of the C-2 to G8 MIDI note range is assigned a different colour to help you visually organize your kits.

Another noticeable difference between Drum Layout and Drum Mode is that although Mode Select, Scene Launch, Function and Mixer buttons send MIDI they will have no default functionality. You may, however, choose to MIDI learn these buttons to parameters in your software.

Given its coloured, 4x4 pad areas the Drum layout makes a great playing surface when using plug-ins such as Native Instruments' Battery or FXpansion's Geist in non-Ableton environments (Logic, Cubase, etc.). Propellerhead's Kong instrument in Reason is another prime candidate for Drum layout use.

*Fader Layout–*Similar to Device Mode in the Live layout, Fader turns the Launchpad Pro's vertical pad columns into virtual faders, capable of moving one or more knobs or sliders on a device or in other software. Fader layout also uses the velocity-sensitive pads for precise movements: the

softer you hit a pad the slower a parameter changes; the harder you hit a pad the faster a change will occur.

Note that in Fader layout, aftertouch settings will not be available when pressing and holding the Setup button.

Programmer (PGM) Layout–Programmer layout is quite advanced, as it is reserved for individuals or firms that want to design their own software to work with the Launchpad Pro. Programmer is most similar to User Mode, but with a different layout. For more information, see the <Programmer's Reference Guide>.

Setup Page Options

Each of the selectable layouts feature the following parameters (except where noted) that can be adjusted to fit your playing or mixing style.

Velocity–The speed at which you strike a pad is read by the Launchpad Pro as velocity information. Usually this means that the harder you hit a pad, the louder your MIDI instrument will sound, and vice-versa. Therefore, this area of the Setup page lets you choose which pad sensitivity fits your playing style.

• 'Medium' (Med) is the default and should suite most playing styles, but if not there are two other options. For example, if you tend to play your pads softly you could choose 'High', which will skew incoming MIDI values upwards. The result will be MIDI notes with higher velocities than otherwise expected. On the other hand, if you play your pads with a lot of force you might set your velocity to 'Low' to counterbalance your strength. Regardless, your velocity selection will be remembered for each layout, meaning that you could, say, set your Drum Mode velocity to 'Off' and your Note Mode velocity to 'Medium'.

• 'Off' means that pads will output CC values at 127, regardless of how hard or soft your strike them.

Aftertouch–This option allows you to choose 'Off', 'Polyphonic' or 'Channel' aftertouch for each Mode or layout. This defines how Live instruments or third-party plug-ins respond to pad pressure while pads are held down.

• Polyphonic aftertouch means every pad can have its own aftertouch amount. In other words, different notes will respond individually even when multiple notes are held.

• Channel aftertouch means that one aftertouch value will apply to all held notes. More specifically, the pad that receives the greatest pressure will dictate the applied aftertouch amount.

• 'Off' simply means that aftertouch capabilities are disabled.

If you are not familiar with aftertouch, it is indeed a powerful sound design tool. Common examples of aftertouch are adding vibrato or tremolo, or opening/closing a filter. Most of Ableton Live's instruments can respond to channel aftertouch–Ableton Live, however, does not currently support polyphonic aftertouch. Please consult your DAW and third-party plug-ins' documentation to confirm their channel or polyphonic aftertouch capabilities.

Aftertouch Threshold–These pads set aftertouch sensitivity at 'Low', 'Medium' or 'High' thresholds. The default setting is High, which requires the most pad pressure in order to send aftertouch messages. When set to Low the pads will produce aftertouch more easily–great if you tend to hit your pads lightly.

Note that the following pads have a global effect, meaning that their settings will apply to all other modes and layouts.

Pad Lighting–These two pads define how pads light up when receiving MIDI notes.

• Internal (Int) – With this option engaged (lit), pads are lit locally by pressing pads and/or buttons.

• MIDI – When this is lit, pads can be lit by MIDI data coming in from the Launchpad Pro's MIDI In port.

Ableton Live users should leave this set to Internal, but if you are using your Launchpad Pro with other software or hardware, you may wish to disengage either of these depending on the circumstance.

MIDI Out–This pad controls whether MIDI is sent to the Launchpad Pro's physical MIDI Out port. This option is mostly helpful for users who want to use the Launchpad Pro with hardware MIDI devices. When set to on (lit), MIDI from the pads and controls will be sent directly to the MIDI Out port.

Note that this pad has a global effect, meaning that changing its state will apply to all modes and layouts.

