Focusrite[®]

Scarlett 4i4 4th Gen User Guide



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Overview

Introduction

Welcome to the Scarlett 4i4 4th generation.

We've designed the Scarlett 4i4 for the artist who never stops creating. Get studio-quality sound wherever you are with the latest generation of Scarlett:

- Make the most of any mic or guitar with +69dB of gain on each input.
- Set your levels in seconds, and never lose a great take again with Auto Gain and Clip Safe.
- · Re-engineered Air mode with Presence and Harmonic Drive.
- Remote control your preamps using our Focusrite Control 2 software.
- Record straight out of the box with Easy Start and a complete suite of studio software included.
- Work seamlessly with your controllers and synthesisers using 5-pin DIN MIDI I/O.

What's in the Box?

The box for your Scarlett 4i4 includes:

- Scarlett 4i4
- USB-C to C cable
- USB-A (male) to C (female) adaptor
- Getting Started Information (printed inside the box lid)
- · Important Safety Information sheet
- Power adapter (USB-C, 5V, 3A, 15W)

System Requirements

The easiest way to check your computer's operating system (OS) is compatible with your Scarlett 4i4 is to use our Help Centre's compatibility articles:

Focusrite Help Centre: Compatibility

As new OS versions become available, you can check for further compatibility information by searching our Help Centre at:

support.focusrite.com

Software System Requirements

To check Focusrite Control 2 is supported on your operating system (OS) please use our Help Centre's compatibility articles:

Focusrite Help Centre: Compatibility

As new Focusrite Control 2 or OS versions become available, you can check compatibility information by searching our Help Centre at:

support.focusrite.com

Getting Started

Powering On Your Scarlett

To power on your Scarlett 4i4 using bus power:

Connect the USB cable from your computer to your Scarlett 4i4

To power on your Scarlett 4i4 using mains power:

- 1. Connect the power supply to your Scarlett 4i4's power socket.
- 2. Connect the USB cable from your Scarlett 4i4 to your computer.

Your Scarlett is now powered on and ready to use.

Easy Start

Easy Start gives you a step-by-step guide to setting up your Scarlett and creates personalised tutorials based on how you plan to use your Scarlett. This online tool also guides you through your Scarlett's registration process and accessing the software bundle.

On both Windows and Mac computers, when you connect your Scarlett to your computer, it first appears as a Mass Storage Device, like a USB drive. Open the drive and double click 'Click Here To Get Started.url'. Click 'Get Started' to open Easy Start in your web browser.

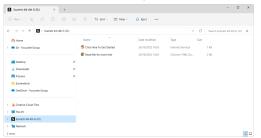
After you've opened Easy Start, please follow the step-by-step guide, to install and use your Scarlett.

Windows

After you connect your Scarlett 4i4 to your computer, a device appears in File Explorer called Scarlett 4i4 4th Gen, this allows you to access Easy Start.

To access Easy Start:

- 1. Open File Explorer.
- 2. Click on Scarlett 4i4 4th Gen (D:). The letter may be different.



3. Double-click Click Here to Get Started. This redirects you to the Focusrite website, where we recommend you register your device:



4. Click Get Started, and we'll take you through a step-by-step setup guide based on how you want to use your Scarlett.

During Easy Start, you'll install Focusrite Control 2. After you install and open Focusrite Control 2, click 'Update Scarlett 4i4'. Do not disconnect your Scarlett while Focusrite Control 2 updates it. After the Focusrite Control 2 update is complete, the Scarlett no longer appears as a Mass Storage Device on your computer.

Your operating system should change the computer's default audio inputs and outputs to the Scarlett.

To verify this, right-click the speaker icon on the Windows taskbar, and make sure Scarlett is your Sound output.

Mac

After you connect your Scarlett 4i4 to your computer, a Scarlett icon appears on the desktop or, if you use Chrome, you'll see a pop-up:





Scarlett 4i4 4th Gen detected

Go to api.focusrite-novation.com to connect.



×

Scarlett Easy Start icon: Double click and start from step 1 below.

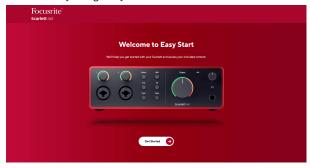
Chrome pop-up: Click and start from step 2 below.

To access Easy Start:

1. Double-click on the icon to open the Finder window shown below:



2. Double-click Click Here to Get Started. This redirects you to the Focusrite website, where we recommend you register your device:



3. Click Get Started, and we'll take you through a step-by-step setup guide based on how you want to use your Scarlett.

During Easy Start, you'll install Focusrite Control 2 . After you install and open Focusrite Control 2, click 'Update Scarlett 4i4'. Do not disconnect your Scarlett while Focusrite Control 2 updates it. After the Focusrite Control 2 update is complete, the Scarlett no longer appears as a Mass Storage Device on your computer.

Your operating system should change the computer's default audio inputs and outputs to the Scarlett.

To verify this, go to System Settings > Sound, and ensure the input and output are set to Scarlett 4i4

All Users

The second file - 'More Info and FAQs' - is also available during the setup process. This file contains some additional information about Easy Start, which you may find helpful if you have any issues with the setup.

Once registered, you have immediate access to the following resources:

- Focusrite Control 2 (Mac and Windows versions available) see note below.
- Multi-language User Guides also always available from downloads.focusrite.com.
- Licence codes and links for the optional bundled software in your Focusrite account. To find out what bundled software is included with Scarlett 4i4, please visit our website: focusrite.com/scarlett.



What is Focusrite Control 2?

Focusrite Control 2 is the software application you use to control your Scarlett interface.



The Focusrite Control 2 icon

We occasionally update your Scarlett 4i4's firmware with new features and improvements, to make sure you are getting the most from your Scarlett. Your Scarlett 4i4 is updated through Focusrite Control 2.

Depending on your model Focusrite Control 2 allows you to control various features of your Scarlett from your computer.





Note

Focusrite Control 2 is compatible with most major screen reader software, allowing you to control the features on your Scarlett.

Installing Focusrite Control 2

You can install Focusrite Control 2 on Windows and Mac. To download and install Focusrite Control 2:

- 1. Go to the Focusrite downloads website: focusrite.com/downloads
- 2. Find your Scarlett on the Downloads website.
- 3. Download Focusrite Control 2 for your operating system (Windows or Mac).
- 4. Open the Downloads folder on your computer and double-click the Focusrite Control 2 installer.
- 5. Follow the on-screen instructions to install Focusrite Control 2.
- 6. If it's not already, connect your Scarlett interface to your computer with the USB cable.
- 7. Open Focusrite Control 2 and it detects your Scarlett automatically.



Note

On Windows, installing Focusrite Control 2 also installs the driver. You can download Focusrite Control 2 at any time, even without registering from downloads.focusrite.com. On macOS, you don't need a driver, you only need to install Focusrite Control 2.

Manual Registration

If you decide to register your Scarlett at a later date, you can at: customer.focusrite.com/register

You need to enter the Serial Number manually: you can find this number on the interface's base (the white number below) or the barcode label on the giftbox.



We recommend you download and install Focusrite Control 2. Opening Focusrite Control 2 disables Easy Start and unlocks your Scarlett 4i4's full feature set.

In Easy Start mode, the interface functions at up to 48 kHz sample rate; once you install Focusrite Control 2, you can work at sample rates up to 192 kHz.

The MIDI input and output are also disabled, while Easy Start mode is enabled.

If you don't install Focusrite Control 2 immediately, you can download it at any time from: downloads.focusrite.com

Disabling Easy Start

After you've been through Easy Start, installed and opened Focusrite Control 2, your Scarlett is no longer in Easy Start mode.

