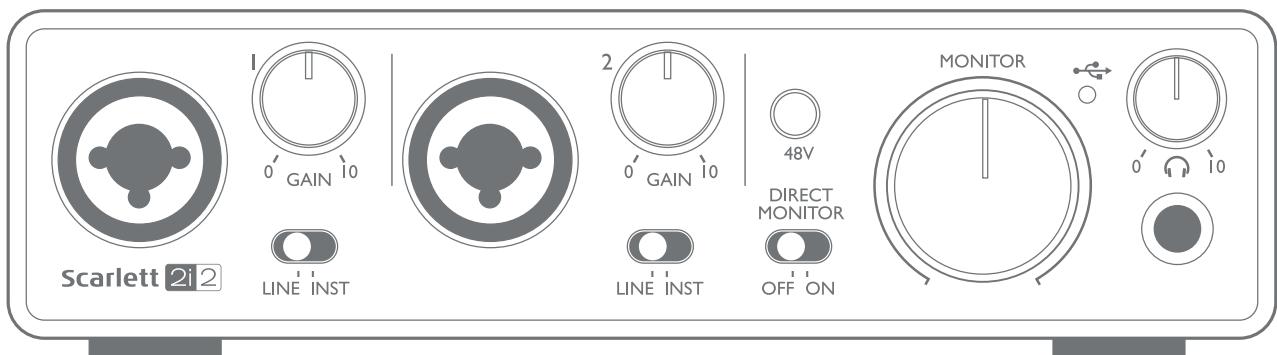


# Scarlett 2i2

## User Guide



# TABLE OF CONTENTS

<b>OVERVIEW .....</b>	<b>3</b>
Introduction .....	3
Features .....	3
Box Contents .....	4
System requirements .....	4
Mac OS & Windows .....	4
<b>GETTING STARTED .....</b>	<b>5</b>
Software Installation .....	5
Mac OS only:.....	6
Windows only:.....	6
Connecting your Scarlett 2i2 .....	7
Audio Setup in your DAW .....	7
Examples of Usage .....	9
Connecting a microphone or instrument.....	9
Using Direct Monitoring.....	10
Connecting Scarlett 2i2 to loudspeakers.....	11
<b>HARDWARE FEATURES.....</b>	<b>13</b>
Front Panel .....	13
Back Panel .....	14
<b>SPECIFICATIONS .....</b>	<b>15</b>
Performance Specifications .....	15
Physical and Electrical Characteristics.....	16
<b>TROUBLESHOOTING .....</b>	<b>17</b>
<b>COPYRIGHT AND LEGAL NOTICES .....</b>	<b>17</b>

# OVERVIEW

## Introduction

Thank you for purchasing this Second Generation Scarlett 2i2, one of the family of Focusrite professional audio interfaces incorporating high quality Focusrite analogue pre-amplifiers. You now have a simple and compact solution for routing high quality audio to and from your computer and you will also be able to download some exciting new software plug-ins once you've registered the product.

In developing the Second Generation series of Scarlett interfaces, we have enhanced both the performance and feature set including support for sample rates up to 192 kHz, improved mic preamp performance with low noise and plenty of gain, and upgraded instrument inputs with additional headroom for recording the loudest guitar parts without clipping. They are class compliant on Mac, which means they are plug-and-play, so no need to install a driver if you are a Mac user.

This User Guide provides a detailed explanation of the hardware to help you achieve a thorough understanding of the product's operational features. We recommend that both users who are new to computer-based recording, as well as more experienced users, take the time to read through the user guide so that you are fully aware of all the possibilities that the Scarlett 2i2 and accompanying software has to offer. If the main User Guide sections do not provide the information you need, be sure to consult [support.focusrite.com](http://support.focusrite.com), which contains a comprehensive collection of common technical support queries.

