Focusrite
Control
User Guide

Focusrite®

www.focusrite.com

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INTRODUCTION

This is the User Guide for Focusrite Control, the software application that has been developed specifically for use with the Focusrite Clarett range of Thunderbolt™ audio interfaces.

If you've just become the owner of a Clarett interface, you'll need both this User Guide and the User Guide for your hardware. You can download the hardware User Guide from http://uk.focusrite.com/downloads.

The combination of the Clarett's excellent audio performance and professional build quality with Focusrite Control's simple and intuitive interface will, in conjunction with the Digital Audio Workstation (DAW) of your preference, provide you with a highly versatile computer recording system.

While we have designed Focusrite Control to be as intuitive and task-oriented as possible, all users will benefit from reading through this Guide, as a full understanding of the software's features can only be gained by considering it in partnership with the connected hardware.

IMPORTANT

The Clarett range of interfaces consist of several different models, all of which use Focusrite Control. The fundamental difference between these models lies in the number of inputs and outputs that each provides; plus the number of features that can be controlled directly from Focusrite Control. The smaller Clarett models have fewer inputs and outputs and software controlled features than the higher-specified models, such as the Clarett 8PreX for example.

Focusrite Control will recognise the particular Clarett hardware to which your computer is connected, and configure itself accordingly. Therefore you will only see on-screen references to the inputs and outputs that your hardware actually supports.

Because of this automatic configuration, this User Guide is applicable to all the models in the Clarett range. We felt it would be confusing to illustrate the Guide with screenshots from more than one model, therefore we have chosen to use the Clarett 8Pre as the "reference" model for this manual. If your Clarett is an 8Pre, the screenshots in this Guide will exactly match what you see on your screen. If you've got a different model, the only significant differences in screen appearance will be in the numbers of available inputs and outputs, and software-controlled features.

System Requirements

Software Installation

Focusrite Control is available for download from the Focusrite website (www.focusrite.com/register). The Getting Started Guide provided with your Clarett hardware contains validation codes which you will need to enter at the above web address. This procedure ensures that you will have the most up-to-date software versions.
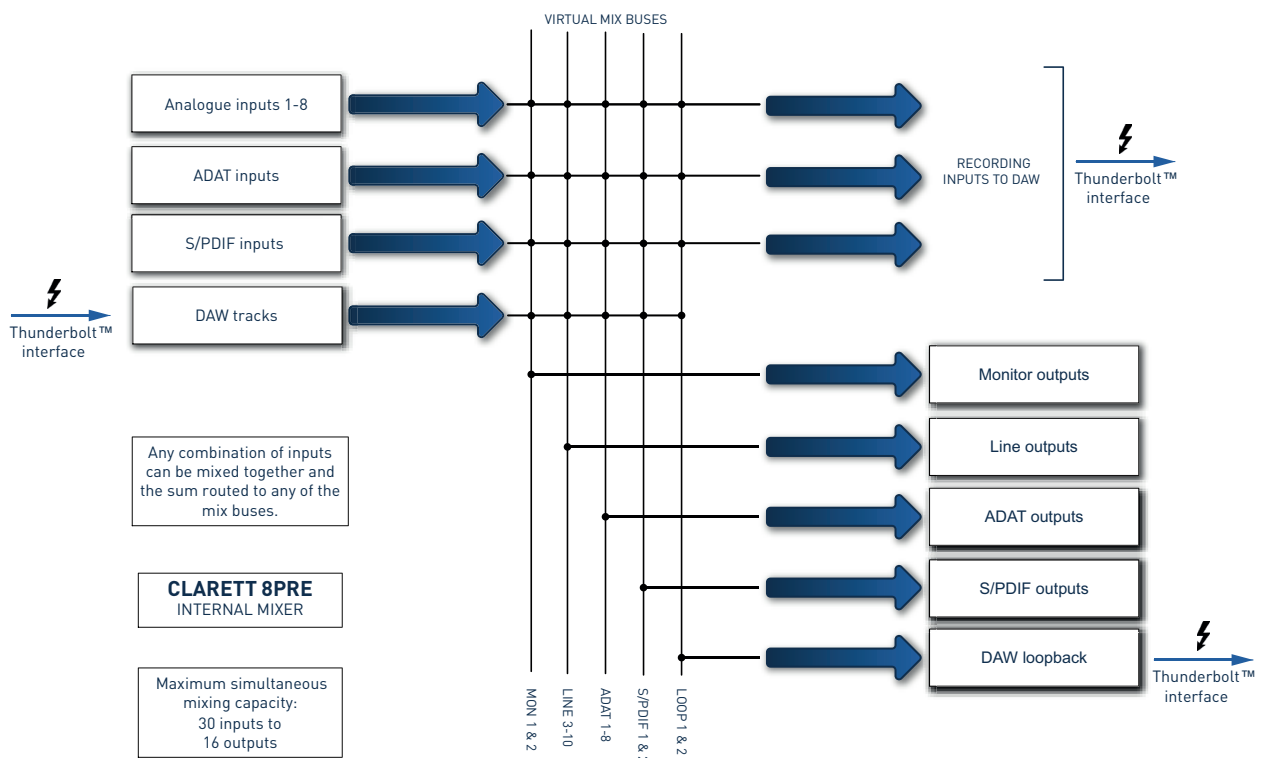
1. Using your usual browser, go to www.focusrite.com/register.

2. Follow the on-screen instructions, entering the "Bundle Code" into the form where prompted. Your Bundle Code can be found on the back of the Getting Started Guide packed with the Clarett interface.

3. Enter the unit's serial number, which can also be found on the back of the Getting Started Guide.

4. You will then be able to access the "My Products" page, where Focusrite Control is available for download, complete with activation codes where applicable.

5. Download and install Focusrite Control, which contains the necessary drivers for your interface. Follow all on-screen instructions.

6. When the installation is complete, you will be prompted to restart your computer.

7. After a restart, connect the Clarett interface to your computer with a Thunderbolt cable.

The Clarett Mixer – basic principles

Your Clarett interface contains an internal audio mixer which allows you to create one or more mixes of the various audio sources in your system, and send them to the physical outputs of your interface. These sources include tracks that you have recorded on your DAW as well as the sources connected to the Clarett's various physical inputs. Before starting to use Focusrite Control, it is a good idea to gain an understanding of the basic principle of this mixer.

The basic idea of an audio mixer will be familiar to most users: a large number of input signals are combined to a smaller number of outputs – often just a stereo pair. On a traditional analogue hardware mixer, you will find a number of identical input channels in the form of vertical strips with faders and other controls, and switches on each channel let you decide where its signal is sent. This is called "routing".

The mixer in your Clarett is no different – its inputs are the various physical inputs on the interface itself, **plus** DAW tracks that you may have already recorded. The outputs are the interface's various physical outputs **plus** two "loopback" outputs which feed back into the DAW. The diagram below shows this principle using the Clarett 8Pre as an example:

VIRTUAL MIX BUSES

Analogue inputs 1-8		RECORDING INPUTS TO DAW	Thunderbolt™ interface
ADAT inputs			
S/PDIF inputs			
DAW tracks			

Thunderbolt™ interface

Any combination of inputs can be mixed together and the sum routed to any of the mix buses.

CLARETT 8PRE
INTERNAL MIXER

Maximum simultaneous mixing capacity:
30 inputs to
16 outputs

| Monitor outputs |
| Line outputs |
| ADAT outputs |
| S/PDIF outputs |
| DAW loopback | Thunderbolt™ interface |

MON 1 & 2 | LINE 3-10 | ADAT 1-8 | S/PDIF 1 & 2 | LOOP1 & 2

Focusrite Control provides a visual representation of the mixer on your screen. A big advantage of Focusrite Control is that it only displays the inputs you actually want to use.

MIXING & ROUTING PAGE

Installing Focusrite Control on your computer will place an FC icon on the dock or desktop.

Click the icon to launch Focusrite Control. You should see a screen similar to that below:
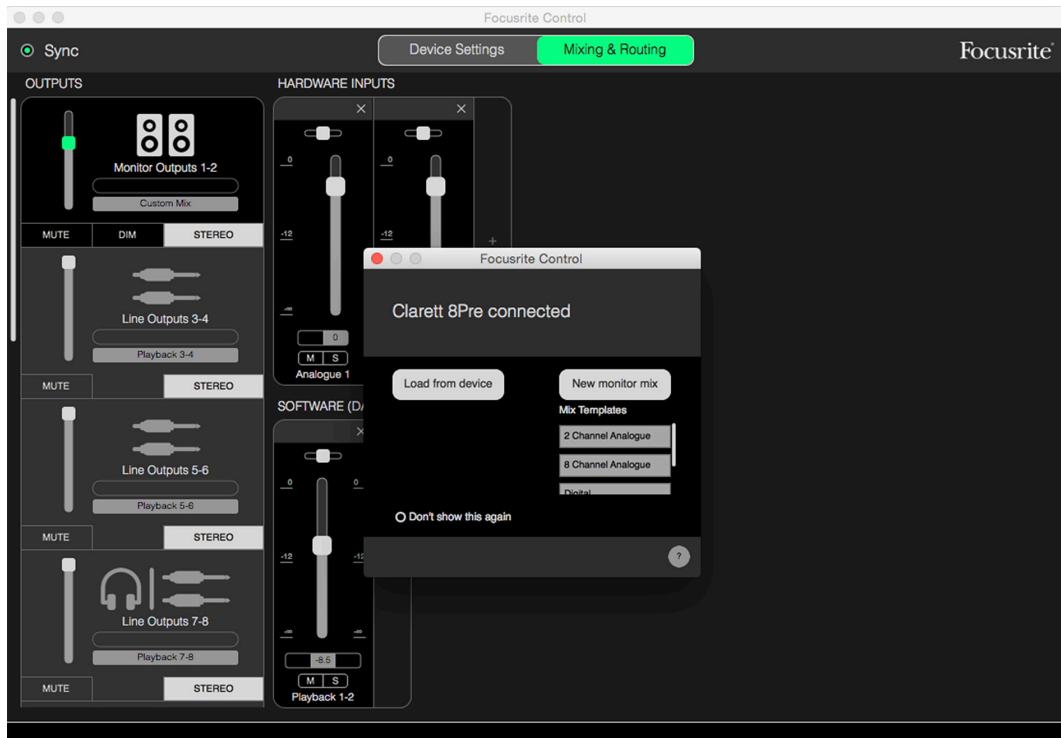
Note that in addition to the main window, there is a dialogue box confirming that the computer is correctly connected to the hardware interface. This box also offers you some options that let you quickly configure or reconfigure the software. These are covered later in the User Guide, so if you are just starting out with Focusrite Control, you may safely close this dialogue box.

