Scarlett Solo

User Guide





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OVERVIEW

Introduction

Thank you for purchasing this Scarlett Solo, one of the family of Focusrite professional computer 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.

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 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 Solo and accompanying software have to offer. If the main User Guide sections do not provide the information you need, be sure to consult http://www.focusrite.com/answerbase, which contains a comprehensive collection of answers to common technical support queries.

Features

The Scarlett Solo hardware interface provides the means for connecting a microphone and an instrument or line level audio source 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, 96 kHz resolution; similarly, the DAW's monitor or recorded output will appear at the unit's physical outputs.

This lets you record "real-world" instruments into Ableton Live Lite, GarageBand® (or whichever other DAW you may use) along with – or instead of – any "native" sounds already available within your computer. Scarlett Solo also lets you route the tracks of your DAW to its physical outputs, which can be connected to an amplifier and speakers, powered monitors, headphones or any other audio equipment with analogue inputs that you wish to use. Although all inputs and outputs on the Scarlett Solo 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. A Direct Monitoring feature lets you hear what you are playing without the effects of computer latency.

Box Contents

Along with your Scarlett Solo you should have:

- Software Activation card, with codes for accessing the following on-line resources:
 - USB Drivers for Windows
 - Scarlett Plug-in Suite for Mac and Windows
 - Ableton Live Lite 9
 - LoopMasters sample library (1 GB)
 - Novation Bass Station
 - Multi-language User Guides
- 1.5 m USB cable (Type 'A' to Type 'B')
- Getting Started Guide

System Requirements

Mac OS

Apple Macintosh with a USB 2.0-compliant USB port OS: Mac OS X 10.8 (Mountain Lion) or OS X 10.9 (Mavericks)

Windows

Windows compatible computer with a USB 2.0-compliant USB port OS: Windows 7 or Windows 8 (32- or 64-bit)

GETTING STARTED

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

Registering your product

To operate correctly with Windows, your Scarlett Solo first needs software drivers to be installed on your computer. These - and several powerful and useful extras - are available for download from the Focusrite website (www.focusrite.com/register). The Software Activation card provided with your Scarlett Solo 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 http://www.focusrite.com/register/.

2. Follow the on-screen instructions, enter the "Product Bundle Code" into the form where prompted. Your "Product Bundle Code" can be found on the Software Download Card packed with the unit.

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 necessary Windows drivers (no additional drivers are required for Mac computers) following the instructions below.

Software Installation

Mac OS

No additional drivers are required when using the Scarlett Solo with a Mac. You should therefore be able to connect Scarlett Solo to your Mac and the computer's default audio outputs should automatically switch to the USB port to which the Scarlett Solo is connected. To verify this, go to **System Preferences > Sound**, and check that the input and output are set to **Scarlett Solo**. For more detailed setup options on a Mac, open **Applications > Utilities > Audio MIDI Setup**.

Windows

- 1. Locate the file **Focusrite USB drivers**; double-click its icon to begin the installation.
- 2. Follow the onscreen instructions to complete the installation.
- 3. When the installation is complete, restart your computer.
- 4. After restart, connect the Scarlett Solo to your computer.

Your OS should automatically switch the computer's default audio outputs to be the USB port to which the Scarlett Solo is connected. To verify this, go to **Start > Control Panel > Hardware** and **Sound > Sound > Manage Audio Devices** and confirm that '**Default Playback**' and '**Recording**' are set to '**Scarlett Solo USB**'.

Powering the Scarlett Solo

The Scarlett Solo is an active device, and needs a DC power source to operate. This will be supplied by the Mac or PC to which it is connected, via the single USB connection. Note that an external power supply is not required.

You should experience no problems in powering the Scarlett Solo from the USB ports on any compatible Mac or PC. However, please be aware that USB ports on some laptops may not be able to deliver the same current to externally-connected devices when they are running off their internal batteries, compared to their current capability when running from AC mains. We therefore recommend strongly that if you are using Scarlett Solo with a laptop, please power the laptop from the mains with its supplied AC adaptor.

Connecting your Scarlett Solo

IMPORTANT: Before you connect your Scarlett Solo to your computer, please complete the software installation according to the instructions above. This will ensure that the hardware uses the correct drivers, and will prevent unexpected behaviour.

