# Logic Pro

# Automation & Control Surface Manual



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# **About this Manual**

By connecting **Control 2802** to your DAW computer via Ethernet, and configuring the DAW software to support **Control 2802** as a HUI<sup>TM</sup> control surface, the console supports two major features: a DAW control surface layer and analogue fader automation.



This manual covers the setup and operation of these features when connecting to Logic Pro.

Note that separate versions of this manual exist for each of the major DAWs: ProTools, Logic Pro and Cubase.

You should already be familiar with console operation. If not, please read the "Control 2802 Operating Manual".

All the documentation is included on the CD packed with the console, or may be downloaded from our website at: www.focusrite.com

#### **Contents**

About this Manual	3
Control Surface (DAW Control) Overview  Dual Layer Fader Strips	<b>4</b> 4
Control Surface Panel	4
Analogue Fader Automation Overview	5
Network Connections & Setup (Mac)	6
DAW Ethernet Connection (Mac)	6
Network Configuration (Mac)	6
Control Surface Configuration	8
<b>Control Surface Operation</b>	11
Starting the Software	11
Layer Switching	11
Working in the DAW Layer - First Steps	11
Control Surface Panel	12
Accessing Tracks and Parameters	13
Transport Panel	13
Navigation & Utility Controls	14
DAW Meters (17)	17
Function Keys	24
Console SETUP	24
Analogue Fader & CUT Automation	25
Preparing for Analogue Automation	26
Writing and Replaying Analogue Automation	26
Automation - Tips and Suggestions	27
Automation Modes in Logic	27
Writing and Viewing Automation in Logic	27
Hiding Tracks in Logic	27
Future Updates	28
Panel Visualisation	29

## **Control Surface (DAW Control) Overview**

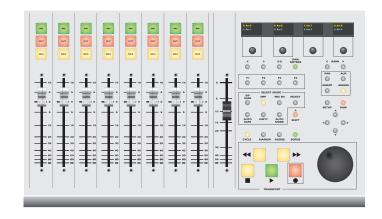
#### **Dual Layer Fader Strips**

The 8 Fader Strips (faders, **SEL**, **CUT** & **SOLO**) flip between controlling analogue channel levels and track faders within the DAW. This dual-layer technology makes it easy to switch from analogue to DAW control in an instant.

When working in the DAW layer, the console remotely adjusts parameters within the DAW software via an Ethernet connection (using the HUI™ control surface protocol).

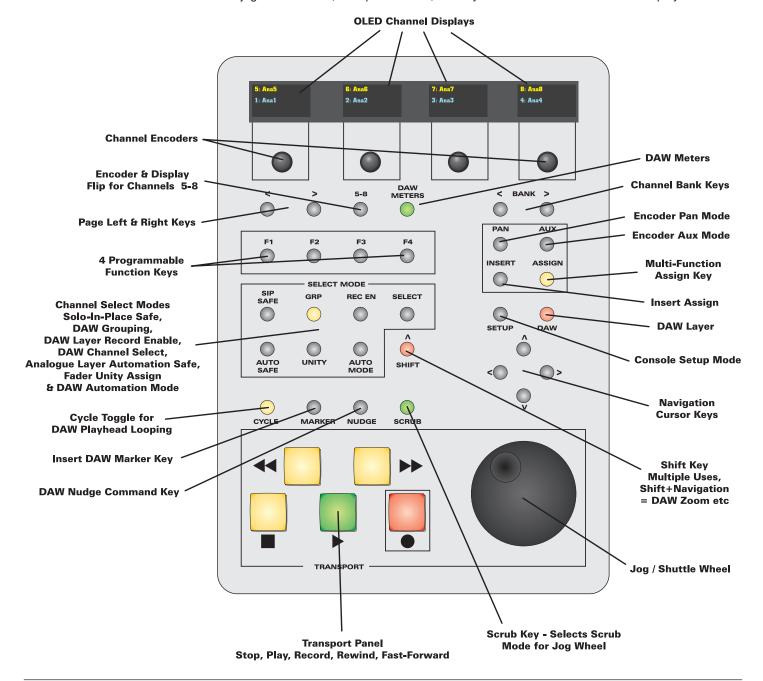
Any 8 DAW tracks may be adjusted from the console's Fader Strips.

Each of the 8 channel faders is motorised, and both the analogue and DAW layers can be fully automated.



#### **Control Surface Panel**

The layer switching, and other DAW parameters, such as auxes, plug-ins, transport and automation, are controlled from Control Surface Centre Section - this includes a jog/shuttle wheel, transport buttons, 4 rotary encoders and OLED channel displays.



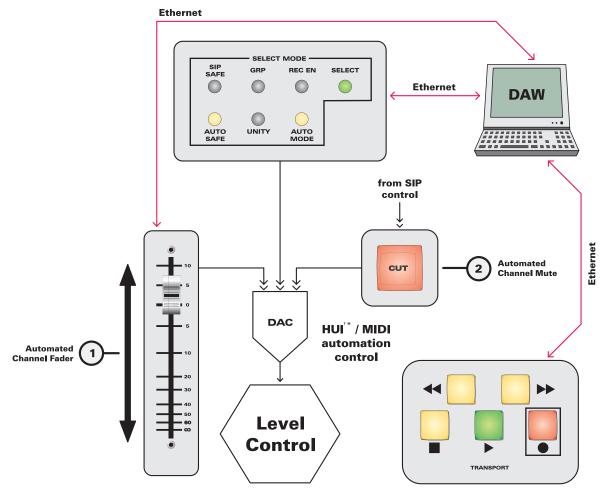
# **Analogue Fader Automation Overview**

HUITM / MIDI automation from your DAW can be applied to **Control 2802**'s analogue channel levels and motorised faders. This allows you to automate the faders and **CUT**s of the 8 analogue main channel paths.

This feature works by setting up 8 "dummy" audio channels in your DAW - blank channels that contain no audio. Then using these to write and replay automation to the 8 analogue faders and **CUT**s of **Control 2802**.

By running the "dummy" channels along with the rest of your DAW mix, you can replay automation on both the analogue channel levels and DAW tracks simultaneously - use the **DAW** switch (on the Control Surface Panel) to flip between the analogue and DAW fader layers.

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



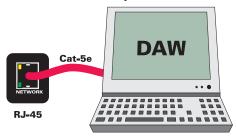
To use either the DAW control surface layer or analogue fader automation, you must connect **Control 2802** to your DAW computer via Ethernet, and configure the DAW software to support **Control 2802** as a HUI<sup>TM</sup> control surface. The next few pages describe the setup in detail:

- Network Connection & Setup page <u>6</u>.
- Control Surface Conifiguration in Logic Pro page 8.