NOTE
If, instead of the above, you get a warning message stating **No Hardware Connected**, this means that the computer has been unable to establish communication with the hardware.

In this case, please check:

- that the Thunderbolt cable is correctly plugged in at both ends, and that the cable or connectors are not damaged in any way,

- that the Clarett interface is turned on.

The green Sync 'LED' at the screen top left should be illuminated; this confirms that the Clarett device is locked to a valid clock source. See page 29 for further information.

Configuring and controlling the mixer

> **NOTE**
> To help you use the software effectively, Focusrite Control provides a comprehensive set of tool tips; when you hover the cursor over any of the controls, a description of what the control does appears in the status bar at the bottom of the window.

Click `File` > `Presets` > `Empty`. There are other Presets available which load up pre-configured mixer configurations – these are often useful starting points for the task you're performing. But `Empty` loads a "blank" template, with no input channels visible.

Focusrite Control only has two pages – `Device Settings` and `Mixing & Routing`. These are selected by the tabs at the top of the window. Most of the time, you'll work on the `Mixing & Routing` page.

The `Mixing & Routing` page is divided into three areas:

- `OUTPUTS` arranged vertically to the left.
- `HARDWARE INPUTS` to the right, occupying the upper half of the page.
- `SOFTWARE (DAW) PLAYBACK` to the right, occupying the lower half of the page.

The Output section

Let's look at the Output section first, as this is always fully visible.

OUTPUTS has a vertical scroll bar; if your hardware interface has more outputs than can be fitted on the screen, scroll down to see the rest. Each output (or pair of outputs if in stereo mode) has its own tab, each of which has the following features:


Stereo Output   Mono Outputs
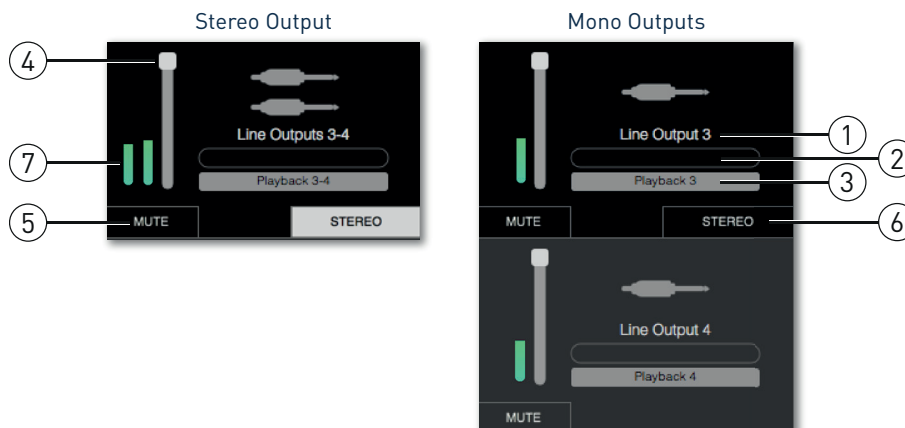
1. Output identifier (e.g., Line Outputs 3-4) and icon – in addition to the name of the output, icons are used to aid identification: you'll notice speaker and headphone symbols as well as jack plug, phono plug and Toslink symbols.

2. User name – you can click this field and enter a name – i.e., what the output's connected to – of up to 11 characters.

3. Current source – this field will display the name of the signal currently feeding the output. In many setups, particularly when using Focusrite Control's presets, this will be by default, just one input or a stereo pair of inputs. Clicking on the field opens a drop-down list letting you select:

- Playback (DAW) – lets you directly route any of the DAW tracks to the output (in pairs when the output is stereo)
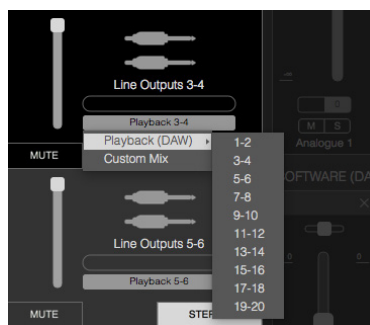
- Custom Mix – lets you create a fresh mix of all available inputs (both hardware and those from the DAW) to the selected output. Note that this option is not available if eight custom mixes have already been assigned.

You'll see that as you change the source selection for an output, the right hand side of the window displays a graphic illustrating the routing. For simple one-to-one routings, the graphic looks like this:
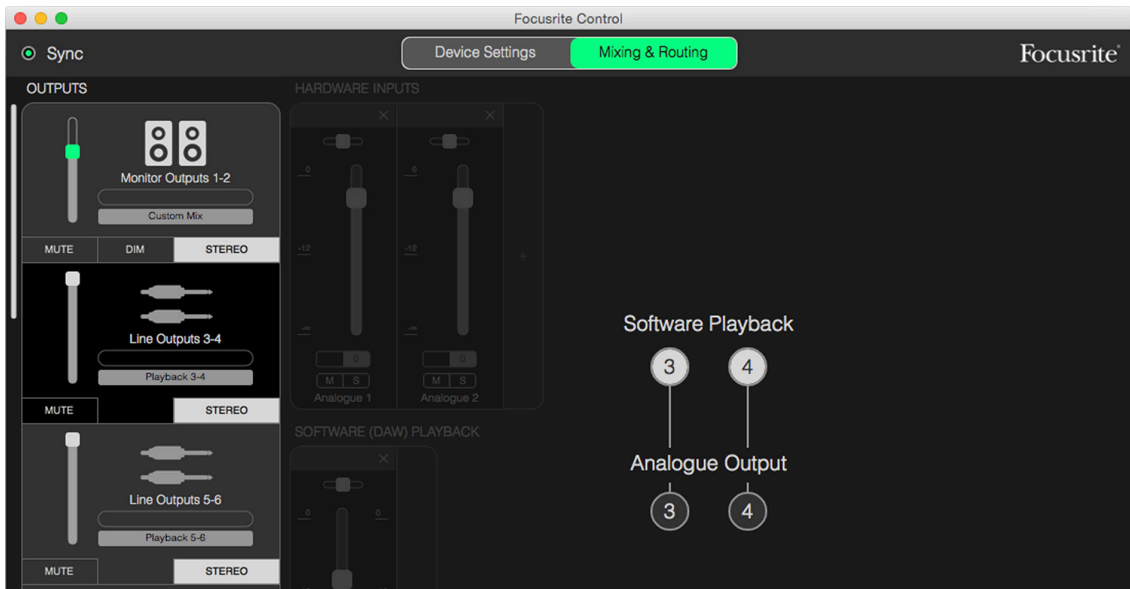
4.   Fader – use this to adjust the signal level at the output. Note that all output levels are set to maximum as a default (unity gain). If the fader "knob" is green, it means that control of the output level is assigned to the physical **MONITOR** control on the Clarett's front panel. This assignment is made on the `Device Settings` page; see page 27.

5.   `MUTE` – click this button to mute/unmute the output.

6.   `STEREO` – assigns the output to be either one of a stereo pair or an individual mono output. In stereo mode, all output functions apply to both outputs forming the stereo pair.

7.   Meters – A bargraph meter (two if configured for Stereo operation) is provided indicating the audio level at the output. A red audio overload icon appears when the output level clips. This icon can be cleared by clicking anywhere in the meter bar.

As well as all the functions above, the Monitor Outputs also have one additional control, a `DIM` button. When active, Dim reduces the level in the monitors (the amount of reduction is determined by the Clarett device connected).

The Input section

The Input section is divided into two: **HARDWARE INPUTS** and **SOFTWARE (DAW) PLAYBACK**. The two halves of the Input area are where you control the inputs to your mix for the selected output.

It is important to remember that you can create a different mix for each output, and you can have as many mixes as your Clarett's internal mixer allows. This is incredibly useful when recording a group of musicians, as it means that each musician can have his/her own mix, personalised to their requirements (assuming there are enough headphones and headphone amps to go round!) The mixer whose input channels will be displayed is selected by clicking anywhere in the relevant output tab.