## Features

The Scarlett 2i2 hardware interface provides the means for connecting microphones, musical instruments or line level audio signals to a computer running Mac OS or Windows. The signals at the physical inputs can be routed to your audio recording software / digital audio workstation (referred to throughout this user guide as the "DAW") at up to 24-bit, 192 kHz resolution; similarly, the DAW's monitor or recorded output will appear at the unit's physical outputs.

The physical outputs can be connected to an amplifier and speakers, powered monitors, headphones, analogue mixer or any other analogue audio equipment that you wish to use. Although all inputs and outputs on the Scarlett 2i2 are routed directly to and from your DAW for recording and playback, you can configure the routing within your DAW in order to meet your needs.

## Box Contents

Along with your Scarlett 2i2 you should find:

- Bundle code\* for accessing the following on-line resources:
  - 2i2 USB Drivers for Windows
  - Focusrite Red 2 & 3 Plug-in Suite
  - Pro Tools | First
  - Ableton Live Lite
  - LoopMasters sample library
- USB cable
- Getting Started Guide and Important Safety Information\*

\* information printed on the inside of the gift box

## System requirements

### Mac OS & Windows

For information on System Requirements for the Scarlett and the optional bundled software, please visit:

[support.focusrite.com](http://support.focusrite.com)

# GETTING STARTED

**IMPORTANT:** WINDOWS USERS - PLEASE ENSURE THAT YOU RUN THE INSTALLER BEFORE CONNECTING THE SCARLETT 2i2 TO YOUR COMPUTER.

THE SECOND GENERATION SCARLETT 2i2 IS CLASS COMPLIANT FOR MACS, THEREFORE DRIVER INSTALLATION IS NOT NECESSARY.

## Software Installation

All software required by the Scarlett 2i2 - and several powerful and useful extras - is available for download from the Focusrite website [www.focusrite.com/register](http://www.focusrite.com/register). You will find a "Bundle Code" printed on the inside of the gift box your Scarlett 2i2 comes in, and the Serial number can be found on the underside of the unit. You will need to enter these when you access the downloads area of the website; this procedure ensures that you will have the most up-to-date software versions.

### DOWNLOADING THE INCLUDED SOFTWARE

To download the included software, you will need to register your Scarlett 2i2 at [focusrite.com/register](http://focusrite.com/register)

You will need the product serial number, found on the bottom of your 2i2 hardware

Once you have entered the serial number, you will be asked to enter your BUNDLE CODE, found below:

PRODUCT BUNDLE CODE

XXXXXX-XXXXXX-XXXXXX

Pour obtenir des instructions en Français sur la façon de commencer, veuillez-vous rendre sur [focusrite.com/downloads](http://focusrite.com/downloads)

Für eine Kurzanleitung zum schnellen Start in deutscher Sprache bitte [focusrite.com/downloads](http://focusrite.com/downloads)

Para la guía de inicio en Español, diríjase a [focusrite.com/downloads](http://focusrite.com/downloads)

所有使用说明中文版,请上网站:[focusrite.com/downloads](http://focusrite.com/downloads)

日本語での説明書はこちら: [focusrite.com/downloads](http://focusrite.com/downloads)

시작 방법에 관한 한국어 가이드는 [focusrite.com/downloads](http://focusrite.com/downloads)에서 찾으실 수 있습니다.

1. Using your usual browser, go to [www.focusrite.com/register/](http://www.focusrite.com/register/).
2. Follow the on-screen instructions, entering the Serial number and then the Bundle Code (XXXXXX-XXXXXX-XXXXXX) into the form where prompted. Your Bundle Code is printed on the inside of the gift box.
3. You will then be able to access the "My Products" page, where the software products to which your registration entitles you are available for download, complete with activation codes where applicable.
4. Download and install the Scarlett 2i2 drivers (Windows only). Follow all on-screen instructions.
  - When the installation is complete, restart your computer.
  - After restart, connect the Scarlett 2i2 to your computer with the USB cable supplied.

