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INTRODUCTION

Thank you for purchasing this Novation Launchkey MIDI controller keyboard. As well as the music keyboard itself, Launchkey is equipped with a range of controllers to allow the modern musician to create great music in the studio, in live performance or on the move. The keyboard allows you to control your existing Digital Audio Workstation (DAW) software, and also the included V-Station and Bass Station software plug-ins. Together, this unique software-hardware combination allows instant, real-time tweaking of synth parameters, loops and audio effects.

This guide will introduce you to Launchkey and explain the various ways you can use it with your music software in your recording set-up.

Launchkey includes Novation's InControl mode, which gives you a simple yet powerful way of controlling all your favourite music software applications.

With Launchkey you have two ways of working:

- **InControl** – automatically maps Launchkey’s sliders, rotary controls and buttons onto your essential DAW parameters, such as channel faders, pan, mute and solo.
- **Basic Mapping mode** – use Launchkey as a conventional MIDI controller, where each controller - sliders, rotary controls and buttons - transmits a dedicated MIDI CC (Continuous Controller) message.

For additional information, up to date support articles and a form to contact our Technical Support Team please visit the Novation Answerbase at: [www.novationmusic.com/answerbase](http://www.novationmusic.com/answerbase)

**Key Features**

- Available with 25, 49 or 61-note synth-action keyboard
- 8 rotary controls
- 9 sliders (49 and 61-note versions)
- 16 performance launch pads with multi-colour backlighting
- Numeric LED display showing parameter values
- Standard transport control set
- Standard synth modulation and pitch bend wheels, plus octave transpose buttons
- Direct integration with Ableton Live recording software
- Track control buttons – change DAW tracks remotely
- Integrated with InControl for seamless control of your DAW
- Very simple installation procedure – class compliant, no driver required

**About This Manual**

We've tried to make this manual as helpful as possible for all types of user, both newcomers to computer music and those more experienced, and this inevitably means some users will want to skip over certain parts of it, while relative novices will want to avoid certain parts of it until they’re confident they’ve mastered the basics.

However, there are a few general points that are useful to know about before you continue reading this manual. We've adopted some graphical conventions within the text, which we hope all types of user will find helpful in navigating through the information to find what they need to know quickly:
Abbreviations, conventions, etc.
Where top panel controls or rear panel connectors are referred to, we’ve used a number thus: 6 to cross-reference to the top panel diagram, and thus: 1 to cross-reference to the rear panel diagram. (See pages page 7 and page 9).

We’ve used CAPS to name physical things like top panel controls and rear panel connectors, and also on-screen buttons which you need to click, and bold Courier font to denote text which you see on the computer screen.

Tips

These do what it says on the tin: we include bits of advice, relevant to the topic being discussed that should simplify setting up Launchkey to do what you want. It’s not mandatory that you follow them, but generally they should make life easier.

What’s In The Box
Launchkey has been carefully packed in the factory and the packaging was designed to withstand rough handling. Should the unit appear to have been damaged in transit, do not discard any of the packing material and notify your music dealer.

Save all the packing materials for future use if you ever need to ship the unit again.

Please check the list below against the contents of the packaging. If any items are missing or damaged, contact the Novation dealer or distributor where you purchased the unit.

- Launchkey MIDI controller keyboard
- USB Type A to Type B cable (1.5 m)
- Getting Started Guide, including Product/software Registration details, allowing download of:
  - Setup instructions for popular DAWs
  - Novation V-Station synth plug-in
  - Novation Bass Station plug-in
  - Loopmaster samples
- Live Lite registration card, with download instructions for Ableton Live Lite music making software
Registering Your Launchkey
It is important to register your Launchkey on-line using the Product/software Registration details on the back of the Getting Started Guide. Apart from validating your manufacturer’s warranty, you will also then be able to download the additional software that you are entitled to as a Launchkey purchaser. The registration details also contain codes you will need to enter in the on-line forms on our website to download the software, but before you attempt to do this, warranty registration is required.

Power Requirements
Launchkey will normally be powered from your computer via its rear panel USB connector. DC power will be supplied by the computer through the standard USB cable. We recommend that you connect Launchkey directly to a computer’s native USB port, and not via a USB hub.

