



swi/sonic

SUB10  
active speaker

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## Table of contents

<b>1</b>	<b>General information</b> .....	<b>4</b>
	1.1 Further information.....	5
	1.2 Notational conventions.....	6
	1.3 Symbols and signal words.....	6
<b>2</b>	<b>Safety instructions</b> .....	<b>8</b>
<b>3</b>	<b>Features</b> .....	<b>13</b>
<b>4</b>	<b>Installation</b> .....	<b>14</b>
<b>5</b>	<b>Connections and operating elements</b> .....	<b>15</b>
<b>6</b>	<b>Technical specifications</b> .....	<b>19</b>
<b>7</b>	<b>Plug and connection assignment</b> .....	<b>21</b>
<b>8</b>	<b>Troubleshooting</b> .....	<b>24</b>
<b>9</b>	<b>Protecting the environment</b> .....	<b>26</b>

# 1 General information

This user manual contains important information on the safe operation of the device. Read and follow all safety notes and all instructions. Save this manual for future reference. Make sure that it is available to all persons using this device. If you sell the device to another user, be sure that they also receive this manual.

Our products and user manuals are subject to a process of continuous development. We therefore reserve the right to make changes without notice. Please refer to the latest version of the user manual which is ready for download under [www.thomann.de](http://www.thomann.de).

## 1.1 Further information

On our website ([www.thomann.de](http://www.thomann.de)) you will find lots of further information and details on the following points:

Download	This manual is also available as PDF file for you to download.
Keyword search	Use the search function in the electronic version to find the topics of interest for you quickly.
Online guides	Our online guides provide detailed information on technical basics and terms.
Personal consultation	For personal consultation please contact our technical hotline.
Service	If you have any problems with the device the customer service will gladly assist you.

## 1.2 Notational conventions

This manual uses the following notational conventions:

### Letterings

The letterings for connectors and controls are marked by square brackets and italics.

**Examples:** *[VOLUME]* control, *[Mono]* button.

## 1.3 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 manual.

Signal word	Meaning
<b>DANGER!</b>	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.
<b>CAUTION!</b>	This combination of symbol and signal word indicates a possible dangerous situation that can result in minor injury if it is not avoided.
<b>NOTICE!</b>	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 – high-voltage.
	Warning – danger zone.

## 2 Safety instructions

### Intended use

This device is primarily designed for monitoring during audio recording and mixing in the studio. 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!**

#### **Danger for children**

Ensure that plastic bags, packaging, etc. are disposed of properly and are not within reach of babies and young children. Choking hazard!

Ensure that children do not detach any small parts (e.g. knobs or the like) from the unit. They could swallow the pieces and choke!

Never let children unattended use electrical devices.





**DANGER!**

**Electric shock caused by high voltages inside**

Within the device there are areas where high voltages may be present. Never remove any covers.

There are no user-serviceable parts inside.

Do not use the device if covers, protectors or optical components are missing or damaged.



**DANGER!**

**Electric shock caused by short-circuit**

Always use proper ready-made insulated mains cabling (power cord) with a protective contact plug. Do not modify the mains cable or the plug. Failure to do so could result in electric shock/death or fire. If in doubt, seek advice from a registered electrician.



### **CAUTION!**

#### **Possible hearing damage**

The device can produce volume levels that may cause temporary or permanent hearing impairment. Over an extended period of time, even levels that seem to be uncritical can cause hearing damage.

Decrease the volume level immediately if you experience ringing in your ears or hearing impairment. If this is not possible, keep a greater distance or use sufficient ear protectors.



### **NOTICE!**

#### **Risk of fire**

Do not block areas of ventilation. Do not install the device near any direct heat source. Keep the device away from naked flames.



**NOTICE!**

**Operating conditions**

This device has been designed for indoor use only. To prevent damage, never expose the device to any liquid or moisture. Avoid direct sunlight, heavy dirt, and strong vibrations.



**NOTICE!**

**Power supply**

Before connecting the device, ensure that the input voltage (AC outlet) matches the voltage rating of the device and that the AC outlet is protected by a residual current circuit breaker. Failure to do so could result in damage to the device and possibly injure the user.

Unplug the device before electrical storms occur and when it is unused for long periods of time to reduce the risk of electric shock or fire.



### **NOTICE!**

#### **Possible damage due to installation of a wrong fuse**

The use of different types of fuses can cause serious damage to the unit. Fire hazard!

Only fuses of the same type may be used.



### **NOTICE!**

#### **Possible staining**

The plasticiser contained in the rubber feet of this product may possibly react with the coating of your parquet, linoleum, laminate or PVC floor and after some time cause permanent dark stains.

In case of doubt, do not put the rubber feet directly on the floor, but use felt-pad floor protectors or a carpet.

## 3 Features

Special features of the device:

- 10" woofer
- XLR and 1/4" phone inputs
- 1/4" phone outputs for external active speakers
- Class AB amplifier
- Low-pass filter with adjustable crossover frequency
- Housing made of vinyl-coated MDF
- Protection circuits against radio interference, over temperature, on / off switching noise and to limit output current
- Standby function

## 4 Installation

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.