> **IMPORTANT**
> It is not possible for the mixers for each output to be made up of a different set of inputs. The set of input channels in use is 'global' – that is, they will be applied across all outputs in the Clarett unit. However, individual mixes, with individual levels, is possible as it is a simple matter to mute unwanted channels.

For some situations the simple one-to-one default routing Focusrite Control sets up (as in the previous example) will be adequate. This is where the outputs on your DAW are directly routed to the hardware outputs on your Clarett interface (i.e., no internal mixing within the unit). But in many cases, you will want to set up the mix yourself. To create a new mix, first click the current source button in the Output tab for the output that you want the mix to be fed to, and select **Custom Mix**. This will clear the current fixed routing for the output and display the Input mix area (this area will be empty if the **Empty** preset was selected earlier in this manual):
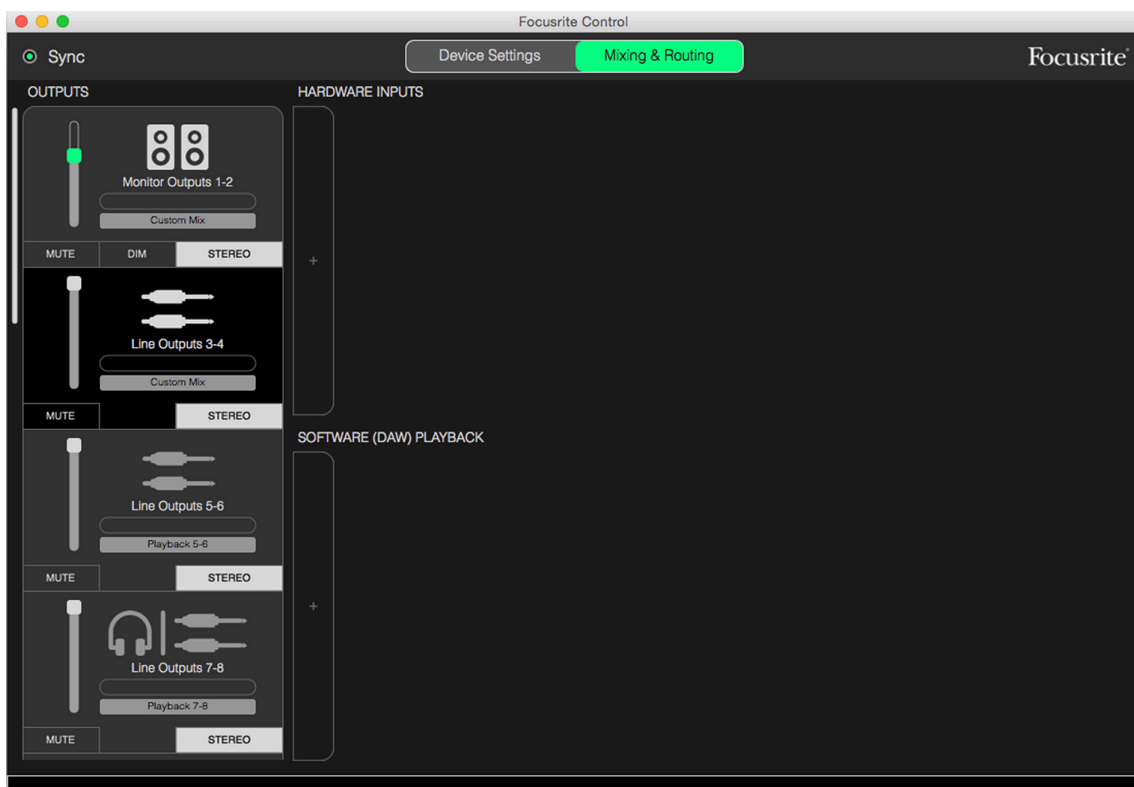
You can now "build" the mixer that will feed the selected Output by clicking on the two '+' tabs. This will open a selection box: the `HARDWARE INPUTS` half of the area lists all the Clarett's physical inputs (see page 13 for details of available hardware inputs for your Clarett device), while in the `SOFTWARE (DAW) PLAYBACK` area, the selection box lists the available DAW tracks. You can repeat this process as many times as you like, adding channels up to the maximum capacity of your Clarett hardware. Note that you may need to resize the window or use the horizontal scroll bar when the number of channels starts to exceed the window size.
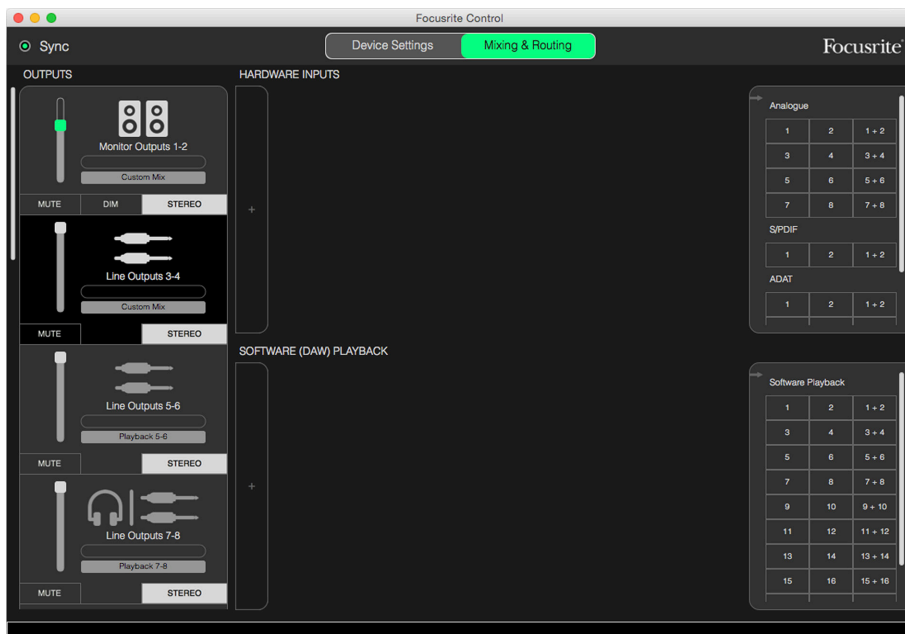

Note that in both boxes, each input is listed twice: individually (mono) and as half of a stereo pair. Selecting a stereo pair of inputs creates a stereo input channel.

In the example above, we might be doing an overdub: several DAW tracks have already been recorded, two additional tracks are going to be recorded and we wish to create a stereo foldback mix for one of the musicians.

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Each input channel has the following features:
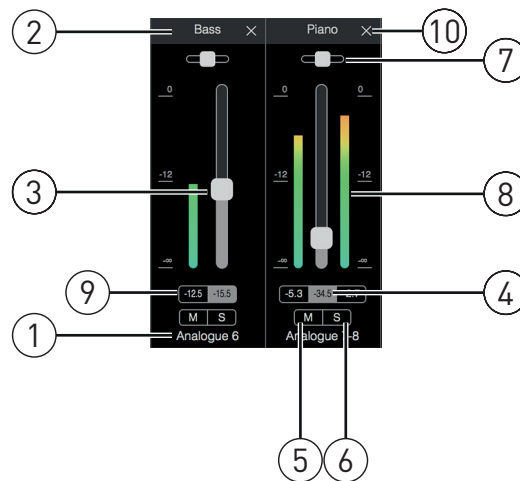
1. Input identifier – this is the actual physical input to the channel.

2. User name – you can click this field and enter a name – e.g., the instrument in question – of up to 11 characters.

3. Fader – use this to adjust the level of the signal in the mix. Note that the default setting for all faders is 0 dB, while "fader max" is at +6 dB. Double-clicking in the fader "slot" will set the fader at 0 dB.

4. Fader value – a numeric readout of the current fader position.

5. **M** – click this button to mute/unmute the channel.

6. **S** – Solo button. Clicking this will route the signal in the channel directly to Monitor Outputs 1 and 2, replacing the signal that was there previously. This is a very useful function during recording as it allows the engineer to check the instrument being recorded without the distraction of the rest of the tracks. The Solo function does not alter any other signal routings, and does not interrupt the signal being recorded into the DAW.

7. Pan slider. This control is only available when the mix is being routed to a stereo output. Its default position is central, and the signal in the channel is then sent at equal levels to both outputs of the stereo pair. Moving the slider either way sends a higher signal level to one output than the other, thus making it possible to "position" individual instruments at a particular place in the stereo image. Double-clicking in the slider "slot" will return the control back to central position.

8. Signal level meter. This indicates the signal level coming into the channel, i.e., pre-fade. It is scaled in dBFS units, with 0 dBFS at the top of the scale. 0 dBFS corresponds to digital clipping, which sounds very unpleasant; levels should always be adjusted to avoid this situation. Stereo channels have two meters, one either side of the fader.