MIDI Channel–The bottom two rows of pads represent the standard 16 MIDI channels. The choice of MIDI channels is fixed in the Live layout's Session, Note and Device Modes; the User Mode's MIDI channel, however, can be set to MIDI channels 6, 7, 8, 14, 15 or 16. Therefore, if you are using multiple Launchpad Pros (up to six) in User Mode you can set the MIDI channel for each unit's User Mode separately. This allows each Launchpad Pro to operate independently when MIDI mapping.

Using the Launchpad Pro, Ableton Live and Hardware

With a little knowledge the Launchpad Pro and Live become a great team for controlling your external hardware devices, such as synthesisers, drum machines, and so on.

As mentioned in the previous section, we recommend using the Live layout (selected automatically when Live detects the Launchpad Pro) if you want to add external hardware devices to your Ableton set. There are two basic methods for setting up the Launchpad Pro, Live and external hardware, as follows.

Using the Launchpad Pro's MIDI Ports

First, make sure you set the Setup page's MIDI Out pad to 'Off' (unlit). Live will then be in control of sending MIDI, so that you are not also playing the hardware directly from the Launchpad Pro itself, thus sending MIDI twice to your hardware.

With the Launchpad Pro connected to your computer via USB, run a MIDI lead (MIDI DIN-5 with adaptor) from the Launchpad Pro's MIDI Out port into your hardware unit's MIDI In port.

Connecting the Launchpad Pro's 'MIDI Out' (left) to your hardware's 'MIDI In' (right).

Next, place Live's External Instrument (found in the 'Instruments' folder) on a MIDI track. In the top 'MIDI To' chooser select 'Launchpad Pro Output (Launchpad Pro (MIDI Port))'.

External Instrument sending MIDI through the Launchpad Pro's MIDI Port.

To get your hardware's sound back into Live connect the Line Out on the back of your hardware unit into an input on your audio interface.

With that done successfully, select the input, in the 'Audio From' section, that is receiving the audio signal from your hardware.

External Instrument's 'Audio From' chooser.

See the 'Quick Tip' in the next section for a short guide on recording your results.

Using Your Audio Interface's MIDI In/Out

With the Launchpad Pro connected to your computer via USB, run a MIDI lead (i.e., a MIDI DIN-5) out of your audio interface (e.g. Focusrite Scarlett.) into your hardware unit's MIDI In port.

Connecting your interface's 'MIDI Out' (left) to your hardware's 'MIDI In' (right).

Next, place Live's External Instrument (found in the 'Instruments' folder) on a MIDI track. In the top 'MIDI To' chooser select your Audio Interface, and in the bottom chooser select the channel that will send MIDI to your hardware.
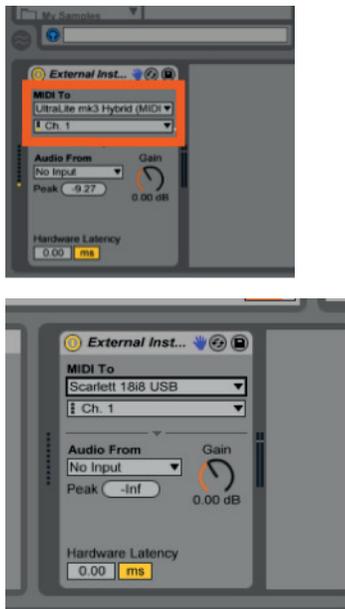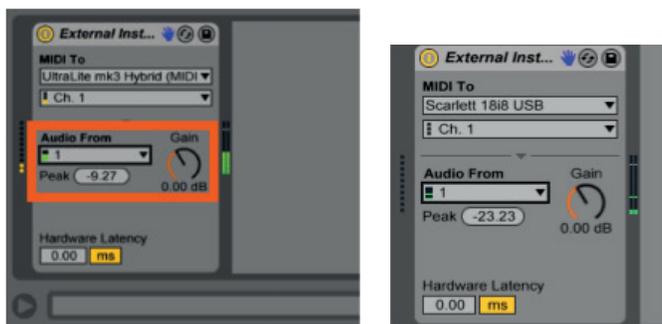

At this point, hitting Launchpad Pro pads in Note Mode should send MIDI to your hardware.

Now it is time to get your hardware's sound back into Live. Connect the Line Out on the back of your hardware unit into an input on your interface.

With that accomplished, select the input—in the 'Audio From' section—that is receiving the audio signal from your hardware.

You can now use chromatic Note Mode to play your hardware unit, and hear the result in Ableton Live.

