

Cubase 5

Automation & Control Surface Manual

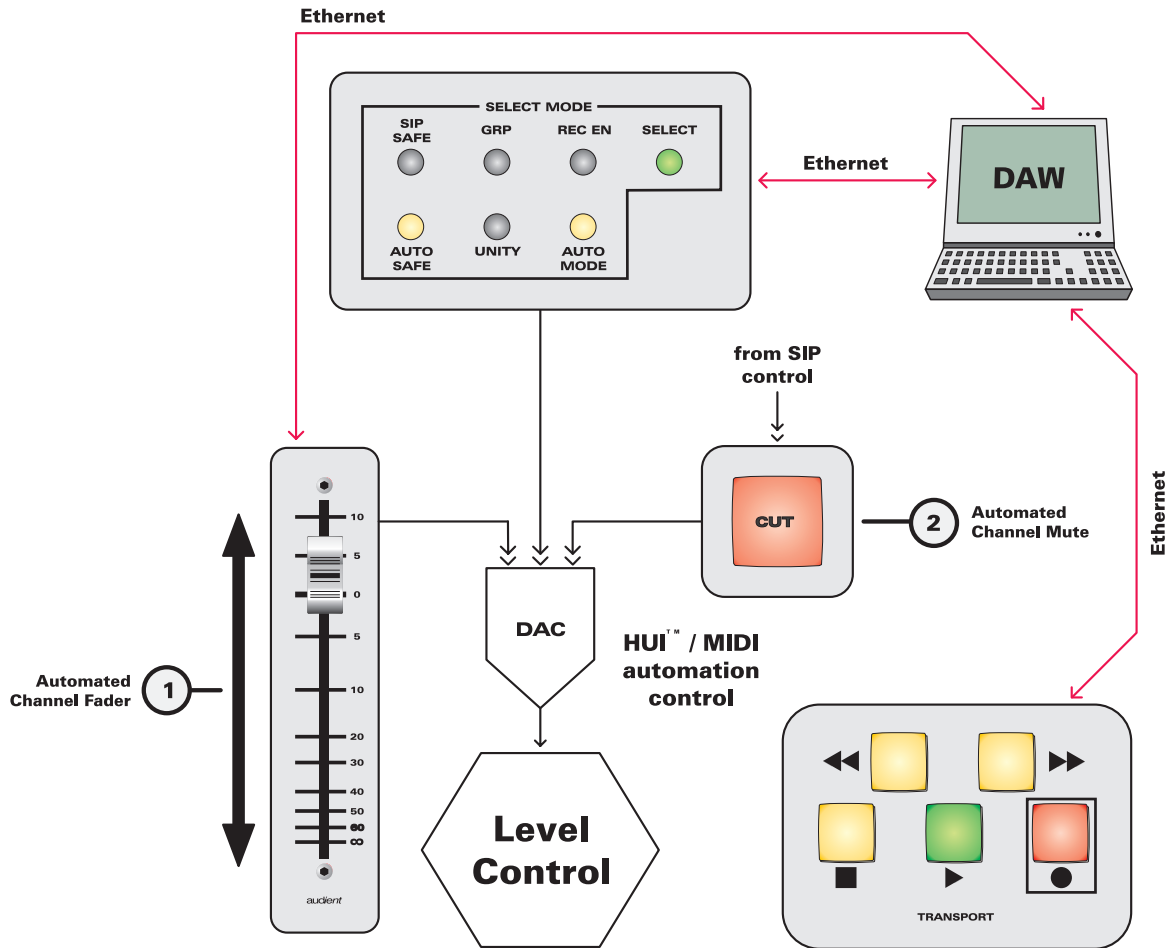
Contents

Control 2802 Fader Automation	Page 3
Automation Overview	Page 3
Automation Setup	Page 3
Recording & Editing Automation Data	Page 4
Automation Safe	Page 5
Running Automation in HUI™ Mode	Page 5
Control 2802 Control Surface Setup	Page 6
Control Surface Panel Overview	Page 6
Control Surface Setup	Page 6
Control 2802 Control Surface Functions	Page 8
Entering DAW Layer	Page 8
Setup Mode	Page 8
Transport Panel	Page 9
Navigation & Utility Controls	Page 10
Zoom Functions	Page 11
Banking & Nudges Control Surface Tracks	Page 11
DAW Meters	Page 11
Select Mode	Page 12
Record Enable Mode	Page 12
Automation Modes	Page 12
Group Mode	Page 13
Solo & Cut	Page 13
Function Keys	Page 14
Page Keys	Page 14
Pan Encoder Mode	Page 14
I/O Assign Mode	Page 15
Aux Encoder Mode	Page 16
Aux Assign Mode	Page 16
Insert Mode	Page 17
Insert Encoder Control	Page 17
Future Updates	Page 19
Panel Visualisation	Page 20

Mackie HUI™ (Human User Interface) is a registered trademark of LOUD Technologies Inc.

FADER AUTOMATION

Automation



Overview of Functions

The diagram below provides an overview of the automation system and the parameters that can be controlled.

Control 2802 provides fader and mute automation along side its full DAW control surface layer.

The sections of most interest when using the console automation are as follows:

- Faders
- Cut (Mute) Switches
- Select Mode Panel – Select and Auto Safe
- DAW Transport

Automation Setup

Assuming that you have followed all steps outlined in the main manual networking section for Apple Mac or PC (page 42 onwards), you will have connected Control 2802 to your studio computer and connected to the console via **Focusrite Control 2802 Software**.

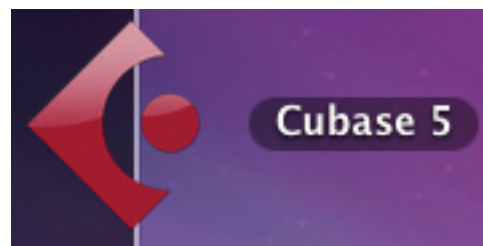
Focusrite Control 2802			
Manufacturer	Name	Serial Number	Status
Focusrite	Control 2802	0123456789	Connected

To set up the 8-channel fader automation system in Cubase / Nuendo, we must use 8 MIDI tracks and place them at the start or end of your session (we recommend the start so you can add tracks afterwards with ease as your session progresses).

Please follow the steps outlined below:

Boot Cubase / Nuendo

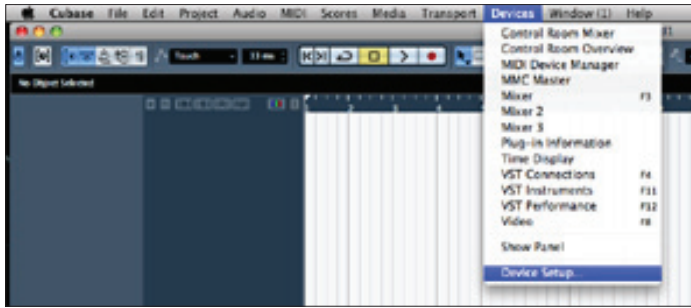
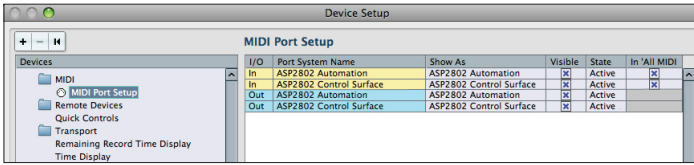
Create a new session or open an existing one



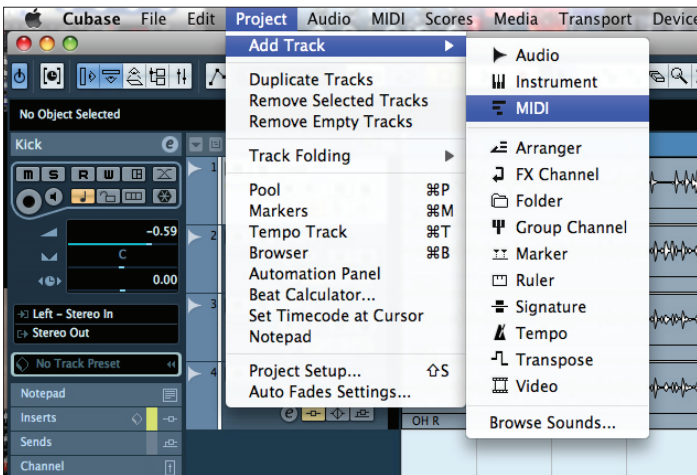
Step 1: Assuming that the MIDI drivers have been detected (which they should have) – Cubase / Nuendo will immediately spot the available MIDI ports for Control 2802.

Check this by navigating to the Devices > Device Setup > MIDI Ports... and verify that the Control 2802 Automation and Control Surface ports show up as detected for both inputs and outputs.

Please note that inputs will be indicated as active, however until you create a MIDI track that addresses the Control 2802 automation output, the output will be shown as inactive.

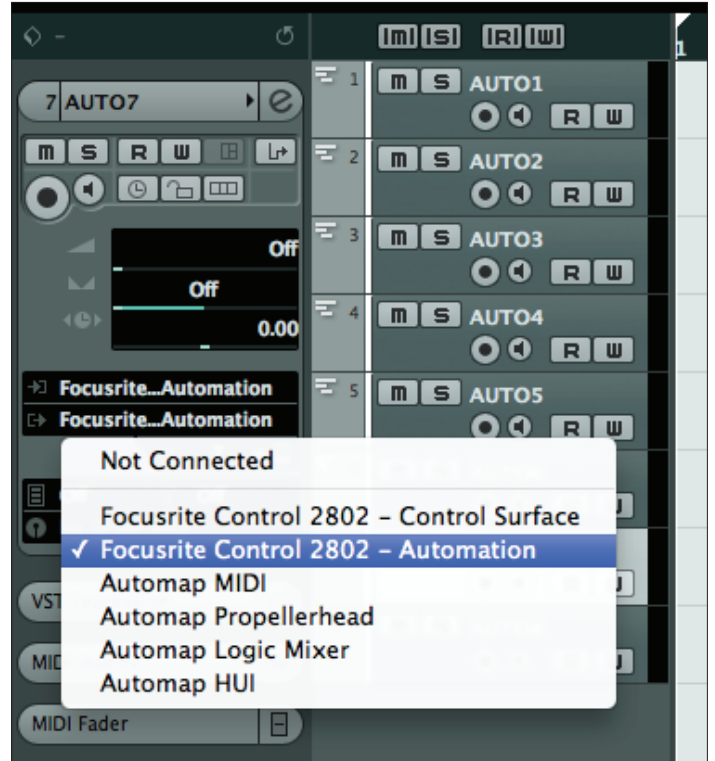


Step 2: Return to the arrange window and create 8 new MIDI tracks that can be used to capture and edit the automation data.