### **Network Connections & Setup (Mac)**

#### **DAW Ethernet Connection (Mac)**

Use the rear panel NETWORK port to connect Control 2802 to your studio DAW computer, via a standard **RJ-45 CAT-5e Ethernet** cable. The interface in Control 2802 is compatible whether you use a straight or cross-over cable. There are two LEDs beside the NETWORK port that indicate network connection and activity.

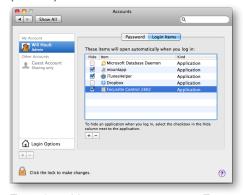


**STUDIO COMPUTER** 

Then download and install the latest version of the **Control 2802.dmg** application from our wesbite at <a href="https://www.focusrite.com">www.focusrite.com</a>

On Apple computers, add the software to your applications folder (Macintosh HD > Applications) via drag and drop.

If you wish, you can enable the application to always boot upon user log-in. Select 'System Preferences... > Accounts > (select the user account you wish to alter) > Login Items tab > Add Item (+ button)'. Browse and select Focusrite Control 2802:



Everytime this user account opens, **Focusrite Control 2802** should now boot.

#### **Network Configuration (Mac)**

Once you have connected Control 2802 to your computer and installed the software, you are ready to set up the networking side of the console.

#### **IP Address Setup for Direct Connection**

If you have a direct Ethernet connection between Control 2802 and your DAW computer, first you must set up your DAW IP address.

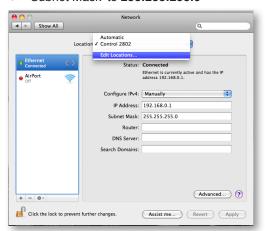
Please note that if you have a router, then the IP address should not be adjusted and you should skip to "Setting up the console with DHCP (for use with routers)" on page 7.

To set the DAW IP address:

Select 'System Preferences... > Network > Ethernet > Location > Edit Locations... > Add New Location (+ button)' and name the location as Control 2802.

Select this **Location** and enter the following settings:

- 'Configure' to Manually
- 'IP Address' to 192.168.0.1
- 'Subnet Mask' to 255,255,255.0



Click to **Apply** to confirm the settings; the status should update to show that the Ethernet port is **Connected**.



Move across to the Control 2802, power up the console and once booted, press the **SETUP** switch.

The OLED displays will show the first page of console setup:





Use the first rotary encoder to select the DAW application you are using with Control 2802.

The options at the time of release include:

- Apple Logic Pro 9
- Avid Pro Tools 8
- Steinberg Cubase 5 (Nuendo)



Once a change has been made, the setup switch LED will flash to indicate that a setting has changed.

If you exit setup by pressing the switch once more, and then return by entering setup again, your setting

is saved automatically.



Using the **PAGE** keys (below the first rotary encoder), page to the right and ensure that **Use DHCP** is set to **NO**.

Page right again to reach the IP address screen and set the IP address to 192.168.0.100 (default) using the encoders:



Then move to the fourth page, and check that the subnet mask is set to 255.255.255.0:



Page right again and check that the port is set to 1212:





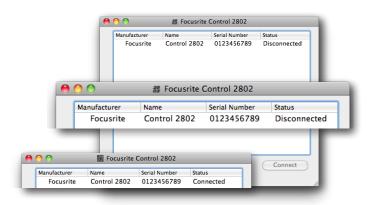
Press the setup key to exit setup and your setting will be saved

Now power down the console and restart your Apple computer.

Once booted, ensure that the **Focusrite Control 2802** application is open on your DAW computer.

Finally power up the console.

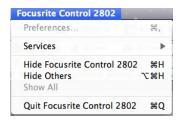
After the console boots, it should be detected by the software and show its serial number:



You may have to repeat the power down / restart process if you are experiencing difficulties.

Select the console and click on Connect (bottom right).

Your console is now connected to the DAW computer and ready for  $HUI^{TM}$  control surface configuration, see page <u>8</u>.



Note that if you close the 'Focusrite Control 2802' window, the software continues to run in the background. If you wish to quit the application, select **Quit** from the main menu.

# Setting up the console with DHCP (for use with routers)

If you have connected Control 2802 to your DAW computer via a network router, you will need to use DHCP to enable automatic configuration of IP address.

Ensure that you enable **DHCP** in your DAW computer's 'System Preferences':



And that the console is set to use DHCP on the second page of the setup menu:



Then reboot the console.

Once the console is detected, follow the same connection procedure as described earlier.

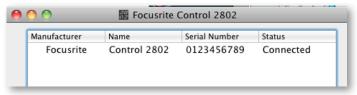
### **Control Surface Configuration**

Having setup the network communication, the next stage is to configure your DAW software to support **Control 2802** as a  $HUI^{TM}$  control surface.

**NOTE** If you wish to use both the DAW control surface layer and analogue fader automation, then you should configure two separate HUI™ controllers - one for each function.

First, please check that you have followed all the steps outlined in the "Network Connections & Setup" section, see page 6.

If your network setup is correct, then Control 2802 should be communicating via the **Focusrite Control 2802** software:



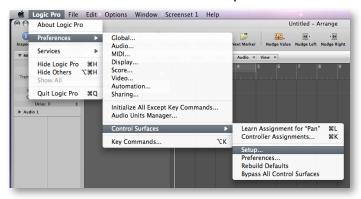
And, on Control 2802, the **SETUP** 'Host Software' page should be set to **Logic**:



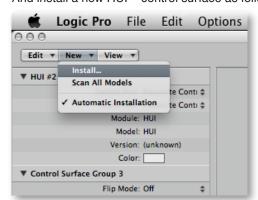
To set-up **Logic Pro** please follow the steps on the next couple of pages.

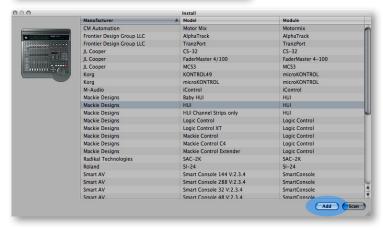
#### Step 1:

Boot the Logic software and navigate to 'Logic Pro > Preferences > Control Surfaces > Setup...'



And install a new HUI™ control surface as follows:





To use both the DAW control surface layer and analogue fader automation, then you will need two separate HUI™ controllers.

