



# nektar Impact LX Plus Series MIDI Keyboard Controller User Manual

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**nektar Impact LX Plus Series MIDI Keyboard Controller**



## Product Information

Product Name: Bitwig 2.0 LX25+ | LX49+ | LX61+ | LX88+

Manufacturer: Nektar

Website: [www.nektartech.com](http://www.nektartech.com)

Compatibility: Bitwig Studio

## Product Usage Instructions

### 1. Setup and Configuration:

- The Impact LX+ Bitwig Integration is installed when Bitwig is installed. No additional files or installation is needed.
- If you are new to Bitwig, visit [www.bitwig.com](http://www.bitwig.com) and create a user account. Register your Bitwig license, then download and install the program on your computer.

### 2. Getting Sound:

- The default song in Bitwig does not host any instruments. To hear sound when playing your LX+, follow the instructions based on your operating system:
  - MacOS: [Instructions]
  - Windows: [Instructions]

### 3. Troubleshooting:

- If your Impact LX+ controller is connected but you cannot control Bitwig or play instruments, check if the controller is listed but inactive. If so, click the '+' sign to activate it.

### 4. Track Changes:

- To navigate Bitwig Studio's tracks from Impact LX+, press [ ] to go to the next track. This is the same as using the arrow up/downkeys on your computer keyboard.

### 5. Transport Functions:

- The transport buttons on Impact LX+ control various functions in Bitwig Studio, such as Cycle (loop), rewind, forward, stop, play, and record.
- Hold down the [Shift] button to access secondary functions of the transport buttons.

- Refer to the chart below for the button combinations and their descriptions:

Button Combination	Description
[Loop]	Switch the loop/cycle between the Loop Start and Loop End on/off
[Rewind]	Moves the Play Start Position backwards by 1 bar for each press
[Forward]	Moves the Play Start Position forward by 1 bar for each press
[Stop]	Stop playback and resume from Play Start Position. Press Stop again to go to Zero
[Play]	Activate play from the Play Start Position. Press again to pause
[Record]	Activate record. Press again to deactivate record but continue play
[Shift]+[Cycle]	Goto Loop Start
[Shift]+[Rewind]	Set Loop Start to the current song position
[Shift]+[Forward]	Set Loop End to the current song position

## Bitwig Studio Integration Setup and Configuration

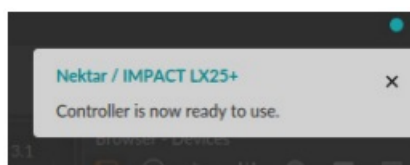
The Impact LX+ Bitwig Integration is installed when Bitwig is installed. No additional files or installation is needed. If you are new to Bitwig, start by visiting [www.bitwig.com](http://www.bitwig.com) and create a user account. Next register your Bitwig license, then download and install the program on your computer.

### Setup

Here are the steps you need to go through to get Bitwig Studio up and running with your Impact LX+:

- Make sure Bitwig is already installed on your computer. If not, please install Bitwig and run it.
- Plug in your Impact LX+ and make sure it's switched on.
- Bitwig now detects your Impact LX+ and a 'Found control surface' message box appears on the right side of Bitwig.

That's it – setup is now complete and you can move on to the fun part, learning how it all works.



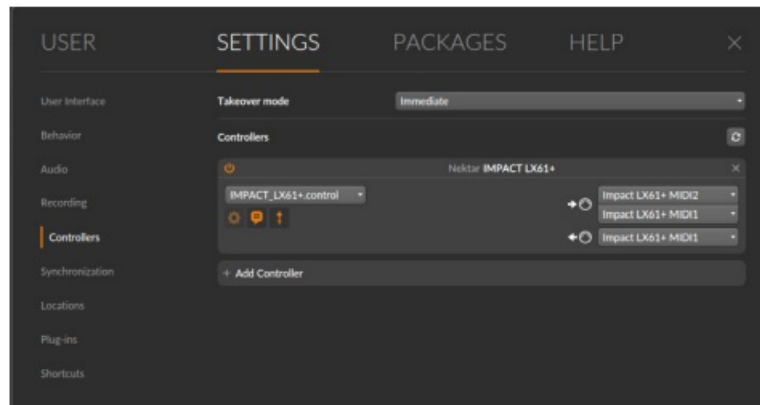
### Getting Sound

The default song in Bitwig does not host any instruments so you won't hear any sound when playing your LX+ unless you do the following:

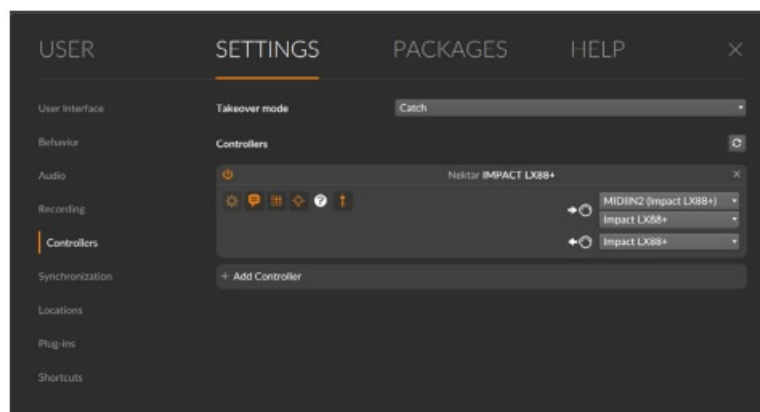
- Go to the Dashboard in Bitwig (click the Bitwig symbol at the top of the screen).
- Select your user name in the upper left corner of the dashboard window..

- Select Quick Start.
- Open the 'Play Keys' project.
- Now you should hear sound when you press the keys.

## MacOS

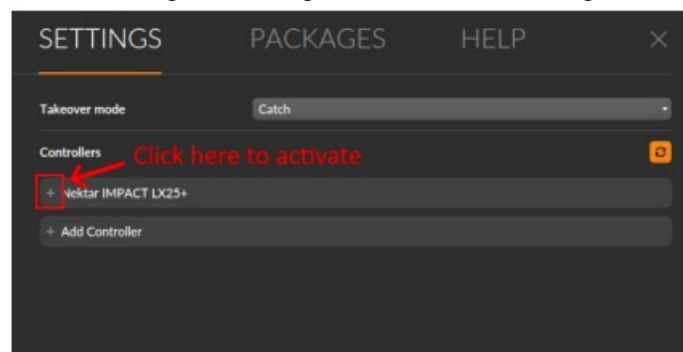


## Windows



## Troubleshooting

If your Impact LX+ controller is connected but you cannot control Bitwig or play instruments, check if the controller is listed but inactive, as shown in the image on the right. If so, click the '+' sign activate it.



## Bitwig and Impact LX+ Working Together

The following pages focus on how Bitwig Studio and Impact LX+ work together. If you have been using Bitwig Studio for a while, you may not need any additional information but it's always a good idea to revisit the extensive Bitwig Studio documentation to remind yourself about how Bitwig Studio's functions work.

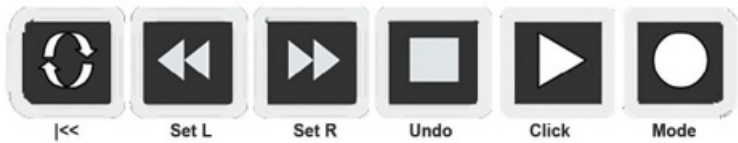
## Track Changes

To navigate Bitwig Studio's tracks from Impact LX+, press [<Track] to go to the previous track and [Track>] to go to

the next track. This is the same as using the arrow up/down keys on your computer keyboard.

**Transport**

The transport buttons control the following transport functions: Cycle (loop), rewind the Play Start Position (in 1 bar decrements), forward the Play Start Position (in 1 bar increments), Stop, Play, Record.



In addition, the buttons have secondary functions which are accessed by holding down the [Shift] button. The chart below shows what each button and button combination does and how they behave.

Key Combination	Description
[Loop]	Switch the loop/cycle between the Loop Start and Loop End on/off
[Rewind]	Moves the Play Start Position backwards by 1 bar for each press
[Forward]	Moves the Play Start Position forward by 1 bar for each press
[Stop]	Stop playback and resume from Play Start Position. Press Stop again to go to Zero
[Play]	Activate play from the Play Start Position. Press again to pause
[Record]	Activate record. Press again to deactivate record but continue play
[Shift]+[Cycle]	Goto Loop Start
[Shift]+[Rewind]	Set Loop Start to the current song position
[Shift]+[Forward]	Set Loop End to the current song position
[Shift]+[Stop]	Undo last changes
[Shift]+[Play]	Switch the Click/metronome on/off
[Shift]+[Record] (Mode)	Toggle Overdub on/off

**Soft Take-Over**

When changing tracks and adjusting Bitwig’s mixer volume with a generic controller you would experience parameter jumping. This happens when a control’s physical position is not the same as the position of the parameter you are controlling

To avoid parameter jumping when using the knob, your Impact LX+ is equipped with Soft Take-Over. This means that if the knob is not in sync with the current channel volume, moving the knob will not cause a change, until it’s position matches the value of the parameter.

