swissonic

Audio 1

User Manual

Audio interface

Thomann GmbH
Hans-Thomann-Straße 1
96138 Burgebrach
Germany
Telephone: +49 (0) 9546 9223-0
Internet: www.thomann.de

14.03.2025, ID: 541119 (V2)

Table of contents


swissonic
1 IN 2
PEAK
MAX
MIC
LINE INST
Audio 1
PWR
PHONES

1 General information

This document contains important instructions for the safe operation of the product. Read and follow the safety instructions and all other instructions. Keep the document for future reference. Make sure that it is available to all those using the product. If you sell the product to another user, be sure that they also receive this document.

Our products and documentation are subject to a process of continuous development. They are therefore subject to change. Please refer to the latest version of the documentation, which is ready for download under *www.thomann.de*.

1.1 Symbols and signal words

In this section you will find an overview of the meaning of symbols and signal words that are used in this document.

Signal word	Meaning
DANGER!	This combination of symbol and signal word indicates an immediate dangerous situation that will result in death or serious injury if it is not avoided.
NOTICE!	This combination of symbol and signal word indicates a possible dangerous situation that can result in material and environmental damage if it is not avoided.

Warning signs	Type of danger
	Warning – danger zone.

2 Safety instructions

Intended use

This device serves to convert analogue audio signals to digital audio signals and vice versa. Use the device only as described in this user manual. Any other use or use under other operating conditions is considered to be improper and may result in personal injury or property damage. No liability will be assumed for damages resulting from improper use.

This device may be used only by persons with sufficient physical, sensorial, and intellectual abilities and having corresponding knowledge and experience. Other persons may use this device only if they are supervised or instructed by a person who is responsible for their safety.

Safety

DANGER!

Risk of injury and choking hazard for children!

Children can suffocate on packaging material and small parts. Children can injure themselves when handling the device. Never allow children to play with the packaging material and the device. Always store packaging material out of the reach of babies and small children. Always dispose of packaging material properly when it is not in use. Never allow children to use the device without supervision. Keep small parts away from children and make sure that the device does not shed any small parts (such knobs) that children could play with.

NOTICE!

Damage to the device if operated in unsuitable ambient conditions!

The device can be damaged if it is operated in unsuitable ambient conditions. Only operate the device indoors within the ambient conditions specified in the "Technical specifications" chapter of this user manual. Avoid operating it in environments with direct sunlight, heavy dirt and strong vibrations. Avoid operating it in environments with strong temperature fluctuations. If temperature fluctuations cannot be avoided (for example after transport in low outside temperatures), do not switch on the device immediately. Never subject the device to liquids or moisture. Never move the device to another location while it is in operation. In environments with increased dirt levels (for example due to dust, smoke, nicotine or mist): Have the device cleaned by qualified specialists at regular intervals to prevent damage due to overheating and other malfunctions.

NOTICE!

Danger of short circuit due to use of unbalanced XLR cables!

The device has a phantom voltage input. Using unbalanced cables with the phantom power may damage the device. Use only balanced cables. Before switching on phantom power, always make sure that no unbalanced wired cables are connected.

NOTICE!

Possible staining due to plasticiser in rubber feet!

The plasticiser in the rubber feet of this product may react with the coating of the floor, resulting in permanent dark stains after a while. If necessary, use a suitable mat or felt pads to prevent direct contact between the product's rubber feet and the floor.

3 Features

- Receiver for the digital transmission of audio signals
- High conversion rate
- Resolution: 24 bit
- Sampling rate: 192 kHz
- Analogue microphone input as an XLR socket
- Line/instrument input as a 6.35 mm jack socket with HI-Z switch
- 2 × analogue line output as 6.35 mm jack socket
- Headphone output as a 6.35 mm jack socket with volume control
- Smartphone connection as a 3.5-mm jack socket
- Direct monitoring options: Off / Mono / Stereo
- Selection of the recording source: Mix, CH1-2 or loopback
- Phantom power when condenser microphones are in use
- Master volume control
- Supports Windows® 7, Windows® 8 / 8.1 and Windows® 10 with ASIO 2.0, MME, WDM and DirectSound support
- Supports macOS® via native CoreAudio USB audio drivers from Apple® (no driver installation required)
- Power supply via USB-C port or USB-B port
- USB port for PC (2.0, type B), USB bus-powered (cable included)

