



swi/sonic

SUB10  
active subwoofer

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# 1 General information

This manual contains important instructions for the safe operation of the unit. Read and follow the safety instructions and all other instructions. Keep the manual for future reference. Make sure that it is available to all those using the device. If you sell the unit please make sure that the buyer also receives this manual.

Our products are subject to a process of continuous development. Thus, they are subject to change.

## 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.



**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 cover the device nor any ventilation slots. Do not place 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.

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

Establish all connections as long as the unit is switched off. Use the shortest possible high-quality cables for all connections.



### **NOTICE!**

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

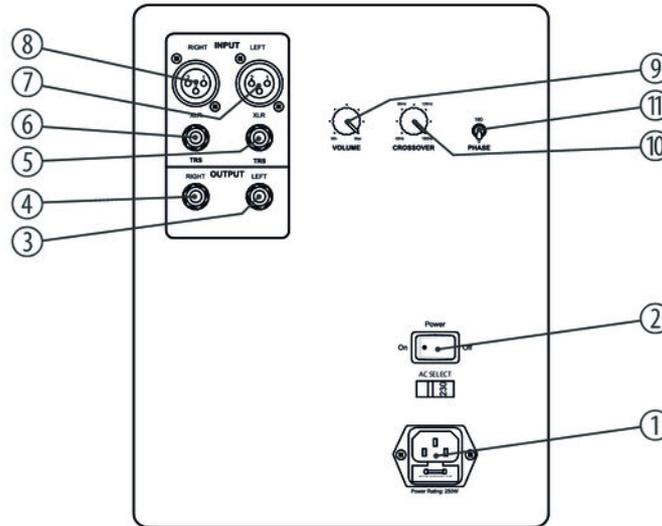
Loudspeakers produce a static magnetic field. Therefore, maintain an appropriate distance to devices that can be adversely affected or damaged by an external magnetic field.

## 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



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1	IEC chassis plug with fuse holder Connection for the power supply. If the fuse blows, replace it with a new fuse of the same type. You must first disconnect the device from 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	<i>[CROSSOVER]</i> Control for stepless crossover frequency adjustment from 40 Hz to 180 Hz.
11	<i>[PHASE]</i> 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

Speakers	10" woofer
Frequency response	30 Hz ... 200 Hz
Inputs	2 × 1/4" phone sockets (balanced), 2 × XLR chassis sockets (balanced)
Outputs	2 × 1/4" phone sockets (balanced and unbalanced usable)
Output power	200 W
Maximum sound pressure level in 1 m distance	93 dB
Signal-to-noise ratio	> 100 dB (typical, A-weighted)
Input impedance	20 k $\Omega$ (balanced), 10 k $\Omega$ (unbalanced)
Input sensitivity	85 V pink noise for 93 dB SPL in 1 m distance (volume control @ 100 %)
Operating supply voltage	AC 230 V ~ , 50 Hz
Dimensions (W × H × D)	320 mm × 381 mm × 385 mm
Weight	16.7 kg

## 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°.

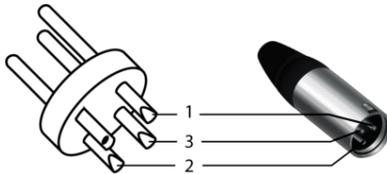
Since the interference affects both cores equally, by subtracting the phase-shifted signals, the interfering signal is completely neutralized. The result is a pure signal without any noise interference.

### 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, -)

## 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	<ol style="list-style-type: none"> <li>1. Check the position of the volume control.</li> <li>2. Check the correct connection of the signal cables.</li> <li>3. Check the signal cables and / or the signal source.</li> <li>4. Try using another signal cable.</li> </ol>
Distortion is audible	Excessive input signal. Reduce the signal level.

Symptom	Remedy
Noise and hum occur	<ol style="list-style-type: none"><li>1. Make sure that only balanced cables are used.</li><li>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). 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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