Let’s say the faders have been used to control an instrument in Bitwig. Now you are ready to control the Bitwig Mixer and need the faders for that. When you move a fader it’s unlikely that it will be in sync with the mixer channel volume that it’s controlling because it was just used to control an instrument parameter.

When a physical control is in a different position from the parameter which is assigned to that control, LX+’s display will show you which direction you need to move the control in order to take over. If the position of the software parameter is above the position of the knob or fader, the display will say “UP”. If the position of the software parameter is below the position of the knob or fader, the display will say “dn”.

**Bitwig Studio Mixer Control**

To control Bitwig Studio’s mixer, press the [Mixer] button to select the mixer preset. The button’s LED is

illuminated while the preset is selected and Bitwig Studio's mixer is being controlled.

### **Open/Close Bitwig Studio's Mixer Window**

If Bitwig Studio's mixer is not in view when you press [Mixer], the action will bring it in to view. Press [Mixer] again to close it. While the Mixer preset is selected, your Impact LX+ continues to control the Bitwig Studio mixer, even if the mixer window is closed.

### **Channel Volume & Pan**

With the mixer preset active, moving faders 1-8 will control the first 8 mixer channels in Bitwig Studio's mixer. The 8 pots control pan for each of the corresponding channels.

LX25+: On the Impact LX25+, the 8 pots control 8 mixer channels by default. You can switch them to control Pan by pressing and holding [Mixer] while moving the pots.

Fader 9 (on LX25+ the single fader) controls the channel of the currently selected track so as you change tracks, you can quickly change volume while you are working. If you have 16 tracks in your song and the currently selected track is 12, that would result in faders 1-8 controlling mixer channel volume 9-16 and fader 9 controlling channel volume 12.

### **Mute & Solo**

Fader buttons 1-8 control mute for each of the tracks to which the faders are assigned. If you prefer to solo tracks, you can press and hold fader button 9 while pressing fader buttons 1-8. The 8 buttons will now control solo for their corresponding tracks.

LX25+: On Impact LX25+, you can use the pads to control mute for tracks 1-8. Press and hold [Mixer] while hitting pads 1-8. This will toggle mute on or off for the corresponding channels. Release the [Mixer] button and the pads revert to trigger MIDI notes. It is not possible to control the solo function with LX25+.

### **Bank Over (1-8), (9-16) etc**

If your song contains more than 8 mixer channels, you can bank over so faders 1-8 control the next group of 8 channels. To do this, press [Shift]+[Bank>] (the second fader button). The faders, pots and fader buttons are now assigned to control channels 9-16. Push the same key combination again to control 17-24 etc.

To go back you press [Shift]+[<Bank] (the first fader button).

LX25+: On Impact LX25+ press and hold [Mixer] while pressing [Octave-] or [Octave+] to move the bank down or up.

### **Master Volume**

You can control the Master Volume fader of Bitwig Studio's mixer by pressing [Fader button 9] and then move fader 9 while the button is pressed.

Upon release of the button, fader 9 will revert to control the current channel volume.

LX25+: On Impact LX25+, press [Mixer] and move the [Fader] to control master volume.

## **Bitwig Studio Instrument (Device) Control**

Pressing the [Inst] button will select Instrument mode. Instrument mode is really a Device mode because this is where you control all devices regardless of whether they are instruments, effects or containers.

In the following pages, we will cover how the instrument preset works with devices in general. Start by pressing the [Inst] button.

### **Open/Close the Instrument Window**

Press [Inst] to bring the device lane in to view in Bitwig Studio. You can close the device lane by pressing [Inst] again. If you are controlling a VST plugin device, press [Shift]+[Inst] to open or close the plugin GUI.

### **Switching a Device on/off from Impact LX+**

Any of the first 8 devices in a device chain, can be switched on or off from LX+. Press any of [Fader button 1-8] to change it's enable/disable status. This is a great feature to switch effects on/off in real-time.

If nested FX's are inserted, you can enable/disable them in the same way, after first selecting them with your

mouse.

### Selecting a Device from Impact LX+

You can select any of the first 8 devices directly from Impact LX+. Press [Shift]+[one of the 8 fader buttons] to select a device from 1-8. To select the second device in a chain therefore press [Shift]+[fader button 2]. Pressing [Master/Track] selects the first instrument device in the chain.

### Changing Patches

You can step through the device patches from Impact LX+ at any time, regardless of which mode or preset is selected.