So, repeat the **Install..** procedure, and then drag the two icons apart so that they can exist as independent controllers:



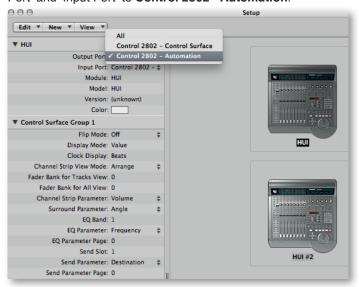
#### Step 2:

Define the function of the HUI<sup>™</sup> control surface by assigning its input and output MIDI ports. These can be accessed by selecting a HUI<sup>™</sup> control surface, and then clicking on the drop-down 'Output Port' and 'Input Port' menus:

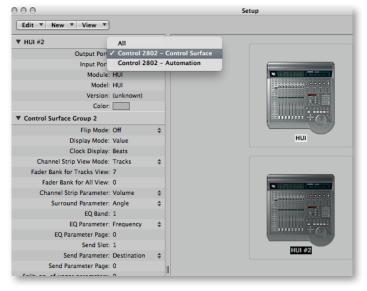


If you are using two separate  $HUI^TM$  controllers, then HUI 1 should be set to **Automation** and HUI 2 to **Control surface** as follows:

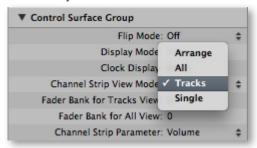
Select the first HUI<sup>™</sup> control surface and set both the 'Output Port' and 'Input Port' to **Control 2802 - Automation**:



Then select **HUI #2** and set both the 'Output Port' and 'Input Port' to **Control 2802 - Control Surface**:



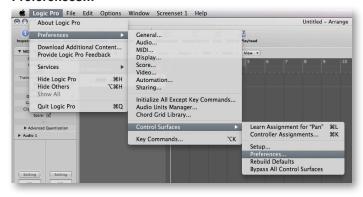
On the first HUI™ control surface (assigned to **Automation**), you might also want to lock the 'Channel Strip View Mode' to **Tracks** only:



This allows you to hide these tracks, using Logic's Hide function, to keep your session tidy. See page <u>27</u> for details.

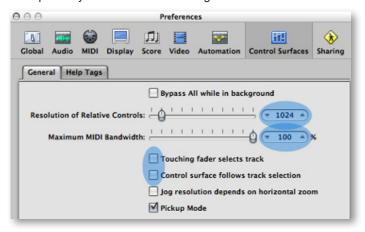
#### Step 3:

Close the control surface 'Setup' window (top left) and navigate to: 'Logic Pro > Preferences > Control Surfaces > Preferences...'



Please set the following parameters to ensure smooth operation of the control surface:

- a. Set the Resolution of Relative Controls to 1024 (or any value greater than 512).
- b. Set the Maximum MIDI Bandwidth to 100%.
- c. De-select Control surface follows track selection.
- d. You can also de-select touching fader selects track if that improves your workflow within Logic.



Close the control surface 'Preferences' window (top left).

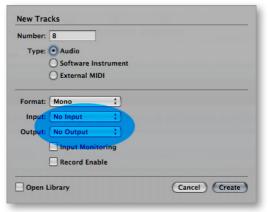
If you have only one HUI<sup>™</sup> controller, configured for **Control Surface** operation, then the setup is complete and you can skip to page 11 for details on operation.

If you have installed a second  $HUI^{TM}$  controller, configured for **Automation**, then continue to step 4.

#### **Step 4 (for Analogue Fader Automation only)**

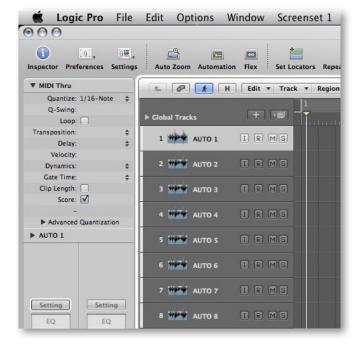
Return to the 'Arrange' window and create 8 mono "dummy" audio tracks - these will be used to write and replay fader and **CUT** automation on the 8 **analogue** channels of Control 2802.

We recommend that you de-assign any input and output track routing. This prevents you from recording audio, making it easier to see that these are automation-only tracks. You can do this by using the Input and Output assign boxes, in the 'New Tracks' dialogue window, when creating the tracks:



Then click and drag the 8 tracks to the top of the 'Arrange' window so that they are the first 8 tracks - the first 8 tracks in the Logic session are always used to write and replay automation to the analogue layer.

The "dummy" automation tracks are indicated by a white marker in the track header (this is the default colour, but it can be changed from the **Color** field during step 2):



**\*TIP!** We also recommend renaming the track labels to make it easier to see that these are automation-only tracks - for example, **AUTO1**, **AUTO2**, **AUTO3**, etc.

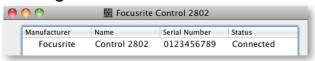
Perhaps with a further addition of the source you are riding - AUTO1-LDVox, AUTO2-Gtr, AUTO3-DrumsL, etc.

The setup for the **Automation** HUI<sup>™</sup> controller is now complete. Please see page 27 for details on how to write

and replay analogue layer automation.

## **Control Surface Operation**

#### Starting the Software



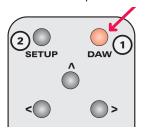
If you have shut down your computer since setting up the HUI<sup>™</sup> controller configuration, remember to start the **Focusrite Control 2802** software and **Connect** to Control 2802 before booting Logic.

#### **Layer Switching**

The 8 Fader Strips (faders, **SEL**, **CUT** & **SOLO**) flip between controlling the 8 analogue main channels and 8 track faders within the DAW:



Select the **DAW** switch (1), on the Control Surface Panel, to flip all 8 Fader Strips to the DAW layer (the LED turns red):



Deselect DAW (1) to control the analogue layer (LED off).

When you change layer, all 8 channel faders (plus **SEL**, **CUT** & **SOLO** switches) update to their corresponding positions.

**Note:** both layers are ALWAYS active. This means that if you set an analogue fader level, and then switch to **DAW**, you will still hear the analogue channels (providing audio is present).

Take care NOT to change layer by accident - if nothing is happening to your level when you move a fader, check that you are controlling the correct layer!

#### Working in the DAW Layer - First Steps

In your Logic session, the 8 HUI™ controlled tracks are marked in light grey (in the track header) - for example, tracks 17 to 24:



On Control 2802, you will see the name of the 8 tracks in the rotary encoder OLED displays:



\* TIP!

You can use the **BANK** switches to quickly access different blocks of tracks, see page <u>13</u>.

**Note:** the 8 tracks assigned to the DAW layer are marked in Logic at all times, even if the console is switched to the analogue layer. Therefore, it is best to use the **DAW** switch (1) and OLEDs to confirm what the Fader Strips are controlling.