If your Scarlett 4i4 is still in Easy Start mode, or you have chosen not to install Focusrite Control 2 to disable Easy Start Mode:

- 1. Turn off your Scarlett 4i4
- 2. Press and hold the 48V button.
- 3. Keeping the **48V** button held, power on your Scarlett 4i4.
- 4. Wait for the front panel to light up, then release the **48V** button.
- 5. Restart (power off and power on) your Scarlett 4i4.

Your Scarlett powers on with Easy Start disabled.

Hardware Features

Front Panel



- 1. Input **1** Gain Control and Gain Halo The Gain control sets the input level and the Gain Halo shows you the input and preamp gain levels for either the jack or XLR Mic input 1.
- Input 1 Neutrik® Combo XLR and 6.35mm (1/4") jack connector. Accepts XLR mic-level inputs, or unbalanced mono (TS) and balanced Mono (TRS) 1/4" jack cables at line or instrument-level.
- 3. Input **2** Gain Control and Gain Halo The Gain control sets the input level and the Gain Halo shows you the input and preamp gain levels for either the jack or XLR Mic input 2.
- Input 2 Neutrik® Combo XLR and 6.35mm (1/4") jack connector. Accepts XLR mic-level inputs, or unbalanced mono (TS) and balanced Mono (TRS) 1/4" jack cables at line or instrument-level.
- Select button Press to move the selection to the next preamp. The other buttons
 change to control the input you select. The currently selected channel's number lights
 green.
- 6. **48V** button Press to turn on 48V phantom power at the XLR mic input to power condenser microphones.
 - You can set 48V independently per preamp channel.

- 7. Air button Press to turn on AIR mode (see AIR).
- Inst button Press to toggle the selected 6.35mm (1/4") input between Line or Instrument level.
- 9. **Auto** button Press to start the Auto Gain feature (see Auto Gain).
- 10. Safe button Press to turn on the Clip Safe feature for your input (see Safe).
- 11. Main Speaker **Output** Control and Output Level meter By default control the level going to Outputs 1 and 2, the meter shows you the level being sent out. You can configure **Output** to control outputs 1-2.
- 12. USB LED Lights green when the interface is recognised by your computer, white if it is connected but not recognised and off if it is not connected.
- 13. Headphone Level Control Control the level sent to your headphones.
- 14. Headphone Output Socket Connect your headphones here using a TRS 6.35mm (1/4") jack connector.

Back Panel



- 1. Kensington Lock, use a lock to secure your Scarlett and deter theft.
- 2. **5V DC** an optional USB-C connector to supply power to your Scarlett 4i4 if your computer can't supply 1.5A USB-C power to your Scarlett 4i4.
- 3. **USB** USB-C connector to connect your Scarlett to your computer.
- 4. **MIDI Out** and **In** standard 5-pin DIN sockets for external MIDI equipment. The Scarlett 4i4 acts as a MIDI interface, allowing MIDI data to/from your computer.
- 5. Line **Outputs 1, 2, 3 & 4** 1/4" jack (TS or TRS) sockets to connect your Scarlett to line-level inputs on devices such as monitor speakers, amplifiers, mixers or external processors. Use 1/4" TRS jack cables for balanced connections where possible.
- 6. Inputs **3** and **4** Neutrik® 6.35mm (1/4") jack sockets. Accepts both unbalanced mono (TS) and balanced Mono (TRS) 1/4" jack cables at line-level.

Front Panel In Depth

This section covers all the features on your Scarlett 4i4's front panel, what they do, how you might use them and how they work in Focusrite Control 2.

Setting Preamp Input Gain

The preamp input gain controls how much signal you are sending into your computer and recording software.

It's essential to set a good level for the preamp input gain so you get the best quality recording. If the preamp input gain is too low your signal will be too quiet and when you try and boost its level later you may hear noise in the recording; if the preamp input gain is too high you might 'clip' the input and hear harsh distortion in your recording.

To increase the input gain move the gain control clockwise, as you move the gain control the Gain Halo gradually lights clockwise to show you the gain level. This diagram shows the gain at various levels:

- 1. No input gain
- 2. 25% input gain
- 3. 50% input gain
- 4. 75% input gain
- 5. 100% input gain



When you adjust your input gain while you send a signal into your preamp, the ring lights the same way as above but a colour, green, amber or red, shows how much level is going into your computer. Shortly after you stop adjusting the gain the meters revert to input meters (see Input Metering).

- 1. Gain at 40%, signal good.
- 2. Gain at 40%, signal pre-clip.
- 3. Gain at 40%, signal clipping.



- 1. Green shows your signal level is good.
- 2. Amber shows your signal is pre-clip, any higher and you are likely to clip the input
- 3. Red shows your signal has clipped, you should reduce the gain.

Software Gain Control

You can also control the preamp gain remotely using Focusrite Control 2.

To adjust the preamp gain in Focusrite Control 2:

- 1. Click the virtual knob for the channel you'd like to adjust or use the tab key to select the preamp gain control.
- 2. Move your mouse up and down or use the arrow keys to increase or decrease the gain (in ±1dB increments).

The following images show the preamp gain at minimum, medium and maximum gain.





No input gain

50% Gain

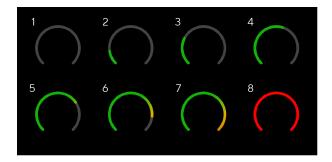


100% Gair

Input Metering

When you're not moving the input gain control the input metering uses the entire Gain Halo. As the incoming signal gets louder (for example with a higher input gain setting) the Gain Halo lights from green through to amber before the entire Gain Halo flashes red to show you the input has clipped.

This diagram shows the meters at different levels to show the input signal level:



- 1. No input signal
- 2. -42 dBFS
- 3. -36 dBFS
- 4. -24 dBFS
- 5. -18 dBFS
- 6. -12 dBFS
- 7. -6 dBFS
- 8. 0 dBFS, clipping turn down the input gain to avoid distortion and clipping.



Tip

If your signal clips the whole gain halo lights up red this ensures you can see the clip state from any angle on the front panel.

Software Metering

In the same way as the input meters on your Scarlett 4i4's front panel, you can see the incoming signal on the meters in Focusrite Control 2 to set the correct preamp gain.

As the signal gets louder the meter in Focusrite Control 2 lights from green to amber (pre-clip).



The indicator above the meter shows you the peak level (in -dBFS), the highest level on this track since you started monitoring the input. When you hover over the Peak level Meter you can click to Reset the value.



Tip

When you're recording, it's a good idea to aim for a -12dBFS peak level. This ensures you have enough headroom when you've recorded all your tracks.



Waiting for an input signal.



The input signal has reached -18dB.



Click to Reset the Peak Level meter.

When you overload the preamp, with too much input signal, or by adding too much gain, the Peak Level Meter lights red. Hover over the Peak Level Meter and click to Reset the value.







Click to Reset the Peak Level Meter after clipping.

Microphone Inputs

The 3-pin XLR connector **Input** is at microphone level and designed for you to connect your microphones.

You can control your microphone level using the corresponding input gain control on the front panel. 48V phantom power is also available if you are using a condenser mic, you can enable phantom power using the front panel 48V button.

You can enable 48V phantom power on a per-channel basis.

Select Button

Many front panel controls on your Scarlett 4i4 are shared across the preamp inputs. The **Select** button moves the preamp controls to different inputs.

At least one preamp is always selected, to change which preamp(s) the controls are affecting, press the **Select** button. When you do this the newly selected preamp's number lights green and the preamp setting lights change to match the new preamp.

When you turn on your Scarlett 4i4 the last selected preamp before you turned it off remains the selected preamp.

Linking Preamps

Linking preamps allows you to control two preamps simultaneously using one set of preamp controls. You can match gain controls for two preamps and enable other preamp controls. This is useful for stereo recording, for example, a microphone pair, stereo synthesiser, or keyboard.

To link preamps:

Press and hold the Select button for one second.