Your Scarlett Solo has a single USB 2.0 port (on the rear panel). Once the software installation is complete, simply connect it to your computer using the USB cable provided. (Note that Scarlett Solo 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 Solo is compatible with any Windows-based DAW that supports ASIO or WDM, or any Mac-based DAW that uses Core Audio. After installing the USB drivers and connecting the hardware, you can start using your Scarlett Solo 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, Ableton Live Lite is included in the software package available once you've registered your Scarlett Solo online. To install Ableton Live Lite, download and save the Ableton installer file from your registered Focusrite "My Products" page as described above, and then run it, following all on-screen instructions.

Operating instructions for Ableton Live Lite are beyond the scope of this User Guide, but the application includes a full set of Help files.

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

.ook eel	Audio Device	
	Driver Type	CoreAudio 🔻
Audio	Audio Input Device	Scarlett Solo USB (2 In, 2 Out)
MIDI	Audio Output Device	Scarlett Solo USB (2 In, 2 Out)
Sync	Channel Configuration	Input Config Output Config
File Folder	Sample Rate	
Library	In/Out Sample Rate	48000 🔻
Library	Default SR & Pitch Conversion	High Quality
Record		
Warp	Latency	
Launch	Buffer Size	512 Samples V

Once the Scarlett Solo is set as the preferred Audio Device* in your DAW, its inputs and outputs 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 two inputs and two outputs enabled in Ableton Live Lite Audio Preferences.

*Typical name. Terminology may differ slightly between DAWs.

Choose which audio hardware inputs to make available to Live ¹ be used as one stereo in and/or two mono ins. Deactivating inp	
1 (mono) & 2 (mono)	/2 (stereo)
Output Config	
Output Config Choose which audio hardware outputs to make available to Live can be used as one stereo out and/or two mono outs. Deactival	

Examples of use

The Scarlett Solo is an ideal audio interface for many DAW applications running on a laptop or other computer, PC or Mac.

A typical set of connections is illustrated below:



Connecting a microphone/instrument

This setup illustrates a typical configuration for recording using DAW software on your Mac or PC. In this case, you might record vocals through Input 1 and guitar through Input 2 into your recording application, while monitoring the playback via headphones or loudspeakers.

Scarlett Solo's inputs are on the front panel; Input 1 uses a standard 3-pin XLR socket, and is configured to work with microphones of most types; you will probably have a mating XLR male connector on the end of your mic cable. Input 2 uses a ¼" (6.35 mm) jack socket (2-pole when in instrument mode and 3-pole when used as a line input), and is intended to accept signals from a guitar or bass.

If you are using a "studio" condenser (capacitor) microphone designed on operate on 48 V phantom power, press the 48V button. Other types of microphone (including the common dynamic type) do not require phantom power, and may suffer damage if phantom power is applied. Some cheaper condenser microphones are able to operate from a lower phantom power voltage – typically 15 V. You should check the mic spec to see if it is safe to operate it from 48 V; if not, obtain a suitable external phantom power supply.

Using Direct Monitoring

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

Scarlett Solo is fitted with a "Direct Monitoring" option, which overcomes this problem. Setting the front panel DIRECT MONITOR switch to ON will route your input signals directly to Scarlett Solo'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 ON, ensure that your recording 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.

Headphone monitoring

Connect a pair of stereo headphones to the front panel headphone socket to hear both what you are recording - your current input signal(s), plus any tracks you've already recorded in your computer. Note: Set the front panel DIRECT MONITOR switch to ON when recording. The pre-recorded tracks will be heard in stereo, and the current input signals in mono – central in the stereo image. If you are using both the mic and instrument inputs, the two inputs will be summed in mono.

Connecting Scarlett Solo to loudspeakers

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



The line output connectors are standard phono (RCA) sockets. Typical consumer (hi-fi) amplifiers and small powered monitors will have inputs on phono (RCA) sockets or a single 3.5 mm 3-pole jack plug (intended for direct connection to a computer). In either case, use a suitable connecting cable with phono plugs (RCA jacks) at one end.

NOTE: You run the risk of creating an audio feedback loop if loudspeakers are active at the same time as 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 and line/instrument signals, and the input gain and monitoring controls.