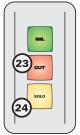
Note: if you are running two HUI™ controllers, for both Control Surface and Automation, then the first 8 tracks are marked in white (the default colour). These tracks are used to automate the analogue layer. Therefore, if your analogue channels are not in AUTO SAFE, controlling these from the DAW layer will affect your analogue channel levels! See page 27 for more on analogue layer automation.

#### **Channel Fader**

When the **DAW** layer is active, move a channel fader on the console and the corresponding DAW fader follows. (Or, move a fader on the 'Mixer' window, and the console follows!)

Please bear in mind that the scale beside the channel fader is for analogue level indication only. When controlling the DAW layer, the fader scale is determined by the DAW software - in Logic, faders can operate to +6dBFS above unity.

For more information on how faders, **SOLO**s and **CUT**s operate in the analogue layer, please see the "Control 2802 Operating Manual".



#### Channel SOLO & CUT

When the **DAW** layer is active, press a **SOLO** or **CUT** switch on the console to activate **S** (solo) or **M** (mute) within Logic.

You may find it useful to group these functions, in Logic, to provide quick solo or cut auditioning across a larger group of channels.



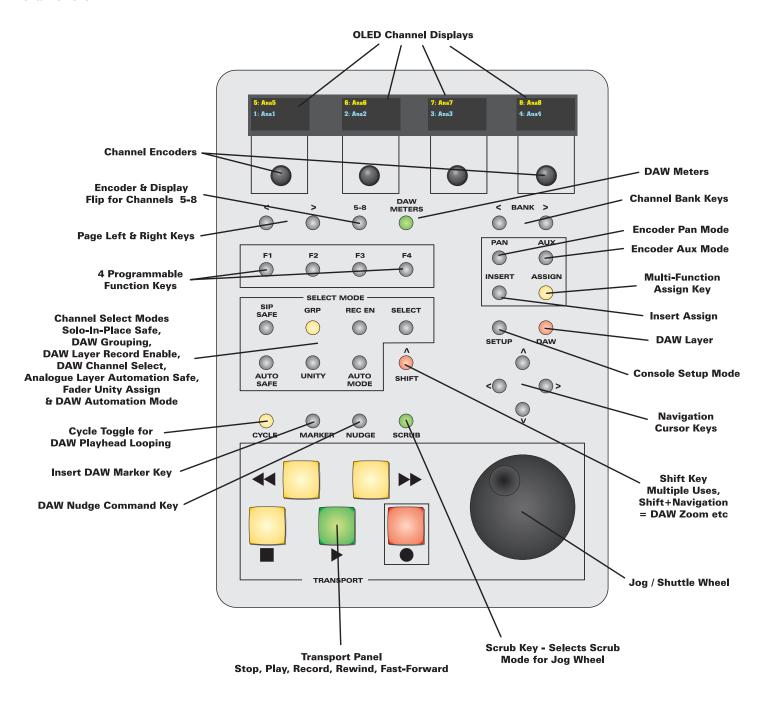
#### **Control Surface Panel**

The Control Surface Panel provides access to many useful DAW functions.

Some are ONLY active when switched to the DAW layer.

Others are active in BOTH layers, and can be used when the Fader Strips are controlling either the DAW or analogue channel level. The functions active in BOTH layers are:

- Transport switches (3-7) and Jog wheel (8).
- CYCLE toggle on/off (9).
- Track/region/zoom navigation cursor controls (14).
- **DAW METERS** (17).

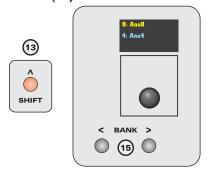


#### **Accessing Tracks and Parameters**

The **BANK** and **5-8** switches (15 & 16) allow you to bring different tracks from your DAW session onto the 8 Fader Strips and 4 rotary encoders.

The switches operate in Logic's 'Mixer' and 'Arrange' windows.

#### **BANK (15)**



When **SHIFT** (13) is not selected, the **BANK** switches (15) 'bank' in eight channel blocks left and right. For example, to control tracks 1-8, then 9-16, then 17-24 and so on.

Enable **SHIFT** (13), and the **BANK** switches (15) now 'nudge' assignments left or right channel-by-channel. For example, to control tracks 1-8, then 2-9, then 3-10 and so on.

#### **BANK**



#### NUDGE



You can also enable the **NUDGE** switch (11) and then turn the jog wheel (8) to nudge up and down through your tracks more quickly.

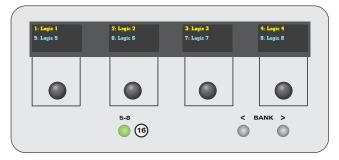
On your Logic session window, the 8 tracks assigned to Control 2802 are marked in light grey (in the track header).

On Control 2802, you will see the name of the 8 assigned tracks in the encoder OLED displays - those in blue are currently assigned to the rotary encoders:



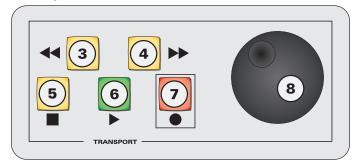
#### 5-8 Switch (16)

Press the **5-8** switch (16) to 'page' the 4 rotary encoders to the second set of four tracks:



The encoders can be used to control pan, aux, insert and input/output assignments for the four active channels. See page 17 for details.

#### **Transport Panel**



The transport panel provides access to the following functions:

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

A jog wheel (8) is also provided.

#### Rewind/Fast-Forward (3 & 4)

Press either switch once to wind at normal speed.

Press the switch again to increase the wind speed.

To exit rewind or fast-forward, press Stop (5) or Play (6).

#### Stop (5) & Return to Zero

Press once to stop at the current playhead position.

Press again (while in stop) to return to zero. This places the playhead back at the beginning of the session.

#### Jog Wheel (8) - Jog/Scrub/Shuttle

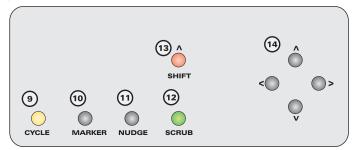
Turn the jog wheel clockwise or anticlockwise to move the playhead forwards or backwards in time; audio playback is slient in this mode.

Please note that in Logic, the **SCRUB** switch (12) has no function. Keep pressing **SCRUB** to step through these modes to return the jog wheel to normal operation (**SCRUB** LED off).

The jog wheel can also be used in conjunction with **NUDGE** (11) to change the DAW tracks in access.

#### **Navigation & Utility Controls**

Control 2802 provides several navigation and utility controls just above the transport panel:



#### CYCLE (9)

Press CYCLE to toggle Logic's cycle loop on and off.