Launchkey cannot be powered from an iPad. When using Launchkey with an iPad, it must be separately powered by an external, 9 V mains adaptor (AC-to-DC adaptor). When using this method, please ensure that your local AC supply is within the range of voltages required by the adaptor BEFORE you plug it into the mains. Please contact your Novation dealer for advice on suitable mains adaptors if you are in any doubt.

A word about laptops:
When powering Launchkey from a computer you should be aware that although the USB specification agreed by the IT industry states that a USB port should be able to supply 0.5 A at 5 V, some computers - particularly laptops – are unable to supply this current. Unreliable operation may result in such a case. When powering Launchkey from a laptop’s USB port, it is recommended that the laptop is powered from AC mains rather than its internal battery.

If this is a problem, Launchkey can be powered via an optional AC-to-DC 9 V mains adaptor, which you should connect to the Power In socket at the rear (see page 9). Please contact your Novation dealer for advice on suitable mains adaptors if you are in any doubt.
Launchkey’s controls are *non-assignable*. This makes Launchkey very simple to configure and use.

1. **Keyboard** – Launchkey is available in 25-, 49- or 61-note versions.

2. **Pitch** wheel – standard pitchbend wheel, spring-loaded to return to centre position.

3. **Modulation** wheel.

4. **9 x 45 mm sliders**, used to control levels and other parameters in your DAW and virtual MIDI devices.

5. **9 x press-buttons**, providing additional DAW/MIDI control functions.
8 x rotary controls, providing further DAW/MIDI control.

Transport controls - these provide remote control facilities for your DAW, but also have specific functions when Launchkey is used with Ableton Live Lite software.

16 x velocity-sensitive launch pads. These can be used to trigger sounds (e.g., drums) in your music software and provide other functions in some DAWs and iPad apps.

2 x round buttons. These can be used for custom functions in the iOS software, or in your DAW.

3 x InControl buttons; these switch the operating mode of the sliders, rotary controls and launch pads to be either DAW controllers or standard MIDI CC controllers.

LED display. Shows the value of the MIDI parameter being transmitted by the control you're currently using.

Octave + / – buttons – shift the keyboard ‘up’ or ‘down’ in octave steps. Pressing the two buttons together lets you transpose the keyboard in semitone increments. The number of octaves over which the keyboard can be shifted varies with Launchkey model; the smaller models have a greater shift range.

Track I/H buttons – use these to change tracks in your music software. Pressing both buttons together lets you change the MIDI channel on which Launchkey will transmit MIDI data.

1 Launchkey 49 and 61 only. Launchkey 25 has one assignable slider.

2 Launchkey 49 and 61 only. There are no buttons on Launchkey 25.

3 Launchkey 49 and 61 only. Launchkey 25 has two InControl buttons.
Rear view – connections

1 **USB** port – USB Type B connector compatible with USB 1.1, 2.0 or 3.0. Connect Launchkey to a USB port on your computer or iPad using the USB cable supplied.

2 **Power In** - you can also connect an AC-to-DC adaptor here to externally power Launchkey.

3 **Sustain** – a ¼” jack socket for the connection of a standard sustain pedal.

4 Kensington security lock – secure your Launchkey to a convenient structural point if desired.
LAUNCHKEY SETUP EXAMPLES

Launchkey is designed to integrate automatically and seamlessly with your computer music software. Launchkey can be used with either a computer/laptop, or with an iPad; however the features and operational possibilities do differ with the two platforms, so they have been covered separately in the User Guide sections that follow.

Interfacing Launchkey to a computer
Connect Launchkey to your computer using the supplied USB cable between Launchkey’s rear panel USB socket and a USB port on the computer.

If Launchkey cannot establish communications with the computer, all the pads will flash rapidly in a multicoloured sequence. (We’ve called this Lightshow mode.) Once the USB data link is working, Lightshow mode will stop and Launchkey will be ready for use.

If you want to impress your friends with a dynamic and impressive lightshow, you can initiate this mode by pressing the Record button while Launchkey boots up. Press the Track  and Track  buttons together to cancel it and return to normal operation.

InControl mode
InControl has been integrated into your Launchkey to allow instant operability with certain DAWs. Consult the Setup Guide for your DAW which you downloaded when you registered your Launchkey*. This will explain how the various controls on Launchkey map onto each DAW’s key functions.