9. Peak level display – a numerical readout of the maximum signal level reached. Stereo channels have two displays.

10. Close – click on the cross to remove the signal from the mix and the channel from the screen.

Hardware Inputs Available on Clarett Devices

Your Clarett interface provides a wide range of audio inputs, however the number available depends on what operating sample rate it is set to (see page 28 for further details). Doubling the sample rate halves the number of ADAT channels available. The tables below provide details of what inputs are available to you when operating at different sample rates.

| 44.1 kHz - 48 kHz				
Input	Clarett 8PreX	Clarett 8Pre	Clarett 4Pre	Clarett 2Pre
1	Analogue input 1	Analogue input 1	Analogue input 1	Analogue input 1
2	Analogue input 2	Analogue input 2	Analogue input 2	Analogue input 2
3	Analogue input 3	Analogue input 3	Analogue input 3	Loopback input 1
4	Analogue input 4	Analogue input 4	Analogue input 4	Loopback input 2
5	Analogue input 5	Analogue input 5	Analogue input 5	ADAT 1 input 1
6	Analogue input 6	Analogue input 6	Analogue input 6	ADAT 1 input 2
7	Analogue input 7	Analogue input 7	Analogue input 7	ADAT 1 input 3
8	Analogue input 8	Analogue input 8	Analogue input 8	ADAT 1 input 4
9	S/PDIF input 1	S/PDIF input 1	S/PDIF input 1	ADAT 1 input 5
10	S/PDIF input 2	S/PDIF input 2	S/PDIF input 2	ADAT 1 input 6
11	Loopback input 1	Loopback input 1	Loopback input 1	ADAT 1 input 7
12	Loopback input 2	Loopback input 2	Loopback input 2	ADAT 1 input 8
13	ADAT 1 input 1	ADAT 1 input 1	ADAT 1 input 1	
14	ADAT 1 input 2	ADAT 1 input 2	ADAT 1 input 2	
15	ADAT 1 input 3	ADAT 1 input 3	ADAT 1 input 3	
16	ADAT 1 input 4	ADAT 1 input 4	ADAT 1 input 4	
17	ADAT 1 input 5	ADAT 1 input 5	ADAT 1 input 5	
18	ADAT 1 input 6	ADAT 1 input 6	ADAT 1 input 6	
19	ADAT 1 input 7	ADAT 1 input 7	ADAT 1 input 7	
20	ADAT 1 input 8	ADAT 1 input 8	ADAT 1 input 8	
21	ADAT 2 input 1			
22	ADAT 2 input 2			
23	ADAT 2 input 3			
24	ADAT 2 input 4			
25	ADAT 2 input 5			
26	ADAT 2 input 6			
27	ADAT 2 input 7			
28	ADAT 2 input 8			

88.2 kHz - 96 kHz				
Input	Clarett 8PreX	Clarett 8Pre	Clarett 4Pre	Clarett 2Pre
1	Analogue input 1	Analogue input 1	Analogue input 1	Analogue input 1
2	Analogue input 2	Analogue input 2	Analogue input 2	Analogue input 2
3	Analogue input 3	Analogue input 3	Analogue input 3	Loopback input 1
4	Analogue input 4	Analogue input 4	Analogue input 4	Loopback input 2
5	Analogue input 5	Analogue input 5	Analogue input 5	ADAT 1 input 1
6	Analogue input 6	Analogue input 6	Analogue input 6	ADAT 1 input 2
7	Analogue input 7	Analogue input 7	Analogue input 7	ADAT 1 input 3
8	Analogue input 8	Analogue input 8	Analogue input 8	ADAT 1 input 4
9	S/PDIF input 1	S/PDIF input 1	S/PDIF input 1	
10	S/PDIF input 2	S/PDIF input 2	S/PDIF input 2	
11	Loopback input 1	Loopback input 1	Loopback input 1	
12	Loopback input 2	Loopback input 2	Loopback input 2	
13	ADAT 1 input 1	ADAT 1 input 1	ADAT 1 input 1	
14	ADAT 1 input 2	ADAT 1 input 2	ADAT 1 input 2	
15	ADAT 1 input 3	ADAT 1 input 3	ADAT 1 input 3	
16	ADAT 1 input 4	ADAT 1 input 4	ADAT 1 input 4	
17	ADAT 2 input 1			
18	ADAT 2 input 2			
19	ADAT 2 input 3			
20	ADAT 2 input 4			

| 176.4 kHz - 192 kHz				
Input	Clarett 8PreX	Clarett 8Pre	Clarett 4Pre	Clarett 2Pre
1	Analogue input 1	Analogue input 1	Analogue input 1	Analogue input 1
2	Analogue input 2	Analogue input 2	Analogue input 2	Analogue input 2
3	Analogue input 3	Analogue input 3	Analogue input 3	Loopback input 1
4	Analogue input 4	Analogue input 4	Analogue input 4	Loopback input 2
5	Analogue input 5	Analogue input 5	Analogue input 5	ADAT 1 input 1
6	Analogue input 6	Analogue input 6	Analogue input 6	ADAT 1 input 2
7	Analogue input 7	Analogue input 7	Analogue input 7	
8	Analogue input 8	Analogue input 8	Analogue input 8	
9	S/PDIF input 1	S/PDIF input 1	S/PDIF input 1	
10	S/PDIF input 2	S/PDIF input 2	S/PDIF input 2	
11	Loopback input 1	Loopback input 1	Loopback input 1	
12	Loopback input 2	Loopback input 2	Loopback input 2	
13	ADAT 1 input 1	ADAT 1 input 1	ADAT 1 input 1	
14	ADAT 1 input 2	ADAT 1 input 2	ADAT 1 input 2	
15	ADAT 2 input 1			
16	ADAT 2 input 2			

Using Presets

Focusrite Control comes with some useful Presets, which have been designed to get you started on a recording task as quickly as possible. Selecting a Preset automatically configures the mixer for you, setting up various useful combinations of input channels.

Presets are selected from the File menu; select Presets from the drop-down list. The Presets available with the Clarett 8Pre are shown below:
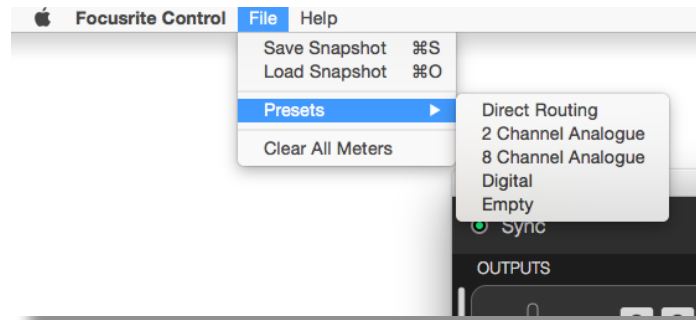
Direct Routing

With complex mixing sessions, it is sometimes desirable to perform the final mix in a separate, physical mixing console. The Direct Routing Preset configures the Clarett for this task, as it routes DAW playback tracks in numerical order to all the available Clarett outputs.
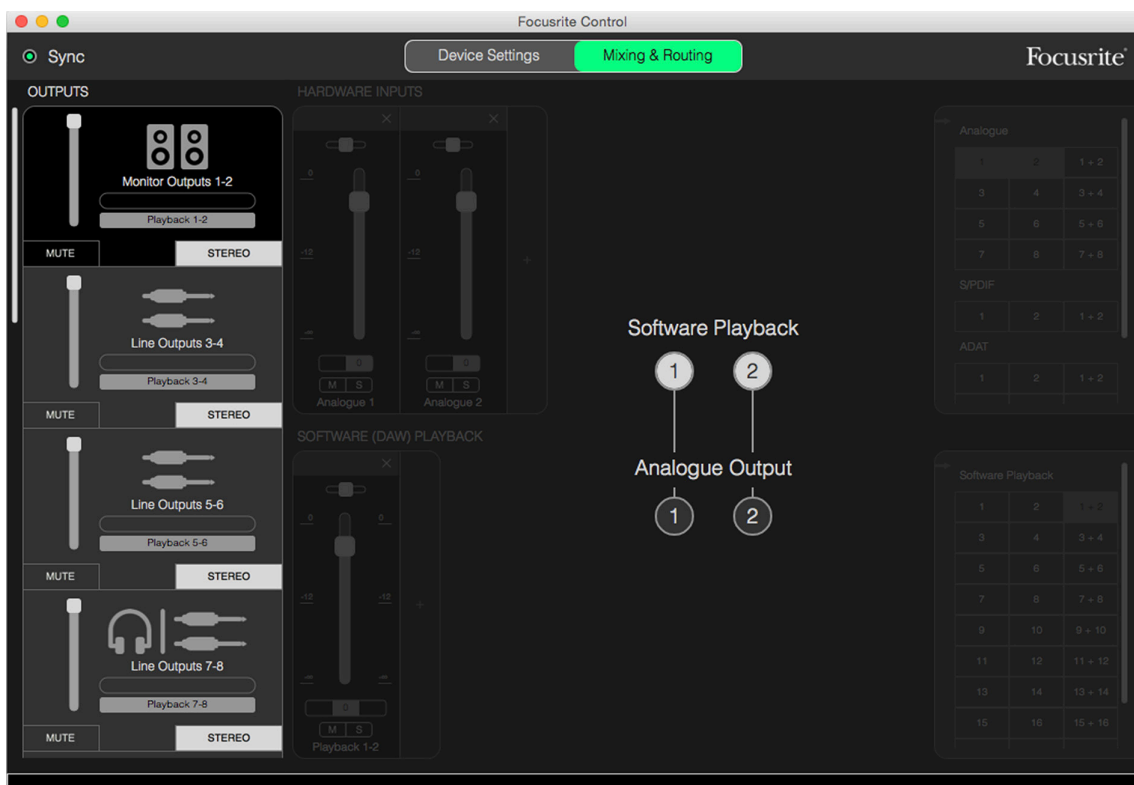
Direct routing connections for the Clarett range are as follows:

DAW track	Clarett 8PreX	Clarett 8Pre	Clarett 4Pre	Clarett 2Pre
1	Monitor Out 1	Monitor Out 1	Monitor Out 1	Monitor Out 1 (HP1 Left)
2	Monitor Out 2	Monitor Out 2	Monitor Out 2	Monitor Out 2 (HP1 Right)
3	Line Out 3	Line Out 3	Line Out 3	Line Out 3 (HP2 Left)
4	Line Out 4	Line Out 4	Line Out 4	Line Out 4 (HP2 Right)
5	Line Out 5	Line Out 5	S/PDIF Out 1	
6	Line Out 6	Line Out 6	S/PDIF Out 2	
7	Line Out 7 (HP1 Left)	Line Out 7 (HP1 Left)	Line Out 7 (HP2 Left)	
8	Line Out 8 (HP1 Right)	Line Out 8 (HP1 Right)	Line Out 8 (HP2 Right)	
9	Line Out 9 (HP2 Left)	Line Out 9 (HP2 Left)		
10	Line Out 10 (HP2 Right)	Line Out 10 (HP2 Right)		
11	S/PDIF Out 1	S/PDIF Out 1		
12	S/PDIF Out 2	S/PDIF Out 2		
13	ADAT 1 output 1	ADAT 1 output 1		
14	ADAT 1 output 2	ADAT 1 output 2		
15	ADAT 1 output 3	ADAT 1 output 3		
16	ADAT 1 output 4	ADAT 1 output 4		
17	ADAT 1 output 5	ADAT 1 output 5		
18	ADAT 1 output 6	ADAT 1 output 6		
19	ADAT 1 output 7	ADAT 1 output 7		
20	ADAT 1 output 8	ADAT 1 output 8		
21	ADAT 2 output 1			
22	ADAT 2 output 2			
23	ADAT 2 output 3			
24	ADAT 2 output 4			
25	ADAT 2 output 5			
26	ADAT 2 output 6			
27	ADAT 2 output 7			
28	ADAT 2 output 8			

To use the Preset to its full extent with a traditional analogue console, a suitable ADAT-equipped D-to-A converter and a two-channel D-to-A converter with an S/PDIF input would be required. However, many modern digital mixers are able to accept ADAT and S/PDIF signals directly as well as analogue sources.

2 Channel Analogue

This is the Preset to use when using the Clarett as your analogue recording "front end". The Preset configures the Clarett's routing with Analogue Inputs 1 and 2 available as `HARDWARE INPUTS` and DAW tracks 1 and 2 available as a stereo channel in the `SOFTWARE (DAW) PLAYBACK` section.

For example, on the Clarett 8Pre, the summed output of these input channels is routed to the Monitor Outputs 1 and 2, and also to Line Outputs 7 and 8, and 9 and 10, as a stereo pair in all cases. On this model, Headphone Outputs 1 and 2 follow Line Outputs 7/8 and 9/10 respectively, with their own front panel headphone levels controls. This setup is ideal for recording a guitarist and a vocalist to a drum track already recorded on the DAW, as it enables each to have an individual mix of the drums and each other.
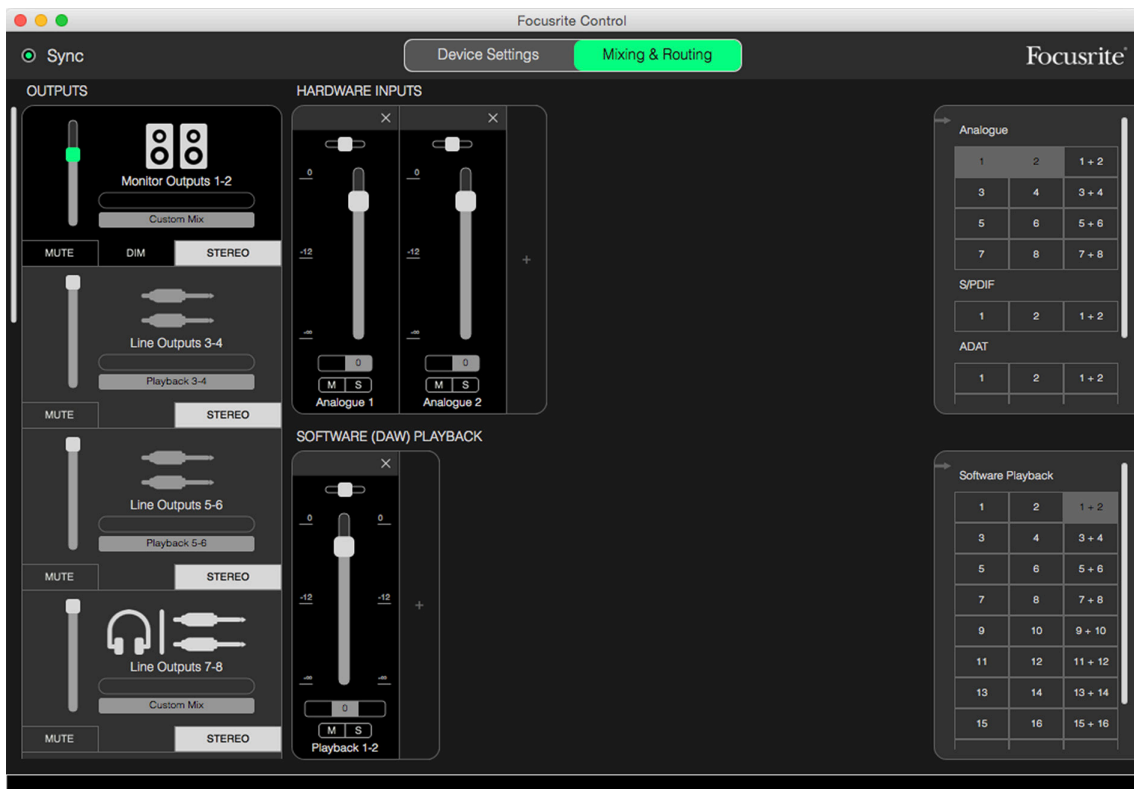
As more tracks are recorded, simply add additional DAW playback tracks to the mix.

All other Clarett outputs are sourced directly from the corresponding DAW playback tracks, as per the Direct Routing table on page 16.

8 Channel Analogue

Use this Preset as a starting point when recording a band. On the Clarett 8Pre, this Preset enables eight mixer channels, one for each of the hardware analogue inputs. DAW tracks 1 & 2 are also enabled as a stereo channel.
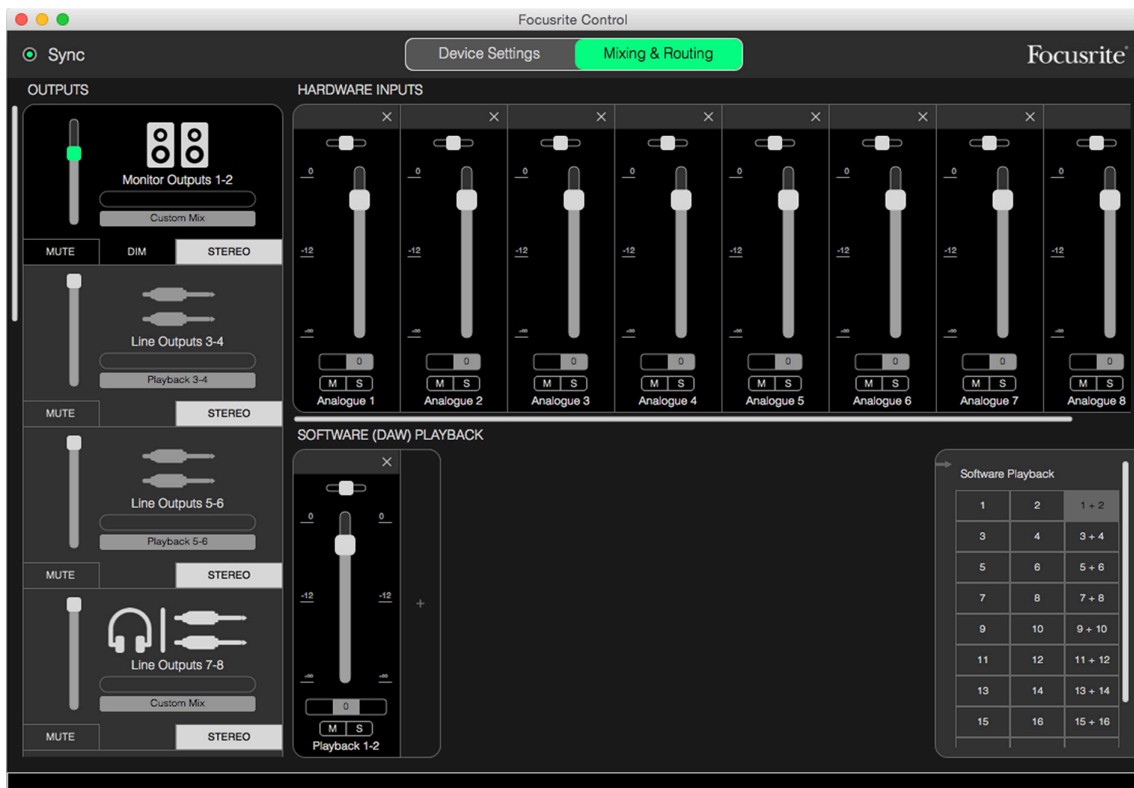

As with the 2 Channel Analogue Preset, the summed output of the mixer is routed to Monitor Out 1 and 2, and Line Outs 7 to 10 as a stereo pair.