#### MARKER (10)

Press **MARKER** to add markers to the Global Marker Track in Logic. For example, to flag edit points during a take. Each press of the switch adds a marker at the current playhead position.



#### **NUDGE (11)**

Enable the **NUDGE** switch, and turn the jog wheel (8) to change the DAW tracks in access.

#### Track/Region/Zoom Navigation Cursor Controls (14)

When **SHIFT** (13) is not selected, these switches select tracks or regions in your Logic session:

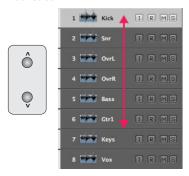
- Up/Down select the next track above/below.
- Left/Right select the next region on the selected track.

Enable SHIFT (13), and the switches operate as zoom controls:

- Up/Down vertical track zoom.
- Left/Right horizontal timeline zoom.

The following diagrams illustrate each operation:

#### Track Select



#### Region Select



#### Vertical Zoom

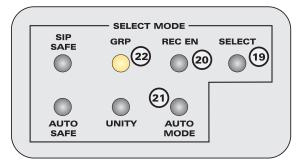


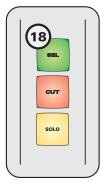
#### **Horizontal Zoom**



#### The SELECT MODE Panel

This panel is used in conjunction with the Fader Strip **SEL** switch (18) to perform a number of functions.





For most functions (not **AUTO MODE** or **GRP**), the operation is as follows:

Press the SELECT MODE - e.g. **REC EN** (20) - and then press the **SEL** switches (18) on each and every channel you wish to affect - for example, press **SEL** on fader strips 1 and 2 to record enable the corresponding DAW tracks.



- The status of channel selections is stored for all SELECT MODEs. This means that when you re-select a function, the SEL switches are how you last left them.
- This applies even after a power down. Therefore, you should clear or reset channel SEL switches if the next session requires a different set-up.
- One of the SELECT MODE switches is always active, so it is a good idea to return to a benign mode, such as channel SELECT, once you have finished making changes.

#### **Analogue Layer SELECT MODEs**

Three modes are only available when controlling the analogue layer:



SIP Safe (Solo-In-Place Safe) – used in the analogue layer to isolate channels that you do not want CUT when a SOLO on another channel is active - very useful for reverb returns.



**Automation Safe** – used in the analogue layer to isolate channels from automation. This prevents HUI<sup>™</sup> controller / MIDI automation from adjusting the analogue channel level, see page <u>26</u>.



**Unity** – used in the analogue layer to provide a quick way to position the channel fader at unity gain (0dB). The channel remains locked at 0dB until you deselect it. This function is ideal for returning stem mixes, or any application where you want the faders at 0dB.

#### **DAW Layer SELECT MODEs**

Four modes are available when controlling the DAW layer:

- SELECT (19) used to select a channel/track.
- REC EN (20) used to record enable tracks.
- AUTO MODE (21) used to select host-specific automation modes such as read, touch and latch.
- GRP (22) used to group tracks.

They operate as follows:



#### **Channel SELECT (19)**

This mode is used to select a channel/track in the DAW. For example, to assign or control a plug-in as described on page 22.

With **SELECT** (19) active, press a Fader Strip **SEL** switch (18) to select a track.

In Logic, only one track can be selected at any one time; the selected track is highlighted in white:



On the Control 2802, the selected track has a box around its name in the rotary encoder OLED display:





#### **REC EN - Record Enable (20)**

This mode is used to record enable tracks in the DAW.

Select **REC EN** (20), and then press the Fader Strip **SEL** switches (18) to record enable tracks:



You may select multiple tracks and use the **BANK** switches (15) to access 'hidden' tracks.

Note that cannot record enable an audio track in Logic if no input is assigned.



#### **AUTO MODE (21)**

This mode is used to select the automation mode for each track.

The available modes in Logic are Read, Write, Touch, Latch and Off:

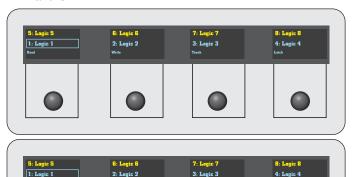


To change automation mode for a track or tracks:

1. Select the AUTO MODE switch (21).

The OLED displays update to show the automation modes at the bottom of each display - **Read**, **Write**, **Touch**, **Latch**.

Use the right **PAGE** key (26) to access the next set of options - **Trim** and **Off**:



Note that **Trim** is NOT supported by Logic (this mode is available in ProTools only).

- Use the Fader Strip SEL switches (18) to select the tracks you wish to alter.
- Then press down on an encoder to apply the option for example, press down on the first encoder to put all selected tracks into **Read**:



If you are using the analogue fader automation, then bank to the first 8 "dummy" tracks to set the automation modes for your analogue fader layer.

See page <u>27</u> for recommendations on writing and replaying automation in Logic.

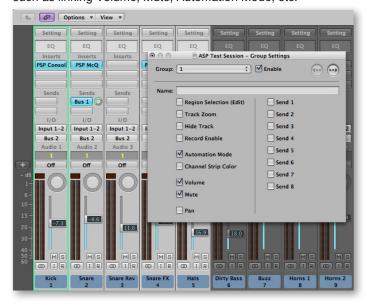


#### GRP - Group Mode (22)

This mode is used to add or remove tracks to existing Logic groups.

If you don't have any groups in your Logic session, then pressing **GRP** (22) followed by a Fader Strip **SEL** switch (18) opens the 'Groups' dialogue box.

Here you can set parameters for the group, using the mouse, such as linking Volume, Mute, Automation Mode, etc:



Please note that after the first group is created, creating new groups (>1) must be done via the mouse within Logic. This is due to a limitation of the  $HUI^{TM}$  protocol.

We suggest that you create groups manually while organising your session.

You can then use the **GRP** SELECT MODE (22) to assign tracks to existing Logic groups as follows:

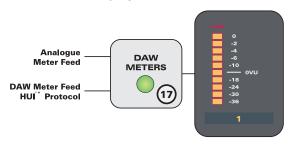
- 1. Select the GRP switch (22).
- Press the left and right PAGE keys (26), below the first rotary encoder, to choose the Logic group - please see the note below.
- 3. Press the Fader Strip **SEL** switches (18) to assign tracks to the selected group.

#### A Note on Group Selection

Unfortunately, due to a restriction of the HUI<sup>TM</sup> protocol, there is no visual feedback from Logic to the OLED displays. This means that when you **PAGE** left and right, you cannot be sure which group is selected. Therefore, use your Logic session to see which group is being assigned - for example, you will get a good overview of grouping from the 'Mixer' window:



#### **DAW Meters (17)**



The **DAW METERS** switch (17) changes the input to the LED bargraph meters globally across the console. This allows you to meter the 8 DAW tracks currently assigned to the console.

