

# Panorama CS12 integration

for



REAPER

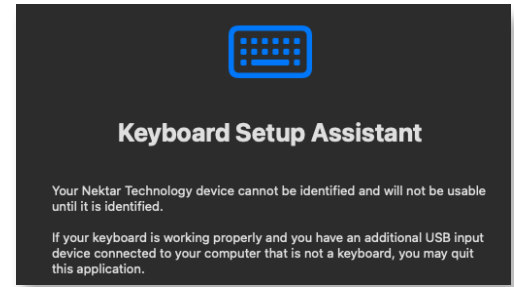
Reaper 7 or higher required

# OWNER'S MANUAL

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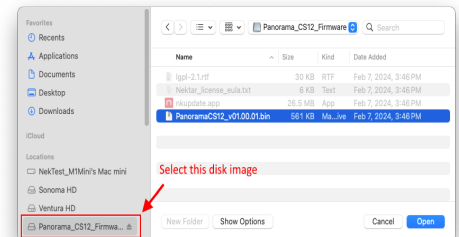
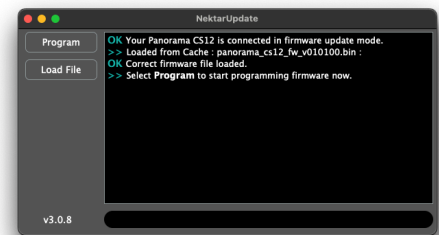
If the Keyboard Setup Assistant message appears after plugging in Panorama CS12, simply close the window. The message does not reappear.

We recommend that you update to the latest firmware immediately, so let's get started.



## Firmware update

1. Make sure Panorama CS12 is connected to your computer via USB.
2. With CS12 switched off, press and hold [Markers]+[⌘] while switching the unit on. The display should read 'FW update mode'.
3. Locate the file 'Panorama\_CS12\_Firmware.dmg' in the package that this guide came with, and double click to open.
4. Launch the nkupdate application. Once launched, it should look like the image.
5. Follow the nkupdate on-screen instructions to load and update the firmware. Note: the firmware file should be selectable after clicking the [Load File] button and is named PanoramaCS12\_FW\_vxxxxx.bin or higher. See image for location.
6. If the 'Load File' button is grayed out, close the updater app and open it again.
7. Once the update process is complete, switch Panorama CS12 off and on again.



That's it, Panorama CS12 is ready so let's move on to install the software.

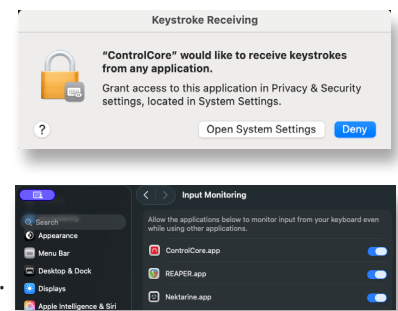
## What is ControlCore?

ControlCore is a simple app that manages plugin mapping files and other important data for Panorama CS12. ControlCore also includes the Reaper control surface file that enables the hardware to communicate directly with the DAW, using the Reaper API. For more information about the ControlCore system, see the “Panorama CS12 System Overview” in the printed quick start guide.

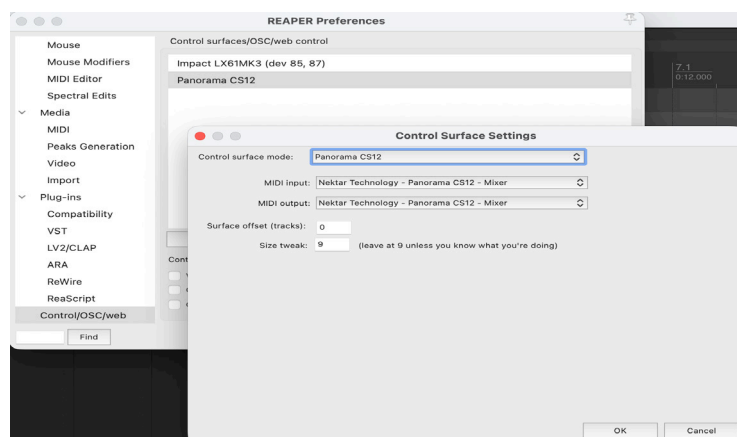
## Setup

Here are the steps you need to complete, to get Reaper up and running with Panorama CS12:

1. Make sure Reaper 7 or higher is already installed on your computer.
2. Run the ControlCore\_Installer\_OSX.dmg installer, included in the downloaded package.
3. Make sure Nektar Mapfiles, Nektar ControlCore and Nektar Reaper Control are all ticked to be installed. Untick any DAWs you don't have.
4. Follow the on screen instructions and complete installation.
5. Connect CS12 to your computer via USB and make sure it's switched on.
6. Click “Open System Settings” when the MacOS message “ControlCore would like to receive keystrokes from any application” appears. [Don't see this?](#)
7. In the “Input Monitoring” window, enable ControlCore, Reaper and Nektarine.
8. Launch Reaper and go to Options/Settings/Control/OSC/Web.
9. Click “Add” in the pop-up window and select “Panorama CS12” in the “Control surface mode” field. If Panorama CS12 is connected and switched on, Reaper should automatically detect the correct ports.
10. Click “OK”.



If Panorama CS12 does not connect to Reaper, [go to this page](#) for troubleshooting.



Panorama CS12 should now be ready to go but let's complete a system check.