This information is accurate as of May 2016, however we are constantly striving to improve the customer experience and as a result this process is subject to change. If anything appears to have changed please refer to [www.focusrite.com/get-started](http://www.focusrite.com/get-started) for the latest info.

### **Mac OS only:**

Your OS should automatically switch the computer's default audio inputs & outputs to the Scarlett 2i2. To verify this, go to **System Preferences > Sound**, and ensure that the input and output are set to **Scarlett 2i2**. For more detailed setup options on a Mac, open **Applications > Utilities > Audio MIDI Setup**.

### **Windows only:**

Your OS should automatically switch the computer's default audio inputs & outputs to the Scarlett 2i2. To verify this go to: **Start > Control Panel > Hardware and Sound > Sound > Manage Audio Devices** and ensure that '**Default Playback**' and '**Recording**' are set to '**Scarlett 2i2**'

## Connecting your Scarlett 2i2

**IMPORTANT - WINDOWS USERS:** Before you connect the Scarlett 2i2 to your computer, please complete the software installation according to the instructions on page 5. This will ensure that the hardware uses the correct drivers, and will prevent unexpected behaviour.

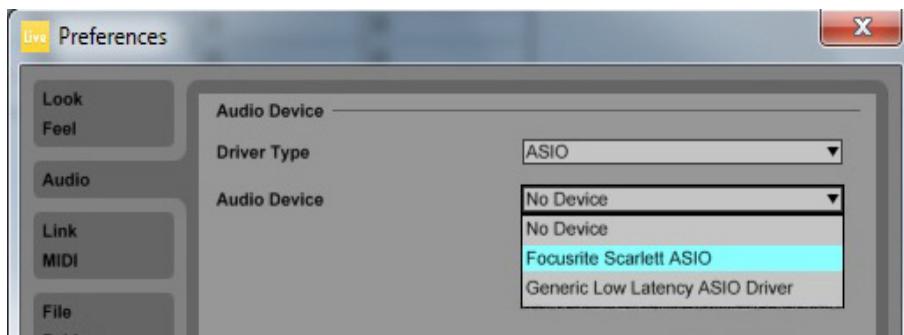
The Scarlett 2i2 has a single USB 2.0 port (on the rear panel). Once the software installation (if necessary) is complete, simply connect the Scarlett 2i2 to your computer using the USB cable provided. Note that Scarlett 2i2 is a USB 2.0 device, and thus the USB connection requires a USB 2.0+ compliant port on your computer. It will not operate correctly with USB 1.0/1.1 ports.

## Audio Setup in your DAW

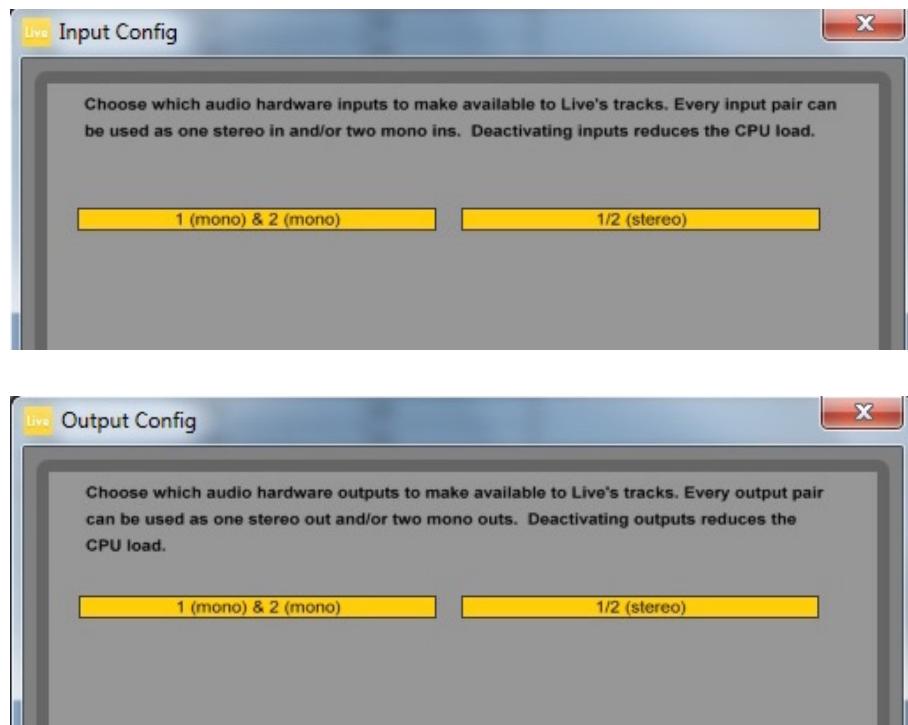
The Scarlett 2i2 is compatible with any Windows-based DAW that supports ASIO or WDM and any Mac-based DAW that uses Core Audio. After installing the drivers (Windows only) and connecting the hardware, you can start using the Scarlett 2i2 with the DAW of your choice. To allow you to get started if you do not already have a DAW application installed on your computer, both Pro Tools | First and Ableton Live Lite are included; these will be available to you once you've downloaded and activated your software on-line. To install either DAW, download and save the desired installer file from your registered Focusrite "My Products" page as described on page 5, and then run it, following all on-screen instructions.