Please note that this is a global command which changes the metering across all 8 channel strips.

**DAW Metering in Logic Session:** 



Control 2802 switched to DAW METERS:



0 VU is the centre of the meter scale and calibrated to a nominal operating level of +4dBu.

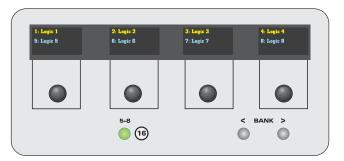
Relative to a typical EBU AD/DA converter calibration of +18dBu = 0dBFS, this means that +4dBu = 0 VU = -14dBFS:

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	_		

You can find more information on the channel bargraph meter in the "Control 2802 Operating Manual".

# Adjusting Parameters from the Rotary Encoders

When controlling the **DAW** layer, the **BANK** and **5-8** switches allow you to assign different tracks from your DAW session onto the 4 rotary encoders. See page <u>13</u> for details.



Once assigned, you can use the encoders and OLED displays to control a number of track parameters. The different modes are accessed from the "encoder mode" switches:

- PAN (27) -
- AUX (28) -
- INSERT (29) -
- ASSIGN (30) -

Note that some modes can be combined to access more than one function.

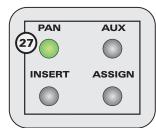
The controls operate in Logic's 'Mixer' and 'Arrange' windows.

#### PAGE Keys (26)



The left and right **PAGE** keys, below the first rotary encoder, are used to scroll through parameter pages.

For example, when editing aux sends, input and output routing, or plug-in insert effects, the available options may cover more than a single page. Scroll left to right through the pages to access all options - the OLED displays update accordingly.



#### PAN Mode (27)

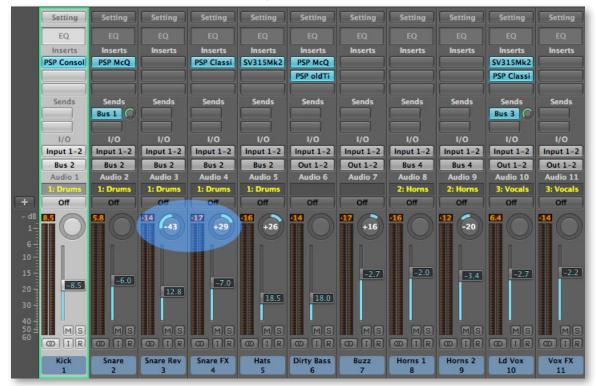
Select the **PAN** switch (27) to assign Logic's pan controls, for channels 1-4 (or 5-8), onto the 4 rotary encoders.

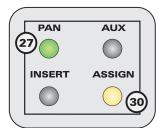
The OLEDs display the channel pan position with a horizontal slider beneath the channel name.

PAN mode (channels 1 to 4):



Logic 'Mixer' window:





#### I/O Assignment - PAN (27) + ASSIGN (30)

By pressing the **ASSIGN** switch (30) when in **PAN** mode, the encoders provide access to channel input and output routing - ideal for assigning inputs when recording, or configuring output bussing during mixdown.

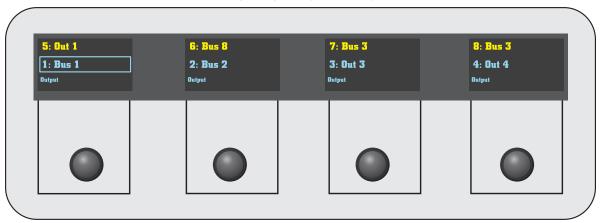
Input assignments are set on the first page. Use the **PAGE** keys (26) to access output assignments on page 2. When dealing with outputs, you may assign onto busses as well as to physical outputs.

To change an assignment, rotate the encoder to the desired input, bus or output - your selection flashes on the OLED display. Press down on the encoder to confirm the assignment.

Input Assignments (channels 1 to 4):



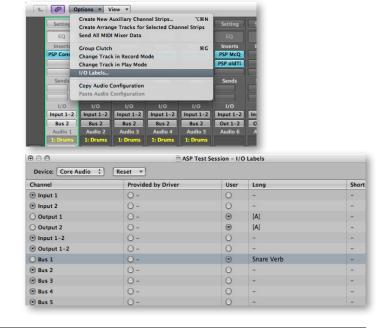
Output Assignments (channels 1 to 4):

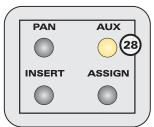


For faster session setups, try using the Logic I/O labelling system (opposite) to rename inputs, outputs and buses.

The HUI<sup>TM</sup> protocol transfers only 4 characters to the control surface, therefore if you use short names, this will make assignments from the console much easier.







#### AUX Mode (28)

Select the **AUX** switch (28) to assign one of Logic's bus sends, for channels 1-4 (or 5-8), onto the 4 rotary encoders.

You can control any one of the first five bus send positions - use the **PAGE** keys (26) to select the send. The OLEDs show the name of the send - e.g. **Snd1** - and the send level position beneath the channel name.

Although the OLEDs provide access to all five sends (**Snd1** to **Snd5**), levels can ONLY be adjusted if a bus is assigned to the send position on the channel. If no bus is assigned, then you cannot turn up the level.

Note also, that any bus may be assigned to the five send positions, either in Logic's 'Mixer' window using the mouse, or from the console in **AUX + ASSIGN** mode.

AUX mode (channels 1 to 4) - controlling Send 1:



#### **Aux Send to Faders**

Press the **AUX** switch (28) again - it flashes - to put the send levels onto the 8 channel faders. You can now use the 8 channel faders to adjust the bus send levels for the selected send. Use the **PAGE** keys (26) to change the send (**Snd1** to **Snd5**). This mode is ideal for setting up a quick headphone balance or effects send across your 8 DAW channels.

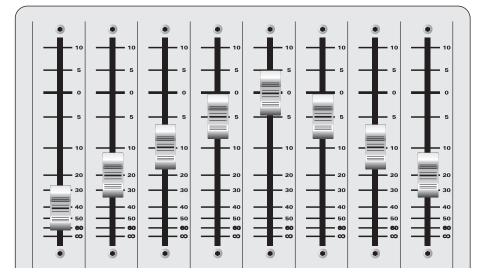
In our example, the console faders are controlling Logic's Bus 1 sends - which have been assigned to the send 2 position (Snd2):

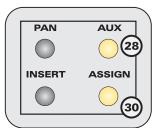
Logic Sends (in the 'Mixer' window):



Aux to Fader Flip Mode:







#### Aux Send Assignment - AUX (28) + ASSIGN (30)

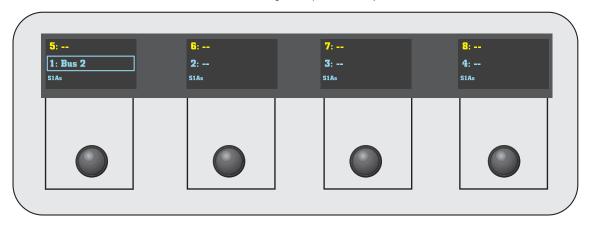
By pressing the ASSIGN switch (30) when in AUX mode, the encoders can be used to assign busses to the first five send positions (Snd1 to Snd5).