All other Clarett outputs are sourced directly from the corresponding DAW playback tracks, as per the Direct Routing table on page 16.

Digital

This Preset is a useful starting point when using a separate ADAT-equipped microphone pre-amplifier such as the Focusrite OctoPre Mk II. When used with the Clarett 8Pre it enables ten digital input channels, eight sourced from the ADAT input port and two from the S/PDIF input. DAW tracks 1 and 2 are also enabled as a stereo channel. The sum of the inputs is routed to the same pairs of outputs as with the analogue Presets described above.
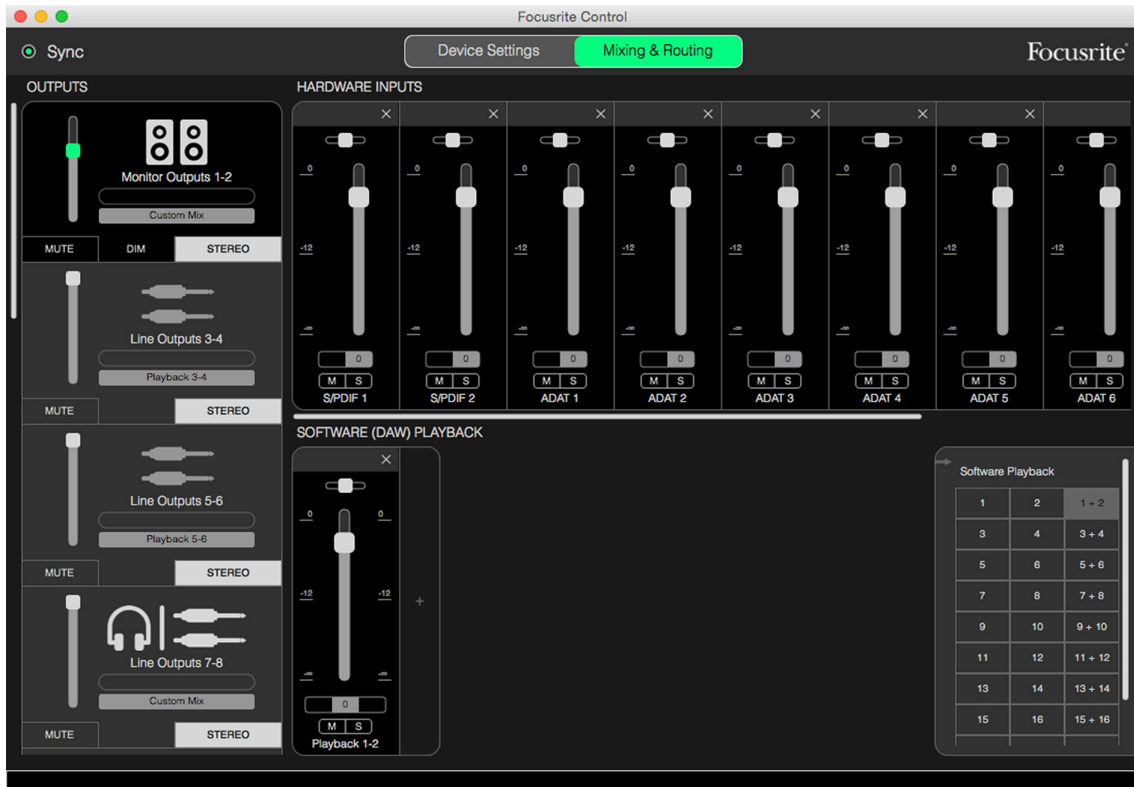
All other Clarett outputs are sourced directly from the corresponding DAW playback tracks, as per the Direct Routing table on page 16.

Empty

This may often be the most convenient preset to use as it clears the existing mixer to allow the user to start building his/her own configuration as required.

On the Clarett 8Pre, Monitor Out 1 and 2 and Line Outs 7 to 10 (paralleled as the headphone outputs) are set to receive a custom mix; all other outputs are sourced from individual DAW tracks, as with the other Presets.

Examples of Use

Recording and Tracking

Recording a band or just recording yourself is basically the same process as far as Focusrite Control is concerned – the only difference is the number of mixer channels you'll have on screen.

Connect the instruments to be recorded to the Clarett interface, either directly using the INST or LINE inputs, or - for acoustic instruments and vocals - with microphones connected to the MIC inputs. Each instrument or microphone will be routed to your DAW via the Thunderbolt cable, and will be recorded - by default - on the track with the same number as its hardware input. Set the recording levels by adjusting the gain controls on the Clarett front panel. Your DAW will allow you to alter the track assignment if you wish.

Focusrite Control lets you create a monitor mix of everything being recorded. The mix you hear in your monitors or headphones can be anything you want, and is completely independent of the signal levels being recorded.

All Focusrite Control channels start out with the fader position at zero, so you will hear a rough mix as soon as you have everything connected up. You can then tweak the mix to suit your requirements.


When loading any of the presets, the mix available at your headphone outputs will be identical to your main monitor mix. However they are independent and are controlled separately. For example, if you want to use the headphones for a musician's foldback, you will probably need a set up a different mix. Just select the output tab for the headphones (`Line Out 7-8` in the Clarett 8Pre example shown) and change the mix. By the same principle you can create further, different mixes for other musicians by using further Line Out tabs and selecting `Custom Mix`.

Recording and Overdubbing

Overdubbing is the process of adding additional instruments to a multitrack recording, listening to the tracks you've already laid down as you do so.

Focusrite Control is easy to configure for this operation.
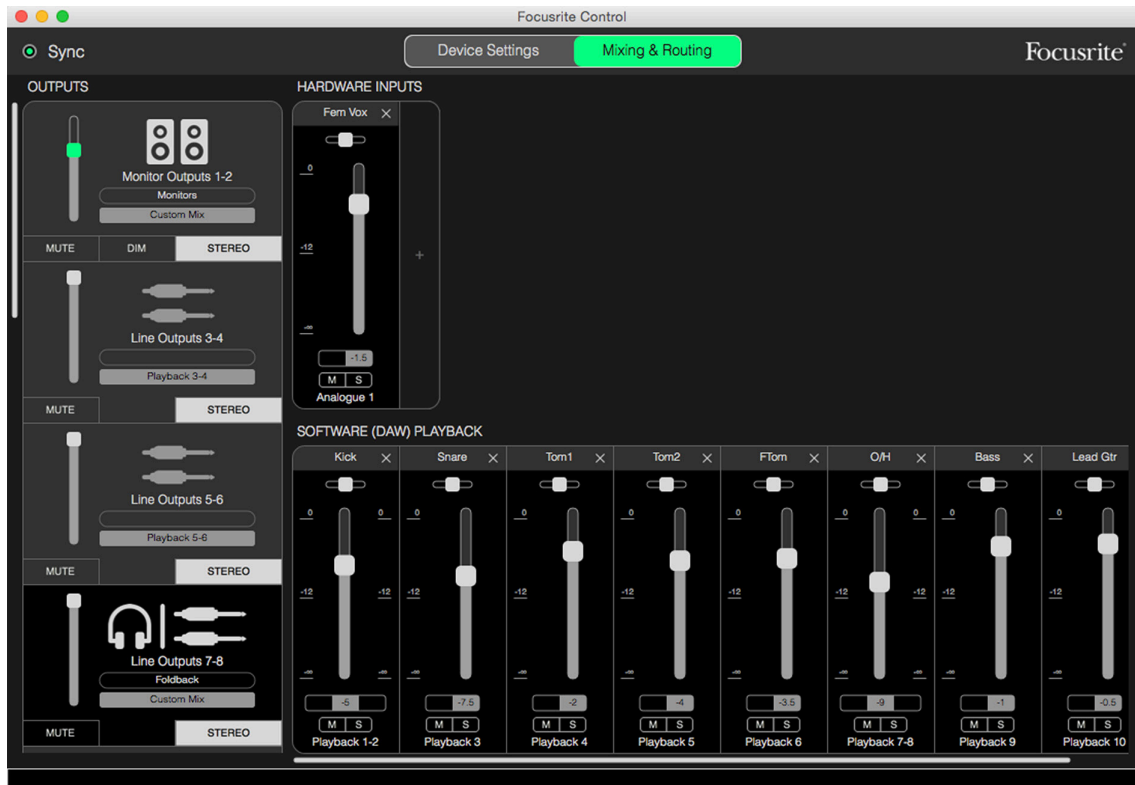
As with the Tracking example, the initial mix you hear from both the Monitor Outputs and Headphone Outputs will be a "rough" mix (faders all at zero) of all the tracks you've already recorded. You can tweak the mix you hear in your headphones to hear more or less of the instrument you're overdubbing, or any other pre-recorded track(s), as you wish.

TIP: Any pre-recorded tracks are likely to be sourced from the DAW master output (1-2) which on Focusrite Control is `Software Playback 1-2`. If the producer wishes to adjust the levels of pre-recorded signals for the musician then this can either be done in the DAW, or - in the scenario that the producer doesn't want to change the mix in the DAW - can be sent out of separate outputs, enabling them to adjust the level within Focusrite Control.

Stand-alone mixer

Once the Clarett's internal mixer has been configured by Focusrite Control, that configuration is retained by the hardware even after you remove the Thunderbolt cable and switch the unit off. This means that you can make use of the Clarett's excellent analogue performance in a live situation, without necessarily needing to connect a computer.