1. Input 1 – electronically balanced input via 3-pin XLR socket for microphones.

2. **01** – adjust the gain for the microphone signal at input 1. The gain control has a concentric bi-colour LED 'ring' 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.

3. 48V - phantom power switch for mic input - enables 48 V phantom power at the XLR socket.

4. Input 2 - for connecting instruments (unbalanced) or line level (balanced) sources; ¼" TRS jack socket.

5. **02** - adjusts the gain for the line/instrument signal at Input 2. The gain control has a bi-colour LED ring as [2].

6. **INST/LINE** - Instrument/Line level switches for Input 2 – switches gain to suit instrument or line level signals.

7. **MONITOR** - main monitor output level control - sets the output level at the rear panel outputs and the front panel headphone output.

8. **USB LED** - illuminates when the unit is successfully connected to the computer via the USB connection.

9. **DIRECT MONITOR** - selects monitoring of input signals to be directly from inputs (On) or via DAW (Off).

10. 🕥 - ¼" TRS output jack - connect your stereo headphones here.

Back Panel



- 1. Kensington security lock secure your Scarlett to a suitable structure if desired.
- 2. **USB 2.0 port** Type B connector; connect to your laptop or computer with the USB cable supplied.
- 3. LINE OUTPUTS 2 x phono (RCA) sockets; +9 dBu max. output level.

PERFORMANCE SPECIFICATIONS

Clock source:	Internal		
ADC Dynamic Range	106 dB 'A-weighted' (all inputs). Converter chipset A/D dynamic range 114 dB		
DAC Dynamic Range	Range 106 dB 'A-weighted' (all outputs). Converter chipset D/A dynamic range 114 dB		
Supported Sample Rates	44.1 kHz, 48 kHz, 88.2 kHz, 96 kHz / 24 bit – operation with Mac and PC		
Microphone Input			
Frequency Response	20 Hz – 20 kHz +/-0.3 dB		
Gain Range	-4 dB to +46 dB		
THD	-97 dB		
Noise (EIN)	- 125 dB		
Dynamic Range	106 dB (A-weighted)		
Max. Input level	+4 dBu		
Instrument Input			
Frequency Response	20 Hz – 20 kHz +/-0.2dB		
Gain Range	-16 dB to +34 dB		
THD	-95 dB		
Noise (EIN)	-109 dB		
Dynamic Range	106 dB		
Max. Input level	+15 dBu		
Line Input			
Frequency Response	20 Hz – 20 kHz +/-0.2dB		
Gain Range	-21 dB to +29 dB		
THD	-93 dB		
Noise (EIN)	-98 dB		
Dynamic Range	106 dB		
Max. Input Level	+21 dBu		
Line Outputs			
THD	-100 dB		
Noise (Equivalent Output Noise) -92 dB, Noise = -97 dB (A-wt)			

Dynamic Range	106 dB
Max. Output Level	+9 dBu, unbalanced
Headphone Output	
THD	-100 dB
Dynamic Range	106 dB
Max. Output Level	+10 dBu (no load)

Physical and Electrical Characteristics

Analogue Input 1					
Connector	Balanced, via female 3-pin XLR on front panel				
Phantom power	48 V phantom power switch				
Analogue Input 2					
Connector	¼" (6.35 mm) jack socket on front panel Instrument mode: Unbalanced, 2-pole Line input mode: Balanced, 3-pole				
Analogue Outputs					
Main outputs	Unbalanced, via 2 x phono (RCA) sockets on rear panel				
Stereo headphone output	¼" TRS jack on front panel				
Headphone output power	100 mW into 50 ohms				
Output level control (main and headphone)	On front panel				
Direct Monitoring	Front panel switch; allows zero-latency monitoring of inputs				
Other I/O					
USB	1 x USB 2.0 Type B connector				
Front Panel Indicators					
Power	LED (green); indicates active USB connection				
Gain controls	Colour-coded LED rings: green (-24 dBFS) and red (0 dBFS)				
Weight and Dimensions					
W x H x D	150 mm x 45 mm x 100 mm				
Weight	0.5 kg				

TROUBLESHOOTING

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

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