First select the send you wish to assign, by using the PAGE keys (26) to scroll through the slot positions: S1 to S5.

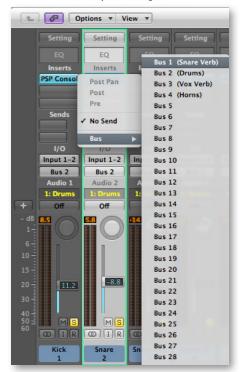
Then rotate the encoder to select the desired bus - your selection flashes on the OLED display.

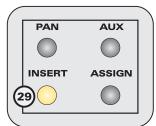
Press down on the encoder to confirm the assignment.

Aux Send Assignments (channels 1 to 4):



Bus Options in Logic:





#### **INSERT Mode (29)**

This mode can be used to assign plug-ins to any of the first four insert slots in Logic, and control the plug-in parameters.

Please note that **ASSIGN** cannot be selected in **INSERT** mode.

#### To assign a Plug-in:

1. Select the track you wish to affect - press **SELECT** (19), on the SELECT MODE panel, and then press a Fader Strip **SEL** switch (18) - the selected channel has a box around its name in the rotary encoder OLED display:



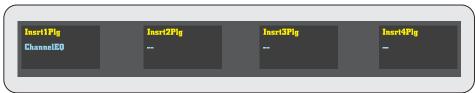
Select INSERT (29) - the OLEDs update to show Logic's first four insert slots for the selected channel (Insrt1PIg to Insrt4PIg) - if
you already have a plug-in assigned, then you see its name in blue on the corresponding display.



Please note that if you select **INSERT** (29) first, and then change your channel selection (18), the OLEDs temporarily display the name of the selected channel:



- 3. Rotate an encoder to select a plug-in your selection flashes on the OLED display.
- 4. Press down on the encoder to confirm the assignment:



At this point, the plug-in window will open within Logic. You can now control the parameters from the rotary encoders as described on the next page.

If you wish to close the plug-in window, press down (tap) the **INSERT** switch (29).

If the plug-in has been added manually, from within Logic, you may have to refresh the Control 2802 displays by tapping the **INSERT** switch again.

To open a plug-in window that is currently closed, tap down on the corresponding encoder - the plug-in window opens in Logic (and the OLEDs update to show the parameter editing mode. Tap the **INSERT** switch to close the plug-in window on Logic, and return the OLEDs to the insert plug-in view.



#### **INSERT Mode (29) - Continued**

To edit the plug-in's parameters:

1. Select the desired plug-in by tapping down on the corresponding rotary encoder - in our example encoder 1:



The plug-in window opens in Logic, and the first page of parameters map onto the 4 rotary encoders. The OLEDs display the parameter names and values:

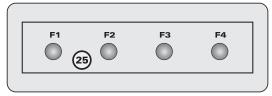


Logic Channel EQ:



- 2. Use the **PAGE** keys (26) to scroll through all the available parameters.
- 3. Turn the encoders to edit parameter values.
- 4. When you have finished editing the plug-in, tap the INSERT switch to exit edit mode, and close the plug-in window.

#### **Function Keys**



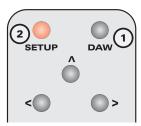
The function keys **F1** to **F4** (25) are provided for future expansion of user programmable commands.

Their default configuration, within the HUI™ protocol and Logic implementation, is as follows:

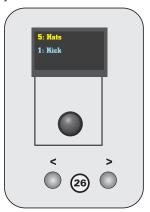
- F1 Clear overload flag in audio channels
- F2 Recall screenset 2
- F3 Recall screenset 3
- F4 Recall screenset 4

Please consult your Logic manual, and Logic Control Surfaces Support document, to learn about modifying these key commands within your host software.

#### **Console SETUP**



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



Press **SETUP** and the OLED displays will show the first page of the setup menu.

To change page, use the page keys (26) located under the left most encoder.

#### **Editing Setup Parameters**

To edit parameters, rotate the corresponding rotary encoder to change the value - the **SETUP** LED flashes to indicate the change.





Press the **SETUP** switch to confirm and apply the changes.

The **SETUP** LED returns to a solid red once changes are confirmed.

The first five **SETUP** pages are described in more detail during the network setup procedure on page 6:

#### Page 1 - Host Software



#### Page 2 - Use DHCP (networking option)



#### Page 3 – IP Address (networking option)



#### Page 4 - Subnet Mask (networking option)



#### Page 5 - Port (networking option)



#### Page 6 - Factory Reset

Press down on the rotary encoder to reset the console to its factory default settings.



Note that this will reset the analogue main channel levels and motorised faders to "off".

#### Pages 7 & 8 - Serial Number & Firmware Info



These pages are for information purposes only.

# **Analogue Fader & CUT Automation**

HUI™ / MIDI automation from your DAW can be applied to **Control 2802**'s analogue channel levels and motorised faders. This allows you to automate the faders and **CUT**s of the 8 analogue main channel paths - ideal if you wish to sum using the analogue mix bus, but still have automated control.

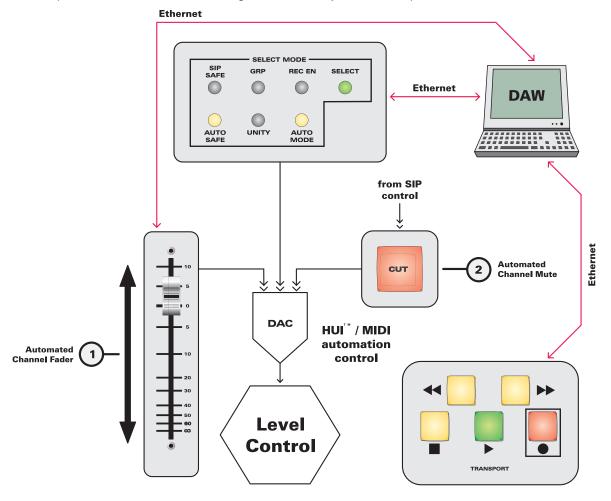
\* TIP!