- Press [Patch>] or [<Patch] to open the Browser.
- Next press either of the patch buttons to navigate through the patch list.
- Press [<Patch]+[Patch>] to load the selected patch and close the Browser.

Make sure you have selected the device for which you would like to change patches. A device is selected in Bitwig Studio when you click on it with your mouse.

### Open/Close VST Plugin GUI

You can open or close a VST plugin's GUI from Impact LX+ by pressing [Shift]+[Inst] at any time.

### Controlling Devices

With the [Inst] (Instrument) preset selected, Impact LX+ will automatically map parameters for the Bitwig Studio devices associated with the track you are currently on. You can control both instruments, effects and container devices in this manner.

There are 3 complimentary options to control device parameters from Impact LX+:

- Nektar Default parameter mapping. Mapping matches the blue silk screen printing on the panel of LX+. To select this option, press the [Page] button and make sure the blue [Default] LED is illuminated.
- Bitwig Remote Control Pages. This option allows you to customize your mappings.
- Nektar Grab. This is a quick option to assign parameters temporarily without any complicated setup.

### Nektar Default Parameter Mapping

Nektar Default parameter mapping is straight forward. With the instrument preset selected, press the [Page] button until the blue LED labeled "Default" is illuminated. Impact LX+ now controls parameters corresponding to the blue silk screen printing for mapped devices. All Bitwig native instruments devices, as well as many VST instrument plugins have been mapped. Note though that while we have mapped a large selection of those, there may be plugins that can't be controlled using this method

### Remote Control Pages

Bitwig's Remote Controls Pages allows complete customization of your own mapping for any device using the 8 pots.

With the Instrument preset active, press the [Page] button until the white LED, labelled "User" is illuminated. Next create a track with the FM-4 synth device. With the white Page button LED illuminated, moving the 8 pots immediately control parameters, different from what the Default page (blue LED) controls. Here is how it works:

- First press the [Page] button on your LX+. This opens the current Remote Controls Page so you can see what's assigned to each pot.
- You can toggle the Remote Controls Page open/close by pressing [Shift]+[Page].
- Press [Page]+[>>] to go to the next page. [Page]+[<<] allows you to go back again.
- In Bitwig, click on the Operators menu. This brings up the list of the Remote Controls pages you navigated.

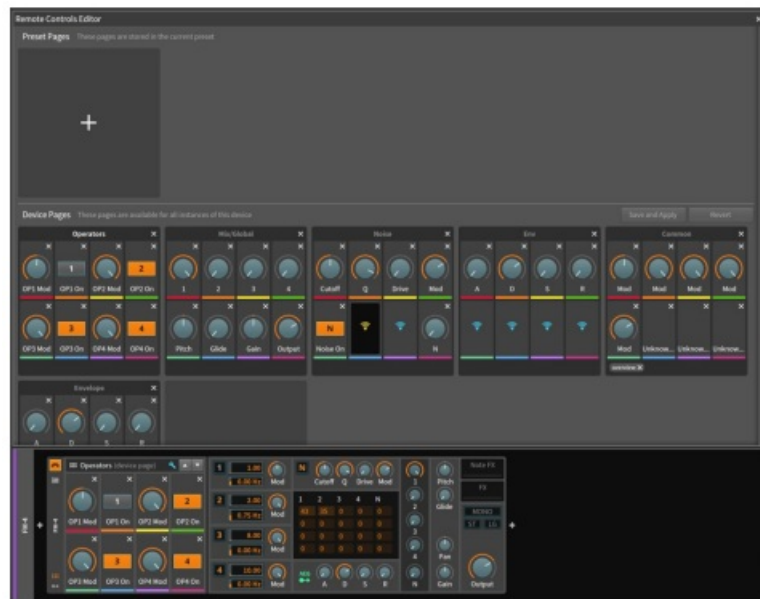
- Next, click on the wrench icon in the device's Remove Controls Page header. This opens the Remote Controls Editor.



The Remote Controls Editor allows complete customization of page mapping for the 8 pots. You can create as many pages as you can manage but it's always better to keep it simple.

To assign a control, click on an empty control slot. It will start to blink. Then click on the parameter you want to assigned.

page mapping for the 8 pots. You can create as many pages as you can manage but it's always better to keep



## Grab

Here is how you can quickly and temporarily assign parameters to any of the 8 pots:

- Hold [Shift] on your Impact LX+.
- Move the controls you want to assign temporarily using the mouse (while holding [Shift]).
- Release the [Shift] button and move the controls on the Impact LX+ that you want the parameters you moved, assigned to.