4 Installation and starting up

Unpack and check carefully there is no transportation damage before using the unit. Keep the equipment packaging. To fully protect the product against vibration, dust and moisture during transportation or storage use the original packaging or your own packaging material suitable for transport or storage, respectively.

Create all connections while the device is off. Use the shortest possible high-quality cables for all connections. Take care when running the cables to prevent tripping hazards.

Turn off phantom power before connecting the device or changing the wiring of the device.

Only turn on phantom power when using a condenser microphone. Otherwise always leave the phantom power switched off.

4.1 System requirements

To enable optimal use of the device, use one of the following operating systems:

- PC: Windows® 7 / 8 / 8.1 or 10 (32 and 64 bit)
- Mac: macOS® X / macOS® 10.7 or above

The PC must have at least one free USB 2.0 port.

4.2 Hardware installation

The device is connected to a USB port on the computer with the supplied cable and is directly supplied with power.

4.3 Driver and software installation

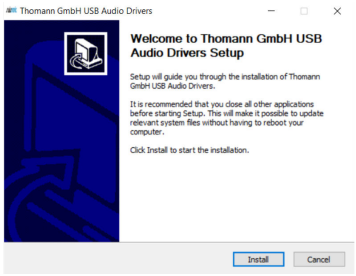
After connecting to the computer, the operating system will automatically detect the device and usually install the correct USB audio driver.

All applications that do not require a special, professional ASIO driver can already be used, e.g. B. DVD playback or DJ applications under Windows® or simple applications like Garageband on MacOS®.

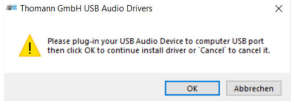
4.3.1 Installation under Windows®

To use the applications to their full extent, install the USB audio driver as follows:

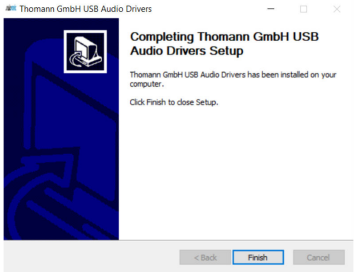
1. Disconnect the USB cable from the computer.
2. Download the driver from the product page of our homepage *www.thomann.de*.
3. Double-click *'Thomann GmbH USB Audio Drivers_setup_WHQL.exe'* to start the installation.
4. When the installation program starts, Windows displays a security warning. Click *[Weitere Informationen]* (more information) and then *[Trotzdem ausführen]* (run anyway) to allow the installation.



5. Click *[Install]* to start the installation. The USB audio driver data is copied to the computer.



6. At the end of the installation, when prompted, connect the USB device and click *[OK]* to continue with the installation or *[Abbrechen]* (cancel) to abort the installation.



7. Click *[Finish]* to complete the installation.

⇨ The device is operational.

4.3.2 Installation under macOS®

macOS® supports native CoreAudio USB audio drivers, so no installation is required.