When you've made the Preamp Link:

 Both preamp numbers light green and the Gain Halos light temporarily to their preamp level.



- The preamp gain level is set to the lowest value of the newly linked pair.
- The preamp settings are inherited from the currently selected preamp, e.g. preamp 1 is selected, therefore Preamp 2 inherits, **Air**, **Safe** and **Inst** settings from Preamp 1.
- · Changing any preamp setting changes the state for both preamps.
- Adjusting either gain control changes the gain level for both preamps and is shown on both Gain Halos.
- · 48V disables for both preamps.

Unlinking Preamps

To unlink preamps, hold the **Select** button for one second. When you unlink a pair:

- The first preamp of the previously linked pair becomes selected and lights green.
- Gain levels and preamp settings stay the same, but you can now change them independently.

Linking Preamps in Focusrite Control 2

Linking Preamps

To link preamps from Focusrite Control 2:

- 1. Hover over the preamp you want to link.
- 2. Click the ellipses icon
- Click Link with Analogue 2 (or similar depending on the preamp).

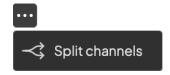


Linked preamps show the 6 icon next to their name.

Unlinking Preamps

To unlink preamps from Focusrite Control 2:

- 1. Hover over the preamp you want to unlink.
- Click the ellipses icon ...
- 3. Click Split channels.



48V Button (Phantom Power)

48V, also commonly referred to as 'Phantom Power', sends 48 Volts from your interface's XLR connector to devices needing power to work. The most common use is sending power to condenser microphones, but you may also need **48V** for inline mic preamps, active dynamic microphones and active DI boxes.

To turn on 48V:

- 1. Connect your microphone, or another powered device, to an XLR input on your interface using an XLR cable. **48V** is not sent to the 6.35mm (1/4") jack inputs.
- 2. Use the **Select** button to move the controls to the correct input.
- 3. Turn down that preamp's gain control to avoid any unwanted pops and clicks.
- 4. Press the 48V button (or the corresponding software button)

The **48V** icon lights green to show it is enabled.

48V phantom power is now being sent to the selected XLR input and to any devices connected to the XLR input.

48V (Phantom Power) Software Control

To enable 48V (Phantom Power) from Focusrite Control 2 click the +48V button. This is the same as pressing the 48V button on the Scarlett 4i4 hardware.



+48V Phantom Power off



+48V Phantom Power on



Important

If you accidentally send **48V** phantom power to the wrong input, most modern microphones of other types, e.g., dynamic or ribbon, will not be damaged, but some older microphones may be. If you're unsure, please check your microphone's user guide to ensure it is safe to use with **48V** phantom power.

Inst (Instrument) Button and Line Level Inputs

The **Inst** (Instrument) button only affects the 6.35mm (1/4") line input for the selected channel. It changes it from an input suitable for *line-level* devices to an input better suited for instrument-level devices.

To enable or disable instrument mode for the 6.35mm (1/4") jack input, press the **Inst** button once. Green shows **Inst** is enabled, and white shows **Inst** is disabled. When you enable Inst and connect a jack to your Scarlett, the minimum gain for the input is changed to +7dB.



Note

When the **Inst** light is white, the 6.35mm jack input is at line level.

When **Inst** is enabled (green) you can connect instrument-level devices to the 1/4" inputs such as, but not limited to:

- Electric or electro-acoustic guitars directly and via effects pedals.
- Electric basses
- Acoustic instruments with pick-ups such as violins, double-basses etc.

When ${\bf Inst}$ is disabled (white) you can connect line-level devices to the 6.35mm (1/4") inputs such as, but not limited to:

- Synthesisers
- Keyboards
- Drum Machines
- External Microphone Preamps

Instrument/Line Software Control

To change between instrument and line from Focusrite Control 2 click the **Inst** button once.







Instrument



Note

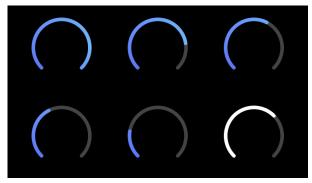
When you switch between **Inst** and Line, the gain remains at the last level you set.

Auto Gain

Auto Gain allows you to send a signal into your Scarlett 4i4 (for example singing, or playing your instrument) for 10 seconds and let the Scarlett set a good level for your preamps. If you find the levels aren't right, you can adjust the gain controls manually to fine-tune the levels before recording.

To use Auto Gain:

- 1. Press the **Select** button to move your preamp controls to the correct preamp.
- Press the white Auto button on your Scarlett, or the corresponding software button.
 The Auto icon lights green for ten seconds. The corresponding Gain Halo turns into a ten-second countdown timer.



3. Speak or sing into the microphone, or play your instrument during the Auto Gain countdown. Perform as you would while you're recording to make sure Auto Gain sets a good level.

If the Auto Gain was successful, the Gain Halo lights green before the gain value is shown on the Gain Halo for a second. The gain is now set at a good level for your recording.

If Auto Gain fails the Gain Halo lights red. Please see the section, The Gain Halo turned Red, for more information.



Note

Scarlett's Auto Gain makes sure your levels are set right not only using the input signal but also factors in:

- · The preamp's noise floor.
- · Digital silence.
- · Inter-channel crosstalk.
- Unwanted knocks or bumps on your microphones.

Auto Gain Software Control

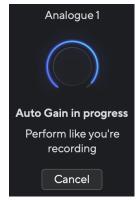
To use Auto Gain in Focusrite Control 2:

1. Click the Auto Gain button in Focusrite Control 2.



2. Speak or sing into the microphone, or play your instrument during the Auto Gain countdown. Perform as you would while you're recording to make sure Auto Gain sets a good level.

The Auto Gain process starts and the software Gain halo turns into a countdown timer.



If the Auto Gain was successful, the Gain Halo lights green before the gain value is shown on the Gain Halo for a second. The gain is now set at a good level for your recording.



The Gain Halo turned red

If the input signal is unsuitable for Auto Gain (for example no signal), after ten seconds, Auto Gain stops and the Gain Halo lights red for a second. The gain returns to the value you set before starting Auto Gain.





Hardware Gain Halo

Focusrite Control 2 Auto Gain unsuccessful

Before running Auto Gain again, make sure your input has something connected to it correctly, if you're using a condenser microphone, 48V is on, and you are making sound while Auto Gain runs.



Note

To cancel Auto Gain, press the Auto Gain button again at any time during the process. The gain returns to the value you set before starting Auto Gain.

Multichannel Auto Gain

Auto Gain allows you to send a signal into your Scarlett 4i4 (for example singing, or playing your instrument) for 10 seconds and let the Scarlett set a good level for your preamps. If you find the levels aren't right, you can adjust the gain controls manually to fine-tune the levels before recording.

Multichannel Auto Gain starts the Auto Gain process for all the preamp channels on your interface. This is particularly useful for quickly setting levels for situations where you are using multiple channels simultaneously, for example:

- Setting levels for yourself if you're playing guitar and singing simultaneously.
- Setting levels for a drummer when you have multiple microphones on the drum kit.
- Setting levels for a band recording 'live' together.

To start the multichannel Auto Gain process:

- Hold the **Auto** button for two seconds.
 The **Auto** icon fades between off and Green for ten seconds, and the Gain Halos for all channels turn into ten-second countdown timers.
- 2. Speak or sing into the microphone, or play your instrument during the Auto Gain countdown. Perform as you would while you're recording to make sure Auto Gain sets a good level.

If the Auto Gain was successful, the Gain Halos light green before the gain value is shown on the Gain Halos for a second. The gain is now set at a good level for your recording.



Note

To cancel Auto Gain, press the Auto Gain button again at any time during the process. The gain returns to the value you set before starting Auto Gain.

Clip Safe Button

The **Safe** button applies Clip Safe which automatically adjusts your preamp gain if you're at risk of clipping.

