Using Impact LX with Reaper

Applicable to
Impact LX25, 49, 61 & 88

nektar

Reaper Integration Installation and Setup

The Impact LX Reaper Integration is compatible with Reaper 4.59 or later. We recommend that you upgrade to the latest version if you have not already done so.

These instructions assumes you have a compatible Reaper program installed running on either Windows (Vista, 7, 8 or higher) or Mac OS X 10.7 or higher.

Installation

- If you have just completed a fresh install of Reaper, make sure to first open Reaper once and quit again, before installing the Impact Reaper support files.

- Download the "Impact_Reaper_Support" file from "My Downloads" on www.nektartech.com after registering your product

- Run the downloaded installer and follow the on-screen instructions

- Plug-in your Impact LX and make sure it's switched on (if you didn't do so already)

- Launch Reaper and go to Options/Preferences/Control Surfaces

- Click "Add", then in the pop-up window, select your Impact LX model in the "Control surface mode" list. As long as your Impact LX is connected and switched on, Reaper should automatically detect the correct ports. (See Image 1 for Windows setup and Image 2 for OS X). Click "Ok"

- Go to Preferences/Audio/MIDI Devices next and enable Port 1 for your Impact LX. The mode should be "Enable+Control". The other 2 Impact LX ports should remain disabled.

- Click "Apply" and OK

That's it, setup is now complete and you can move on to the fun part, learning how it all works.
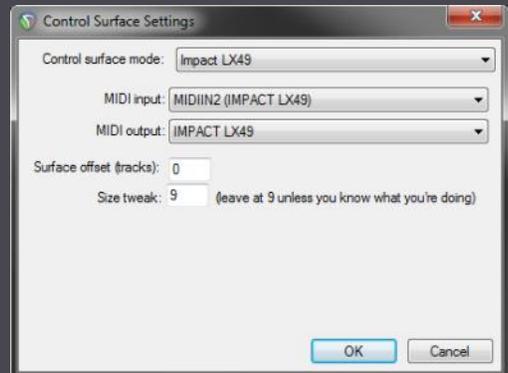
Image 1 - Windows

Control Surface Settings

Control surface mode: Impact LX49

MIDI input: MIDIIN2 (IMPACT LX49)

MIDI output: IMPACT LX49

Surface offset (tracks): 0

Size tweak: 9 (leave at 9 unless you know what you're doing)

OK   Cancel

Image 2 - OS X

Control Surface Settings

Control surface mode: Impact LX49

MIDI input: Nektar – IMPACT LX49 – Port 2

MIDI output: Nektar – IMPACT LX49 – Port 1

Surface offset (tracks): 0

Size tweak: 9 (leave at 9 unless you know what you're doing)

OK   Cancel

Reaper and Impact LX Working Together

The following pages focus on how Reaper and Impact LX work together. If you have been using Reaper for a while, you may not need any additional information but it's always a good idea to revisit the extensive Reaper documentation to remind yourself about how Reaper works with control surfaces.
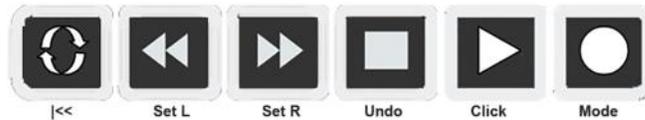
Track Changes

To navigate Reaper tracks from Impact LX, press [Shift]+[<Track] to go to the previous track and [Shift]+[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 give access to activate or deactivate the following transport functions: Cycle (loop), Rewind (in 1 bar decrements), Forward (in 1 bar increments), Stop, Play, Record.

In addition the buttons double up with functionality that's accessed by holding down the [Shift] button. The chart below Shows you what each button and button combination does and how they behave.

Key Combination	Description
[Cycle]	Switch the loop/cycle between the Left and Right loop points on/off
[Rewind]	Rewinds in steps of 1 bar. Press and hold for continuous rewind
[Forward]	Forward in steps of 1 bar. Press and hold to continuous forward
[Stop]	Stop playback. Play will start again at the same location you previously started from
[Play]	Activate play. Press again to pause play. Pressing [Play] again will continue playback from the location you paused at.
[Record]	Activate record. Press again to stop record
[Shift]+[Cycle]	Goto Left loop point
[Shift]+[Rewind]	Set Left loop point to the current song position
[Shift]+[Forward]	Set Right loop point to the current song position
[Shift]+[Stop]	Undo last changes
[Shift]+[Play]	Switch the Click/metronome on/off
[Shift]+[Record] (Mode)	Toggle between overdub MIDI record mode and replace(latch) MIDI record mode

Soft Take-Over

As you control different parts of Reaper with the same controls you would normally experience parameter jumping. This is what happens when a control's physical position is not the same as the position of the parameter you are controlling.

To avoid parameter jumping your Impact LX is equipped with Soft Take-Over. This means that if a control is not in sync with a parameter, moving the control 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 Reaper. Now you are ready to control the Reaper 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.