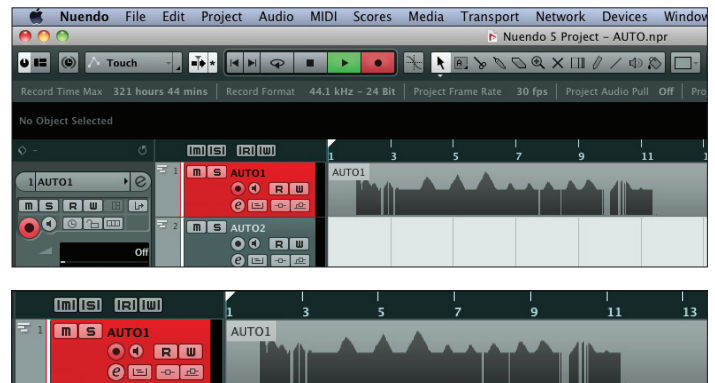


Step 3: Label the tracks something useful so that they are easy to locate, AUTO1, AUTO2, AUTO3 etc – perhaps with a further addition of whatever source you are riding, AUTO1-LDVox, AUTO3-DrumsL etc.

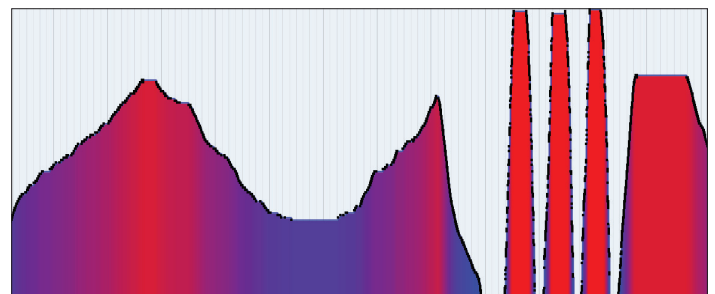
Step 4: Assign the channel inputs and outputs to the Control 2802 MIDI port, ensuring that each track addresses a new MIDI channel. AUTO1 = channel 1, AUTO2 = channel 2 etc.

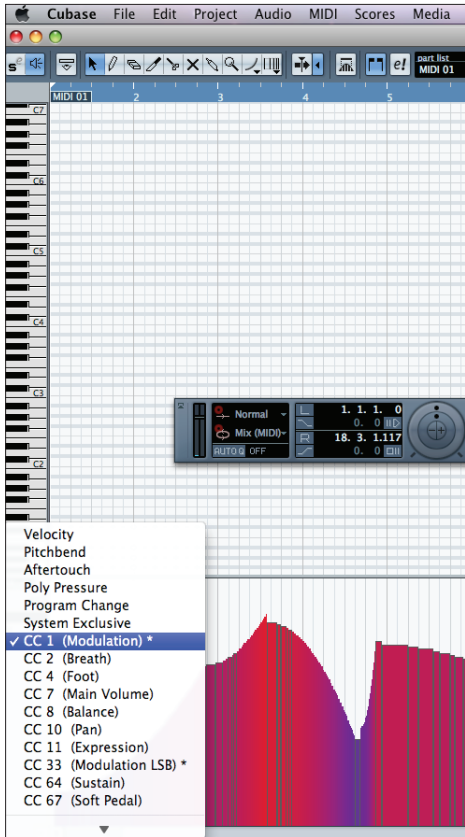


Step 5: You are now free to record your automation passes to and from the console to these MIDI tracks. Just record enable the track(s) and place Cubase into record.



Once recorded it is possible to copy, paste and duplicate this data in region form. However as this data is captured via a combination of MIDI CC controllers (modulation included) you cannot freely edit and draw in your own curves and fades. The best procedure here is to record new passes of automation if you are unhappy with previous rides.





Note that all select mode layers are stored and function simultaneously. By toggling the select mode switches in conjunction with the large green channel select switches it is possible to obtain rapid control of SIP safe, DAW record enable, select, unity and automation safe channel settings.

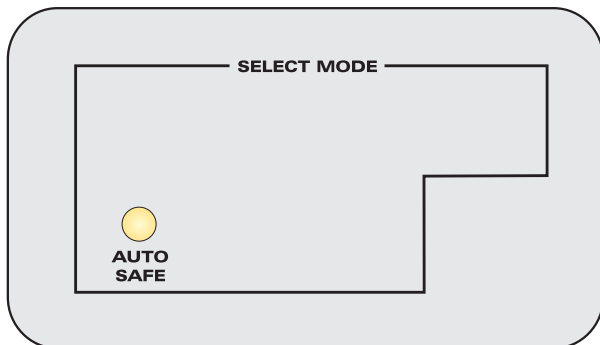
All select mode layers are stored even after a power down, so remember to clear them manually if the next session requires a different setup.

Automation Enable / Safe

A Note on Automation Safe

Automation safe should be used when you want to isolate a particular channel from automation – for example – to audition rides without “fighting” existing automation data or without “printing” the rides if channels are still in write enabled.

When the console boots automation safe is engaged by default. If you wish to automate a channel you must first press the automation safe switch (in the select mode panel) and then turn off automation safe from each channel you wish to automate.



Automation Enable

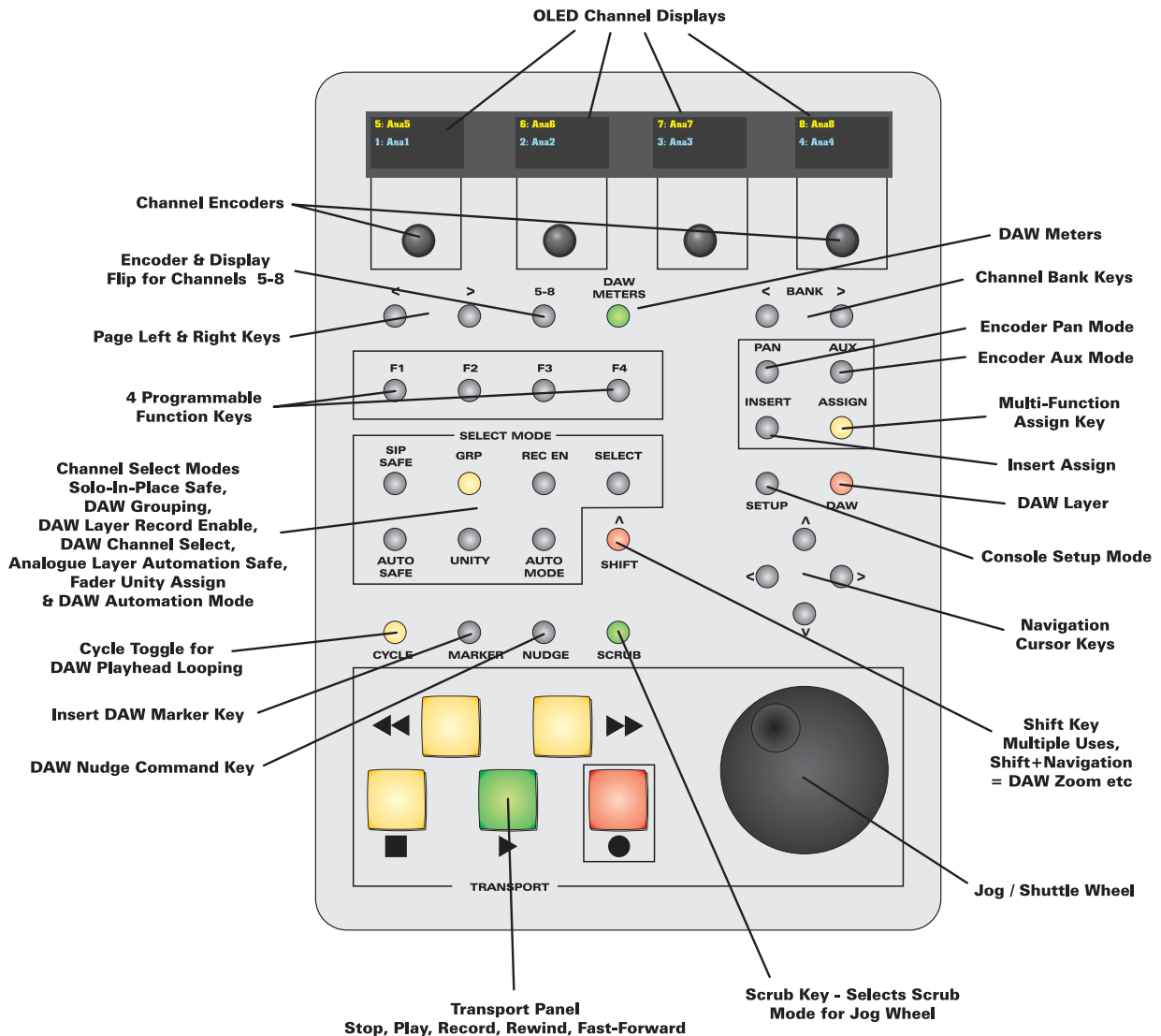


Automation Safe



CONTROL SURFACE SETUP

Control Surface Panel



Control Surface Operation

The control surface panel on Control 2802 provides access to many common and useful DAW functions.

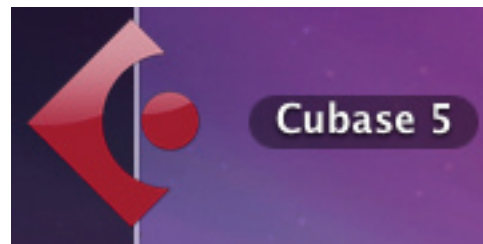
Please follow the setup procedure below, and read the following pages to learn how to operate the Control 2802 control surface.

Control Surface Setup

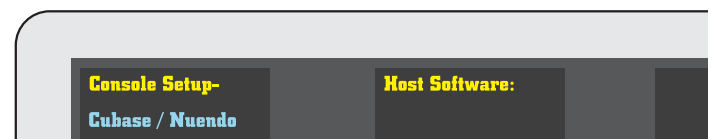
Assuming that you have followed all steps outlined in the networking section, you will have connected Control 2802 to your studio computer and connected to the console via **Focusrite Control 2802 Software**.