- Locate the power button on the rear of Panorama CS12 and switch the unit off and on again .
- In the display's top right corner you see two icons, one for ControlCore connectivity and the other for power. If both are green all should be well and you can go ahead and launch Reaper.  
If Reaper is already open and CS12 does not automatically reconnect, go to Options/Settings/Control-OSC-Web. Then select Panorama CS12, click "Edit" and "OK".
- If the connect icon is gray and connection to Reaper is not established, go to this [Troubleshooting page](#).
- If the power icon is gray but Panorama CS12 is connecting to Reaper, it indicates that the USB port the unit is connected to, is a low power port. That's sufficient to power CS12 but watch out for any unexpected behavior and connect to a different USB port that supplies higher power if the problem persists.

In Reaper load an existing project or create a new one. Then select a track hosting plugins plugins.

The printed Quick Start guide includes an overview of the hardware which you can also find on the [next page](#). Use the overview to familiarize yourself with Panorama CS12. It explains the broad strokes of how to operate it.

## First steps

Panorama CS12 is able to control every aspect of the currently selected Reaper channel strip, including plugins. Tracks or channels can be selected directly from Panorama CS12 but lets start by selecting channels using the mouse.

- Click on a track or channel in Reaper, to select it. You'll see Panorama CS12's display update to show the plugin list, detailing the plugins loaded in the channel's first 8 plugin slots.
- To control a plugin, you need to select a plugin slot on Panorama CS12. Press one of the illuminated plugin slot buttons numbered 1-8 on the panel (11 in the printed functional overview).
- The display now shows the currently assigned plugin parameters and their values. The rotary controls (12) are illuminated to correspond with the display. Move controls to adjust plugin parameters.
- Press another illuminated plugin slot button on Panorama CS12 to control the plugin hosted in that slot. The plugin list appears briefly.
- Use the top button labeled [9-16 ] to open the plugin list if you need more time to view the plugins hosted on current channel. The button also toggles plugin slots 1-8 and 9-16, if there are more than 8 plugins on the channel.
- Select another channel in Reaper and repeat the process to control that channel's plugins.

The getting started steps may be enough for you to start exploring your new Panorama CS12 with Reaper. Feel free to do so. The product is intended to compliment your existing workflow and enhance it in key areas where tactile control helps creativity and productivity. Use this document for reference as needs arise or jump in and learn all the power user features. Either way, we hope Panorama CS12 finds a permanent place in your setup.



- 1** 100mm motorized fader, controls current mixer channel and any other channel parameter using [Select].
- 2** Mixer channel controls include 6 segment VU meter, 1 x 360 pot for pan control, buttons for channel Arm, Solo and Mute.
- 3** Select button. When illuminated blue, click on a parameter in your plugin or DAW, and control using the fader or 360 pot (Pan) control. Hold [Shift] and press [Select] to select the master output channel for control by the motorized fader (1).
- 4** TFT display shows plugin control assignments and values in the main area of the display with the top line showing any parameters currently controlled, including the motorized fader assignment.
- 5** Four display buttons control plugin parameters according to the display label immediately above.
- 6** Zoom encoder controls horizontal zoom. Hold [Shift] and move Zoom to control vertical zoom.
- 7** Tempo controls the DAWs tempo by default with an additional 7 selectable options including Playhead (Jog), Scrub, Nudge, Loop, Vertical Zoom, Clip Gain and Focused Plugin Preset. Hold [Shift] and move [Tempo] to select from the display list.
- 8** Data/Menu opens the plugin page menu list when moved. Most plugins only have one main page but larger plugins can have multiple. Hold [Shift] and press this encoder (it's a button too) to activate the plugin learn menu.
- 9** Seventeen transport and navigation buttons as indicated by the icons. To access functions silk screened below the buttons, hold [Shift] and press the function needed. See [page 25 for complete overview](#).
- 10** Markers button. When active (illuminated) the buttons labeled M1 - M10 above, are used for marker selection.
- 11** Channel strip select buttons determine how the 12 pots, 4 display buttons and 4 RGB buttons are assigned. From the bottom, Channel assigns the DAWs channel features (if applicable) and Sends control sends. The following 8 buttons select plugin slots 1-8 as labeled. The last button toggle plugin slots 1-8 and 9-16, when it's illuminated. The button also opens the plugin overview page at any time.
- 12** The 12 rotary controls are 360 or endless pots. Each pot is illuminated by an RGB LED with the color matching the parameter value indicator in the display. Customize colors by holding [Shift], move a pot for selection, then move the Data/Menu control (8).
- 13** Four RGB buttons for plugin control. Customize colors by holding [Shift], press a button for selection, then move the Data/Menu control (8). Combined with the 4 display buttons (5), Panorama CS12 can control up to 8 switch parameters per control page.
- 14** Power supply socket for 5 v DC , center positive barrel connector.
- 15** Power on/off switch.
- 16** USB-C connector. Connect the included USB cable to CS12, with the other end connected to a USB A socket on your computer. You can also use a cable with USB-C connectors on both ends (optional, not included). Compatible with USB 2 and 3, as well as USB C.
- 17** 1/4" TRS jack socket for connecting up to 2 foot switches (using a Y-splitter cable configuration TRS to 2xTS 1/4" jacks, not included).
- 18** Kensington lock point (Kensington lock not included).

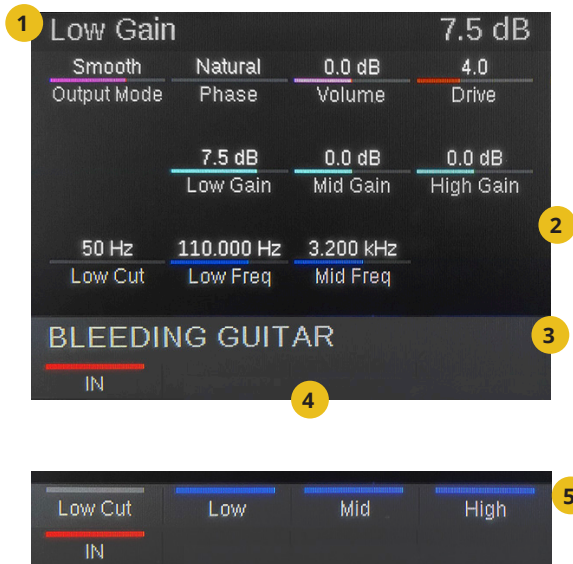


## What the display shows you

Three display designs cover the Reaper feedback needed to operate Panorama CS12.