**CUT**s as well as faders can be automated - this is ideal for muting analogue channels (with inserts) during quiet sections of the mix, and thereby reducing any unwanted noise from vintage outboard.

\* TIP!

The analogue automation works along side the full DAW control surface layer. This means that fader and cut automation can be written and replayed on both the DAW and analogue fader layers.

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



The sections of most interest when using the analogue automation are:

- Faders
- CUT switches
- AUTO MODE and AUTO SAFE SELECT MODEs
- DAW Transport Control

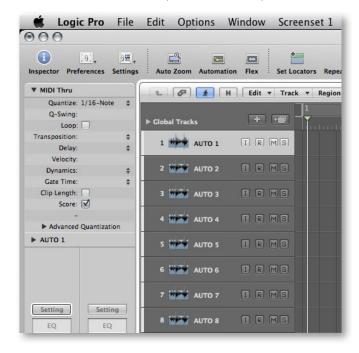
#### **Preparing for Analogue Automation**

#### Configuration

The analogue automation works by setting up 8 "dummy" audio channels in your DAW - blank channels that contain no audio. Then using these to write and replay automation to the 8 analogue faders and **CUT**s of **Control 2802**.

See page 10 for details on configuration.

If the setup is correct, then the 8 "dummy" tracks appear at the beginning of the Logic session. They are indicated by a white marker in the track header (the default colour):



**Note:** if your analogue channels are not in **AUTO SAFE**, then controlling the "dummy" track faders and mutes from the DAW layer will affect your analogue channel levels!

If you find this confusing, you can hide these tracks using Logic's 'Hide' functionality, see page <u>27</u>. Note, however, that you will need to control the tracks from the DAW layer in order to set the automation mode from the console (see below).

#### **Setting the Automation Mode**

Use the **DAW** layer switch (on the Control Surface Panel) to flip the Fader Strips to the DAW fader layer, and navigate to the 8 "dummy" tracks.

By controlling the 8 tracks in the DAW layer, you can set the **AUTO MODE** for each channel. This will determine how the faders and **CUT**s write (and replay) automation within Logic.

See page 16 for details on automation modes.

#### **Enabling Automation (turn off AUTO SAFE)**

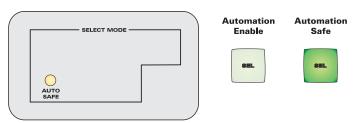
**AUTO SAFE** is a SELECT MODE, used in the analogue layer to isolate channels from automation - it prevents HUI<sup>TM</sup> controller / MIDI automation from adjusting the analogue channel level.

Please note that **AUTO SAFE** is turned ON across ALL channels by factory default. Therefore, to automate a channel, you must turn **AUTO SAFE** off.

The status of **AUTO SAFE** is then stored, if you exit the mode or power down. This means that when you re-enter **AUTO SAFE**, your last used settings are recalled.

To enable the analogue channels for automation:

- Use the **DAW** switch to flip the Fader Strips back to the analogue fader layer. (**AUTO SAFE** can only be selected when controlling the analogue layer).
- Press the AUTO SAFE SELECT MODE switch on the Control Surface Panel.
- 3. Then press the **SEL** switches, on the Fader Strips, to enable or isolate the analogue channels:
- SEL switch LED on = channel is isolated.
- **SEL** switch LED off = channel is enabled for automation.



If automation is already written for the analogue layer, **AUTO SAFE** can be used to isolate the channels to prevent moves playing back. This is ideal for trying out fader rides before writing a new automation pass, without "fighting" existing automation data.

#### Writing and Replaying Analogue Automation

Having prepared your channels, you can now use the console's TRANSPORT panel to control the DAW playback, and write/replay automation for the analogue layer.

Just treat the analogue fader and **CUT** automation like any other channel in your DAW mix:

- Use the DAW layer switch (on the Control Surface Panel) to flip the Fader Strips between the DAW and analogue layers.
- View your analogue automation on the first 8 "dummy" tracks of your Logic session.

# **Automation - Tips and Suggestions**

Whether you are writing automation on your DAW or analogue layer, the following tips and suggestions apply.

#### **Automation Modes in Logic**

We recommend the use of **Touch**, **Latch** and **Read** mode for the majority of your work.

**Touch** mode provides the most essential workflow, writing automation data when a fader is touched or moved, and returning to previously recorded automation data when a fader is released.

Note that the **Control 2802** faders are motorised and touch sensitive.

**Latch** mode is useful, but will write up to the last touched fader position unless playback is stopped. Therefore, you may overwrite important rides. If so, use the stages of undo in your DAW.

Read mode is used to play back automation data.

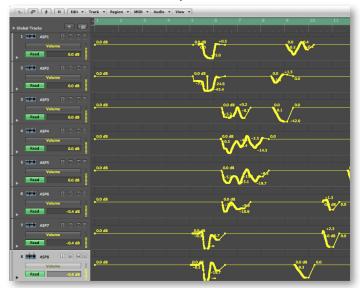
Be very careful if using **Write** mode, as Logic may automate any paramater touched - plug-ins, EQ bands, everything if you're not careful!



#### Writing and Viewing Automation in Logic

Fader rides and mutes can be recorded into Logic and viewed, edited or manually drawn, as in any other DAW-based automation system.

To view your recorded automation press 'A' on your computer keyboard (this is a standard Logic keyboard shortcut). Or click on the automation icon at the top of the screen.



#### **Hiding Tracks in Logic**

When running automation on both DAW and analogue fader layers, you may find it useful to hide the analogue automation tracks (1-8). Hiding the tracks still allows the automation data to function but keeps your session tidy.

Note that you can only access this option if you set **Channel Strip View** to **Tracks Only** during step 2 of the  $HUI^{TM}$  controller configuration, see page  $\underline{9}$ .

Select the tracks you wish to hide by clicking on the small 'H' beside each channel. Then, to hide (or show) the tracks, press 'H' on your computer keyboard. Or click on the small 'H' hide icon at the top of the 'Arrange' window.



# **Future Updates**

When updates are released to improve control surface workflow, bug fixes and add new features, you will need to update the console firmware.

To do this please visit <a href="www.focusrite.com">www.focusrite.com</a> to obtain the latest firmware from the <a href="Control">Control</a> 2802 webpage. Then follow the simple instructions provided with the firmware download to flash the upgrade to the console memory.

If you experience any issues please read the  ${\bf Control~2802}$  FAQ found online at  ${\bf \underline{www.focusrite.com}}$ .

Thanks from the Focusrite team.

# **Panel Visualisation**