Operating instructions for both Pro Tools | First and Ableton Live Lite are beyond the scope of this User Guide, but both applications include a full set of Help files.

Please note - your DAW may not automatically select the Scarlett 2i2 as its default I/O device. In this case, you must manually select '**Scarlett 2i2**' as the driver on your DAW's **Audio Setup\*** page. Please refer to your DAW's documentation (or Help files) if you are unsure where to select the ASIO or Core Audio driver. The following example shows the correct configuration in the Ableton Live Lite **Preferences** panel (Windows version shown).



Once the Scarlett 2i2 is set as the preferred Audio Device\* in your DAW, Inputs 1 & 2 and Outputs 1 & 2 will appear in your DAW's Audio I/O preferences. Depending on your DAW, you may need to enable certain inputs or outputs before use. The two examples below show Inputs 1 & 2 and Outputs 1 & 2 enabled in the Ableton Lite Audio Preferences.

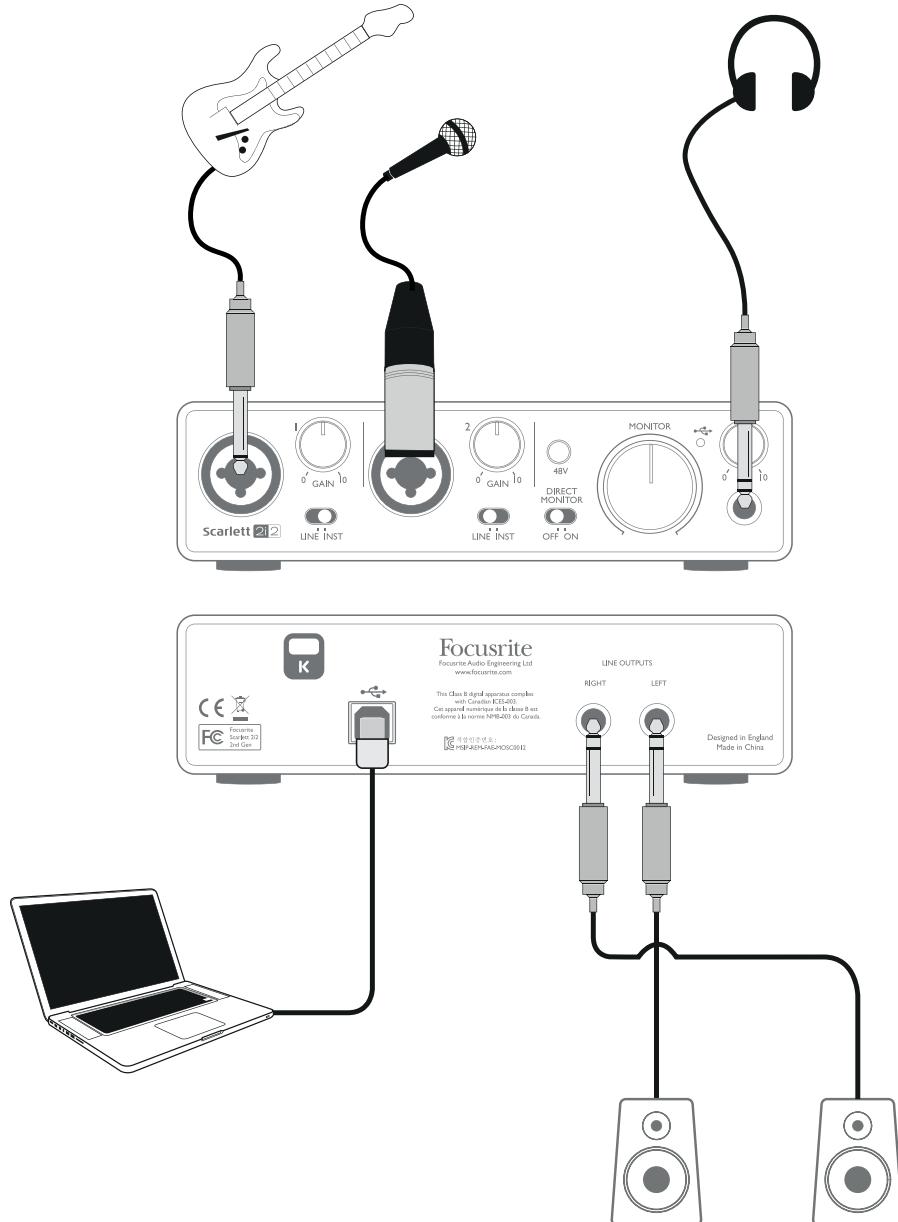


\*Typical name. Terminology may differ slightly between DAWs.

## Examples of Usage

The Scarlett 2i2 is an excellent choice for several different recording and monitoring applications. Some typical configurations are shown below.

### Connecting a microphone or instrument



This setup illustrates the most typical configuration for recording with DAW software on your Mac or PC. In this case, you might record guitar through Input 1 and vocals through Input 2 into your DAW, while monitoring the playback from the DAW via headphones (or speakers).