### 1. Control display

The main control display shows the assignments of the controls assigned to plugin parameters and channel menus.



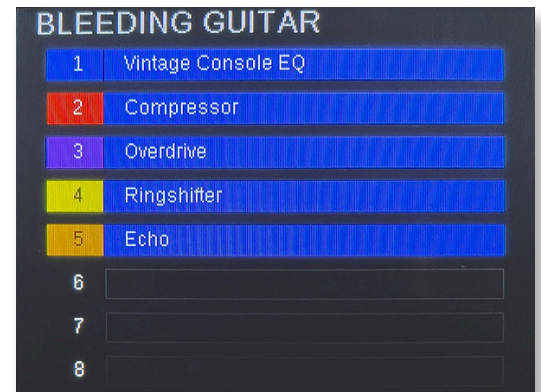
1. The current parameter line is at the top. It displays the last controlled parameter and its value to the right.
2. The main body area of the display show the 12 rotary assignments. The parameter name is below and the value above a value bar, colored the same as the corresponding rotary control,
3. The name of the currently selected track.
4. Up to 4 labels, 1 for each of the display buttons located below the display. In the example, a button parameter, identifiable by its on/off status bar, is assigned to the first display button.
5. Toggle the encoder button [DATA/MENU] to alternately display the assignments to the 4 LED buttons (13) and the track name.

### 2. Plugin slot list

The list shows the plugins loaded in the current channels plugin slots. To control a plugin in the list, press the corresponding plugin slot button.

If there are 9 or more plugins on the channel, the top plugin slot buttons labeled [9-16] is illuminated. Press the button to toggle plugin banks 1-8 and 9-16.

The current parameter line remains at the top to show parameter feedback from the motorized fader and other sources.

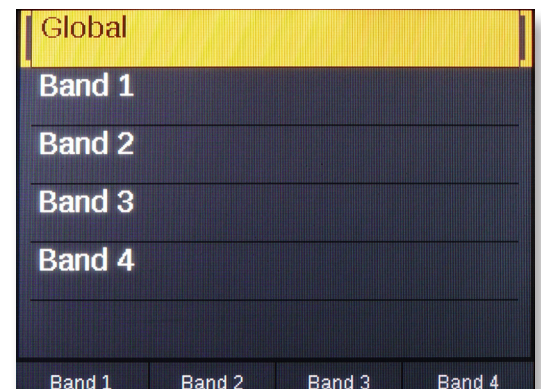


### 3. Menu options

When the [DATA/MENU] encoder is used to offer selection options, this is the list that appears.

For example, when controlling a plugin with a lot of parameters, additional pages are listed when moving the [DATA/MENU] encoder.

To select, simply rest on the selection or press the [DATA/MENU] encoder (it's a button too).



The mixer channel controls are assigned to the main mixer parameters.

## 1. Fader

The 100mm long-throw motorized fader is assigned by default to control the selected Reaper mixer channel's volume. With a control resolution of 10 bit, the fader is capable of detailed control. Select a channel and the fader jumps to that channel's volume position.

**Fine Control:** The fader can control parameters at 14 bit resolution. Hold the Fine (magnifier) button while moving the fader. To reposition the fader without affecting the parameter, hold [Fine]+[Mute] and move the fader.

For more information, see the section [Fine - High Resolution Control on page 20](#).

**Setting volume to 0 db:** Hold [Shift]+[touch the fader]

**Temporarily disable fader motor:** Hold [Select]+[touch the fader]. Touch the fader again to re-enable.

## 2. Meter

The 6 segment stereo meter shows the channel level activity.

## 3. Pan

The rotary pot controls all 3 pan types. Press [Shift] and move the pot to adjust second pan parameter when Stereo or Dual Pan are selected.

The pots RGB LED color is set by the channel strip color in Reaper.

To change it in Reaper, open the Mixer and right-click the area around the channel number and select "Track Color". Select one of the options in the menu.

The Reaper channel color also illuminates the Channel and Sends buttons.

## 4. Arm / Monitor button

[Arm] is red if the current track is enabled for record. Press [Arm] to enable/disable Arm.

## 5. Solo button

Activate (green)/deactivate (white) solo on the current channel. Press [Shift]+[Solo] to disable solo on all channels.

## 6. Mute button

Activate (orange)/deactivate (white) channel mute. Press [Shift]+[Mute] to disable mute on all muted channels.

## 7. Select button:

See next page.



## 7. Select button:

Controlling the selected parameter is a significant, yet easy to use feature. Mixer/Track and plugin parameters can be controlled by either the fader or the pan control. Parameters can be selected for control across the entire project. Open multiple plugins hosted on any combination of channels and simply clic/select to control.

- First enable the [Select] button. Its illuminated blue when active.
- Next click on a parameter in Reapers UI, such as any channel level fader or a plugin parameter.
- Move either the fader or the pan pot to control the selected parameter. If you prefer the pan control, press [Shift]+[Fader cap] to temporarily dispable the fader's motor.
- Click on another parameter for control, it's that easy.

**Note:** Sends are currently not controllable using Select but check out the extensive Sends control on the next page.

## Fader vs Pan pot

The fader and pan controls both adjust the same parameter.

The faders 10 bit resolution gives detailed control over parameters with the added benefit that the fader moves reassuringly to the value position of the selected parameter.