If your favourite DAW is not in this list, you can still use Launchkey with it effectively, but you will need to use Basic Mapping Mode  (see following page).

*This can be downloaded at any time from www.novationmusic.com/downloads.
**Basic mapping mode**
Launchkey will act as a general-purpose MIDI controller for use with a wide range of music software applications. In addition to the keyboard’s Note On/Note Off messages, each of the various controls (sliders, buttons and rotary controls) will always transmit their own unique MIDI control message, allowing you to configure your software to respond to the messages as you wish.

**Interfacing Launchkey to an iPad**

If you have an iPad or iPad mini*, you can control many different music making apps with your Launchkey. Depending on the connector on your iPad, you will need either an Apple iPad Camera Connection Kit (earlier iPads), or an Apple Lightning to USB Camera Adapter (more recent iPads) to interface Launchkey to an iPad, as shown above:

1. plug the USB cable (in the box) into the USB port on Launchkey,
2. plug the other end of the USB cable into the USB port on the Camera Connection Kit or Lightning to USB Camera Adapter,
3. now connect the Camera Connection Kit or Lightning to USB Camera Adapter to the iPad.

**NOTE:** Please note that neither an Apple iPad Camera Connection Kit nor an Apple Lightning to USB Camera Adapter is included with Launchkey, and must be sourced separately.

**IMPORTANT**
Launchkey cannot be powered from an iPad. An external 9 V DC mains adaptor must be used.

* OS version-dependant
EXPLORING LAUNCHKEY

MIDI Channel
MIDI data can be sent on any one of 16 channels, and will only be received and interpreted correctly if the receiving device is set to the same channel. In InControl mode, you don’t need to worry too much about MIDI channels, as InControl will ensure that all messages are transmitted on the correct channels in any case.

To select a different channel:

- Press the two TRACK buttons simultaneously; the LED display will flash, indicating the current MIDI channel
- Use the TRACK buttons, select the desired channel number.

The exception to the above are the launch pads; these ALWAYS transmit on MIDI Channel 10, as this is the standard GM MIDI channel for percussion instruments.

When powering-on, Launchkey ALWAYS defaults to MIDI Channel 01; if you have re-powered since changing the MIDI channel number, you will need to reset it.

Transport controls
Launchkey is provided with a standard set of six ‘transport’ controls, which can be used to start, stop, relocate, etc., within your DAW’s timeline. They act as a convenient remote control for the software and duplicate the on-screen buttons.

In InControl mode, these will control the DAW’s standard transport functions. In Basic Mapping mode, each button will transmit its own unique MIDI CC message, and you may need to configure your DAW to respond correctly. See the MIDI tables from page 19 onwards.

When Launchkey is used with Ableton Live, the buttons act as Previous Scene and Next Scene respectively.
Octave up/down

The **Octave + / Octave** - buttons [12] shift the keyboard ‘up’ or ‘down’ in octave steps. The number of octaves over which the keyboard can be shifted varies with Launchkey model:

- Launchkey 25: -4 to +5 octaves
- Launchkey 49: -3 to +4 octaves
- Launchkey 61: -3 to +3 octaves

Note that the LED display will confirm the number of octaves shifted (as a positive or negative value).

Transpose

Pressing the **Octave + / Octave** - buttons [12] together lets you transpose the keyboard in semitone increments, up to a maximum of +/- 12 semitones. The LED display flashes, and confirms the transposition.

Pitch Wheel

Launchkey’s Pitch Wheel [2] transmits standard MIDI Pitch bend messages; use it with synth software to vary the pitch of the played note.

Modulation Wheel

The Modulation Wheel [3] transmits standard MIDI Modulation messages (CC=1); what effect these have on your synth sound will be determined by how the synth has been configured.

Typically, a Modulation Wheel is used to vary a synth parameter such as filter cut-off frequency or vibrato.
Slider(s)

Launchkey 25 has one slider control, and Launchkeys 49 and 61 have nine.

The single slider on the Launchkey 25 transmits a Master Volume message (CC=7). This slider cannot be used in InControl mode.