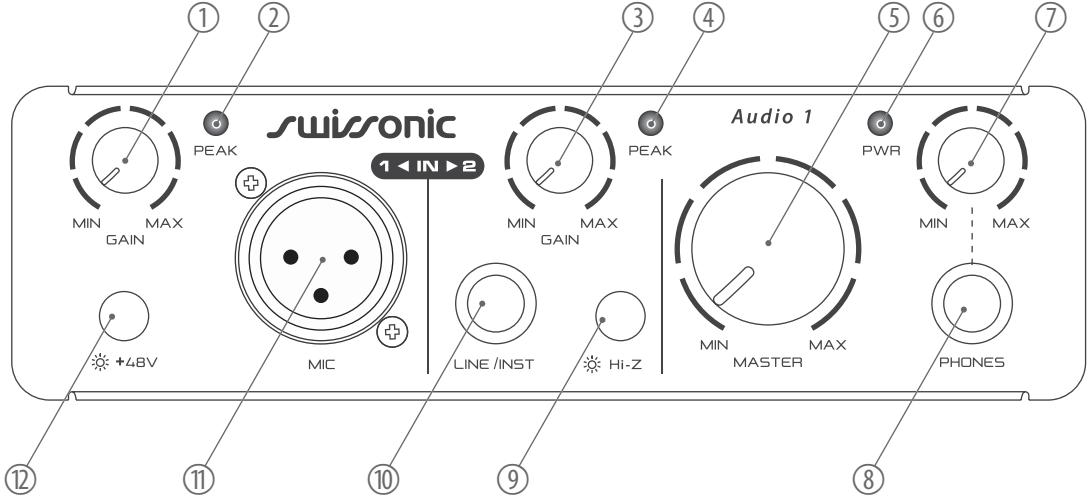
1. Connect the audio interface to the computer's USB port. Once connected, the USB audio driver will automatically detect the device and perform the necessary setup.

⇨ The device is operational.

2. Controlling some options of the device under macOS® is also possible via the macOS® Audio MIDI Configuration.

5 Connections and controls

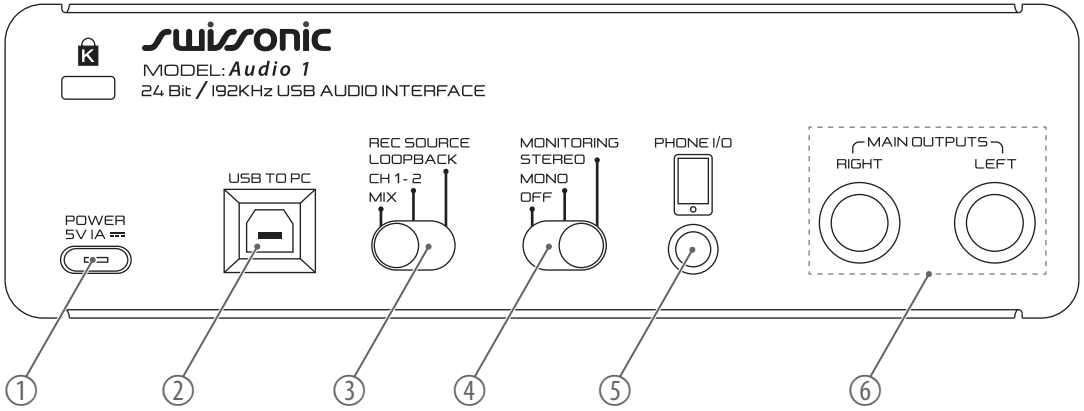
Front



1	*[GAIN] - [MIN] / [MAX]* | Setting the input level on the microphone input
2	*[PEAK]* | The LED lights up green when the input level on the microphone input is sufficient, and lights up red when the input level is too high. This setting can be corrected with the *[GAIN]*controller.

3	*[GAIN] - [MIN] / [MAX]* | Setting the input level on the line/instrument input
4	*[PEAK]* | The LED lights up green when the input level on the line/instrument input is sufficient, and lights up red when the input level is too high. This setting can be corrected with the *[GAIN]*controller.
5	*[MASTER] - [MIN] / [MAX]* | Control for adjusting the master volume
6	*[PWR]* | The LED lights up green when the device is powered via the USB-C port.
7	*[MIN] / [MAX]* | Control for adjusting the listening volume of the headphones
8	*[PHONES]* | Headphone output (stereo, 6.35 mm jack socket)
9	*[HI-Z]* | Pushbutton for setting the input sensitivity when an electric guitar or electric bass with a passive pickup is connected to *[LINE/INST]*
10	*[LINE/INST]* | Line/instrument input, e.g. for an electric guitar, electric bass or other audio source with line signal, designed as a 6.35 mm jack socket
11	*[MIC]* | Microphone input, designed as an XLR socket
12	*[+48 V]* | Switches the phantom power for the 48 V power supply for condenser microphones on (push button pressed) or off (push button not pressed) The phantom power will damage the device if unbalanced lines are connected. Only switch on phantom power if all connected cables are balanced. Turn off the phantom power when connecting a device to *[MIC]* that does not support phantom power. Switch off the phantom power when making changes to the cable connections. Turn the *[GAIN]* control of the input to minimum before turning on the phantom power.