Clipping happens when your gain is set too high for the sound being recorded and your input overloads the preamp. A clipping symptom is preamp distortion, which is often unpleasant and can ruin a recording. Clip Safe helps you avoid this so if your input gets near to clipping, Clip Safe reduces the preamp gain, so you won't have to re-record your take.



Note

Clip Safe is only available at up to 96kHz, you cannot use it at quad-band (176.4kHz and 192 kHz) sample rates. The Safe LED lights red to show when it's unavailable.

To enable Clip Safe:

- 1. Press the **Select** button to move your preamp controls to the correct preamp.
- 2. Press the **Safe** button on the interface or the corresponding software button.

When you enable Safe, the **Safe** icon lights green. The Safe icon lights white when it is disabled and available.

When you have two inputs selected using Preamp Link, **Safe** is applied to both preamps.



Tip

When you enable Clip Safe, your Scarlett continuously monitors your input signals, up to 96,000 times a second, and through a combination of analogue preamp adjustment and DSP, Clip Safe significantly reduces the risk of clipping.

Clip Safe Focusrite Control 2

To enable Clip Safe from Focusrite Control 2, click the Safe button:





Safe on

Air Modes

Air lets you change your Scarlett's preamp sound with two different modes; Air Presence or Air Presence and Harmonic Drive.

Air affects the mic, line and instrument inputs.

To enable Air, select your input, press the Air button once for Air Presence, again for Air Presence and Harmonic drive and again to turn off. The Air LED changes colour to show which mode you have selected:

Mode	Description	AIR LED	Notes
Off	The preamp is clean	White	
Air Presence	An analogue circuit gives a presence boost to your sources.	Green	
Air Presence and Harmonic Drive	Adds harmonics, in addition to the analogue Air circuit.	Amber	Only available at up to 96kHz

Air Software Control

To enable AIR from Focusrite Control 2 click the Air button. This is the same as pressing the Air button on the Scarlett 4i4 hardware.



Air Off



Air Presence selected



Air Presence and Drive selected

When you click Focusrite Control 2's Air button the last selected Air mode becomes activated. To change the selected Air mode (Presence or Presence and Drive) click the arrow to show the dropdown menu.



Air Presence selected



Air Presence and Drive selected



Note

Air Presence & Drive is only available at up to 96kHz, you cannot use it at quad-band (176.4kHz and 192 kHz) sample rates.

Output Control and Level Meter



The **Output** control and Output level meter are related to the signals going to Outputs 1 and 2 on the back of your Scarlett 4i4, the outputs you'd most often connect to monitor speakers.

The **Output** control sets the level at the outputs from nothing (fully anti-clockwise) to full-scale output (fully clockwise).

The Output Level meter around the Output level control is a pre-fade meter (it is not affected by the control's position) showing you the signal level coming from your computer.

Headphone Output



The headphone output is a 6.35mm (1/4") TRS jack. Many headphones have a 3.5mm TRS jack, to connect them to your Scarlett 4i4 you must use a TRS 6.35mm to 3.5mm adaptor.

The control above the headphone output controls the level going to your headphones.

Some higher impedance headphones may be quiet using them with a Scarlett 4i4, we recommend using headphones with an impedance up to 300Ω .



Note

Some headphones and jack adaptors may have TS or TRRS connectors, for example, if they have a microphone or volume control built into the cable. It's unlikely these headphones will work properly. If you're having issues, use headphones and a jack adaptor with TRS jack connectors.

Speaker, Line, and Headphone Output Routing

The headphone output can be assigned a combination of hardware inputs (direct monitoring) and software playback channels.

For more information on creating a mix for your headphone output, see Focusrite Control 2 Mixer [36].

The Scarlett 4i4 headphones output is independent of the line outputs 1/2 and 3/4 giving you a completely independent headphone mix.

Back Panel In Depth

This section covers all the features on your Scarlett 4i4's back panel, what they do, how you might use them and how they work in Focusrite Control 2.

USB Connections

USB Port

The USB Type-C port labelled **USB** is to connect your Scarlett to your computer.



The connection to your computer provides USB power, two-way audio communication, and a connection to Focusrite Control 2.

5V DC Port

The Scarlett 4i4 consumes a large amount of power. In some high-power situations, such as playing headphones at a high volume, some computers' USB ports may not be able to provide enough power and your Scarlett 4i4 may disconnect or the USB icon • • flashes red.

If you experience this behaviour, we recommend you use a mains PSU to power your Scarlett via the **5V DC** port.



The USB Icon Flashes Red

If the USB icon flashes red this means your Scarlett 4i4 isn't getting enough power.

To resolve this issue:

- Disconnect both USB cables. In this order: connect the power supply to the Power USB port then connect the USB cable to the USB port on the Scarlett.
- 2. Make sure you are using the original USB power supply.
- 3. Test a different USB port on your computer, make sure you're connecting directly to your computer and not via a USB hub.

MIDI



The Scarlett 4i4 MIDI In and Out ports allow you to use your Scarlett as a USB MIDI interface. MIDI IN receives MIDI signals from keyboards or controllers; MIDI OUT sends MIDI information to Synths, Drum machines or MIDI-controllable equipment.



Important

When you first receive your Scarlett 4i4 MIDI is disabled because it is in Easy Start mode. To enable MIDI, install and open Focusrite Control 2.

The MIDI IO doesn't require any setup for your to use your Scarlett 4i4 as a USB MIDI interface, however, to use MIDI you must install and open Focusrite Control 2. The Scarlett 4i4's MIDI ports appear in your MIDI-enabled software and you can either send or receive MIDI data between your computer and MIDI hardware via the Scarlett's 5-pin DIN MIDI ports.



Note

The MIDI Out port on your Scarlett 4i4 cannot function as a MIDI Thru port.

Speaker Outputs

Outputs L and **R** are line-level outputs to connect your Scarlett 4i4 to an amplifier or active monitors. The outputs are balanced 1/4" TRS jack outputs, you can use them with either unbalanced TS or balanced TRS jack cables.

Your Scarlett 4i4's front panel Output dial controls the level sent to Outputs L and R.

Line Outputs

Line Outputs 3-4 have identical electrical characteristics to the Monitor line Outputs 1 to 2 but are not controlled by the Output control.

You can set the signals available at these outputs using Focusrite Control 2, and use the outputs to drive additional speakers in a multichannel monitoring system, such as a subwoofer or to send signals to outboard effects processors.

DAW (Recording Software) Setup

The Scarlett is compatible with any ASIO-supported DAW on Windows and any Core Audio-supported DAW on macOS.

To help you get started, we've put together steps to set up your interface and start recording in the most common DAWs. If you need any more information, please see the user guide for your DAW.

If you don't already have a DAW installed on your computer to help get you started, the Scarlett comes with Ableton Live Lite and a version of Pro Tools. You can access these in Easy Start [5], or from your Focusrite account.



Tip What is a DAW?

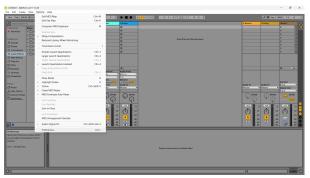
DAW stands for 'Digital Audio Workstation' and is the term given to any software you use to record arrange or make music.

III Ableton Live

To get set up in Ableton Live follow these steps:

Windows

- 1. Open Ableton Live on your computer.
- 2. Click Options > Preferences....

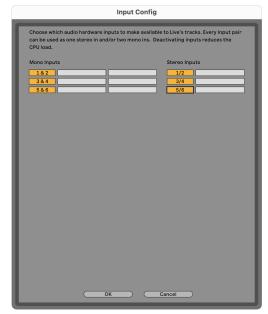


- 3. Go to the **Audio** tab on the left-hand side of the Preferences window.
- 4. Set the **Driver Type** to ASIO, and **Audio Device** to Focusrite USB ASIO.