To set up the Control 2802 as a control surface for Cubase / Nuendo please follow these steps:

Step 1: Press the Control 2802 Setup button and select Cubase / Nuendo in the host software option page using the rotary encoder.



Manufacturer	Name	Serial Number	Status
Focusrite	Control 2802	0123456789	Connected



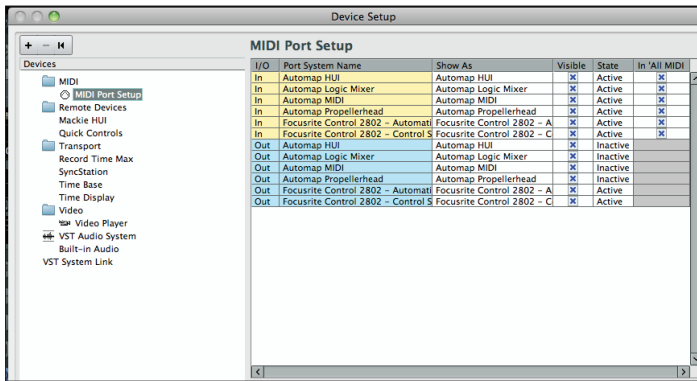
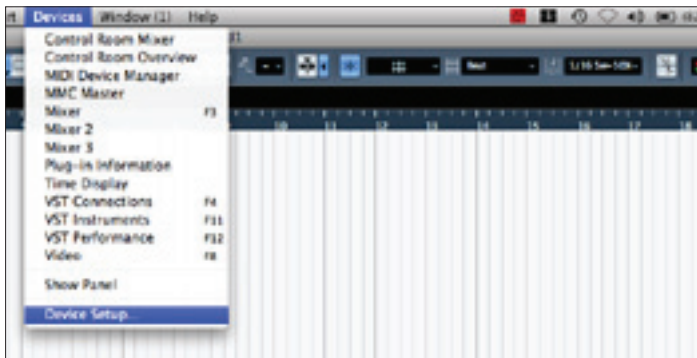
Please note that the setup light may flash if you have changed from another host software selection. Settings are saved upon exit from setup mode.



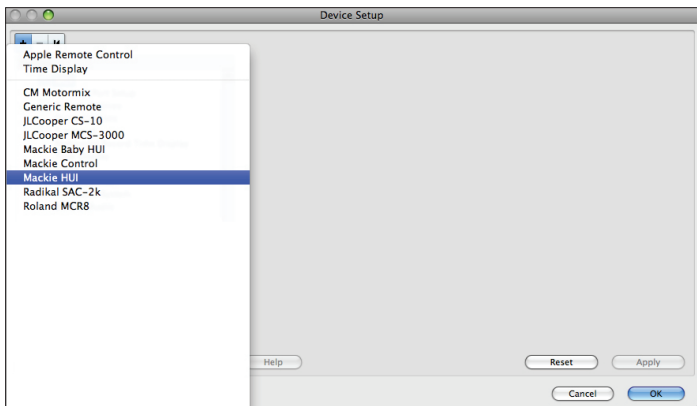
Step 2: Exit ASP Setup and boot Cubase. Assuming that the MIDI drivers have been detected (which they should have), Cubase / Nuendo will immediately spot the available MIDI ports for Control 2802.

Check this by navigating to the Devices > Device Setup > MIDI Ports... and verify that the Control 2802 Control Surface ports show up as detected for both inputs and outputs.

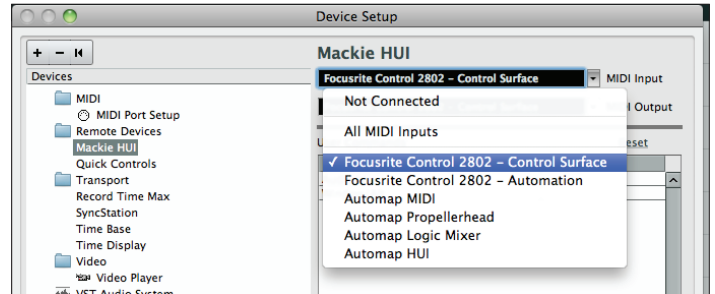
Please note that inputs will be indicated as active, however until you create a control surface that addresses the Control 2802 output, it will be shown as inactive.



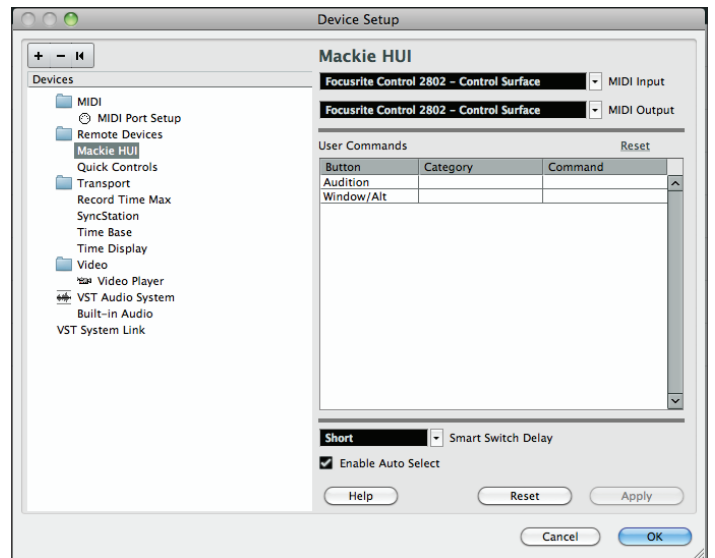
Step 3: In the Device Setup menu, click on the (+) sign to add a new control surface, here select Mackie HUI™.



Step 4: Here assign the MIDI inputs and outputs to the Control 2802 Control Surface ports in the drop down menu.

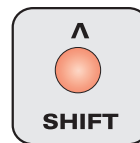
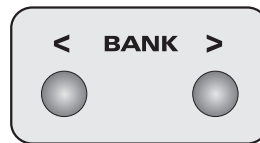


Step 5: Once assigned, click apply to confirm your settings.



You should be ready to go, please enter DAW layer on the Control 2802 and ensure that it picks up your channels in Cubase / Nuendo and you can bank around the project using the channel bank or nudge keys in the controls surface,

Shift + Bank = Nudge

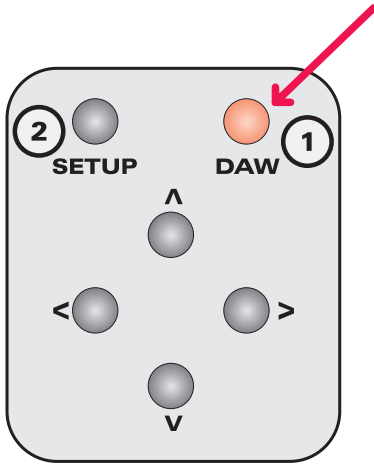


CONTROL SURFACE FUNCTIONS

Entering DAW Layer

To enter the **DAW layer** for control surface functionality ensure that the DAW switch (1) is depressed and **illuminated**.

Whenever it is not illuminated, the faders and channel switches operate in the analogue layer.



However some of the control surface functionality remains active when in the analogue layer to aid your session workflow, allowing simultaneous control of both analogue fader level and important DAW functions.

These are:

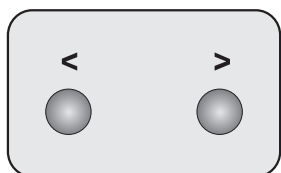
- Transport switches (3-7) jog / shuttle disabled
- Cycle toggle on / off
- Track / region navigation cursor controls
- Shift + navigation cursor controls for horizontal and vertical zoom
- DAW meters

Console Setup Switch

The **setup** switch (2) allows you to access a number of useful networking parameters as well as set the host DAW platform of choice and check your current firmware revision.

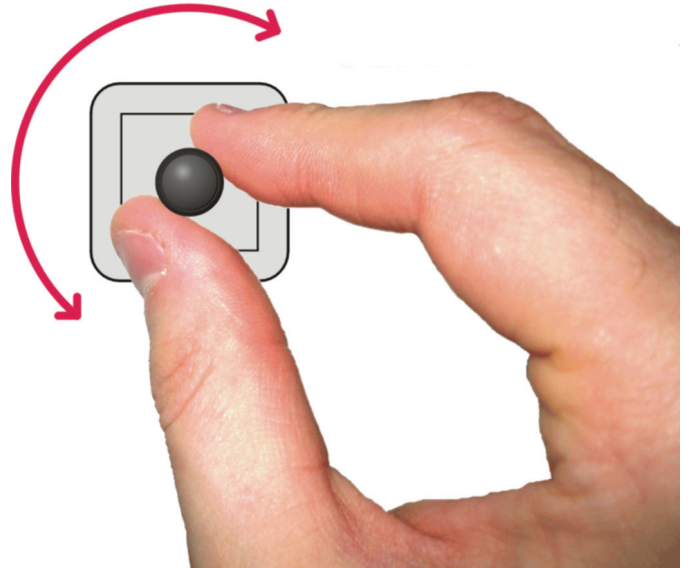
Once the setup switch has been pressed, the OLED displays will show the first page of the setup menu.

To page through various other pages on the OLED displays, whether it be in the setup menu or when accessing insert plugin parameters, use the page function switches (26) located under the left most encoder.



Editing Setup Parameters

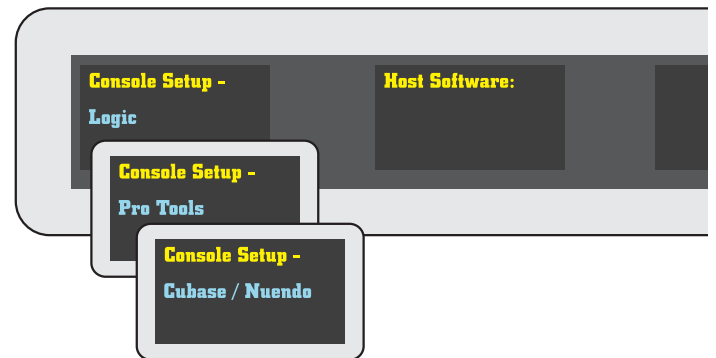
To edit parameters in any of the OLED displays when in setup mode, rotate the corresponding rotary encoder to change values and then press the setup switch to select and apply the changes.