Quick Tip: Since Ableton Live's External Instrument records MIDI and actually only monitors the audio input , you might

want to 'print' your results as audio. To do so, create a new audio track and select the External Instrument track as its input in the 'Audio From' chooser. Then, simply press record in empty clip slots to make new audio clips.

Using Standalone Layouts With Hardware

Let's take Ableton Live out of the equation entirely. In this case, the Launchpad Pro can serve as a control surface for any device able to send and/or receive MIDI. Simply press and hold the Setup button and choose from the Note, Drum or Fader layouts to begin sending MIDI out of the Launchpad Pro. If you suspect that MIDI is not being sent, check that the 'MIDI Out' button found on the Setup page is lit. This ensures that MIDI created from hitting the control surface will be sent from the Launchpad Pro's MIDI Port to your hardware.

As previously explained (see 'Using the Launchpad Pro's MIDI Ports') you will need to run a MIDI lead (i.e., a MIDI DIN-5) out of your Launchpad Pro's MIDI Out port into your hardware unit's MIDI In port. In order to receive MIDI, connect another MIDI lead from the hardware unit's MIDI Out port into the Launchpad Pro's MIDI In port.

Using Other Software

Although this user guide primarily covers how to use the Launchpad Pro with Ableton Live it can also work with other Digital Audio Workstations or 'DAWs' (FL Studio, Logic, etc). As of publication, Ableton is the only software company with support for Launchpad Pro. This is likely to change over time, so please check the resources of your preferred software to see if Launchpad Pro support has become available.

Regardless, the Launchpad Pro will still input standard MIDI data into most DAWs. Please consult your DAW's documentation for specifics on sending and receiving MIDI,

customizing MIDI controls, or any other troubleshooting.

Let's look at how you might start using the Launchpad Pro with Logic X, but the methods shown here will apply to most other music software.

With the unit properly connected, Logic X should by default receive MIDI from the Launchpad Pro (in Note layout) if you press its pads. This tiny circle above the time signature confirms that Logic is receiving MIDI when lit.
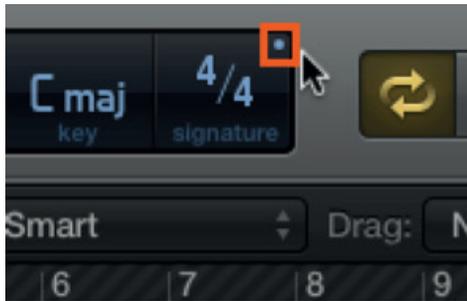

Logic's 'MIDI In' indicator

Assuming Logic X is receiving MIDI, simply record arm a MIDI track that contains an instrument. The Launchpad Pro will then be able to make melodies and chords in Logic, using the chromatic note grid in Note layout, or 4x4 pad areas in Drum layout. Just like in Ableton Live, you can use the Up and Down arrow buttons to shift octaves, and the Left and Right arrow buttons to transpose the pad layout in semitones.

For more in depth control of Logic from the Launchpad Pro we will have to set it up ourselves. One possibility is to use Fader layout (see 'Setup') to mimic a traditional mixer, and control selected tracks in Logic.

First, change the Launchpad Pro to the Fader layout on the Setup page. Once in Fader, you are now ready to 'learn' Logic's parameters to the Launchpad Pro's virtual faders. This is be done by finding 'Control Surfaces' under the Logic menu, and then selecting 'Controller Assignments'. Follow these steps in the pop-up window:

• First, click the 'Learn' button
• Next, click the Logic parameter you want to map to the Launchpad Pro (e.g., Track Stack volume sliders)
• Then, touch the Launchpad Pro's pads
• Finally, click 'Learn' again to exit

You now have convenient, hands-on control of your Logic X session.
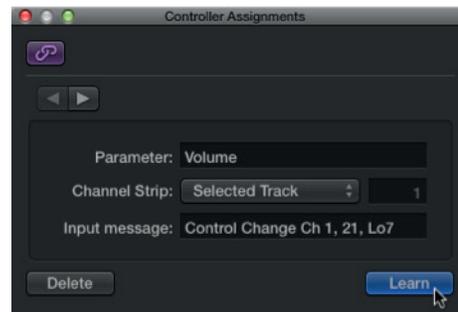
Logic X's 'Controller Assignments' window.

Troubleshooting

For all troubleshooting queries, please visit the Novation Answerbase at www.novationmusic.com/answerbase where you will find articles covering numerous troubleshooting examples.