On Launchkeys 49 and 61, the functions of sliders 1 to 8 will differ depending on whether InControl mode is in use. In InControl mode, the sliders will act as faders in the DAW's mixer section, controlling the track levels in a set of eight consecutively-numbered channels. In Basic Mapping mode, each slider transmits a fixed MIDI CC message. See the MIDI tables from page 19 onwards.

Buttons

Only Launchkeys 49 and 61 have control buttons. There are a total of nine, one under each slider. In InControl mode, buttons 1 to 8 will typically act as mute or solo buttons for the selected set of eight channels in the DAW's mixer. In this case, the ninth button switches the function of buttons 1 to 8 between Mute and Solo. Note that Solo mode is indicated by the internal LED. In Basic Mapping mode, each button transmits a fixed MIDI CC message. See the MIDI tables from page 19 onwards.

Rotary controls

All models have eight rotary controls, which like the other Launchkey controllers, may be placed in InControl mode, or used in Basic Mapping Mode. In InControl mode they would typically act as pan controls for a set of eight channels in the DAW's mixer section. In Basic Mapping mode, each rotary control transmits a fixed MIDI CC message. See the MIDI tables from page 19 onwards.

Launch Pads

All models of Launchkey are equipped with a set of sixteen velocity-sensitive pads. Their primary purpose is to trigger percussive sounds, and to do so, the pads need to be set to Basic Mapping mode. In this case, all data is transmitted on MIDI Channel 10. In this mode, the pads illuminate red when struck. If the pads are set to InControl mode, they can be used to trigger clips or loops with certain software (such as Ableton Live), but have no function with non-clip-based applications such as Logic Pro or Cubase (hence cannot be switched into InControl mode).
Round buttons
The two large, round buttons transmit fixed MIDI CC messages (upper = 104, lower = 105) when Launchkey is in Basic Mapping mode. When InControl is active they have specific functions within the software being used.

Track ↓ / ↑
The two Track ↓ / ↑ buttons are only operative in InControl mode. They allow you to ‘step’ the slider(s) between tracks or instruments in your DAW, which will be assigned to consecutive DAW tracks by successive presses of Track ↓ / ↑.

Note that the action of the Track buttons can differ slightly between DAWs; for example, Logic Pro automatically selects the next bank of eight tracks when you step from the “last” track in a bank of eight; e.g., stepping from track 8 to track 9 switches the controlled tracks from 1-8 to 9-16.

Velocity Curves
To suit different keyboard playing styles, Launchkey lets you select the relationship between key velocity (i.e., how hard you hit the keys) and volume. The relationship is called the velocity curve, and the default curve is NORMAL, which will be satisfactory for a great number of players. Three alternative velocity curves are available – Low, High and Fixed.

To select an alternative curve, press and hold the top InControl button and press one of the transport buttons as follows:

<table>
<thead>
<tr>
<th>BUTTON</th>
<th>CURVE</th>
<th>DISPLAY</th>
</tr>
</thead>
<tbody>
<tr>
<td>↓</td>
<td>Low</td>
<td>lo</td>
</tr>
<tr>
<td>↓</td>
<td>High</td>
<td>hi</td>
</tr>
<tr>
<td>■</td>
<td>Fixed</td>
<td>f</td>
</tr>
<tr>
<td>▶</td>
<td>Normal</td>
<td>nor</td>
</tr>
</tbody>
</table>

With the Fixed curve selected, velocity sensing is disabled, and all notes will be at maximum volume regardless of how hard the key is struck. With the Low curve selected, the volume of the notes will be lower compared to the Normal curve for the same style of playing. The High curve has the opposite effect.

Note: Velocity curves only affect the response of the keys, not the drum pads.
Using Launchkey with InControl

If you have one of the DAWs for which a DAW Setup Guide is available, you will first need to follow the instructions on how to set it up to operate correctly with Launchkey. Once this has been done, InControl will automatically assign each hardware controller to a key DAW function in an intelligent manner. You should be able to discover very easily how each controller is mapped onto which DAW function by experimenting, but a full list of mappings is contained in the DAW Setup Guide.

InControl assignments are fixed and invisible to you, so its operation is seamless and transparent.

InControl mode may be selected independently for the various blocks of controllers – sliders/buttons, rotary controls and launch pads, using the three (Launchkey 49/61) or two (Launchkey 25) InControl buttons. When enabled, the InControl buttons are illuminated.