The front panel input sockets are “Combo” type, which accept either an XLR male connector (you will probably have one on the end of your microphone cable) or a ¼” (6.35 mm) jack plug. If you are using a capacitor (or “condenser”) microphone, you will need to turn on the 48 V phantom power.

Note the Scarlett 2i2 has no “Mic/line” switch – the Focusrite preamplifier stage is automatically configured for a microphone when you plug an XLR into the input, and for a line or instrument when you connect a jack plug. Set the **LINE/INST** switch next to the socket to **INST** if you are connecting musical instrument (a guitar in the example) via an ordinary 2-pole (TS) guitar jack, or to **LINE** if you are connecting a line level source such as a keyboard, synthesiser or the balanced output of an external audio mixer via a 3-pole (TRS) jack. Note the Combo connector accepts both TRS and TS types of jack plug.

### Using Direct Monitoring

You will frequently hear the term “latency” used in connection with digital audio systems. In the case of the simple DAW recording application described above, latency will be the time it takes for your input signals to pass through your computer and audio software. Latency can be a problem for a performer who wishes to record while monitoring their input signals.

The Scarlett 2i2 is fitted with a “Direct Monitoring” option, which overcomes this problem. Setting the front panel **DIRECT MONITOR** control to **ON** will route your input signals directly to the Scarlett 2i2’s headphone and main monitor outputs. This enables you to hear yourself with zero latency – i.e., in “real time” – along with the computer playback. The input signals to your computer are not affected in any way by this setting.