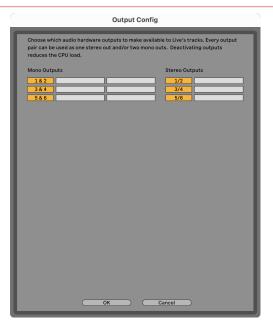


Click Input Config.
 The next step is to make all the inputs on your device appear as input options in Ableton.

6. Click to highlight each set of **Mono** and **Stereo Inputs** to make sure they appear as selectable in Live.



- 7. Click OK.
- 8. Do the same for the **Output Config**, if you are using multiple outputs from your Scarlett 4i4.



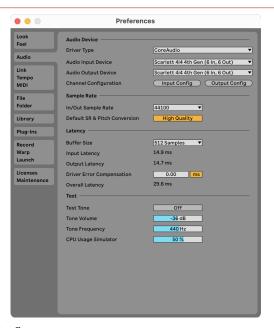
9. Close the Preferences Window.

Mac

- 1. Open Ableton Live on your computer.
- 2. Click **Live** in the top menu bar.



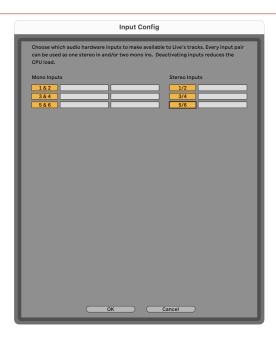
- 3. Click Settings.
- 4. Go to the **Audio** tab on the left-hand side of the Preferences window.
- 5. Set the **Audio Input Device** and **Audio Output Device** to Scarlett 4i4 4th Gen.



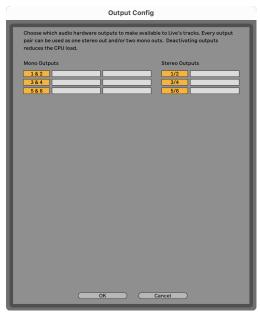
6. Click Input Config.

The next step is to make all the inputs on your device appear as input options in Ableton.

7. Click to highlight each set of **Mono** and **Stereo Inputs** to make sure they appear as selectable in Live. You will see up to six channels.



- 8. Click OK.
- 9. Do the same for the **Output Config**, if you are using multiple outputs from your Scarlett 4i4.



10. Close the Preferences Window.

Getting sound into Ableton

 Click to highlight an **Audio** Track in Live's main window. Live had two views (Session and Arrangement), so depending on which view you are in, please see the following screenshots.





2. Set the **Audio From** to **Ext. In** and the input drop-down to the interface input you are using, e.g. **1**.



3. Set the Monitor to Auto.

This allows you to hear sound coming in from your Scarlett's input.



Click the record arm button beneath the track. It lights red when record arm is on.
 Send a signal to the input on your Scarlett and you should see the meter in Ableton move.



5. When you're ready to record, click the record \(\Delta \) button in Ableton's transport bar.



Logic and GarageBand

To get set up in Logic Pro and GarageBand follow these steps:

- 1. Open Logic Pro or GarageBand on your computer (you may be prompted to Choose a project, you can choose an Empty Project or use a template).
- 2. Select Audio in the **Choose a track type** window.
- 3. Set the **Audio Input** to Input 1.

If you don't see any inputs, make sure the **Device:** is set to your Scarlett 4i4.

- a. Click the arrow to the right of the Device section.
- b. In the preferences window, set the **Output Device** and **Input Device** to Scarlett 4i4 4th Gen.





Logic Pro X

GarageBand

- c. Click **Apply** (Logic Pro only).
- d. Close the **Preferences or Settings** window.
- Logic Pro: Tick Input Monitoring and Record Enable.
 GarageBand: Tick I want to hear my instrument as I play and record.
 This allows you to hear sound coming in from your Scarlett's input.
- 5. Click Create.





Logic Pro

GarageBand

6. When you're ready to record, click the record button at the top of Logic/GarageBand.

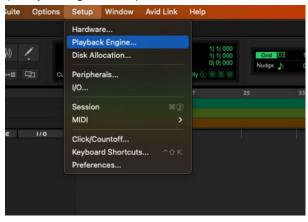


Pro Tools

To get set up in Pro Tools, follow these steps:

Mac and Windows

- 1. Open Pro Tools on your computer.
- 2. Click Setup > Playback Engine in the top menu bar.

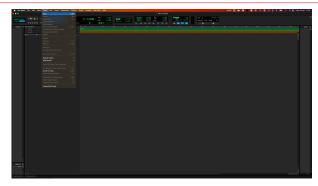


3. Select Focusrite USB ASIO (Windows) or Scarlett 4i4 4th Gen in the **Playback Engine** dropdown.





4. Click Track > New in the top menu bar.



5. Set the number of tracks you need and set the type to Audio Track.



- 6. Click Create
- 7. Click the record arm and input enable buttons on the track.
 This allows you to hear sound coming in from your Scarlett's input.
- 8. Click the main Record Enable button at the top of the Pro Tools window, it turns red when enabled.
- 9. Click the Play button to begin recording.

Reaper

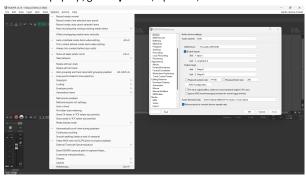
To get set up in Reaper, follow these steps:

Windows

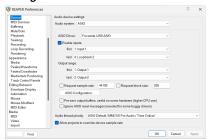
- 1. Open Reaper on your computer.
- 2. If you see a pop-up window, asking you to select your audio device driver, click **Yes**



If you don't see the pop-up, go to **Options** (top menu) > **Preferences** > **Device**



3. In the Audio device settings.



- a. Select ASIO in the **Audio system:** dropdown.
- b. Select Focusrite USB ASIO in the **ASIO Driver:** dropdown.
- 4. Click OK.
- 5. Click **Track** (top menu) > **Insert New Track**.



6. Click the red record-armed button.



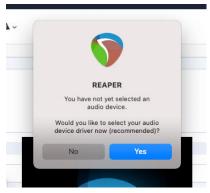
7. Click the **Input 1** box to select your input on your Scarlett 4i4.



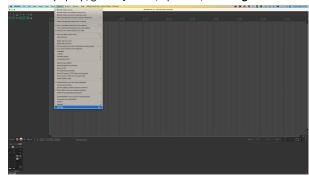
8. When you're ready to record, click the record button in the bottom section of Reaper.

Mac

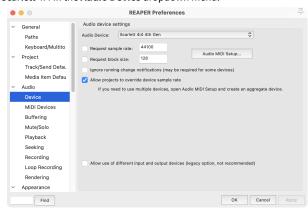
- 1. Open Reaper on your computer.
- 2. If you see a pop-up window, asking you to select your audio device driver, click **Yes**



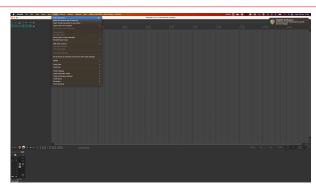
If you don't see the pop-up, go to **Options** (top menu) > **Settings** > **Device**



3. Choose Scarlett 4i4 in the Audio Device dropdown menu.



- 4. Click OK.
- 5. Click Track (top menu) > Insert New Track.



6. Click the red record-armed button.



7. Click the **Input 1** box to select your input on your Scarlett 4i4.

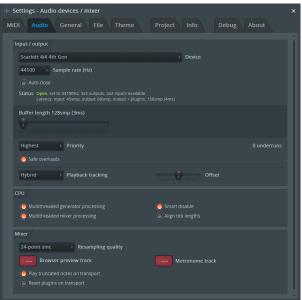


8. When you're ready to record, click the record button in the bottom section of Reaper.

FL Studio

To get set up in FL Studio follow these steps:

- 1. Open FL Studio on your computer.
- 2. Go to Options > Audio Settings.
- 3. Set the Device to Scarlett 4i4 4th Gen (or Focusrite USB ASIO on Windows) in the **Input / output** section.