Note that the launch pads have no InControl functionality with some DAWs – these will be DAWs which are not clip-based, such as Logic Pro and Cubase. Ableton Live is clip-based, and you will be able to trigger clips and loops directly with these DAWs, using the pads. When used with Reason, the pads can be used for many other purposes, such as to select and edit drum loops or modify sequencer steps.

Using Launchkey with Ableton Live Lite

Ableton Live Lite is available for download to Launchkey owners, and is an excellent Digital Audio Workstation (DAW) if you don’t already have one that you’ve been working with for some time. Using Ableton Live Lite gives you the advantage of a deeper level of integration between the controls on your Launchkey and various DAW functions than is possible with other DAWs.

It is possible to reassign the rotary controls as Device controls, panpots or Send level controls.
A long press of the top InControl button for the rotary controls places Launchkey in Pot Selection mode. The drum pads will now illuminate in various colours to indicate the current function within Ableton Live Lite of the rotary controls (the bottom row of pads), and the currently selected Ableton Device Bank (the top row).

**Bottom row:**
One pad will be significantly brighter than the others; this indicates the function that the rotary controls will now perform. The first four pads’ functions are indicated by legends on the Launchkey panel – Device, Pan, Send A or Send B respectively. If you want to control a different Ableton function from that currently selected, hold down the top InControl button while pressing a different pad.

The colour coding used is as follows:

- Pink: Device Select
- Orange: Pan
- Purple: Send A
- Blue: Send B

Note that the remaining pads on the bottom row operate in a similar manner, and assign the rotary controls to Sends C to F respectively, although this is not indicated on the Launchkey panel. If these Sends have been enabled in Ableton Live Lite, the relevant pad(s) will illuminate in further distinguishing colours. Only Sends A and B are enabled by default.

Additionally, you can scroll through the Devices on a track by holding the top InControl button down while using the Track and Track buttons.

**Top row:**
If you touch any of the top row of drum pads while holding down the top InControl button down, you can select alternative Device Banks within Ableton Live Lite. The active Device Bank is indicated by one pad illuminating bright pink (the others will glow a dimmer pink).

The first pad, which is always activated by default when you enter Pot Selection mode - selects the Default Bank (Ableton’s “best of” page of pre-selected controls), while the remaining seven pads select Device Banks 1 to 7 (depending on the number of Banks available at the time – it will often be only Banks 1 and 2).

For many users, the Default Bank – Ableton’s “best of” set – will prove adequate most of the time, so the top row of pads need not be altered.
TECHNICAL INFORMATION

TROUBLESHOOTING

For the latest information and assistance with your Launchkey please visit:
www.novationmusic.com/answerbase

Basic Troubleshooting Examples

Q. Where can I find my software?
A. The software for Launchkey is available from our web site.
   Go to www.novationmusic.com/register and follow the instructions.

Q. Do I need to install a USB driver when using Launchkey with a Mac or PC?
A. No, Launchkey is a class-compliant device. This means your computer will detect the
   keyboard when you connect it and, if necessary, install the correct drivers automatically.

Q. What is the DC power socket for?
A. You can power Launchkey with an external DC power supply of the recommended type.
   This way it won't draw power from the your laptop battery. If you're using Launchkey with
   an iPad, you must use an external power supply connected here – an iPad cannot power
   Launchkey via the USB cable.

Q. Can I connect Launchkey to both a computer and an iPad at the same time?
A. Launchkey is designed to connect via USB, and thus can only connect to one device
   at a time.

Q. What is InControl?
A. A Novation innovation that provides control of all major music software straight
   out of the box.