The Impact LX therefore reads the parameter value from Reaper and tells you in the display if you need to move the fader up {UP} or down {dn}. If a fader is positioned at 0 and the Reaper parameter it is controlling, is positioned at 100, moving the Impact LX fader will cause it's display to show {UP}. No data is sent by the fader until you reach value 100 at which point the Reaper parameter will start to move and values will update in the Impact LX display.

Reaper Mixer Control

To control the Reaper mixer, press the [Mixer] button to select the mixer preset. The display's left dot is illuminated while the preset is selected and the Reaper mixer is being controlled.

Open/Close the Reaper Mixer Window

If the Reaper mixer is not in view pressing [Mixer] will bring it in to view. Press the same button again to close the mixer window. While the Mixer preset is selected, your Impact LX49 continues to control the Reaper 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 the Reaper mixer. The 8 pots control pan for each or 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 corresponding to the currently selected track. As you change tracks, you can therefore quickly change volume for the track you are working with. 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 the faders are assigned to control. 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 the 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]

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 the Reaper 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.

Reaper Instrument Control

Press the [Inst] button to select the Instrument preset. The display's center dot is illuminated while the preset is selected. To control an instrument you must however be on an instrument track. From the Reaper "Project" menu, select "Add Track/ Instrument" and then select "ReaSynth (Cockos)" as a starting point.

Open/close the Instrument Window

With an instrument track selected, you can press [Shift]+[Inst.] to bring the instrument GUI window in to view. Press the same button again to close the instrument window. If you elect to "Show UI" of bridged plug-ins then note that the bridged GUI of plug-ins will not close when you press [Inst.].

Changing Patches

You can step through instrument patches from Impact LX providing patches are available for selection in the drop-down instrument window in Reaper. If no presets are available you can create and save your own. This makes it easy to change and tweak sounds while you play.

Change instrument patch by pressing [Shift]+[Patch>] to go to the next patch or [Shift]+[<Patch] to go to the previous patch.

Controlling Instruments

With the [Inst.] (Instrument) preset selected, Impact LX will automatically map parameters for the instrument associated with the instrument/MIDI track you are currently on. If you select any other type of track, there are no parameters to control. Let's start by looking at how parameters are typically mapped.

Many instruments have a four stage ADSR envelope. The faders are therefore typically mapped accordingly (on LX25, press [Inst.] and move pots 1-8):

Fader 1	Amp Attack		Fader 5	Filter Attack
Fader 2	Amp Decay		Fader 6	Filter Decay
Fader 3	Amp Sustain		Fader 7	Filter Sustain
Fader 4	Amp Release		Fader 8	Filter Release

Fader 9 is assigned to control the instrument volume.

The 8 pot's (on LX25, this is the pots default assignment) are assigned to parameters that typically have the biggest impact on the instruments sound. For most instruments this puts Filter Cutoff and Resonance on pot's 1 and 2 respectively. Try moving these two pots while controlling Retrologue and notice the parameters change.

"Grab" Instrument Mapping

The unique "Grab" function allows you to quickly assign controls to parameters on the device associated with the current track. Here is how it works:

- Press and hold [Shift] on Impact LX
- Move the parameters you want to control one at a time, on the instrument associated with the current track
- Release the [Shift] button
- Move each of the controls in the order you want the parameters you moved to be assigned to those controls

"Grab" is for quick temporary assignments. The assignments are not stored with your project file.

Note: If you add an instrument to an existing track via the FX button, grab mode will not be able to control the plug-in. We recommend you select "Insert Virtual Instrument on New Track" for consistent behavior.

Save Plugin Instrument Mapping

You can save the parameters you mapped to controls using the "Grab" function by pressing [Shift] twice in quick succession. A saved map is recalled every time you create an instrument track with the corresponding VST instrument.

This enables you to set up your instruments for control, exactly as you want them with automatic recall every time you use them.

Kontakt, Reaktor, EW Play...

Some plugins can change configuration when you change patch. The most common such plugins include NI Kontakt, Reaktor and EW Play. Impact gives you maximum flexibility by detecting that two patches are not the same and allowing you to create individual maps for each.

All you need to do is learn parameters for patches that are configured differently and then remember to save by pressing [Shift] twice in quick succession. You can save as many map setups this way as you want and they will be recalled automatically when you reload a given patch within any of these plugins.

Using Impact LX pads

Drum instruments can be played from the Impact LX49 keyboard or 8 pads.

Operating the drum instrument works the same way as any other instrument and using the Pad maps 1+2 you are able to play many drum instruments straight away. However there is no exact standard for how drum sounds should be mapped so you may have instruments where the Impact LX pads don't trigger the sounds you want.

Thankfully there is a learn function for that.

"Learning" a VST Instrument drum Sounds to the Pads

It's easy to change pad note assignments 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 LX49. To learn how to do that, go to the "Setup Menu" section in this manual.

Future Updates

We have strived to provide a feature complete experience with our DAW support and hope this is reflected in your experience with Impact LX. Over time, there will be updates that may include new features, added support for new version of operating systems and programs or bug fixes.

If you want to get automatic notifications of any updates and other news you can create a Nektar user account and subsequently register your product with us. Here is the URL to get started

Http://www.nektartech.com/registration