- 4. Close the Settings window.
- 5. In the **Mixer** click on the insert you want to record in to.
- 6. Set the external input drop-down from **(none)** to the interface input you are using, e.g. **Input 1** for input mono, or **Input 1 Input 2** for both inputs 1 and 2 in stereo.



7. Click the main record button in the transport section.



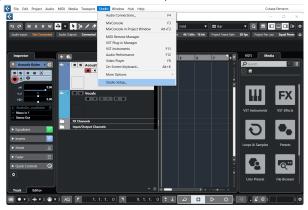
- Choose an option in the What would you like to record? window.
 If you're not sure which option to choose, please see FL Studio's help files.
- 8. When you're ready to record, press the play button in the transport section.



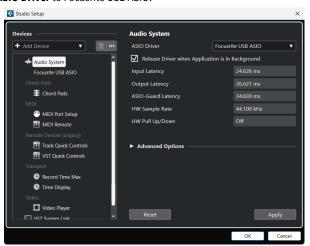
Cubase

Windows

- 1. Open Cubase on your computer.
- 2. In the top menu bar click Studio > Studio Setup...



- 3. Click Audio System on the left-hand side.
- 4. Set the ASIO Driver to Focusrite USB ASIO.



- 5. Click OK.
- 6. Right-click in the MixConsole.
- 7. Click Add Audio Track.



8. Configure the track type as Audio and set the **Audio Input** to the channel you're using on your interface.



- 9. Click Add Track.
- 10. Click the Record Enable and Monitor buttons (off) on the Cubase channel to enable the track for recording and so you can hear it using input monitoring (on)
- 11. Click Transport Record in Cubase's transport to start recording.

Mac

- 1. Open Cubase on your computer.
- 2. In the top menu bar click Studio > Studio Setup...



3. Change the **ASIO Driver** to Scarlett 4i4 4th Gen.



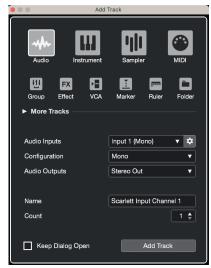
4. Click Switch.



- 5. Click OK.
- 6. Right-click in the MixConsole.
- 7. Click Add Track.



8. Configure the track type as Audio and set the **Audio Input** to the channel you're using on your interface.



- 9. Click Add Track.
- 10. Click the Record Enable and Monitor buttons (off) on the Cubase channel to enable the track for recording and so you can hear it using input monitoring (on).
- 11. Click Transport Record in Cubase's transport to start recording.

Examples of Use

Connecting Inputs and Outputs

The following diagram shows how to connect a range of inputs and outputs to the Scarlett 4i4.



- Connect instruments such as guitars, bass, electro-acoustic guitars and other
 instruments with pickups to Input 1 or 2 the 6.35mm jack input on the front panel.
 When you connect an instrument use a 6.35mm to 6.35mm TS mono jack cable and set
 the input to 'instrument' using the Inst button.
- Connect a microphone (e.g. the CM25 MkIII) to Input 1 or 2 using an XLR to XLR cable.
 You must connect a microphone via an XLR cable, other microphones may not work, or you may have problems. Enable 48V if your microphone needs it.
- Connect your headphones (e.g. the Scarlett SH-450 headphones) via a 6.35mm jack to the headphone output. You must use a 6.35mm TRS jack connector to connect your headphones. If your headphone jack connector is smaller you need a headphone jack adaptor.
- Connect line-level devices, such as synthesisers, keyboards, mic preamps etc. to the fixed-level line Inputs 3 and 4. For a balanced connection, use a 6.35mm TRS jack connector. You can use a TS jack connector but the connection will be unbalanced.

- You can also connect line-level devices to **Input 1** or **2**, where you can use the gain control to boost your line-level devices' signal into your recording software. Make sure you turn off Inst if you're connecting line-level devices to **Input 1** or **2**.
- Connect monitor speakers (also called Monitors) to Outputs R and L (right and left).
 Use 6.35mm balanced TRS jack cables to connect monitors. If your monitors have different connections please see the monitor's user guide.
- 6. Connect the Scarlett to your computer using a **USB** cable.
- 7. Connect your Scarlett to a wall outlet using the included power supply.



Note

You can't connect guitars or microphones directly to Inputs 3 and 4.

Using Outboard Gear

Your Scarlett 4i4 has enough outputs and inputs to use 'outboard' gear in your mixes. By outboard gear or equipment, we're referring to effects you may want to include in the mixing process, for example, equalisers (EQ), compressors, reverbs, delays etc.

There are two ways to mix with outboard effects, either as insert effects (often EQs or Compressors) or Send and Return effects (more common for Reverbs and Delays).

- Inserts the effect is placed in the path of the signal so the entire signal is affected by the outboard equipment.
- **Send and Return** you send the 'dry' signal to the outboard effect and return the 'wet', or affected, signal to your DAW, often on a different channel. You can then mix a combination of the original dry signal and the affected wet signal.



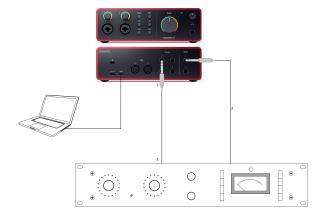
Tip

There are no strict rules for using effects as inserts or send-and-return effects. One interesting technique is utilising a compressor as a send effect, commonly referred to as parallel or New York compression. This technique can be highly effective for adding more weight to parts of your mix.

The setup below shows how you can connect your outboard equipment to your Scarlett 4i4 and use Focusrite Control 2's Mixer to route the signal. To get the signal out of your DAW, most DAW software will have a guide on using an external processor as an insert or as a Send and Return effect. Use this guide in combination with the user guide for your DAW.

Hardware Connections

To set up the hardware we're going to connect the equipment in the order of the signal flow.



- Connect a 6.35mm balanced TRS jack cable from one of the spare line outputs of your interface (e.g. not outputs 1-2 which are usually reserved for monitors).
- 2. Connect the other end of the cable to the input of your outboard effect processor. This may be a 6.35mm jack input, but it may also be XLR. If it is XLR make sure the input is suitable for line-level input signals.
- 3. Connect the output of your outboard effect processor to a spare 6.35mm jack input on your Scarlett 4i4. The outboard of outboard effects processors is likely a line-level signal so you must connect it to a jack input on your Scarlett 4i4.

Software Routing

The following steps offer a high-level overview of the routing in software. Steps may vary between DAWs.

 Add an Insert or Send to the DAW track you want to affect. Make note of the software output of your Insert or Send e.g. Output 3.



Logic Pro's I/O insert plugin- for Send and Return effects, use this plugin on a Send, or Bus, channel.

2. In Scarlett 4i4 make sure the software output from your Insert or Send, e.g. output 3, is routed to the output you connected from your Scarlett to your outboard gear. For more information on routing see Focusrite Control Mixer [36].



3. In your DAW, make sure the input to your insert, or your send's return, is set to the input on your Scarlett 4i4 you connected to the output of your outboard gear.

After going through these steps when you play your DAW session you should hear the effected signal coming back from your outboard gear either inserted in the channel's effects chain or by listening to the effect's return.



Tip

You can use the same process to reamp your DI guitar signals. Replace the outboard effects unit with a reamp box and guitar amp.

Loopback

With Loopback, you can capture computer audio and record it into your recording software on separate channels alongside your connected mics or instruments.

To use Loopback select inputs channels 5-6 in your DAW software.

Loopback works by 'looping back' audio outputs from your computer to virtual input channels within your Scarlett. Any computer audio can be recorded into a DAW (Digital Audio Workstation).