The rotary pan control adjusts the selected parameter at 7 bit and therefore covers the value range in one rotation. You can activate Fine control (Magnifier button) to control at up to 14 bit if fine grained adjustments are needed.

The choice of control depends on your preference and the result you are looking for.

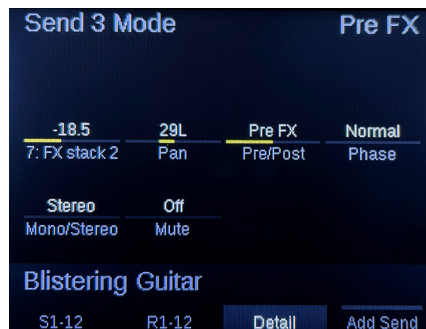
With [Select] enabled, the fader is particularly useful to write LFO style automation that can be looped while you experiment with note combinations. The select feature can become a part of your creative toolbox with quick results that can be difficult or impossible to achieve using an instruments standard modulation options.

The Sends page in Reaper gives you extensive routing options and CS12 is able to both control Send levels as well as receiving levels on any channel. There are also options to Add Sends and adjust detail send parameters such as Pan, Pre/Post fader and Phase settings.

## Sends

Pressing the [Sends] button assigns the 12 control rotaries to the selected channel's sends 1 to 12 with the following options:

- When display button [S1-12] is selected each rotary controls the send level to a channel. The receiving channel number and name is displayed under the send value bar.
- Select [R1-12] to control a channels receiving sends values. The sending channel's number and name is displayed under the receiving value bar (below left image).
- The selected send's detail parameters can be controlled when selecting [Detail]. Parameters such as Send/receive level, Pan, Pre/post fader, Phase, Mono/Stereo and Mute can be set for the selected send. The selected send is the last controlled send (below right image).
- Sends can be added from Panorama CS12 by pressing [Add Send] or [Add Receive], depending on whether [S1-12] or [R1-12] is selected. In the popup list, use the [Data/Menu] encoder to scroll through a list of available send destinations/sources and press [Data/Menu] to select. Repeat to add more sends/receives.



**TIP:** If you need fine grained control over send levels, activate [Magnifier - Fine].

## Changing the channel strip color in Reaper

The color of all RGB illuminated channel controls can be set in Reaper.

The channel color affect the illumination of the pan control, the [Sends] button as well as the 12 rotary controls when the Sends menu is active.

Here is how you set the color of a channel in Reaper:

- Right-click in the channel number/name area.
- Select 'Track color' from the popup list and choose one of the options.
- To get strong colors select the option "Set tracks to custom color" and make sure the color is as saturated as possible.

Panorama CS12 is capable of extensive instrument and fx plugin control. Pre-mapped plugins give you the best immediate experience and since many of Reaper's own plugins are pre-mapped, start by loading a few in a channel strip, such as ReaDelay or ReaSynth.

The display plugin list updates as plugins are loaded. Press the top button [9-16] at any time, to view the plugin list.

## Plugin slot selection

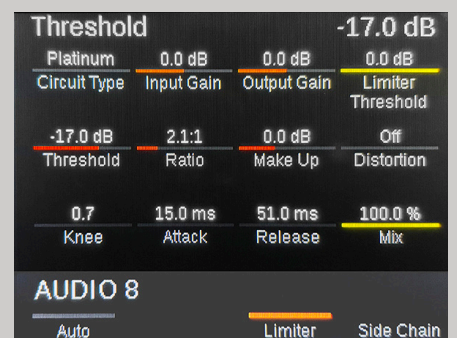
The 8 buttons 1-8/9-16 are used to select the channels audio fx plugin slots.

- If a plugin is present in the slot, the button is illuminated.
- The color of the slot indicates type of plugin as a visual clue.
- Press [9-16] to view the plugin list at any time.
- [9-16] is illuminated if there are more than 8 plugins loaded on the current channel. Press it to toggle slots 1-8 and 9-15 (Reaper has 15 insert slots, not 16).
- Press any of the illuminated slot buttons to control the hosted plugin. The selected slot's button is white.



The display shows the parameter assigned to each of the 12 rotary controls. A value indicator is colored to match the rotary control with the parameter name below and value above.

At the top of the display, the current parameter line shows the last controlled parameter. In this case the compressors Threshold parameter.



## Bypass plugin slots

Plugin slots can be bypassed directly from Panorama CS12. Once bypassed, the plugin slot's LED is dim and the plugin slot display list shows the slot's background in gray. Just as it appears in Reaper.

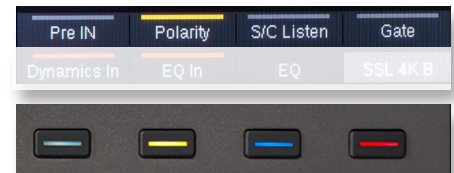
- To bypass one plugin slot, press [Shift]+[Plugin slot button 1-8].
- To bypass all plugin slots on the current channel, press [Shift]+[button 9-16].
- Repeat to disable bypass again.

## Display buttons and page navigation

The display buttons are either used for page navigation or parameter control. If a button has an on/off indicator, it's a parameter button. If it does not, it's used for page navigation which means you can freely press the button without risking affecting plugin settings. In our example, buttons 1 and 3 control parameters and button 4 [Side Chain] toggles control pages.



The 4 LED buttons below the 12 pots can also be used for parameter control. If a button is illuminated, it's controlling a parameter. To view the assigned parameter names, press the [DATA/MENU] encoder.