Grab assignments are only active until you select a new device, after which it reverts to either Default or User mapping.

## Triggering Clips with Pads

Impact LX+ has been set up to control Clips and Scenes using the 8 illuminated pads.

First select "Mix" view in Bitwig Studio. This is the easiest way to follow what's going on. Make sure you have some clips already loaded, ready to be triggered.

## Clips

First press the [Clips] button on LX+. While the [Clips] button is illuminated, the pads are assigned to control clips. You can control up to 64 clips for the current track using the 8 pads, via 8 banks of 8 clips each. To change bank, press and hold [Clips] and press a pad from 1-8 to select your bank. Once selected, release the button



combination.

The pad LEDs tell you the status of each clip within the current bank:

- **Off:** The clip corresponding to this pad is empty
- **Yellow:** The clip corresponding to this pad has content and can be played.
- **Green:** The clip corresponding to this pad is currently playing.
- **Red:** The clip corresponding to this pad is currently recording.

Here is an overview of how you use the pads to not only trigger clips, but also record and delete them.

\* Press [Shift]+[Pad 1-8] will create a 1 bar clip by default (yellow), but hit the pad 2 times creates 2 bars (orange), hitting 3 times creates 4 bars (green) and hitting 4 times creates an 8 bar (red) clip

Functions	Button Combination
[Clips]+[Pad 1-8]	Selects clip banks 1-8 for a total of 64 clips for current track
[Pad 1-8]	If clip is empty hitting a pad will start recording (red). If clip has content, it will play (green)
[Shift]+[Pad 1-8]	If clip is empty (off), hitting a pad will set a fixed length*. If clip has content (yellow), it will be deleted

## Enable / Disable Launcher Overdub

You can toggle launcher overdub on/off from LX+ by pressing [Shift]+[Clips]. This allows MIDI notes to be recorded to existing clips. If you create clips with a set length as described above, Launcher Overdub must be on to record on the clip. If you don't want to record over existing clips.



## Triggering Scenes with Pads

Impact LX+ has been set up to control Scenes using the illuminated pads.

First press the [Scenes] button on LX+. While the [Scenes] button is illuminated, the pads are assigned to control Scenes.

You can control up to 64 Scenes for the current track using the 8 pads, via 8 banks of 8 Scenes each. To change bank, press and hold [Scenes] and press a pad from 1-8 to select your bank. Once selected, release the button combination.

- If there is no content to play in a scene the corresponding pad is off.
- If there is content, by default the corresponding pad is yellow.

You can also customize the color for each scene. Press [Shift] and hit a pad repeatedly to select the color you want. Color selection is stored with your project song.

To open/close the launcher, press [Shift]+[Scenes] To play a scene, simply hit the corresponding pad. The pad will blink while playing.

## Using the Pads

Drum instruments can be played from the Impact LX+ keyboard or it's 8 pads.

Operating a drum instrument works the same way as any other instrument and using the Pad maps 1+2 you are able to play drum sounds straight away. However you may want to re-organize the sounds played by each pad for your playing style.

### “Learning” Drum Sounds to the Pads

It's easy to change a pad note assignment using the Pad Learn function. It works as follows:


1. Press the function button labeled [Pad Learn]. The display will now blink, showing P1 (pad 1) as the default selected pad.
2. Hit the pad you want to assign a new note value to. The display blinks and updates to show the number of the pad you selected.
3. Press the key on the keyboard that plays the sound you want to assign to the pad. You can keep playing notes on the keyboard until you have found the note you want.
4. When you are done, press [Pad Learn] to exit and start playing your pads with the new assignment.

You can keep repeating steps 2. and 3. until you have created a complete Pad Map. The settings are stored over power cycling so you will not lose them as you power down your system. However it's a good idea to save setups that you may want to have access to regularly in the future to one of the 4 pad map locations in Impact LX+. To learn how to do that, go to the “Setup Menu” section in this manual.



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[www.nektartech.com](http://www.nektartech.com)

## Documents / Resources

	<p><a href="#">nektar Impact LX Plus Series MIDI Keyboard Controller</a> [pdf] User Manual LX25 Plus, LX49 Plus, LX61 Plus, LX88 Plus, Impact LX Plus Series MIDI Keyboard Controller, Impact LX Plus Series, MIDI Keyboard Controller, Keyboard Controller, Controller</p>
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## References

-  [Bitwig | Home | Bitwig](#)
-  [HOME > MIDI Controller | Beat Composer | VST Synthesizer - Nektar Technology, Inc](#)

Manuals+.