You can also use Loopback to create a mix of any audio sources on your Scarlett, instruments connected to the preamps or audio from your computer. With Loopback, you can mix instruments and backing tracks for your online concerts or balance your microphone and game audio for your live stream. See Focusrite Control 2 Mixer [36].



Important

When you're using Loopback, mute the channels in your recording software so you don't cause a feedback loop.

Standalone Mode

The Scarlett 4i4 has a standalone mode; this mode allows your interface to pass audio when it's not connected to a computer. This can be useful for:

- Increasing the number of preamps on another interface or mixer that has run out of microphone preamps, for example:
 - Using any spare line inputs on the other interface.
 For example, by routing the Scarlett's microphone inputs to its line outputs.
- To use your studio setup without having your computer turned on or plugged in, for example, to use your guitar through your speakers, or any electronic music equipment connected.

To setup Standalone mode:

- 1. Connect your Scarlett's power socket to mains power.
- Connect your Scarlett 4i4 to a computer running Focusrite Control 2. In Focusrite
 Control 2 's mixer page route the Scarlett 4i4's inputs to the outputs you'd like to use.
 See Focusrite Control 2 Mixer [36].
 - For example, you could route microphone inputs 1 and 2 to line outputs 3 and 4 to use your Scarlett 4i4 as a standalone mic preamp connected to another preamp's line inputs.
- 3. Disconnect your Scarlett 4i4 from your computer and it continues to pass audio in standalone mode.
- 4. Connect your inputs and outputs to your interface as usual (see Examples of Use).

Focusrite Control 2

Focusrite Control 2 Mixer

Your Scarlett 4i4 contains a mixer controllable from the Mixer page in Focusrite Control 2. You can use this mixer to combine and send input sources to the physical outputs of your Scarlett 4i4.



The input sources to the mixer include:

- Physical Inputs
 - Analogue inputs (Instrument, microphone or line inputs)
- Playback Inputs
 - · Output Channels from your DAW software
 - Software playback from other computer software.



Once you've created a mix of inputs you can send this to the physical outputs of your Scarlett 4i4 to create a custom mix for your speakers, or for an artist's headphone mix.

Mixes

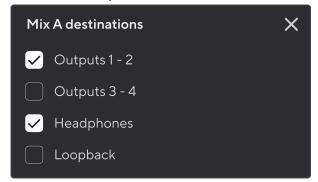
At the top of Focusrite Control 2's Mixer you can see the different Mixes you have available listed as Mix A, Mix B, etc.



Each Mix allows you to mix different inputs and send the mixes to outputs for different needs. For example, you may wish to use Mix A to listen to audio through speakers and use Mix B for a singer's headphone mix. The singer may want to hear more of their own vocals in their headphones so you can increase the volume for Mix B only.

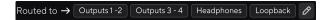
Click on a Mix to select it. You can now route it to any Output(s) of your choice. To do this:

- 1. Click the pencil icon next to **Routed to** →
- 2. Tick the **destinations** you want to send this Mix to.



For example, you could send Mix A to Outputs 1-2, where you may have connected your monitors, and also Headphones. You could then hear the same mix in your headphones and monitors.

Above the mixer channels, you can see which Outputs your Mix is routed to. If you've not routed a Mix to an output you'll see **No outputs assigned**.





Note

Each Output can only be fed from one Mix. For example, your headphones can't be fed from Mix A and Mix B simultaneously. When you're choosing Mix destinations Focusrite Control 2 shows you if an output already has a feed from a different Mix. If you route the current Mix to an Output with a Mix already routed to it, it overwrites the routing to that Output.

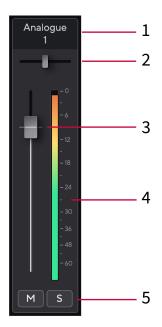


Loopback Destination

If you would like to record the specific mix of inputs you have made, select **Loopback** as a Mix destination. See Loopback.

Using the Mixer Channels

Each mixer channel has a number of functions.



1. Mix Channel Name

This shows the name of the mixer input.

2. **Pan**

Moves a mono channel's position in the stereo image from left to right or changes a stereo channel's balance from left to right. The default is centre. Alt, option ∼ or double-click to reset.

3. Fader

The Fader adjusts the level going to your Mix destination. Alt, option imes or double-click to reset.

The faders have no effect on the sources you are currently recording.

Meter

This shows you the channel's level, in dBFS. Green shows a good level and amber means the level is very high.

You'll see two meters for stereo channels, one for each left and right side.

The meter shows the level post-fader, the fader setting will affect the meter.

5. Mute and Solo

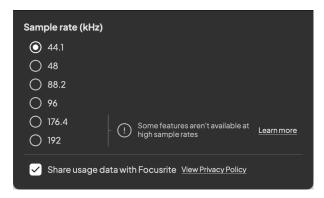
Mute - Click to silence the channel in the Mix. The Mute button lights blue when enabled. You can Mute multiple channels simultaneously.

Solo - Click sto solo the track by silencing all other channels in the Mix. The Solo button lights yellow stwhen enabled. Enabling Solo on multiple channels silences any channels without Solo enabled, i.e. you will hear all the Solo'd channels. If you enable both Mute and Solo, the last clicked option takes priority.

Focusrite Control 2 Settings

Click the ellipsis in Focusrite Control 2's top right corner and click Professional to open the Settings page.

The settings page has the following options:



Sample rate (kHz)

Sample rate refers to the samples per second your computer is recording. The higher the value, the higher the quality; however the higher the value the more hard drive space your recordings take up.

Often, using 44.1kHz is more than enough for recording.



Note

Some features, listed below, are not available at quad-band sample rates (176.4 and $192 \mathrm{kHz}$).

- · Air Harmonic Drive
- Clip Safe

Analytics

Use this tick box to opt into usage analytics to help us make Focusrite Control 2 better. Please see our Privacy Policy for more information.

Updating

Updating Focusrite Control 2

We update Focusrite Control 2 occasionally with new features and improvements to make sure you are getting the most from your Scarlett 4i4.

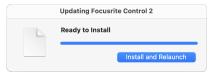
There are two ways to make sure you have the latest Focusrite Control 2 version:

- 1. Use the updater in Focusrite Control 2:
 - 1. Open Focusrite Control 2.
 - 2. There are two options in the Focusrite Control 2.
 - a. If an update is available, a dialogue window automatically appears. Click Install Update to start the update.



- b. To check you are using the latest version, click the ellipses in Focusrite Control 2's top right corner and click Check for updates.
- 3. Click Install and Relaunch in the prompt that appears after the update has been downloaded.

Focusrite Control 2 updates, the following update screen shows before the software resets.



- 2. Install Focusrite Control 2 from our Downloads page:
 - Go to the Focusrite downloads website:
 focusrite.com/downloads
 - 2. Find your Scarlett on the Downloads website.
 - 3. Download Focusrite Control 2 for your operating system (Windows or Mac).
 - 4. Open the Downloads folder on your computer and double-click the Focusrite Control 2 installer.
 - 5. Follow the on-screen instructions to install Focusrite Control 2.
 - If it's not already, connect your Scarlett interface to your computer with the USB cable.
 - 7. Open Focusrite Control 2 and it detects your Scarlett automatically.

Updating your Scarlett

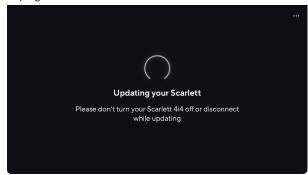
We occasionally update your Scarlett 4i4's firmware with new features and improvements, to make sure you are getting the most from your Scarlett. Your Scarlett 4i4 is updated through Focusrite Control 2.

To update your Scarlett:

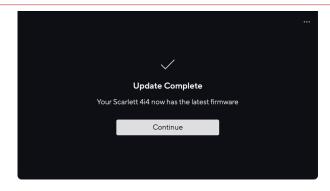
Open Focusrite Control 2.
 If there is an update available, Focusrite Control 2 tells you when you open it.