### **NOTICE!**

#### **Possible property damage by magnetic fields**

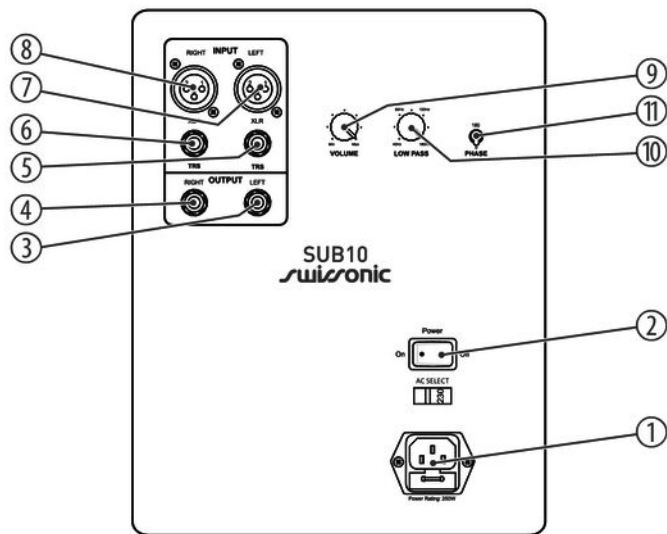
Loudspeakers produce a static magnetic field. Therefore, maintain an appropriate distance to devices that can be adversely affected or damaged by an external magnetic field.

## 5 Connections and operating elements

### **Control LED on the front panel**

If the speaker box receives no signal for 10 to 15 minutes, it switches to standby mode. The control LED on the front panel then lights red. As soon as the speaker box receives a signal, it switches back to normal mode and the LED will turn blue.

## Rear panel





1	IEC chassis plug with fuse holder Connection for the power supply.
2	<i>[POWER]</i> Mains switch. Turns the device on and off.
3, 4	<i>[OUTPUT RIGHT], [OUTPUT LEFT]</i> Connections for external active speakers, designed as 1/4" phone sockets.
5, 6	<i>[INPUT]</i> Signal inputs, designed as 1/4" phone sockets.
7, 8	<i>[INPUT]</i> Signal inputs, designed as XLR chassis sockets.
9	<i>[VOLUME]</i> Volume control.

10 *[LOW PASS]*

Control for stepless crossover frequency adjustment from 40 Hz to 180 Hz.

11 *[PHASE]*

Phasing switch. Shifts the phase of the subwoofer signal by 180 °, if necessary. This avoids unwanted cancellation effects in combination with other speakers.

## 6 Technical specifications

Speaker	10" woofer	
Input connections	Signal input	2 × 1/4" phone socket (balanced)
		2 × XLR panel socket (balanced)
	Voltage supply	IEC chassis plug C14
Input impedance	20 kΩ (balanced), 10 kΩ (unbalanced)	
Output connections	Signal output	2 × 1/4" phone socket (balanced and unbalanced usable)
Output power	RMS: 200 W	
	Peak: 320 W	
Frequency range	30 Hz ... 200 Hz	
Crossover frequency	40 Hz ... 180 Hz	
Signal-to-noise ratio	> 100 dB (typical, A-weighted)	

## Technical specifications

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Sound pressure level (SPL), max.	93 dB	
Power consumption	340 W	
Operating supply voltage	AC 230 V ~ , 50 Hz	
Fuse	5 mm × 20 mm, 2 A, 250 V, slow-blow	
Dimensions (W × H × D)	320 mm × 381 mm × 385 mm	
Weight	16.7 kg	
Ambient conditions	Temperature range	0 °C...40 °C
	Relative humidity	50 %, non-condensing

## 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°.

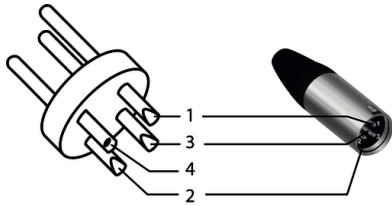
Since the interference affects both cores equally, by subtracting the phase-shifted signals, the interfering signal is completely neutralized. The result is a pure signal without any noise interference.

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



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

**XLR plug (balanced)**



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

## 8 Troubleshooting

In the following we list a few common problems that may occur during operation. We give you some suggestions for easy troubleshooting:

Symptom	Remedy
The unit does not work	Check the power supply terminal and the position of the power switch.
No sound	1. Check the position of the volume control. 2. Check the correct connection of the signal cables. 3. Check the signal cables and / or the signal source. 4. Try using another signal cable.
Distortion is audible	Excessive input signal. Reduce the signal level.



Symptom	Remedy
Noise and hum occur	<ol style="list-style-type: none"> <li data-bbox="890 244 1517 288">1. Make sure that only balanced cables are used.</li> <li data-bbox="890 288 1517 381">2. Make sure that all audio devices are connected to the same power circuit and thus share the same ground reference.</li> </ol>

If the procedures recommended above do not succeed, please contact our Service Center. You can find the contact information at [www.thomann.de](http://www.thomann.de).

## 9 Protecting the environment

### Disposal of the packaging material



For the transport and protective packaging, environmentally friendly materials have been chosen that can be supplied to normal recycling.

Ensure that plastic bags, packaging, etc. are properly disposed of.

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

### Disposal of your old device



This product is subject to the European Waste Electrical and Electronic Equipment Directive (WEEE) in its currently valid version. Do not dispose with your normal household waste.

Dispose of this device through an approved waste disposal firm or through your local waste facility. When discarding the device, comply with the rules and regulations that apply in your country. If in doubt, consult your local waste disposal facility.



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