## Menu pages

Audio effects can often be controlled using 1 main page with additional sub pages accessible via the display buttons, as already covered. Plugins with 50+ parameters typically require more pages and the menu page is how we can navigate them. Fabfilter Pro-Q 4 EQ for example has over 500 parameters so the map uses 7 pages, each with 4 sub-pages to cover all parameters and all 24 bands. Here is how you select a page:

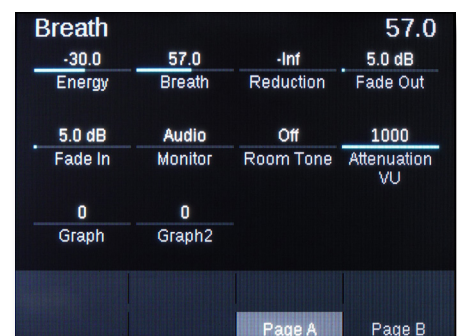
- With FabFilter Pro-Q 4 any other very large plugin selected for control, move the [DATA/MENU] encoder to display the page list on the right.
- Select a page by resting the select brackets. The page is selected and the control display appears showing parameter assignments, ready for control.
- A page can also be selected by pressing the [DATA/MENU] encoder. If only a single page is present, it's necessary to use that method or press another plugin slot button.

You can always jump up to the home level by pressing the plugin slot button. Nektar instrument maps always have home page with the most common parameters accessible. It's intended for user customization and easy access. A home page can be added to any plugin in Nektarine, such as Fabfilter Pro-Q4. Just add a page and move it to the top of the page hierarchy.

## Default plugin mapping

Plugins that are not pre-mapped are assigned to controls in the order the parameters are presented by the plugin. There are 2 pages, Page A and B, ready for simple customization using the Panorama CS12 parameter learn options.




See [Customize Plugin Mapping](#) on page 14.



Panorama CS12 is designed to control Reaper parameters and plugins without focus which means that the plugin's UI does not need to be in view for CS12 to control it.

Once you get used to how it all works, you may not need to look at the UI most of the time but it can also be comforting to see the changes happening in realtime.

Here is a list of short-cut commands designed for window recall and cleanup. It's worth getting familiar with these commands to speed up the workflow and keep Reaper windows tidy.

PLUGIN WINDOW SHORTCUTS	DESCRIPTION
[  ]	Open/close the plugin window in the selected plugin slot.
[SHIFT]+[  ]	Close all open plugin windows. Repeat to open windows again.
[SHIFT]+[ ↓↑+ ]	Currently not in use.
[  ]+[PLUGIN SLOT BUTTON 1-8]	Open/close the plugin hosted in the plugin slot.
[ ↓↑+ ]	Open/close the Mixer.

Plugin mapping can be customized either by making simple assignment changes or with a complete navigation structure and customized parameter names.

There are no less than 3 options you can use to customize plugin mapping:

- Quick-learn
- Learn menu
- Nektarine graphical map editor

You can use any combination of the 3 options such as for example starting by assigning parameters to controls using one of the learn options, then use Nektarine to create the navigation structure. Once a map files is saved, it can be used both in Nektarine and directly in Reaper.

## Quick-learn

Of the 3 options, Quick-learn is the simplest.

1. Make sure the plugin you want to map is selected on CS12 and it's UI is visible in Reaper.
2. Hold [Shift] while moving a parameter in the plugin UI with the mouse.
3. Move or press a control to assign the moved parameter. The control's LED and display element updates accordingly and you can release [Shift].
4. Repeat steps 2 and 3 to learn more parameters to controls.

The control's color can also be adjusted using this approach:

- Hold [Shift] and move/press the control to select it.
- Move the [DATA/MENU] encoder to select color.
- Repeat the process if needed and release [Shift] when done.

You can also change the color of the plugin which illuminates the plugin slot button. Hold the [Plugin slot] button that corresponds with the Reaper insert slot hosting the plugin and move the [DATA/MENU] encoder.

**Important:** Learned parameters are remembered for as long as ControlCore is running. To revert the unsaved changes, go to Applications/Nektar/ControlCore and click stop, then start ControlCore again. To store changes permanently, save the map file in Panorama CS12s Learn Mode.

## Learn Mode

If you are planning to learn more parameters, it may be easier to use the Learn Mode.

Press [SHIFT]+[DATA/MENU] (i.e. the encoder switch) to activate Learn Mode.

With Learn mode active, the process of learning parameters is the same as Quick-learn, except you don't need to hold the [Shift] button. Instead:

- Move a parameter in the plugin UI.
- Move/press a control to assign the parameter.

For more options, move the [DATA/MENU] encoder and the below menu options appear. For each option you need to move the [DATA/MENU] encoder to view the learn menu.

**Clear One:** Clears an assignment from a control. Since you can learn a control to a new parameter, you only need this option if you don't want a parameter assigned to the control.

- Select Clear One, using the [DATA/MENU] encoder and press the [DATA/MENU] encoder to confirm.
- Next move/press the control to clear its assignment.



**Clear All:** Clears all assignments on a page, including any page navigation. Use this option only if you want a single page map.

**Setting the plugin color:** The plugin color illuminates the plugin slot button as well as all the controls, except when controls are individually set.

- To set the plugin color hold the [Plugin slot button] and move the [DATA/MENU] encoder.

**Set Control Color:** This option sets the color for each control, overriding the plugin color.

- Press the display button labeled 'Set Color' to activate.
- Move/press the controls to change their color.
- To disable 'Set Color', move the [DATA/MENU] encoder and deactivate the button.

**Save plugin map:** Press the 4th display button labeled Save.

The plugin map is instantly saved to the user directory /Documents/Nektar/Nektarine/Mapping Files.

**Exit:** To exit either press the 3rd display button labeled Exit or at any time, press [Shift]+[DATA/MENU] to deactivate the learn menu.

Using the Nektarine software, (included as a separate download in your Nektar account), you'll be able to:

- Create, delete and name pages.
- Create sub pages that can be selected from a display button.
- Rename parameters.
- Map parameters using drag and drop.
- Clear/delete parameters from a map page.
- Map parameters using learn mode working with Panorama CS12 as explained on the previous page.