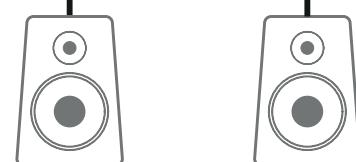
When Direct Monitoring is set to **ON**, ensure that your DAW software is not set to route its input (what you are currently recording) to its output. If it is, you will hear yourself “twice”, with one signal audibly delayed as an echo.

## Connecting Scarlett 2i2 to loudspeakers

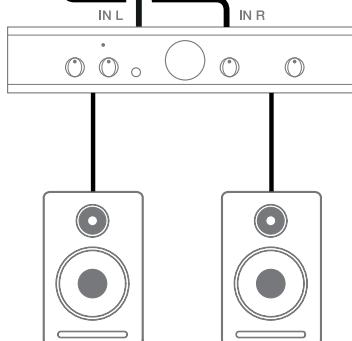
The 1/4" jack outputs on the rear panel can be used to connect monitoring speakers. Self-powered monitors (e.g., typical computer speakers) incorporate internal amplifiers with a volume control, and may be connected directly. Larger, passive loudspeakers will require a separate stereo amplifier; in this case, the outputs should be connected to the amplifier's inputs.



Connecting active speakers



Connecting passive speakers



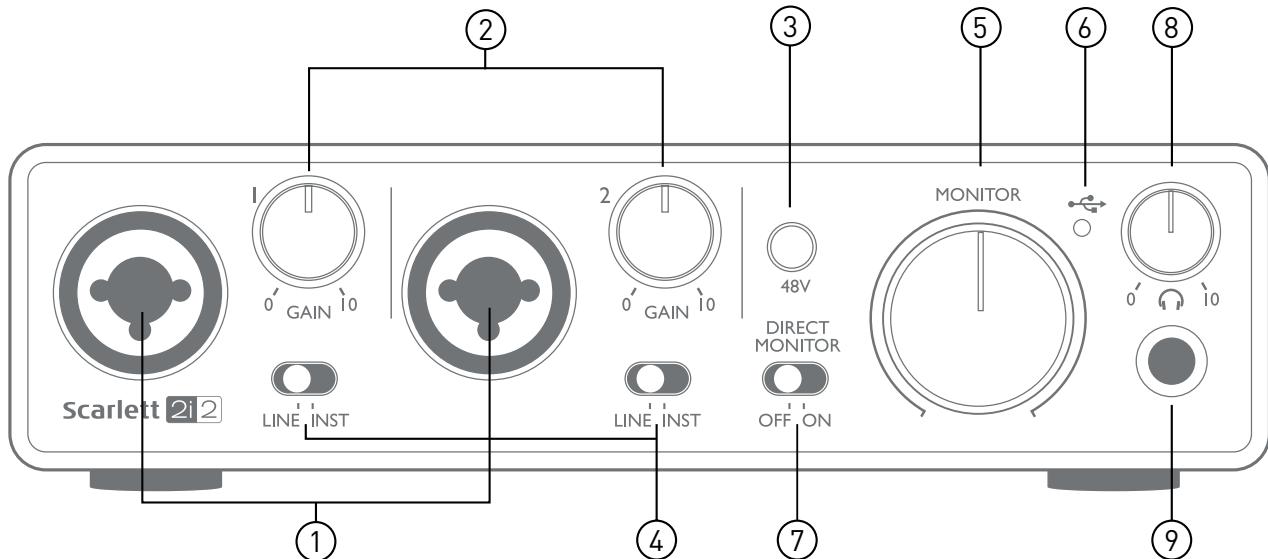
The line outputs are 3-pole (TRS)  $\frac{1}{4}$ " (6.35 mm) jack sockets, and are electronically balanced. Typical consumer (hi-fi) amplifiers and small powered monitors will have unbalanced inputs, either on phono (RCA) sockets, or via a 3.5 mm 3-pole jack plug intended for direct connection to a computer. In either case, use a suitable connecting cable with jack plugs at one end.