Back



1	*[POWER] - [5V 1A]* | USB-C port for power supply
2	*[USB TO PC]* | USB-B port for power supply and for importing digital audio signals with the supplied cable
3	*[REC SOURCE]* | Switch for selecting the recording source
	[LOOPBACK] | Recording the signals received from the PC via the *[USB TO PC]* interface
	[CH1-2] | Recording the signals received via channels 1 and 2 (*[MIC]* / *[LINE/INST]*)
	[MIX] | Recording all incoming signals

	Turn off DAW monitoring when using the loopback or mix function, as it may cause unwanted feedback.
4	*[MONITORING]* | Switch for selecting the mode
	[STEREO] | Listening in stereo mode
	[MONO] | Listening in mono mode
	[OFF] | No direct monitoring
5	*[PHONE I/O]* | Connection for the smartphone headphone output, designed as a 3.5 mm jack socket (4-pin, stereo) The audio signals of the smartphone are output internally, the audio signals of the external microphone on the audio interface are transmitted to the smartphone via this socket. Signals received via this interface cannot be recorded. When connecting a PC and a smartphone for live broadcasting, set the *[REC SOURCE]* switch to *[CH1-2]* and the *[MONITORING]* switch to *[OFF]* to avoid interference. The volume of the signals transmitted via this connection can now be adjusted using the *[MASTER]* rotary control. If you are only connecting a smartphone for live broadcasting, set the *[REC SOURCE]* switch to *[CH1-2]* or *[MIX]* and the *[MONITORING]* switch to *[MONO]* or *[STEREO]* to allow normal transmission. The volume of the signals transmitted via this connection can now be adjusted using the *[MASTER]* rotary control.
6	*[MAIN OUTPUTS] - [RIGHT] / [LEFT]* | Line outputs for connecting an amplifier or an active speaker, designed as a 6.35 mm jack socket (mono, balanced) for the left and right channels

6 Technical specifications

Input connections	Mic	1 × XLR panel socket, 3-pin, balanced
		Input impedance: 33 kΩ…1 MΩ
	AUX	1 × USB port, 2.0, type B
	Power supply	1 × USB port, type C
	Phone I/O	1 × 3.5 mm jack socket, 4-pin, stereo
	Line/instrument	1 × 6.35 mm jack socket, 3-pin, mono, with Hi-Z switch
Output connections	Headphones	1 × 6.35 mm jack socket, 3-pin, stereo
		Impedance: ≥32 Ω
	Line	2 × 6.35 mm jack socket, mono, 3-pin, balanced
		Output impedance: <100 Ω
Frequency range		20 Hz…20 kHz ±1 dBu
Signal-to-noise ratio		>98 dB (A-weighted)
Total harmonic distortion (THD)		< 0.002% (A-weighted)
Dynamic range		106 dBu (A-weighted)
Gain		50 dB

USB port		USB 2.0, type B (compatible with 1.1)
Supported sampling rates		44.1 kHz, 48 kHz, 88.2 kHz, 96 kHz, 176.4 kHz, 192 kHz
Resolution		16 bit, 24 bit
Phantom power		48 V
Power supply		5 V ⎓ / 1 A via USB-C
Dimensions (W × H × D)		145 mm × 44 mm × 110 mm
Weight		0.54 kg
Ambient conditions	Temperature range	0 °C…40 °C
	Relative humidity	20%…80% (non-condensing)

Further information

S-PDIF interfaces	No
ADAT interfaces	No
AES / EBU interfaces	No
MADI connections	no
Ethernet	No
MIDI interface	No
USB bus-powered	Yes
Including Power supply	No
USB version	2.0
Monitoring without latency	Yes

7 Plug and connection assignment

Introduction

This chapter will help you select the right cables and plugs to connect your valuable equipment in such a way that a perfect sound experience is ensured.