To do all this, Nektarine needs to host the plugin you want to map but once you save a map file, it's immediately available for use in Reaper. You can run Nektarine as a VST3 plugin in Reaper or run the standalone version separately.

## Nektarine installation and setup

If you haven't installed Nektarine yet, start by downloading the package from your Nektar account and complete the installation process as detailed in the [on-line Nektarine user guide](#).

Once installation and scanning of plugins has completed, you can move on to load and map plugins.

**Tip:** Disable AU and VST plugin formats in Nektarine Settings ( the gear icon). By doing this you'll avoid mapping the wrong plugin format which in many cases mean the map file cannot be used with VST3 plugins.

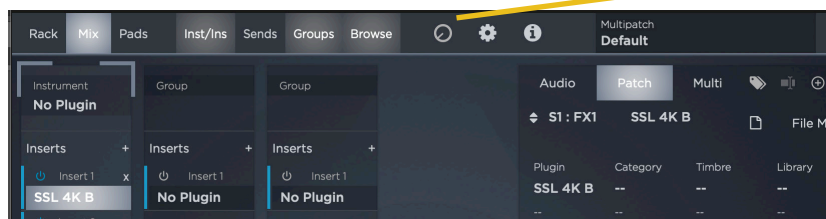
## Loading a plugin in Nektarine

With Nektarine running, you have a couple of options to load a plugin:

- Use the browser to select or search for a plugin. Double-click to load it or drag and drop to the slot you want it loaded in.
- Select a plugin in the slot. This can be done both in [Plugin Rack](#) and [Mix view](#).

## Control mapping

Once you have loaded an insert plugin in a Nektarine insert slot, click the insert slot to open the plugin so you have the option to view the UI and learn parameters to controls. Next click on the Control page button.



Panorama CS12 can be used in Learn mode with Nektarine ([Shift]+press [Data/Menu] in combination with the Control page mapping features. To learn about the Control page, check the on-line user guide's [Control Mapping section](#).

## Troubleshooting: Connecting Panorama CS12 to Nektarine

When you open the standalone Nektarine app or select a track hosting the plugin version, CS12 and Nektarine automatically connects. If that doesn't happen, check the [input monitoring settings in MacOS](#),

## Nektarine recap

Nektarine is a Nektar plugin that allows extensive control of VST, VST3 and AU instrument plugins from Panorama CS12 and can be hosted on an instrument track in Reaper. Nektarine install options include AU, VST, VST3, AAX plugin and Standalone.

With Nektarine you can:

- Control instrument plugins without any parameter limits. CS12 switches seamlessly between Reaper and Nektarine control.
- Load up to 16 instrument plugins with individual key ranges for split and layering adjustable for each plugin.
- Load up to 4 insert effect plugins in each of the 16 instrument channel.
- Route any instrument slot to [it's own mixer channel](#) in Reaper, using Nektarine 32Out,
- 4 sends per channel routed to 4 effects channels.
- Rack page showing all plugin UI's in a single rack overview.
- Mixer page with single plugin window.
- [Customize Panorama CS12 control mapping](#) including creation of map pages and renaming parameters.
- Insert plugin maps are compatible with Nektar integration/ControlCore for Reaper.
- Instrument and insert slots can be navigated from Panorama CS12.
- Route multi-out plugins to channels in Nektarine.
- Route any channel to Group channels for internal mixing.

## Navigating Nektarine from Panorama CS12

Nektarine navigation works similar to how you navigate Reaper's channel strip from CS12. When any track hosting Nektarine is selected in Reaper, CS12 is automatically switched to control Nektarine.

- Plugin slots on the selected Nektarine channel can be selected using the slot buttons 1-5.
- Press [9-16] to view available Nektarine channels and press the corresponding slot button to select.
- Select [Sends] to set send levels for the current 4 Nektarine channels.
- Select [Channel] to set volume and pan for the current 4 Nektarine channels.
- To control the Reaper channel strip press [Shift]+[Channel]. Repeat to toggle back to Nektarine control.

Since Nektarine uses the same map files as ControlCore it means the control experience is the same when you add an insert plugin in Nektarine vs controlling the same plugin in Reaper. Any changes made in Reaper or Nektarine affects both applications, even if the plugin map is not saved. This is true for as long as ControlCore is running.

## Resetting unsaved mapping or rescanning for maps created in Nektarine

If you have mapped parameters temporarily and you'd like to revert to the saved map file, do the following:

- Go to Applications>Nektar>ControlCore>ControlCore Panel.
- Click "Stop ControlCore", then repeat this time clicking "Start ControlCore".

The operation clears any unsaved maps but also rescans for new maps saved from Nektarine. You are ready to continue working once CS12 reconnects to Reaper.

When you control parameters with a wide value range, such as EQ frequency ranging from 20Hz to 20kHz, the traditional 7 bit control resolution is limiting. The result is steppy changes that ultimately can force you to reach for the mouse to get the accuracy needed.

The traditional 7 bit control resolution is however great when controlling a standard parameter in one rotation and there are many plugin parameters that don't need higher resolution than that.

## Fine resolution, a practical example

Using the example of EQ frequency, load Reaper's Frequency plugin on the currently selected track.

On Panorama CS12, move one of the pots in the center row, assigned to Frequency. The pot allows you in one rotation to scroll through the whole range. Now change from 20kHz moving the pot counter clockwise. The values change in steps of roughly 600 Hz.

- Switch the [Q] button on and the steps are now reduced to roughly 100Hz.

Moving the control to change Frequency now is as smooth as using the mouse.



## Using Fine resolution with the Fader

The faders already control parameters at 10 bit which is adequate in most situations. However there are times when you only want minute changes so Panorama CS12 gives you an option to use the fader for fine control as well.