Professional power amplifiers will generally have balanced inputs; we highly recommend using balanced cables to connect these to the outputs of the Scarlett 2i2.

**NOTE:** You run the risk of creating an audio feedback loop if loudspeakers are active when you are monitoring a microphone! We recommend that you always turn off (or turn down) monitoring loudspeakers while recording, and use headphones when overdubbing.

# HARDWARE FEATURES

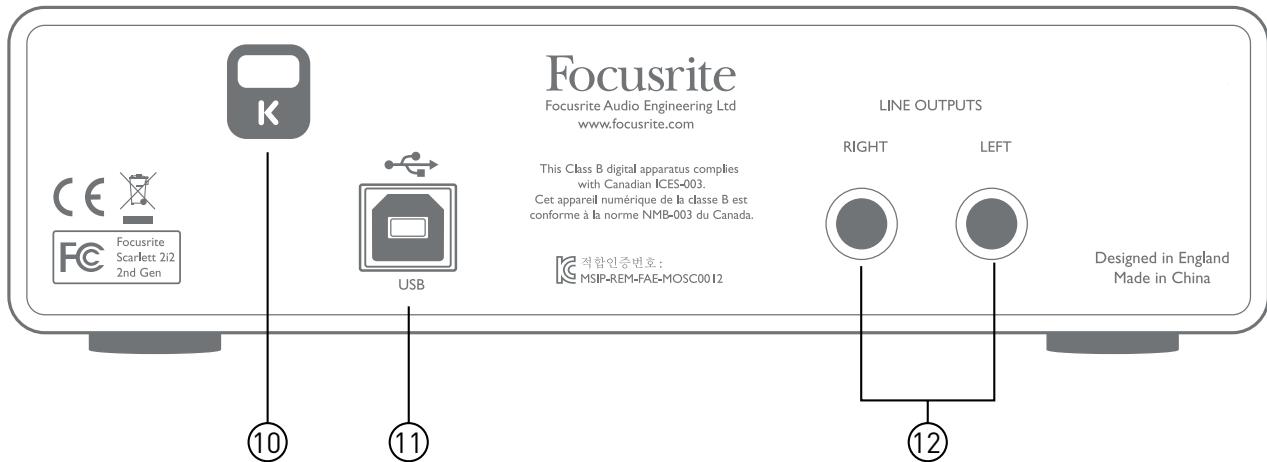
## Front Panel



The Front Panel includes the input connectors for Mic, Line and Instrument signals, as well as the input gain and monitoring controls.

1. Inputs 1 & 2 – “Combo” type input sockets - connect microphones, instruments (e.g., guitar), or line level signals via XLR or ¼” (6.35 mm) jacks as appropriate.
2. **GAIN 1** and **GAIN 2** – adjust the input gain for input signals on inputs 1 and 2 respectively. The gain controls have LED ‘rings’ to confirm signal level: green indicates an input level of at least -24 dBFS (i.e., ‘signal present’), the ring then turns red when signal level reaches 0 dBFS, indicating digital clipping.
3. **48V** – phantom power switch for mic inputs - enables 48 V phantom power at XLR contacts of both Combo connectors.
4. **LINE/INST** – Line/Instrument level switches for each input – switches gain and input impedance to suit instrument or line level signals.
5. **MONITOR** – main monitor output level control - sets the output level at the main (rear panel) outputs 1 and 2.
6. **USB** LED – illuminates when the unit receives USB bus power and is confirmed by the computer as connected and operating correctly.
7. **DIRECT MONITOR** – allows you to select how you monitor your live recording - either via the DAW or directly (zero latency).
8. **Headphone** level – adjusts the output level at the front panel stereo headphone output.
9. **Headphone** socket – ¼” TRS output jack - connect your stereo headphones here.