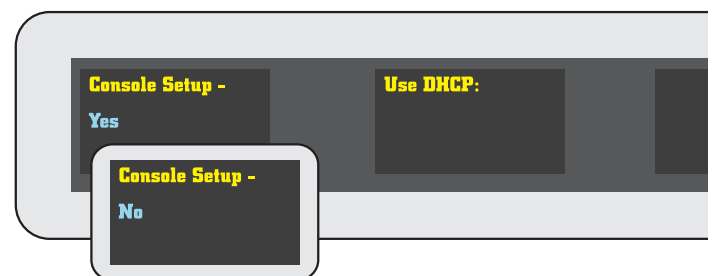
Note that once a change has been made, the setup switch LED will flash to indicate that a setting has changed and will return to a solid red once changes are confirmed.

Console Setup Switch OLED Pages

Setup Page 1 – Host Software



Setup Page 2 – Use DHCP (networking option)

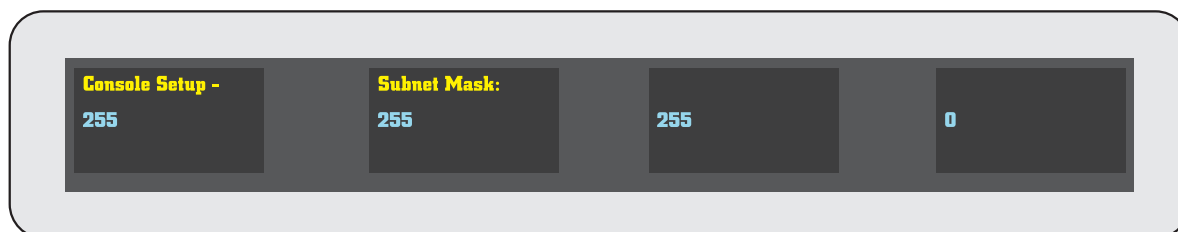


Console Setup Switch

Setup Page 3 – IP Address (networking option)



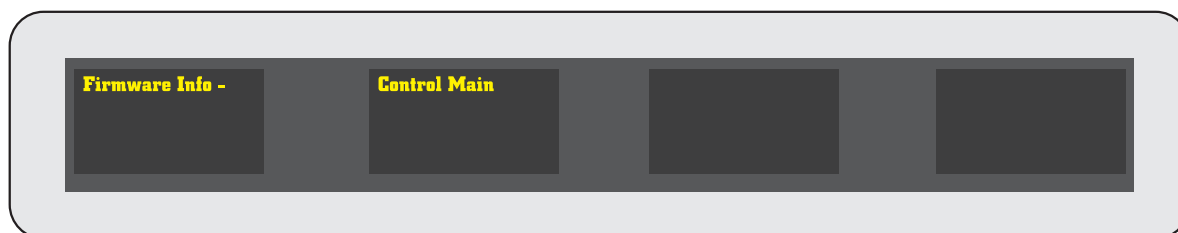
Setup Page 4 – Subnet Mask (networking option)



Setup Page 5 – Port (default 1212, networking option)

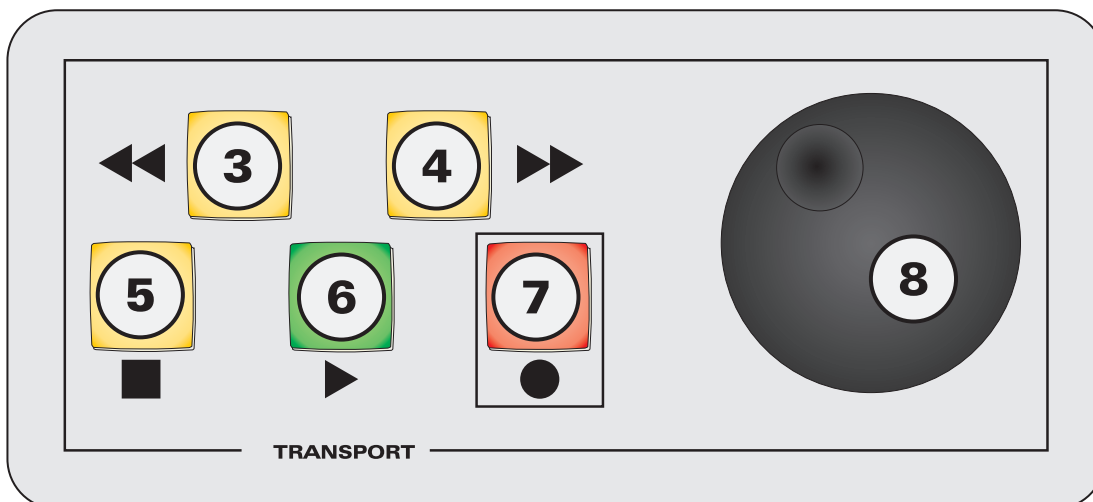


Setup Page 6 – Firmware Info



Transport Panel

The transport panel on Control 2802 provides access to the following functions:

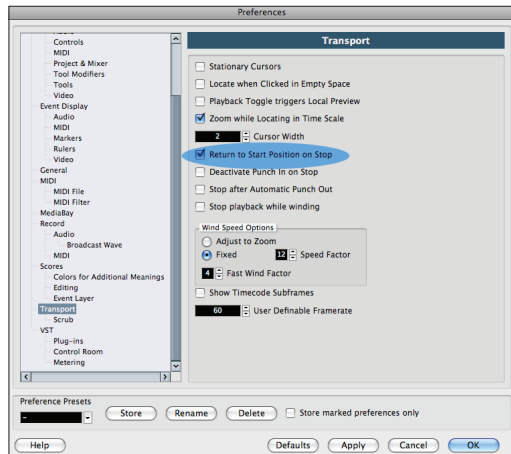


- Rewind (3)
- Fast-Forward (4)
- Stop (5)
- Play (6)
- Record (7)

A jog wheel (8) is also provided and can be used to control several DAW commands.

When operating the **rewind** or **fast-forward** controls (3 & 4) it should be noted that one switch press initiates a small jump in either direction and you must press and hold either switch to perform playhead rewind or fast-forward. Releasing the switches will return to the previous mode of operation (**stop** or **play**).

A double tap on the **stop** control (5) provides **return to playhead start** location functionality, placing the playhead wherever the last start position was located.



You can activate a **return to start on stop** command in the transport section of Cubase / Nuendo preference (see right >>>)

The **jog wheel** (8) operates as a silent re-position of the playhead cursor, with clockwise movements positioning the playhead cursor forwards in time and anti-clockwise movements positioning the playhead cursor back in time.

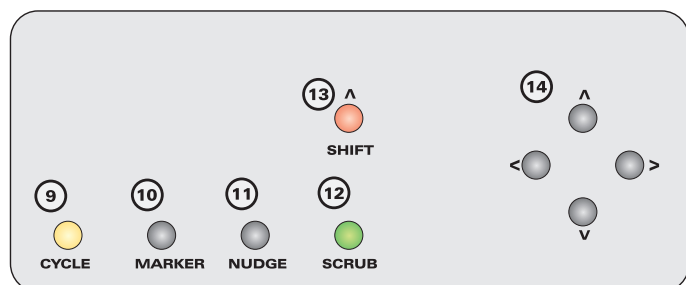
By using the **scrub** function (12) in conjunction with the **jog wheel** (8), the playhead cursor can be used to 'scrub' through the audio within your Cubase / Nuendo session in realtime as if 'rocking the tape against the playhead'. This is useful for finding edit points and punch-in locations etc. When in this mode, the scrub switch will illuminate a solid green.

If the **scrub** switch (12) is pressed for a second time, the **jog wheel** (8) performs shuttle operation, providing continuous rewind or fast-forward of the playhead cursor. This is silent and indicated by a flashing green LED in the switch.

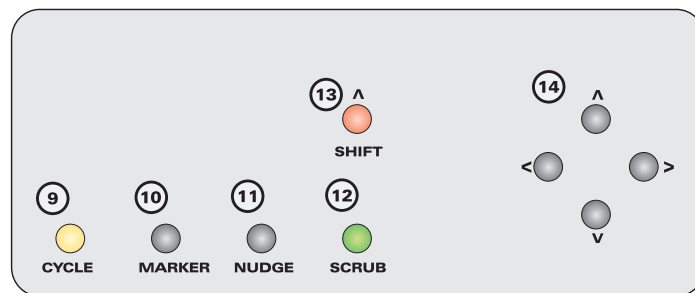
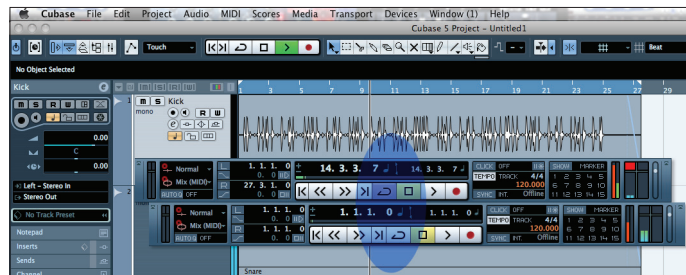
A third press on the **scrub** switch (12) toggles back to standard jog wheel operation, indicated by no switch illumination.

Navigation & Utility Controls

Control 2802 provides several navigation and utility controls just above the transport section.



The **cycle** control (9) can be used to toggle Cubase / Nuendo's cycle loop on and off.



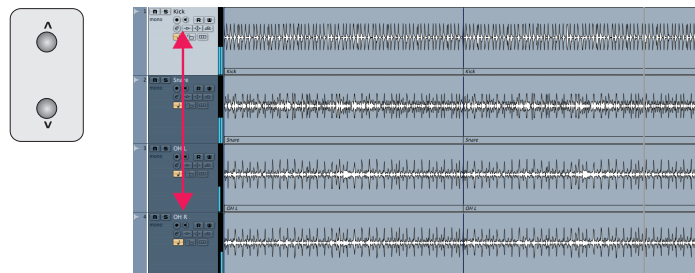
The **marker** (10) and **nudge** (11) controls are currently unsupported in Cubase / Nuendo.

Please see www.focusrite.com for the latest updates to control functionality.