- Hold [Q] and move the fader from its current position in either direction.

Because the fader now controls at a higher resolution, it makes it easier to precisely adjust channel volume within a narrow range.

- Release the fader and [Q] when done and the fader moves to it's new position.

Fine resolution fader control can also be used for selected parameter control.

Panorama CS12 enables you to record automation using rotary controls and buttons, as well as of course the motorized fader. Combined with the selected parameter control option, the motorized fader is uniquely suitable for automation, not least because of its 10 bit default resolution.

## Automation modes

Activating automation is as simple as pressing the [Auto] button.



Choosing the right automation mode can however make all the difference so here is an overview of the options. Most are part of Reaper so you may already be familiar with them, but we've added a few additional to better take advantage of the motorized fader's touch capabilities.

Hold [Auto] and move the [DATA/MENU] encoder to select from the pop-list.

Any selection only affects the current track so you can have different automation modes throughout your project.

AUTOMATION MODE	DESCRIPTION
OFF	Automation is off.
READ	Existing automation is played back only.
TOUCH	Existing automation is played back and new automation captured when a control is moved. When the control is no longer moved, previous automation is not overwritten
WRITE	Similar to Touch except when the control is no longer moved, the previous automation is overwritten by the new latched value.
LATCH	Continues writing automation data during playback and keeps the last value when you release the control.
AUTO-TOUCH	Similar to touch, only automation is not captured when the fader is not touched.

## Zoom

The dedicated zoom encoder adjusts horizontal zoom. Holding [Shift] while moving zoom adjusts vertical zoom of the in-focus window.

## Tempo

There are 7 control options available for the [Tempo] encoder.

Press [Shift] and move [Tempo] to scroll through the options listed in the chart below and release the encoder to select. When you restart Reaper, the encoder will revert to its default Tempo assignment.

Function	Description	Function	Description
<b>Tempo</b>	Adjust tempo in 1 BMP steps. Hold [Fine] to adjust in increments of 0.1 BPM steps.	<b>&lt;Loop&gt;</b>	Moves the cycle loop by the Grid Type setting across the timeline. Hold [Magnifier] and move encoder to change the Grid Type.
<b>Playhead</b>	Moves the playhead across the timeline by the Grid Type setting. Hold [Magnifier] and move encoder to change the Grid Type.	<b>Vertical Zoom</b>	Dedicated vertical zoom control of the window in focus.
<b>Scrub</b>	Moves the playhead to scrub audio.	<b>Clip Gain</b>	Adjusts the audio clip gain in 1 db steps in realtime. Hold [Magnifier] to adjust in 0.1db steps.
<b>Nudge</b>	Nudge the current selection according to the Nudge setting. Hold [Magnifier] and move encoder to adjust the Nudge setting.	<b>Focused Plugin Preset</b>	Use the encoder to scroll through saved presets located in Reaper's browser.

## Channel/Track select

There are 3 different ways a track or mixer channel can be selected from Panorama CS12.



- Press one of the [◀ ▶] buttons to select the previous or next track. By association, the mixer channel routed to the track, is selected for control by Panorama CS12. If a track is hidden, it will be skipped.
- Hold [Shift] and press the [◀ ▶] buttons to select previous or next channel. If a channel is hidden, it will be skipped.
- Hold one [◀ ▶] button while moving the [DATA/MENU] encoder to scroll through channels.

## Navigating the timeline

Panorama CS12 has multiple options to navigate the timeline, manage the cycle loop and markers.

Starting with the basics, press [◀◀] or [▶▶] to move the play head.. Hold the button to move faster. The distance travelled while using the buttons depends on what Primary Time Format and which Grid Type are selected in Reaper.

The [DATA/MENU] encoder can also be used to scroll through the timeline. Hold either [◀◀] or [▶▶] and move the [DATA/MENU] encoder. The encoder now moves the play head according to the Grid Type selection, for every encoder tick, either forward or backwards.

## Setting loop locators

To set the repeat/loop locators first move the play head to the position the locator should be moved to.

- Press [Shift]+[◀◀/Set L] to move the left locator to that position.
- Repeat the process and press [Shift]+[▶▶/Set R] to move the right locator.



To move the play head to either the left or right locator, press the [◀◀]/[▶▶] buttons.

## Moving the loop

The cycle/loop locators can be moved according to the Grid Type setting:

- Press [Shift]+[◀◀/Loop>] to move it forward.
- Press [Shift]+[▶▶/<Loop] to move it backwards.



The [DATA/MENU] encoder can be used to move the loop longer distances. Hold [◀◀/<Loop] or [▶▶/Loop>] to move the loop either backwards or forward according to the Grid Type setting, for every encoder tick.

## Markers

Using markers in Reaper is another great way to navigate your project. Markers gives you instant access to key sections in your project for a more efficient workflow.



When the Markers button is illuminated, the 10 buttons with labels M1 - M10 above are no longer illuminated. This indicates they are in Marker mode.

Pressing any of buttons M1-9 now select markers in Reaper, if a marker is present. You can also hold [Markers] and move the [Data/Menu] to scroll through all markers on the current marker track.

## Add, delete, goto marker

There are additional options to add, delete, goto previous marker and got next marker.

- Hold [Marker] and press [▶/Play] to add a marker at the current position.

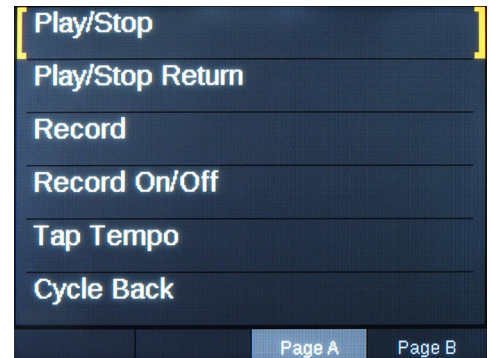
Once markers are present in the timeline, markers 1-9 can be selected directly by pressing buttons M1-9.