An example of this application would be as an on-stage keyboard mixer. Multiple keyboards can be connected to the Clarett's inputs, and mixed together to the Monitor Outputs. The relative levels of each keyboard can be adjusted from the front panel.
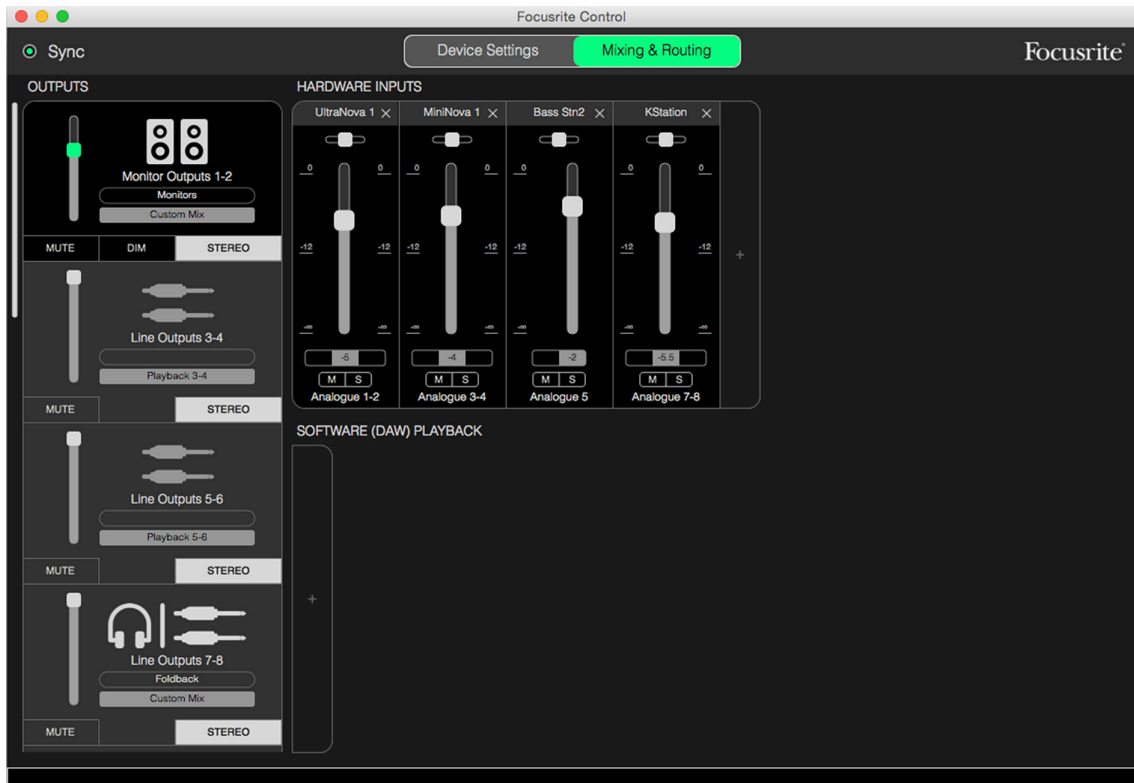
The setup shown above would configure the mixer as described above; because the Clarett retains its last configuration, the unit can then be switched off, and used at the venue as a stand-alone unit.

Using the Loopback feature

Focusrite Control's Loopback feature lets you record other audio sources from within your computer (e.g., the audio output from a web browser). Loopback uses the Clarett's "virtual" inputs, which have no physical connectors on the hardware interface itself, but may be selected in the DAW as signal sources for recording in the same way as any other.

Thus by selecting the Loopback output as the recording source on a mono or stereo DAW track, you can record from another software application into your DAW. Note that your computer will assign DAW 1 and DAW 2 as the default sound output channels.

An example of configuring Loopback in Focusrite Control is given below:

1. In the Loopback output tab, select the audio source you wish to loop back into your DAW. Default is **`Playback 1-2`**.

2. In your DAW, ensure that the Loopback tracks are enabled for recording.

3. Create a new audio track.

4. **Important!** - MUTE THE DAW CHANNEL. If you are routing the output of the channel you are recording back to DAW 1 & 2, a feedback loop will be created, potentially damaging for your speakers, or worse – your ears.

5. Check that the Loopback output is not muted.

6. Set the DAW channel to record enable.

7. Now, any audio playing on your computer, e.g., a separate audio replay program or from an Internet browser, will be routed into your DAW ready for recording. Hit record in your DAW to capture the audio.
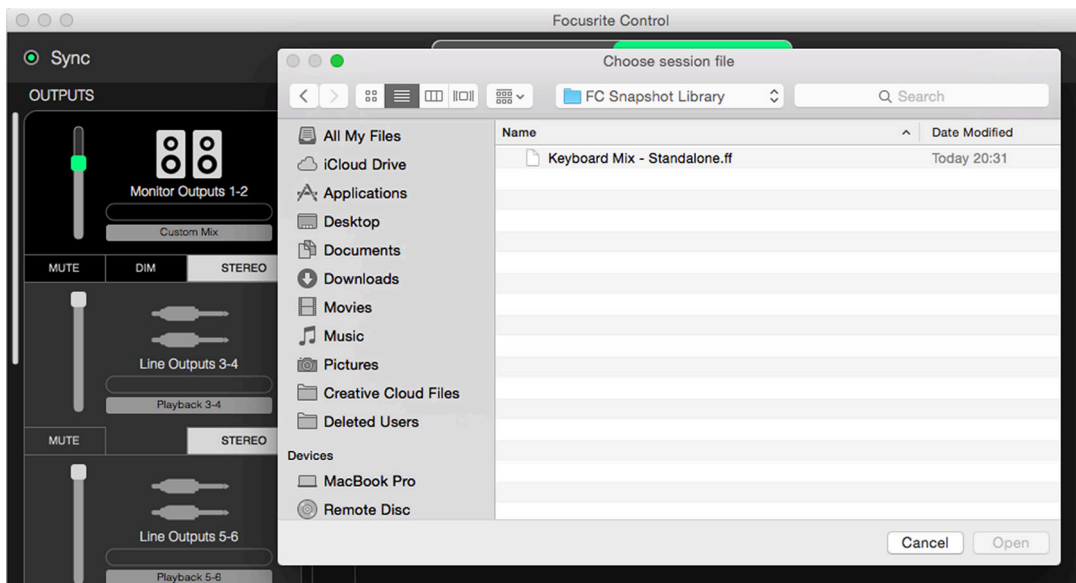
Snapshots

The mixer in your Clarett interface retains the last Focusrite Control settings at all times. However, you may wish to save your session settings – mixer layouts, fader, mute and pan settings, etc. – so that you can get back to them at a later time, perhaps when working on a similar project or with a different compatible hardware device.

Focusrite Control includes a Snapshot facility for this purpose, which does just that – it effectively takes a "snapshot" of the entire mixer and lets you save it on your computer for later recall.

To save the current mixer settings, click `File` > `Save Snapshot`.
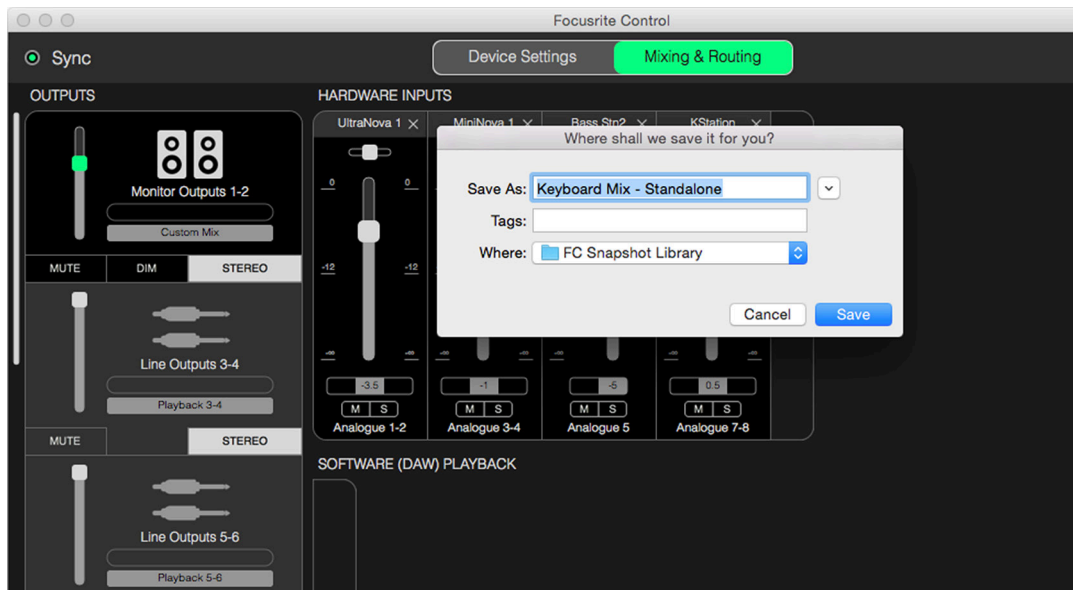
The snapshot session file is saved with a `*.ff` file extension. To recall the session, click `File` > `Load Snapshot`, which opens a standard File Open box; navigate to the where you saved the file and open in the usual way.

You can also recall both recently saved session files (`Recent Snapshots`) and load the Presets (`Mix Templates`) from the dialogue box that appears when you launch Focusrite Control. You may want to ignore this box once you've become familiar with the software, in which case you can click `Don't show this again`.