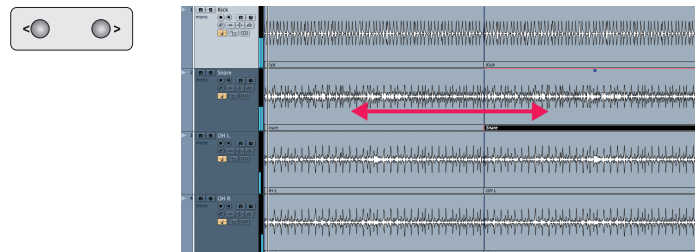
The **navigation cursor controls** (14) can be used to select tracks in your Cubase / Nuendo session (up & down cursors) or to select regions on the selected track (left & right cursors).

If used with **shift** mode (pressing switch 13), the navigation cursors operate as zoom controls. Vertical track zoom is achieved with the up & down cursor switches, while horizontal timeline zoom is achieved with the left & right cursor switches.

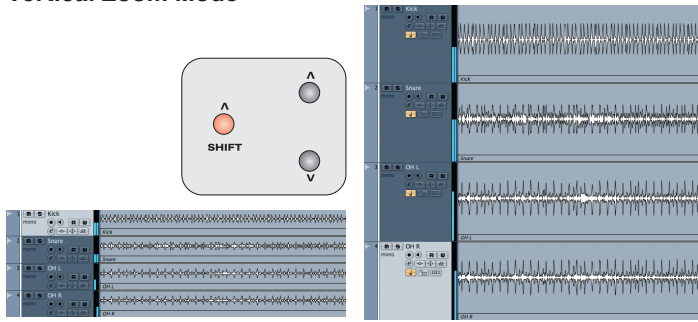
Track Select Mode



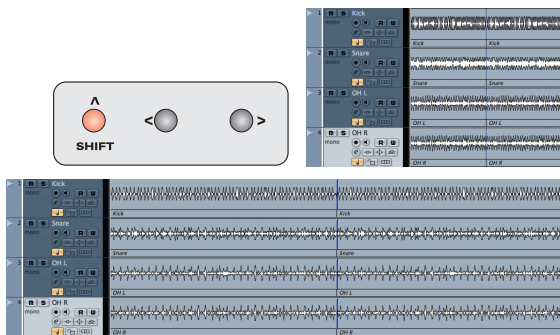
Region Select Mode



Vertical Zoom Mode

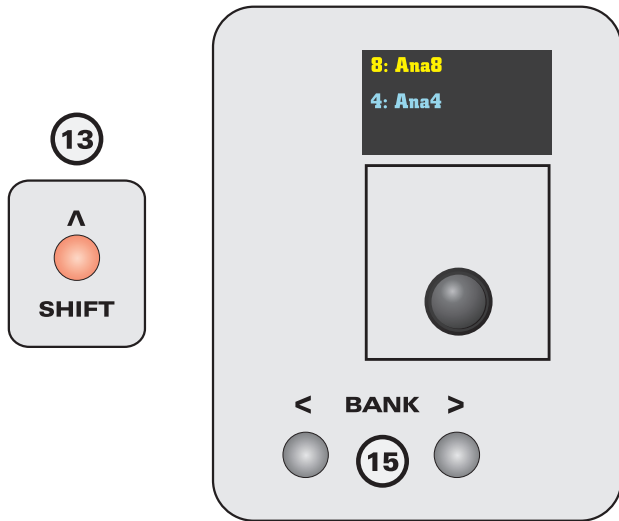


Horizontal Zoom Mode

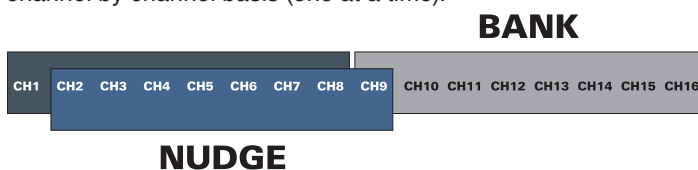


In order to navigate around your session and bring banks of 8 tracks onto the Control 2802 control surface, there are several switches that are useful.

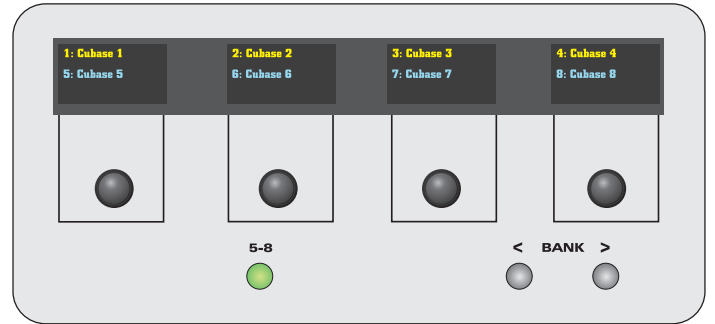
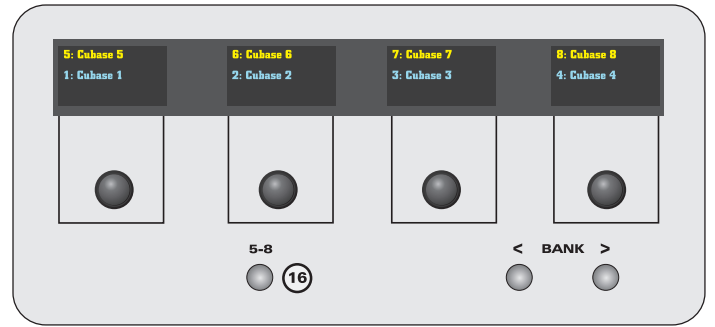
The **bank switches** (15) allow you to 'bank' in eight channel blocks left and right, through either your tracks or arrange page channels (for example 1-8 or 9-16).



If using the **bank switches** (15) in conjunction with the **shift switch** function (13), it is possible to 'nudge' left or right on a channel by channel basis (one at a time).



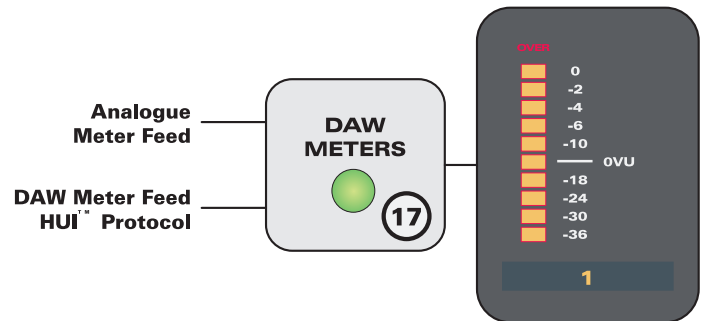
To access **encoder parameters and / or OLED display information** for all eight channels, the **5-8 switch** (16) must be used to access the last four channels in the bank of eight.



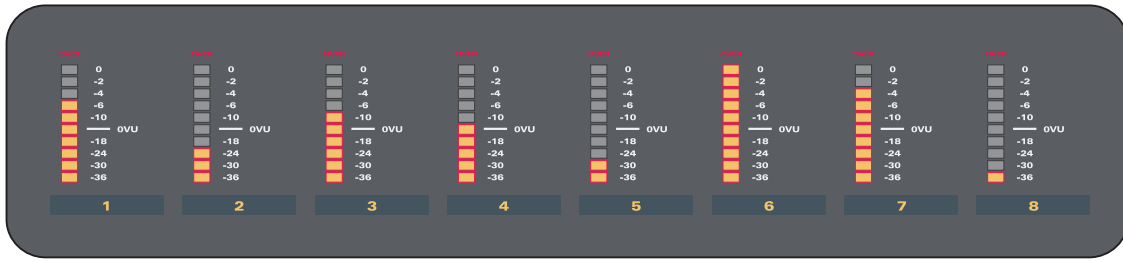
The channels that are active and available on the encoders are **illuminated in blue**. The encoders can be used to access pan, aux, insert and input / output assigns for the four active channels.

DAW Meters

If you wish to display eight channels of DAW metering on Control 2802's LED bargraph meters, a global command switch (17) **DAW Meters**, provides this functionality.



DIGITAL CLIP		
— 0 dBFS —	+18 dBu —	
— -2 dBFS —	+16 dBu —	
— -4 dBFS —	+14 dBu —	
— -6 dBFS —	+12 dBu —	
— -10 dBFS —	+8 dBu —	
— -14 dBFS —	+4 dBu —	0VU
— -18 dBFS —	0 dBu —	
— -24 dBFS —	-6 dBu —	
— -30 dBFS —	-12 dBu —	
— -36 dBFS —	-18 dBu —	

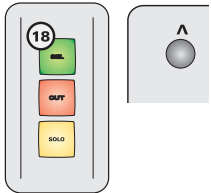
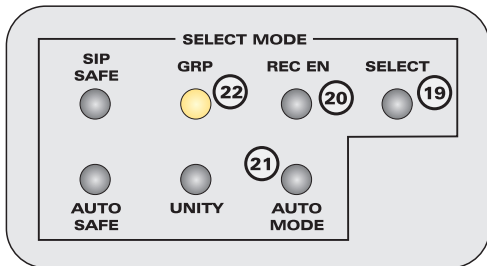


Channel Select Mode

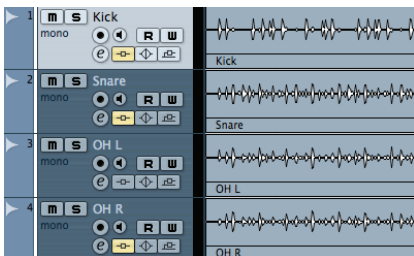
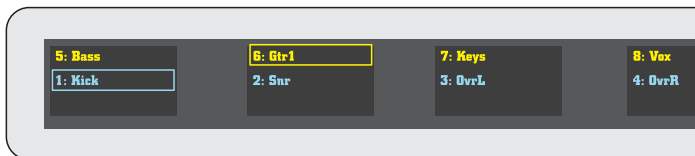
The select mode panel provides various functions, some of which operate on the analogue layer and are useful for automation control (auto safe etc), while others are specifically used for control over DAW functions on the DAW layer.

Above each fader are three illuminated push switches.

The first switch, **select** (18) can be used for several functions on both analogue and DAW layers when used in combination with the select modes available in the middle of the control surface panel.



When **select mode** is chosen (19), the large green **channel select switches** above the channel faders become DAW channel selects when in control surface mode. Selected channels are highlighted in light grey within Cubase / Nuendo and a box is shown around the channel name in the Control 2802 OLED display. In Cubase / Nuendo, only one channel can be selected at any one time from the hardware but shift+clicking in software allows multiple selections.