Please note these advices, because especially in 'Sound & Light' caution is indicated: Even if a plug fits into the socket, an incorrect connection may result in a destroyed power amp, a short circuit or 'just' in poor transmission quality!

Balanced and unbalanced transmission

Unbalanced transmission is mainly used in semi-professional environment and in hifi use. Instrument cables with two conductors (one core plus shielding) are typical representatives of the unbalanced transmission. One conductor is ground and shielding while the signal is transmitted through the core.

Unbalanced transmission is susceptible to electromagnetic interference, especially at low levels, such as microphone signals and when using long cables.

In a professional environment, therefore, the balanced transmission is preferred, because this enables an undisturbed transmission of signals over long distances. In addition to the conductors 'Ground' and 'Signal', in a balanced transmission a second core is added. This also transfers the signal, but phase-shifted by 180°.

Since the interference affects both cores equally, by subtracting the phase-shifted signals, the interfering signal is completely neutralized. The result is a pure signal without any noise interference.

1/4" TS phone plug (mono, unbalanced)

1	Signal
2	Ground, shielding

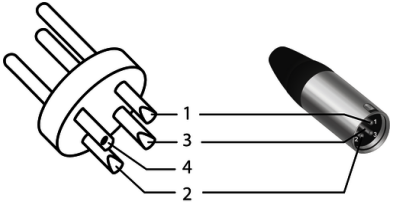
1/4" TRS phone plug (mono, balanced)

1	Signal (in phase, +)
2	Signal (out of phase, –)
3	Ground

Three-pole 1/8" mini phone jack (stereo, unbalanced)

1	Signal (left)
2	Signal (right)
3	Ground, shielding

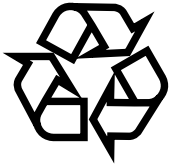
XLR plug (balanced)



1	Ground, shielding
2	Signal (in phase, +)
3	Signal (out of phase, –)
4	Shielding on plug housing (option)

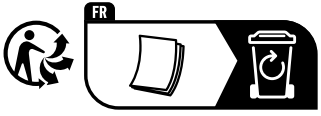
8 Protecting the environment

Disposal of the packing material



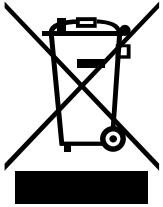
Environmentally friendly materials have been chosen for the packaging. These materials can be sent for normal recycling. Ensure that plastic bags, packaging, etc. are disposed of in the proper manner.

Do not dispose of these materials with your normal household waste, but make sure that they are collected for recycling. Please follow the instructions and markings on the packaging.



Observe the disposal note regarding documentation in France.

Disposal of your old device



This product is subject to the European Waste Electrical and Electronic Equipment Directive (WEEE) as amended.

Do not dispose of your old device with your normal household waste; instead, deliver it for controlled disposal by an approved waste disposal firm or through your local waste facility. If in doubt, consult your local waste management facility. You can also return the device to a retailer if they offer to take the device back for free or if they are legally obliged to do so. When disposing of the device, comply with the rules and regulations that apply in your country. You can also return your old device to Thomann GmbH at no charge. Check the current conditions on *www.thomann.de*.

Proper disposal protects the environment as well as the health of your fellow human beings. This is because the proper handling of old devices negates the potential negative effects of hazardous substances, and because it conserves resources by recycling them.

Also note that waste avoidance is a valuable contribution to environmental protection. Repairing a device or passing it on to another user is an ecologically valuable alternative to disposal. For example, use the classified ads of Thomann GmbH.

If your old device contains personal data, delete those data before disposing of it.