Click `New Monitor Mix` to open a new default mix template. For the Clarett 8Pre, clicking `New Monitor Mix` opens the `2 Channel Analogue` preset.

Click `Load from device` to retrieve the settings that are internal to the hardware interface and load them into Focusrite Control. This could be useful if you are connecting your interface to a different computer for example.

DEVICE SETTINGS PAGE

Clarett interfaces have a variety of hardware functions that are operated from Focusrite Control, rather than by physical controls on the unit itself.

The **Device Settings** page gives you access to these functions. The page for the Clarett 8Pre looks like this:
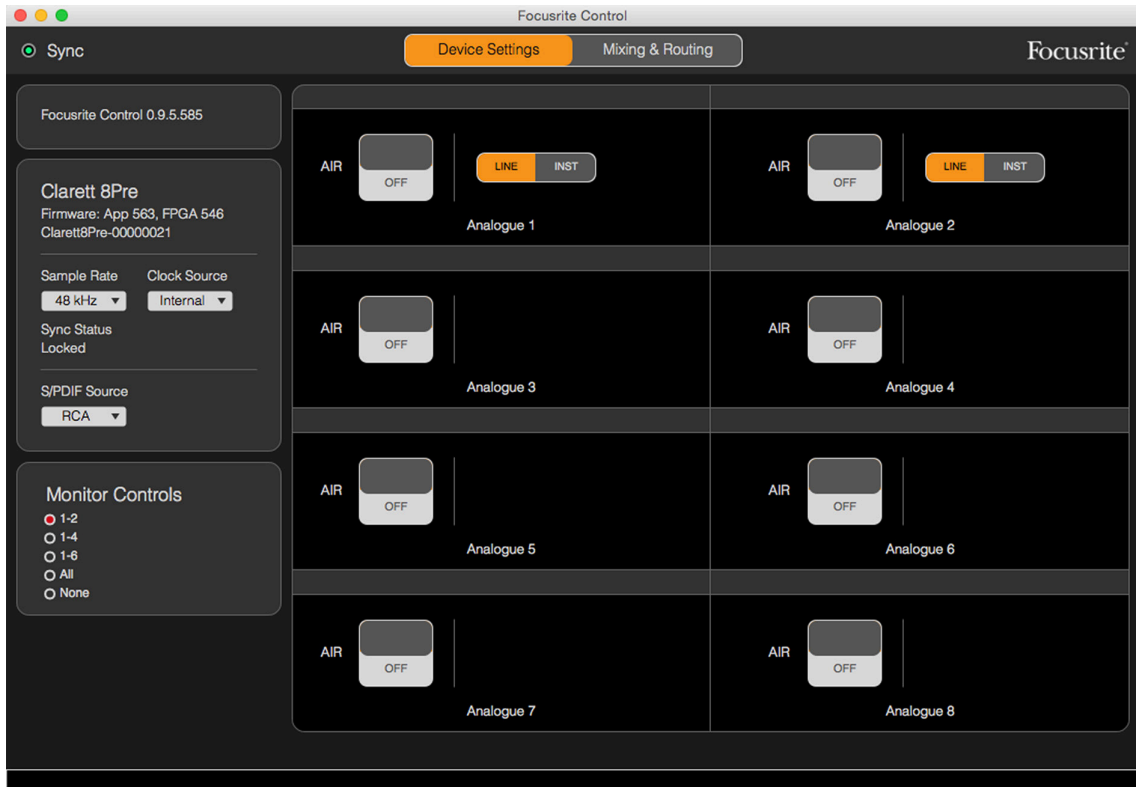
If you have a different Clarett model, most of the functionality will be the same, but fewer switches may be visible because your interface has fewer channels.

Air

Each input channel of your Clarett interface has a switchable AIR function; this subtly modifies the pre-amp's frequency response to model the impedance and resonance characteristics of Focusrite's classic transformer based ISA mic Pre-amps. See your Clarett User Guide for more details.

AIR can be switched in and out of circuit independently for each channel by clicking the AIR buttons. The LEDs on the unit's front panel will also confirm that AIR has been selected for each channel.

Inst/Line

Some of the channels on your interface may be able to accept electric instruments directly. Selecting INST for these channels unbalances the input and alters the gain and impedance to optimise the pre-amplifier for a high-impedance source like an electric guitar.

Selection of `INST` mode is confirmed by a red LED on the unit's front panel.

The alternative switch position for these channels is `LINE`; in this mode, the inputs are suitable for a standard balanced line level signal.

All the channels on your interface are able to accept dynamic or condenser microphones. The Combo-type connectors sense either an XLR plug or a jack plug, and reconfigure the pre-amplifier for mic or line operation automatically. The channels which additionally have the INST function use the same connector.

Monitor Controls

It is very convenient (and traditional!) to adjust your master monitoring volume with a conventional rotary control. Clarett interfaces have a **MONITOR** control on the front panel for this purpose. Normally (i.e., by default), this will adjust the level at Monitor Outputs 1 and 2 while also providing Mute and Dim control.

If you are using some of the Clarett's other outputs for secondary speakers – typically nearfield, though also in LCR or surround setups – you can assign the rotary control, Mute and DIM switches to affect them as well.
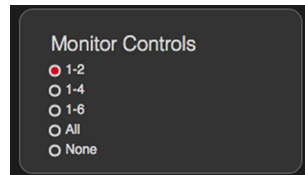

The options are:

- `1-2` – Monitor Outputs 1 & 2 (default setting)
- `1-4` – Monitor Outputs 1 & 2 and Line Outputs 3 & 4
- `1-6` – Monitor Outputs 1 & 2 and Line Outputs 3 to 6
- `All` – Monitor Outputs 1 & 2 and Line Outputs 3 to 10
- `None` – The rotary control, MUTE and DIM switches are disabled; output levels may still be controlled from the software faders.

Note: Assigning outputs 7-8 and 9-10 to monitor control will affect the level of the headphone outputs as they are shared.

In the Output tabs on the `Mixing & Routing` page, the fader "knob" will be green for the outputs assigned to the hardware rotary control. This means that the on-screen fader is inoperative and you have to adjust the level of those outputs from the front panel. However, the on-screen fader position, plus Mute and Dim status will reflect the hardware control's operation.

S/PDIF Source
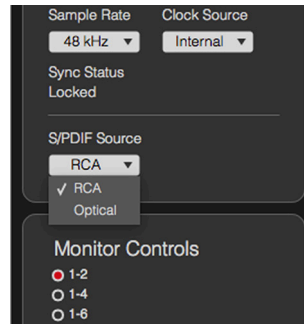
Your Clarett interface includes both an S/PDIF input and an S/PDIF output. You can connect these to digital audio equipment to route two-channel digital audio (meeting the S/PDIF standard) in and out of the interface and hence into your recording system.

These signals are normally connected at the dedicated RCA (phono) **SPDIF IN** and **OUT** connectors on the rear panel, but to accommodate some digital audio equipment which only has S/PDIF inputs or outputs on an optical TOSLINK connector, it is possible to reassign the **OPTICAL IN** and **OPTICAL OUT** ports to handle the S/PDIF signals instead of the ADAT signals they are normally used for. In this case, the Clarett will not be able to accept or output 8-channel ADAT format signals.
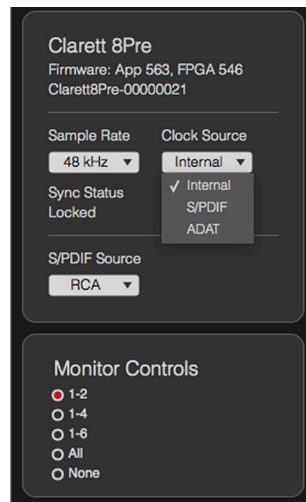
If you need to use S/PDIF signals via an optical TOSLINK connection, click the `Optical` option of `S/PDIF Source` instead of `RCA`.

Sample Rate
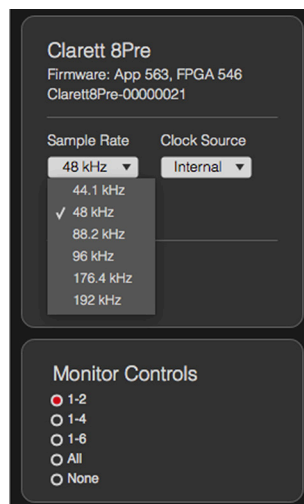
Your Clarett interface is able to operate at any of six sample rates: 44.1 kHz, 48 kHz, 88.2 kHz, 96 kHz, 176.4 kHz and 192 kHz. The default sample rate is 48 kHz. Select an alternative sample rate if needed.

Clock Source

Interconnected digital audio equipment must always use the same reference clock source. Your Clarett interface is able to synchronise from three sources:

- **Internal** – the internally generated reference clock. This is the default selection.
- **S/PDIF** – the embedded clock signal in a signal at the S/PDIF IN connector.
- **ADAT** – the embedded clock signal in a signal at the OPTICAL IN connector.

Whichever source is selected, the clock signal is available at the Clarett's **WORD CLOCK OUT** rear panel BNC socket to allow synchronisation with other digital equipment.

TROUBLESHOOTING

For all troubleshooting queries, please visit the Focusrite Answerbase at www.focusrite.com/answerbase where you will find articles covering numerous troubleshooting examples.

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