Record Enable Mode

Use **record enable** (20) within DAW control surface mode when arming tracks for recording in Cubase / Nuendo.



Activate this mode and then use the large green **channel select switches** (18) to record enable each track active on the eight channel HUI™ bank.



Please note that by using multiple channel select switches (18), you can record enable more than one track at once.

Automation Modes

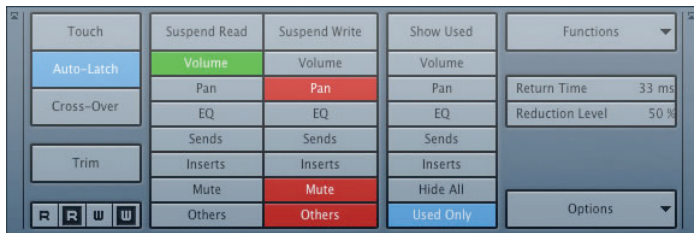
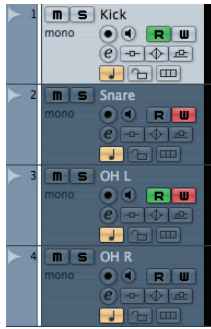
The **automation mode** control (21) is used in the DAW layer to set host specific automation modes like read, touch and latch etc.



This control can be used to access automation modes for channels active on the control surface.

The available automation modes in Cubase / Nuendo operate in conjunction with the main automation panel:

- Read
- Write
- Read/Write
- Off

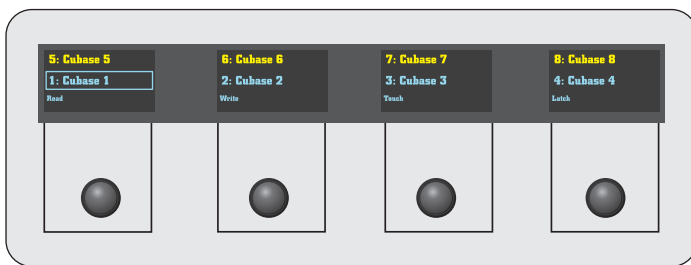


To access the automation mode selections using the Control 2802 control surface press the **automation mode** switch (21).



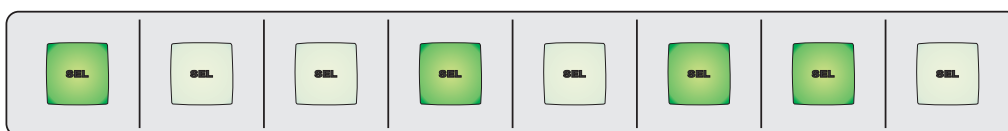
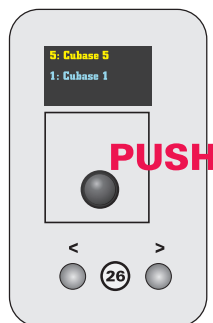
Observing the OLED displays, you should see a series of options appear above each encoder. Use the **read** or **write** encoder switches to set either mode or a combination mode.

The switches behave in a toggle arrangement, cycling through the possible automation modes in Cubase / Nuendo.



Select whichever tracks you wish to apply the automation mode to using either the large green channel select switches (18) or shift+clicking in the Cubase / Nuendo mixer with your mouse.

Press down on the encoder below the option you require to apply the setting to the selected channels.



Group Mode

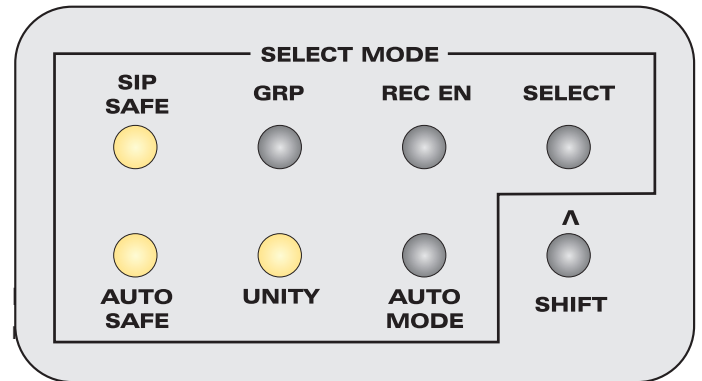
Group mode (22) is currently unsupported in the initial Cubase / Nuendo software release.



Please see www.focusrite.com for the latest updates to control functionality.

Other Select Modes – Analogue Layer.

There are three further select modes available on Control 2802 which are used in the analogue layer.



Solo-In-Place Safe – not used in the DAW layer, please consult the full Control 2802 analogue manual for more information.

Automation Safe – used in the analogue layer for isolating channels from any automation control data, ideal for trying out a new ride before recording the pass of automation.

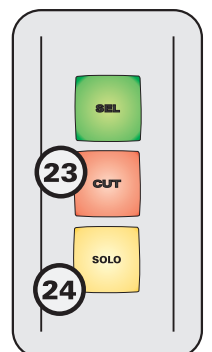
Unity – used in the analogue layer to provide a quick and easy way to position the channel fader at the unity gain (0 dB) position. This is very useful if you are setting up a stem session for analogue summing etc.

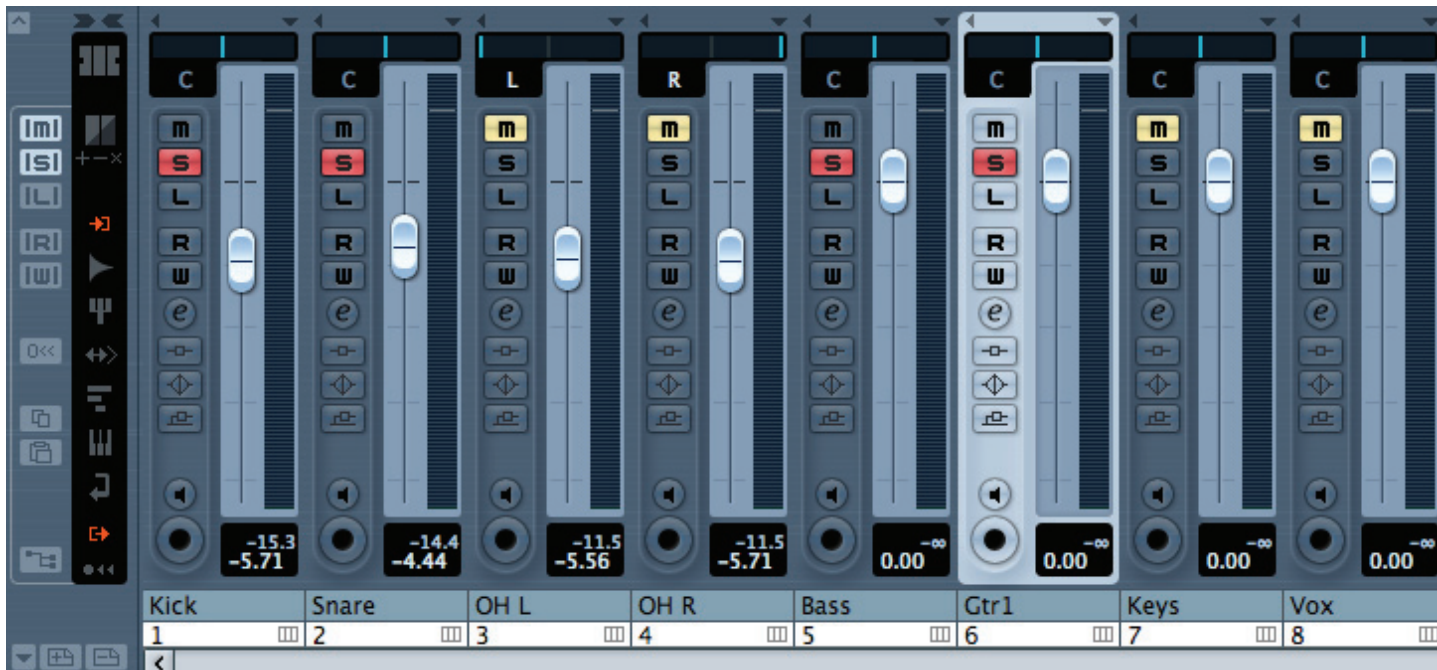
To use these functions press the function required in the select mode panel and then press the large channel select switches (18) on each and every channel that requires the application of the function selected.

Channel Solo & Cut

When in **DAW layer** the large channel cut and solo switches (23 & 24) perform mute and solo functionality within Cubase.

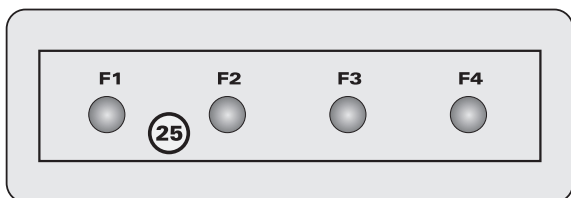
If you are using any internal Cubase grouping you may find it useful to group these functions to provide quick and easy solo or cut auditioning across a larger group of channels.





Function Keys

Function keys F1 to F4 (25) are currently unsupported in the initial Cubase / Nuendo software release.

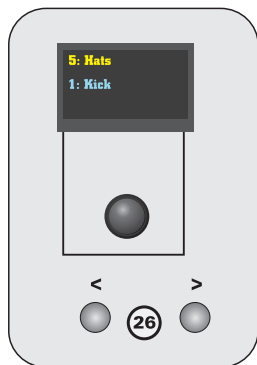


Please see www.focusrite.com for the latest updates to control functionality.

Page Keys

The page keys (26) are used to page through various parameters that are assigned to the rotary encoders and OLED displays.