## Back Panel



10. **K** (Kensington security lock) – secure your Scarlett 2i2 to a suitable structure if desired. Please see [www.kensington.com/kensington/us/us/s/1704/kensington-security-slot.aspx](http://www.kensington.com/kensington/us/us/s/1704/kensington-security-slot.aspx) for further information on how to use this feature.
11. **USB** 2.0 port – Type B connector; connect to your computer with cable supplied.
12. **LINE OUTPUTS: LEFT and RIGHT** – 2 x 1/4" (6.35 mm) TRS jack sockets; +10 dBu output level (variable), electronically balanced. Either 1/4" TRS (balanced connection) or TS (unbalanced connection) jack plugs can be used.

**IMPORTANT - Line Outputs 1 and 2** do not have anti-thump, please make sure you power on your amplifier or monitor speakers last to avoid thumps, pops or clicks when you power on your computer and interface.

# SPECIFICATIONS

## Performance Specifications

Clock Source	Internal
Supported sample rates	44.1 kHz, 48 kHz, 88.2 kHz, 96 kHz, 176.4 kHz, 192 kHz
<b>Microphone Inputs</b>	
Dynamic Range	106 dB (A-weighted)
Frequency Response	20 Hz to 20 kHz $\pm 0.1$ dB
THD+N	<0.002% (minimum gain, -1 dBFS input with 22 Hz/22 kHz bandpass filter)
Noise EIN	-128 dB (A-Weighted)
Maximum Input Level	+4 dBu
Gain Range	50 dB
<b>Line Inputs</b>	
Dynamic Range	106 dB (A-weighted)
Frequency Response	20 Hz to 20 kHz, $\pm 0.1$ dB
THD+N	<0.003% (minimum gain, -1dBFS input with 22 Hz/22 kHz bandpass filter)
Maximum Input Level	+22 dBu
Gain Range	50 dB
<b>Instrument Inputs</b>	
Dynamic Range	106 dB (A-weighted)
Frequency Response	20 Hz to 20 kHz, $\pm 0.1$ dB
THD+N	<0.02% (minimum gain, -1 dBFS input with 22 Hz/22 kHz bandpass filter)
Maximum Input Level	+13 dBu
Gain Range	50 dB
<b>Line Outputs 1 &amp; 2 (balanced)</b>	
Dynamic Range	106 dB (A-weighted)
Maximum Output Level	+10 dBu
THD+N Outputs (1-2)	<0.002% (minimum gain, -1 dBFS input 1 kHz, with 22 Hz/22 kHz bandpass filter)

Headphone Outputs	
Dynamic Range	107 dB (A-weighted)
Maximum Output Level	> +10 dBu
THD+N	<0.002% (minimum gain, -1 dBFS input, 1 kHz, with 22 Hz/22 kHz bandpass filter)

## Physical and Electrical Characteristics

Analogue Inputs	
Connectors	XLR "Combo" type: Mic/Line/Inst (Inputs 1-2) on front panel
Mic/Line switching	Automatic
Line/Instrument switching	2 x front panel switches
Phantom power	Shared 48 V phantom power switch for inputs 1 & 2 (XLR connections only)
Analogue Outputs	
Balanced outputs	2 x 1/4" TRS jacks on rear panel
Stereo headphone output	1/4" TRS jack on front panel
Main output level control	On front panel
Headphones level control	
Other I/O	
USB	1 x USB 2.0 Type B connector
Front Panel Indicators	
USB power	LED
Gain Halos	Colour-coded LED rings (concentric with <b>GAIN</b> controls)
Phantom power	LED (within <b>48V</b> button)
Weight and Dimensions	
W x H x D	145 mm x 45 mm x 115 mm 5.7 in x 1.77 in x 4.53 in
Weight	0.60 kg 1.32 lb

## **TROUBLESHOOTING**

For all troubleshooting queries, please visit the Focusrite Help Centre where you will find articles covering numerous troubleshooting examples:

[support.focusrite.com](http://support.focusrite.com)

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