 Click Update Scarlett 4i4.
 Focusrite Control 2 starts the update, do not disconnect your Scarlett 4i4 while the update is in progress.



3. Click Continue after the update has finished.



Your Scarlett 4i4 is now up to date and you can continue to use it as normal.

Specifications

These specifications allow you to compare your Scarlett 4i4 with other devices and make sure they'll work together. If you're not familiar with these specifications, don't worry you don't need to know this information to use your Scarlett 4i4 with most devices

Performance Specifications

Where possible we measure all performance figures following AES17.

Supported Sample Rates 44.1 kHz, 48 kHz, 88.2 kHz, 96 kHz, 176.4 kHz, 192 kHz

Bit Depth 24-bit

Microphone Inputs		
Frequency Response	20Hz - 20kHz ± 0.06dB	
Dynamic Range (A-weighted)	116dB	
THD+N	-100dB (Minimum @ 8dB Gain)	
Noise EIN (A-Weighted)	-127dBu	
Maximum Input Level (at minimum gain)	+16dBu	
Gain Range	69dB	
Input Impedance	3kΩ	

Variable Line Inputs		
Frequency Response	20Hz - 20kHz ± 0.05dB	
Dynamic Range (A-weighted)	115.5dB	
THD+N	-100dB (Minimum @ 8dB Gain)	
Maximum Input Level (at minimum gain)	+22dBu	
Gain Range	69dB	
Input Impedance	60kΩ	

Fixed L	ine Inputs
Frequency Response	20Hz - 20kHz ± 0.02dB
Dynamic Range (A-weighted)	115.5dB
THD+N	-105dB (Minimum @ 8dB Gain)
Maximum Input Level (at minimum gain)	22dBu
Input Impedance	60kΩ

	Instrument Inputs
Frequency Response	20Hz - 20kHz ± 0.15dB
Dynamic Range (A-weighted)	113dB
THD+N	-80dB (Minimum @ 8dB Gain)
Maximum Input Level (at minimum gain)	+12dBu
Gain Range	62dB

	Instrument Inputs
Input Impedance	1ΜΩ

Line Outputs (Balanced)	
Frequency Response	20Hz - 20kHz ± 0.02dB
Dynamic Range (A-weighted)	120dB
THD+N	-112dB
Maximum Output Level	+16dBu
Output impedance	100Ω

Headphone Outputs	
Frequency Response	20 Hz - 20 kHz ± 0.1 dB @ $33\Omega / 300\Omega$
Dynamic Range (A-weighted)	112dB @ 33Ω
	115dB @ 300Ω
THD+N	-99dB @ 33Ω (Minimum)
	-108dB @ 300Ω (Minimum)
Maximum Output Level	$5dBu$ into 33Ω
	11dBu into 300 Ω
Maximum Output Power	57mW into 33Ω
	27mW into 300Ω
Output impedance	11Ω

Physical and Electrical Characteristics

Analogue Inputs	
Connectors	Two front panel Neutrik® XLR combo connectors
	Two rear panel Neutrik® 6.35mm (1/4") jack sockets
Mic/Line switching	Automatic
Phantom Power (48v)	Front panel 48V (phantom power) button or switch in software
Line/Instrument switching	Front panel Inst button or switch in software
Auto Gain	Front panel Auto button or switch in software
Clip Safe	Front panel Safe button.
AIR function	Front panel Air button or switch in software

Analogue Outputs	
Balanced Outputs	Four rear-panel Neutrik®6.35mm (1.4") TRS jack sockets
Headphone Output	Front panel stereo 6.35mm (1.4") TRS jack socket
Main Output Level Control	Front panel analogue control with pre-fade output level meter
Headphones Level Control	Front panel analogue control

Other I/O				
USB	One USB 2.0 Type-C connector for data and power - • - • -			
	1.5A			
	One USB Type-C power connector - 5V DC			
	7.5W			

Front Panel Indicators			
Channel Selection	White/Green LEDs for channels 1 and 2		
Select button	White/Green Select LED		
48V	White/Green 48V LED (depending on the selected channel)		
Inst	White/Green Inst LED (depending on the selected channel)		
Auto	White Auto LED to initiate Auto Gain		
Clip Safe	White/Green Safe LED (depending on the selected channel)		
Air Mode	White/Green Air LED (depending on the selected channel)		
Output Level Meter	Three-colour LED ring around Output control.		
USB	Green USB €←→ LED		
Direct Monitor	Three-state © LED		

Weight and Dimensions		
Weight	798g (1.76lbs)	
Height	60mm (2.36")	
Width	180mm (7.09")	
Depth	130mm (5.12")	

Environmental		
Operating Temperature	40°C / 104°F Maximum ambient operating temperature	

Channel Order

Input Channels

Input	Channel
1	Input 1 (Mic/Line/Inst)
2	Input 2 (Mic/Line/Inst)
3	Input 3 (Line)
4	Input 4 (Line)
5	Loopback 1
6	Loopback 2

Output Channels

	Output	Channel
1		Output Left
2		Output Right
3		Line Output 3
4		Line Output 4
5		Headphones Left
6		Headphones Right

Notices

Troubleshooting

For all troubleshooting queries, please visit the Focusrite Help Centre at support.focusrite.com.

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Credits

Focusrite would like to thank the following Scarlett 4th Gen team members for their hard work in bringing you this product:

Aarron Beveridge, Adam Watson, Adrian Dyer, Adrien Fauconnet, Alex Middleton-Dalby, Alice Rizzo, Alistair Smith, Andy Normington, Andy Poole, Andy West, Arne Gödeke, Bailey Dayson, Bamber Haworth, Bash Ahmed, Ben Bates, Ben Cochrane, Ben Dandy, Benjamin Dunn, Bran Searle, Callum Denton, Carey Chen, Cerys Williams, Chris Graves, Dan Clarke, Dan Stephens, Dan Weston, Daniel Hughley, Daniel Johnson, Danny Nugent, Dave Curtis, David Marston, Derek Orr, Ed Fry, Ed Reason, Eddie Judd, Ellen Dawes, Emma Davies, Flavia Ferreira, Greg Westall, Greg Zielinski, Hannah Williams, Harry Morley, Ian Hadaway, Isaac Harding, Jack Cole, Jake Wignall, James Hallowell, James Otter, Jason Cheung, Jed Fulwell, Jerome Noel, Jesse Mancia, Joe Crook, Joe Deller, Josh Wilkinson, Joe Munday, Joe Noel, Jon Jannaway, Julia Laeger, Kai Van Dongen, Keith Burton, Kiara Holm, Kieran Rigby, Krischa Tobias, Lars Henning, Laurence Clarke, Loz Jackson, Luke Piotrak, Luke Mason, Marc Smith, Mark Greenwood, Martin Dewhirst, Martin Haynes, Mary Browning, Massimo Bottaro, Matt Morton, Matt Richardson, Max Bailey, Michalis Fragkiadakis, Mick Gilbert, Mike Richardson, Nicholas Howlett, Nick Lyon, Nick Thomson, Oliver Tapley, Olly Stephenson, Paul Chana, Paul Shufflebotham, Pete Carss, Pierre Ruiz, Richard Carvalho, Richard Walters, Robert Blaauboer, Robert Mitsakov, Ross Chisholm, Sam Lewis, Samuel Price, Sandor Zsuga, Sebastian Heinz, Simon Burges, Stefan Archer, Stefan Elmes, Steve Bush, Stratis Sofianos, Taavi Bonny, Taren Gopinathan, Tom Carter, Tom Haines, Tony Pow, Valeria Cirillo, Will Hoult, Will Munn, Vidur Dahiya, Wade Dawson, Zih-Syuan Yang.

Authored by Ed Fry.