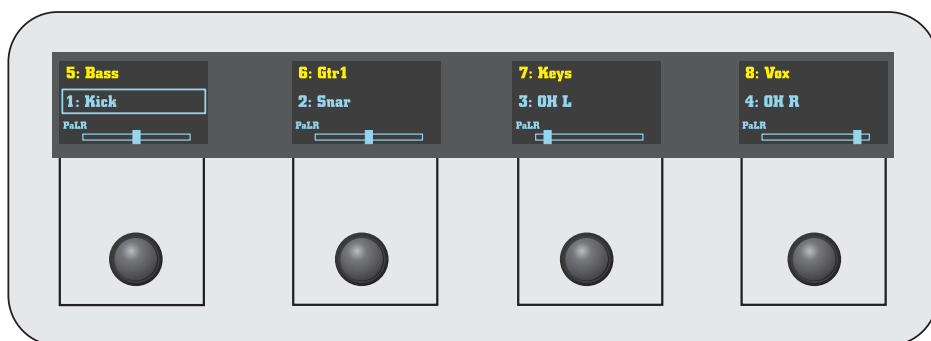
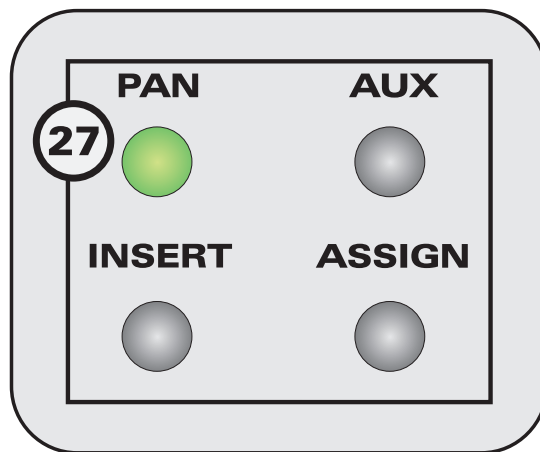
If editing aux sends, input and output routing or plugin insert effects, the parameters or host options will often cover more than one page. Scroll left to



right through the available parameter pages using the page keys located beneath the left hand encoder.

Encoder Pan Mode

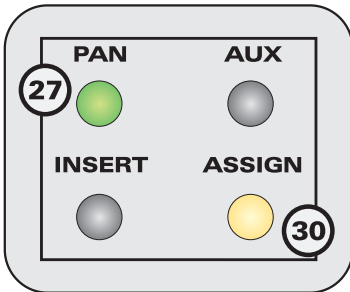
When selecting pan (27) as the encoder mode on the right hand side of the control surface, the encoders become pan controls for channels 1-4 (or 5-8) of the control surface selection. The OLED displays indicate Cubase / Nuendo channel pan position with a horizontal slider located beneath the channel name.



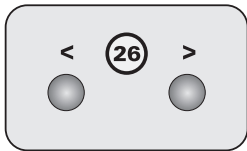


Pan Mode + Assign

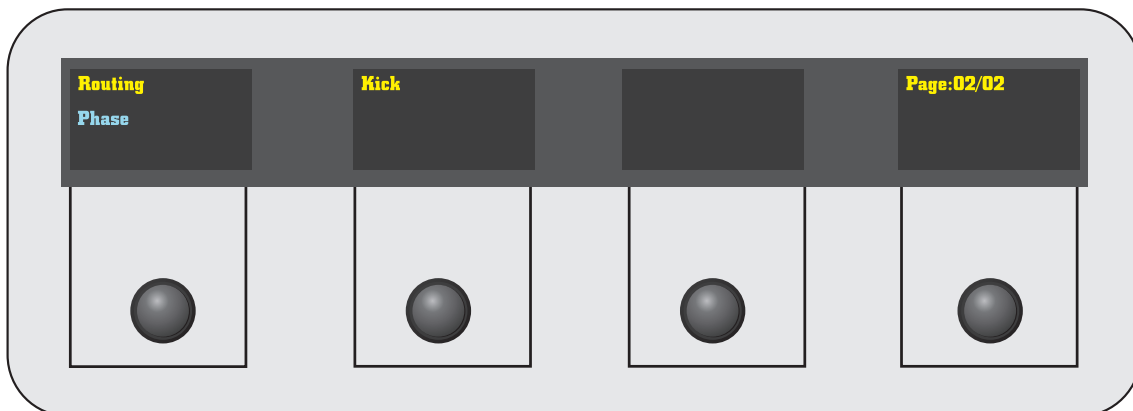
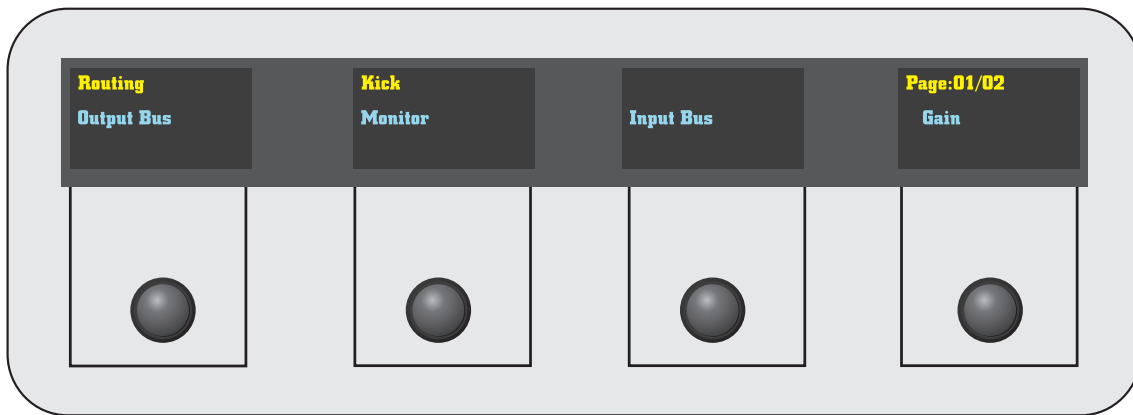
By pressing the assign key (30) when in pan mode, the encoders provide access to several channel functions including routing. This is very useful for setting up inputs for recording or bussing architecture when mixing. First a channel must be selected using the large green channel select switches (18).



Input assigns are set on page one. Use the page keys (26) to access page two where polarity reverse can be toggled on and off.



Assigning channel inputs, outputs or enabling software monitoring can be achieved on page one of **pan + assign** mode.



Pan Mode + Assign

To assign a **channel output** (encoder one) just scroll through the options with the rotary encoder and the assignment will change upon rotation.

To turn on **software monitoring** (encoder two, page one) or polarity invert (encoder one, page two) press encoder two.

To assign a **channel input** (encoder three) just scroll through the options with the rotary encoder and the assignment will change upon rotation.

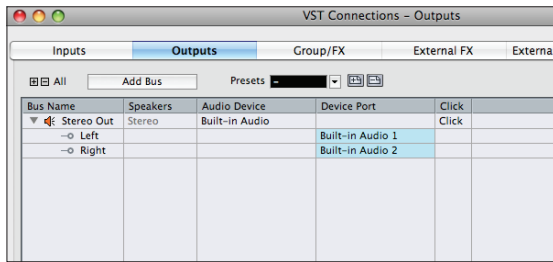
Encoder four (**gain**) is currently unsupported in the initial software release.

Please see www.focusrite.com for the latest updates to control functionality.

To aid you in navigating your studio setup at a faster pace, try using the VST Connections labelling system to name inputs, outputs and buses something simple (shortform text) and useful.

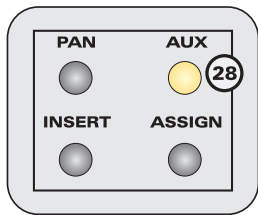


Please bear in mind that the HUI™ protocol only relays 4 characters to the control surface therefore short names may be more useful.



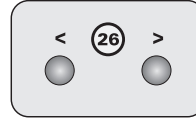
Encoder Aux Mode

When selecting aux (28) as the encoder mode on the right hand side of the control surface, the encoders become aux send controls for channels 1-4 (or 5-8) of the control surface selection.



The OLED displays indicate Cubase / Nuendo channel send level with a horizontal slider located beneath the channel name.

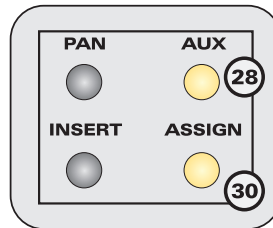
Use the page keys (26) to select other available sends (all eight sends).



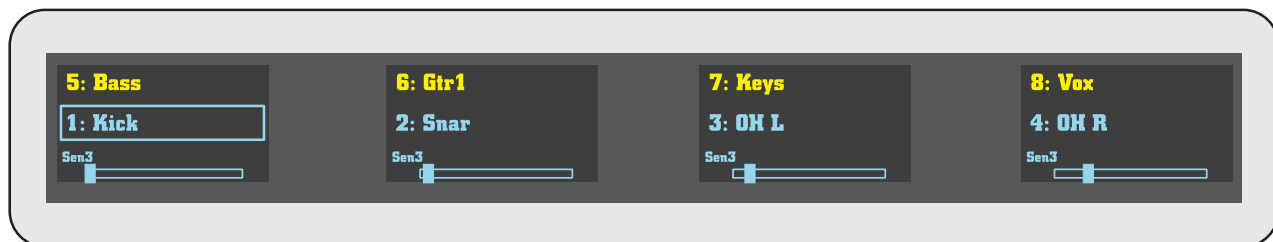
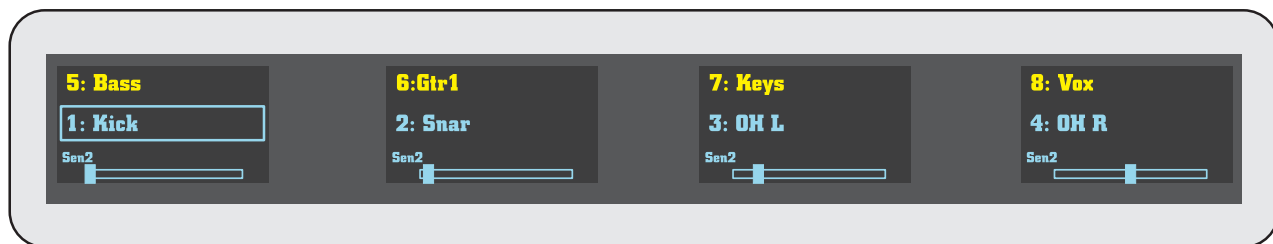
To edit several useful aux parameters access aux + assign mode.