For markers higher than M9:

- Press [Marker]+[▶▶] to go to the next marker
- Press [Marker]+[◀◀] to go to the previous marker.
- Press [Markers] and move the [Data/Menu] encoder to scroll through markers.
- Press [Markers]+[■] to delete the currently selected marker.

Connecting a foot switch to the rear 1/4" jack (17) enables the triggering of one of the following options:

- Play/Stop
- Play/stop return
- Record
- Record on/off
- Tap tempo
- Move repeat/cycle back
- Move repeat/cycle forward
- Track Arm
- Track Solo
- Track Mute
- Auto on/off (Automation)



To select an option, hold [SHIFT] and press the foot switch.  
Release [SHIFT] and move the [DATA/MENU] encoder to make a selection.  
Release the footswitch to exit.

## Connecting a second foot switch

The 1/4" jack is a TRS connector type. Using a Y-splitter cable it's possible to connect 2 foot switches, each controlling one of the options listed.

The Y-splitter cable should have a 1/4" TRS connector in one end, splitting to 2 x 1/4" TS female jacks (or whichever connector your foot switches have) at the other end.





BUTTON	DESCRIPTION	MODIFIER
<b>MARKERS</b>	Activates the markers menu and assigns the buttons labeled M1-M9 to markers. See Markers section.	
<b>PREVIOUS</b>	Previous track. Hold button and move the Reaper control surface channel selector by moving [DATA/MENU].	
<b>NEXT</b>	Next track. Hold button and move the Reaper control surface channel selector by moving [DATA/MENU].	
<b>PLUGIN</b>	Open/close the plugin window in focus.	[SHIFT] + [  ] close all open plugin windows.  Hold [  ] and press a slot button to open/close the hosted plugin.
<b>MIXER</b>	Open/close the MixConsole window.	[SHIFT] + [  ] toggles the selected channels Channel Strip window.
<b>MAGNIFIER</b>	Enables Fine - high resolution control up to 10x (or 14 bit) depending on the parameter.	Hold [  ] and move the fader to increase control resolution to 14 bit. Hold [  ] and move [DATA/MENU] to fine-adjust song position in Reaper.
<b>SHIFT</b>	Hold to activate modifier [SHIFT] functions as indicated by the silkscreen printed below the buttons.	
<b>GOTO L</b>	Go to left loop Locator.	[SHIFT]+[  ] move Repeat loop back. [  ] + move [DATA/MENU] move Repeat loop.
<b>GOTO R</b>	Go to right loop Locator.	[SHIFT]+[  ] move loop forward. [  ] + move [DATA/MENU] move loop with encoder.
<b>UNDO</b>	Trigger Reaper's undo.	[SHIFT+[UNDO] = redo.
<b>METRONOME</b>	Toggle Metronome on/off.	[Shift]+[  ] toggles Pre-roll.
<b>AUTO</b>	Activate Automation.	Hold [AUTO] and move [DATA/MENU] to select automation mode. See Automation section for details.
<b>REPEAT/LOOP</b>	Activates Repeat Loop	[Shift]+[  ] activates Repeat loop selection.
<b>REWIND</b>	Rewind	[Shift]+[  ] set left cycle locator.
<b>FORWARD</b>	Forward	[Shift]+[  ] set right loop/cycle locator
<b>STOP</b>	Stop	Press again to go to start. [Shift]+[  ] activates quantize.
<b>PLAY</b>	Play	[Shift]+[  ] = play selection
<b>RECORD</b>	Record	

SHORTCUT COMBINATION	DESCRIPTION
[SHIFT]+[MUTE]	Set all Mute states to off.
[SHIFT]+[SOLO]	Set all Solo states to off.
[SHIFT]+[ARM]	Activates Monitor on the current track.
[SHIFT]+[SELECT]	Switch fader control to master volume. Repeat to toggle fader control back to channel.
[SHIFT]+[FADER TOUCH]	Sets channel volume to 0db
[Q ]+[FADER]	Adjust the parameter the fader controls at 14 bit fine resolution.
[Q ]+[MUTE]	Hold button combination to reposition the fader without affecting the parameter it controls. Upon release the fader moves to the set position.
[SHIFT]+[SLOT BUTTON]	Bypass the plugin slot.
[SHIFT]+[9-16]	Bypass all plugin slots.
[  ]+[SLOT BUTTON]	Open/close the plugin window without selecting the slot.
[SHIFT]+[  ]	Close all open plugin windows.
[SHIFT]+[  ]	Open/close the Channel Strip window.
[  ]+[CHANNEL]	Open/close instrument plugin window if software instrument track is selected.
[SHIFT]+[SENDS]	Bypass all Sends on the current track.
[SHIFT]+[ZOOM]	Adjust vertical zoom.
[SHIFT]+[TEMPO]	Select any of 7 control options: Playhead (jog), Scrub, Nudge, Cycle, vertical Zoom, Clip gain and Tempo. Selection is stored until changed again.
[SHIFT]+[MARKERS]	Create marker at current location.
[MARKERS]+[  ]	Create marker at current play head position.
[MARKERS]+[  ]	Goto next marker.
[MARKERS]+[  ]	Goto previous marker.
[MARKERS]+[DATA/MENU ]	Move the encoder to scroll through markers.
[SELECT]+[TOUCH FADER]	When [Select] is engaged, this shortcut enables the faders motor. The motor is reactivated when either the fader is touched or [Select] is disabled.
[SHIFT]+[AUTO]	Disables Automation on the current track. Press [Auto] again to re-enable.