Q. What do the arrow buttons do?
A. These turn InControl mode on or off for Launchkey's faders, knobs and pads individually.
   InControl mode is available when a control surface connection to your music software is
   established.
**MIDI messages table**

**25-note Launchkey:**

<table>
<thead>
<tr>
<th>Control</th>
<th>Msg Type</th>
<th>Msg No.</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rotary control 1</td>
<td>cc</td>
<td>21</td>
<td>0 - 127</td>
</tr>
<tr>
<td>Rotary control 2</td>
<td>cc</td>
<td>22</td>
<td>0 - 127</td>
</tr>
<tr>
<td>Rotary control 3</td>
<td>cc</td>
<td>23</td>
<td>0 - 127</td>
</tr>
<tr>
<td>Rotary control 4</td>
<td>cc</td>
<td>24</td>
<td>0 - 127</td>
</tr>
<tr>
<td>Rotary control 5</td>
<td>cc</td>
<td>25</td>
<td>0 - 127</td>
</tr>
<tr>
<td>Rotary control 6</td>
<td>cc</td>
<td>26</td>
<td>0 - 127</td>
</tr>
<tr>
<td>Rotary control 7</td>
<td>cc</td>
<td>27</td>
<td>0 - 127</td>
</tr>
<tr>
<td>Rotary control 8</td>
<td>cc</td>
<td>28</td>
<td>0 - 127</td>
</tr>
<tr>
<td>Slider 9 (Master)</td>
<td>cc</td>
<td>7</td>
<td>0 - 127</td>
</tr>
<tr>
<td>Pad 1</td>
<td>Note</td>
<td>40 (E1)</td>
<td>0 - 127</td>
</tr>
<tr>
<td>Pad 2</td>
<td>Note</td>
<td>41 (F1)</td>
<td>0 - 127</td>
</tr>
<tr>
<td>Pad 3</td>
<td>Note</td>
<td>42 (F#1)</td>
<td>0 - 127</td>
</tr>
<tr>
<td>Pad 4</td>
<td>Note</td>
<td>43 (G1)</td>
<td>0 - 127</td>
</tr>
<tr>
<td>Pad 5</td>
<td>Note</td>
<td>48 (C2)</td>
<td>0 - 127</td>
</tr>
<tr>
<td>Pad 6</td>
<td>Note</td>
<td>49 (C#2)</td>
<td>0 - 127</td>
</tr>
<tr>
<td>Pad 7</td>
<td>Note</td>
<td>50 (D2)</td>
<td>0 - 127</td>
</tr>
<tr>
<td>Pad 8</td>
<td>Note</td>
<td>51 (Eb2)</td>
<td>0 - 127</td>
</tr>
<tr>
<td>Pad 9</td>
<td>Note</td>
<td>36 (C1)</td>
<td>0 - 127</td>
</tr>
<tr>
<td>Pad 10</td>
<td>Note</td>
<td>37 (C#1)</td>
<td>0 - 127</td>
</tr>
<tr>
<td>Pad 11</td>
<td>Note</td>
<td>38 (D1)</td>
<td>0 - 127</td>
</tr>
<tr>
<td>Pad 12</td>
<td>Note</td>
<td>39 (Eb1)</td>
<td>0 - 127</td>
</tr>
<tr>
<td>Pad 13</td>
<td>Note</td>
<td>44 (G#1)</td>
<td>0 - 127</td>
</tr>
<tr>
<td>Pad 14</td>
<td>Note</td>
<td>45 (A1)</td>
<td>0 - 127</td>
</tr>
<tr>
<td>Pad 15</td>
<td>Note</td>
<td>46 (Bb1)</td>
<td>0 - 127</td>
</tr>
<tr>
<td>Pad 16</td>
<td>Note</td>
<td>47 (B1)</td>
<td>0 - 127</td>
</tr>
<tr>
<td>Round button top row</td>
<td>cc</td>
<td>104</td>
<td>0 / 127</td>
</tr>
<tr>
<td>Round button bottom row</td>
<td>cc</td>
<td>105</td>
<td>0 / 127</td>
</tr>
<tr>
<td>Arrow up button</td>
<td>cc</td>
<td>112</td>
<td>0 / 127</td>
</tr>
<tr>
<td>Arrow down button</td>
<td>cc</td>
<td>113</td>
<td>0 / 127</td>
</tr>
<tr>
<td>Track left (HUI Track Down)</td>
<td>cc</td>
<td>103</td>
<td>0 / 127</td>
</tr>
<tr>
<td>Track right (HUI Track Up)</td>
<td>cc</td>
<td>102</td>
<td>0 / 127</td>
</tr>
<tr>
<td>Octave left (down)</td>
<td>None</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Octave right (up)</td>
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### 49 and 61-note Launchkeys:

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