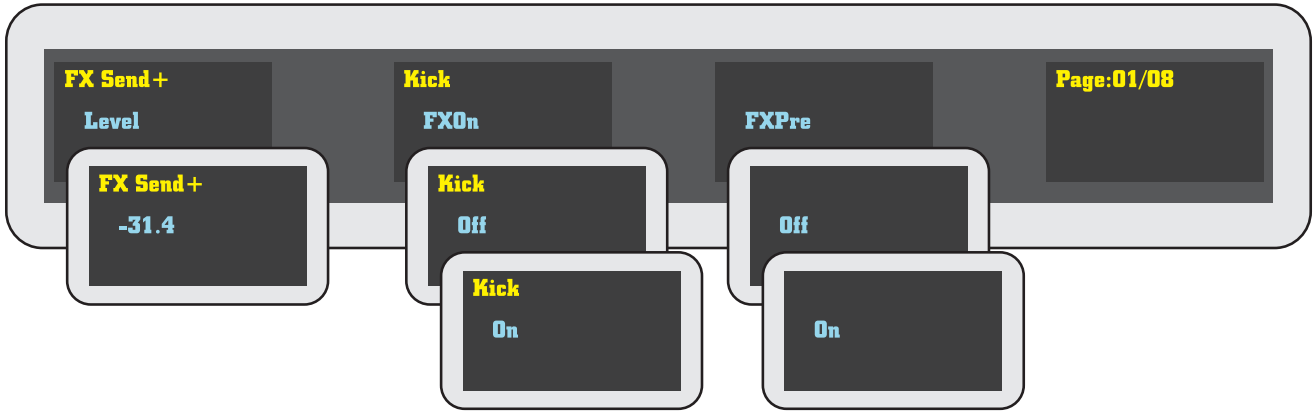
Aux Mode + Assign

When in aux mode, pressing the assign key (30) provides access to several useful aux send parameters, however it should be noted that in the release version of the Control 2802 firmware, aux sends cannot be instantiated from the control surface.



Aux sends must be setup in software using the mouse.





To edit existing send parameters press the assign key (30).

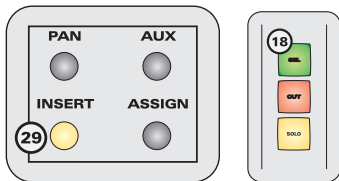
Here you will find access to level readout in dB, FX send on / off switching and pre / post switching.

There are 8 pages available so that you can access this finer level of control for all 8 aux sends.

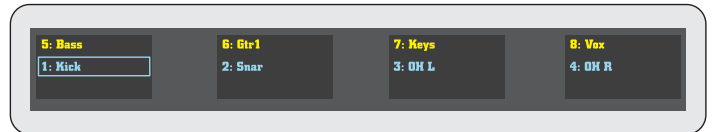
Rotate the encoders to change level, press on them to toggle between send on / off and pre / post fader settings.

Insert Mode

The Control 2802 control surface can be used to instantiate and control insert plugins within Cubase / Nuendo.

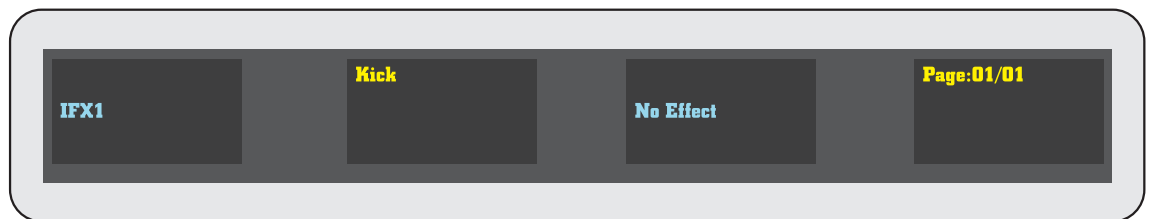


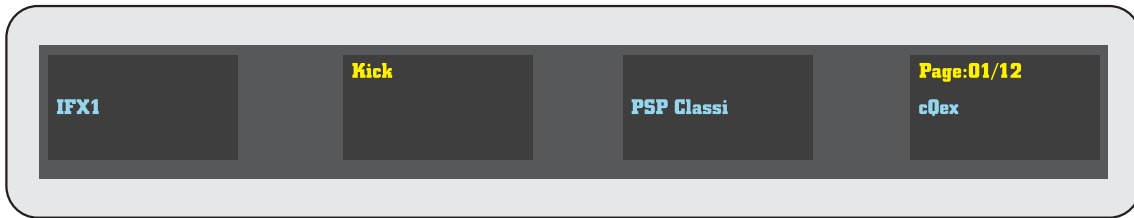
Firstly select the track you wish to instantiate the plugin insert on via the large green channel select switches (18) banking or nudging the control surface if needed.



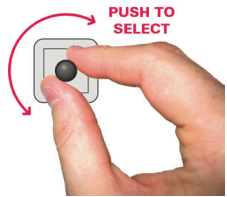
Once your channel is selected, press the insert switch (29) in the encoder mode panel. Note that the OLED display changes to show you insert assign page (the actual assign switch (30) is disabled in Cubase / Nuendo insert mode).

Please note that if you wish to change your channel selection or repeat the following process on another channel, the OLED will update for a few seconds to show this new selection in insert mode:



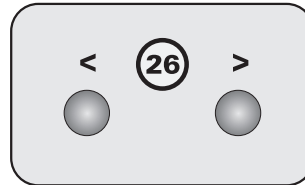


To select a plugin for instantiation, rotate the first encoder to select an empty insert slot and then rotate encoder three to scroll through the plugin list. Once the desired plugin is located, press the encoder down to instantiate the plugin.



At this point, notice that the plugin window will open within Cubase / Nuendo, however to close this window you must do so manually with the mouse.

Also note that the number pages will update to reflect the number of parameter pages for the loaded plugin. To edit the plugin parameters, simply page to the right using the page keys (26) and adjust any corresponding encoders.

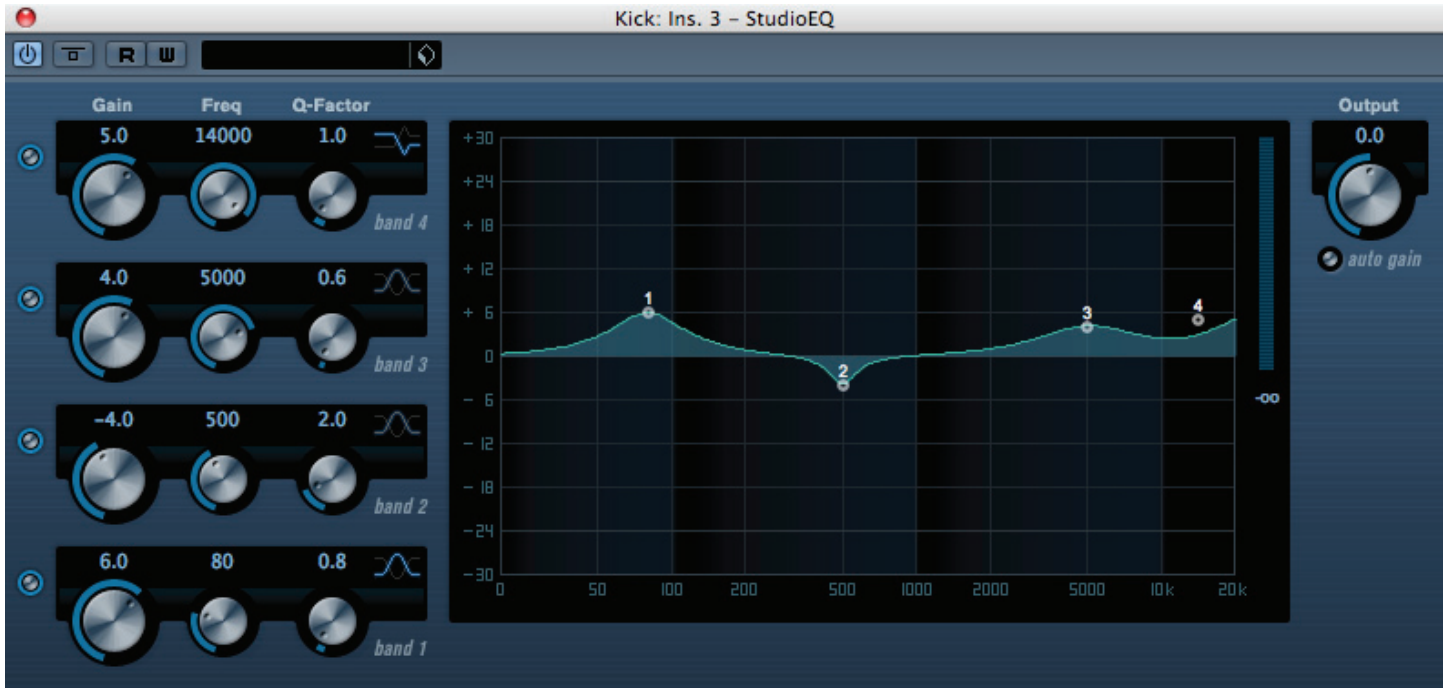
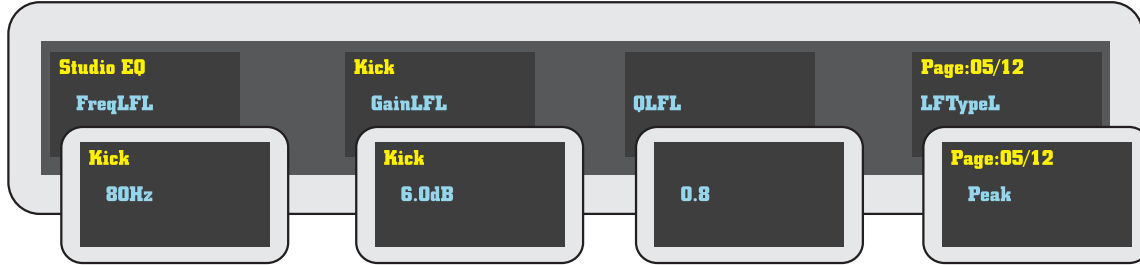


The OLEDs will display parameter values during encoder rotation but after a few seconds will return to displaying the parameter title.



Insert Editing Mode

The example below illustrates the mapping of some of the controls from a Steinberg Studio EQ.



To return to slot selection page backwards to page 01.

Here you can access other insert slots for instantiation and editing, To exit insert mode simply return to pan or aux mode.

Future Updates

For any future updates to the control surface functionality of Control 2802, please see the Control 2802 webpage and latest firmware available online at www.focusrite.com.

We hope you enjoy your new control surface and analogue console.

Thanks from the Focusrite team.

Panel Visualisation

