SYRINCS

S4WA, S5WA
User manual

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22.03.2016
Issue 1

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1 General information about this manual

This user 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.

Signal words used

All precautions in this manual are clearly highlighted. The following signal words are used for precautions:

DANGER	This warns of dangers that can result in severe injuries or death if the instructions are not followed.
WARNING	This warns of dangers that can result in severe injuries or death and/or cause considerable material damage if the instructions are not followed.
CAUTION	This warns of dangers that can result in reversible injuries and/or considerable material damage if the instructions are not followed.
NOTICE	This warns of dangers that can result to faults during operation and/or considerable material damage. Environmental damage may also occur if the instructions are not followed.

Symbols used

	General warning of a dangerous location
	Notice

2 For your safety

Intended use

This device is designed as a PA system. 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 instructions

DANGER

Danger for children

Ensure that plastic bags, packaging, etc. are properly disposed of and are not in the 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 product. They could swallow the pieces and choke!

→ Never let children play unattended with the electrical devices.

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

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.

3 Features

Special features of this active subwoofer:

- XLR/1/4" jack combo-socket and RCA installation socket for signal input
- XLR chassis connector for signal output
- Integrated digital amplifier with sound processor (DSP)
- Setting options and display for delay time, crossover frequency and volume
- Switchable phase
- Power supply via locking PowerCON input
- Multiplex housing
- Pole mount (M20)

Optionally available accessories:

- Transport casters

4 Installation

Unpack the device and check carefully that 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.

CAUTION

Risk of injury due to heavy weight

Due to the heavy weight of the device, at least two persons are required for transport and installation.

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.

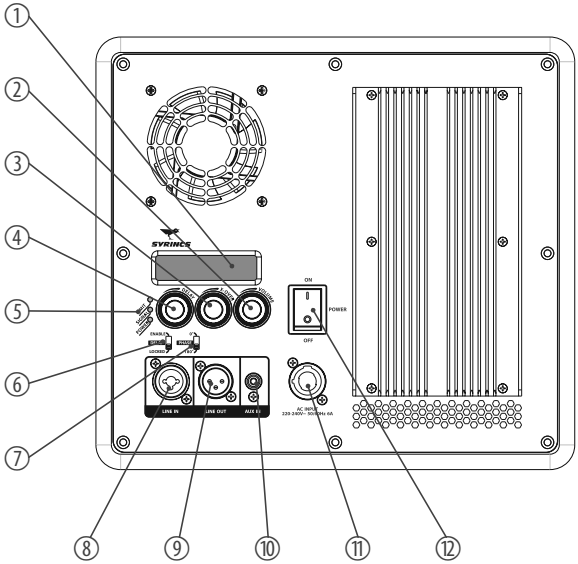
We recommend you to set up the speakers in a way, that their sound signals can reach the audience unobstructedly. It will often be helpful to mount the speakers on tripods. Thus, the sound will be evenly spread with maximum range throughout the audience area.

Always use high grade cables to connect your equipment. Otherwise you won't reach maximum sound quality.

For optimum results both impedance and power rating of the speaker must match the requirements of the amplifier / input signal. Consider the technical specifications of the speakers connected. The overall impedance of the connected loudspeakers shall not be less than the minimum output impedance of the amp. The amps max. RMS output power should be 50 % above the power handling capacity of the connected speakers.

If you notice distortion during operation, either the amp or the speaker is overloaded. This may permanently damage the amp or the speaker. Always reduce the volume as soon as you notice distortion.

5 Connections and controls



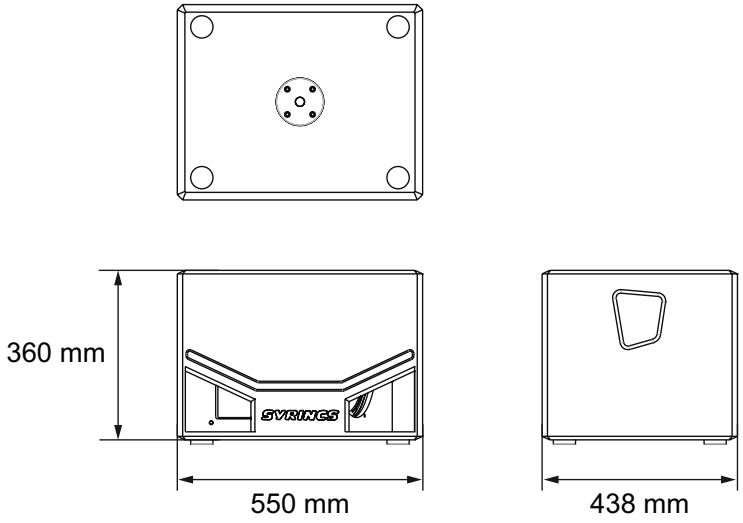
1	Display. Shows the set values for delay time, crossover frequency and volume.
2	*VOLUME* Volume control.
3	*X-OVER* Control for adjusting crossover frequency.
4	*DELAY* Control for adjusting delay time. This allows you to balance out time differences when speakers are arranged at an offset.

5	Control LEDs – *LIMIT*: The red LED indicates that the limiter has been triggered. – *SIGNAL*: The green LED indicates that a signal is present at the input. – *POWER*: The green LED lights up when the device is turned on.
6	*DELAY* Switch for locking delay time setting. In the "enable" position, the delay time can be set using the *DELAY* (2) control. In the "disable" position, the last delay time set is maintained.
7	*PHASE* Phasing switch. Shifts the phase of the subwoofer signal by 180 °, if necessary. This avoids unwanted cancellation effects in combination with other speakers.
8	*LINE IN* Line signal input, designed as XLR / 1/4" combo socket.
9	*LINE OUT* Line output for connecting further speakers, designed as XLR chassis plug.
10	*AUX IN* Signal input for additional audio devices like MP3 or CD players.
11	*AC INPUT* Power supply input powerCON (NAC3FA).
12	*POWER* Main switch. Turns the device on and off.

6 Technical specifications

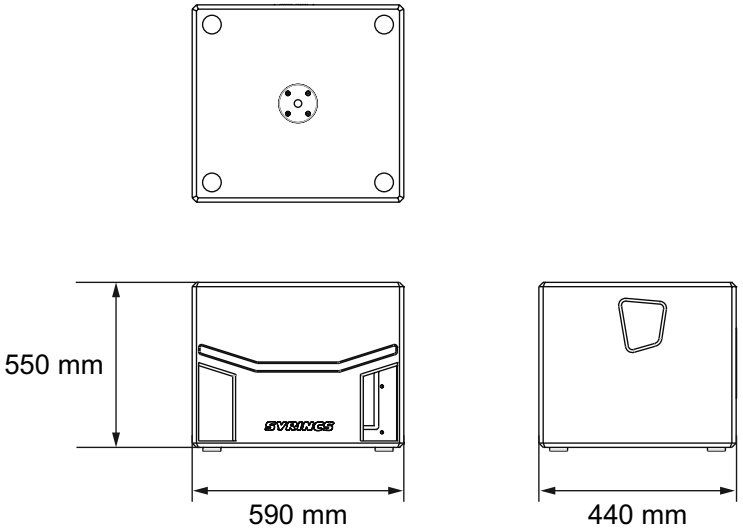
S4WA

Configuration	12-inch-neodymium-woofer
Power handling	1000 W (RMS)
Maximal sound pressure	125 dB (1 m) 131 dB (peak)
Frequency range	50 Hz … 120 Hz (–3 dB)
Dimensions (W × H × D)	550 mm × 360 mm × 438 mm
Weight	23 kg

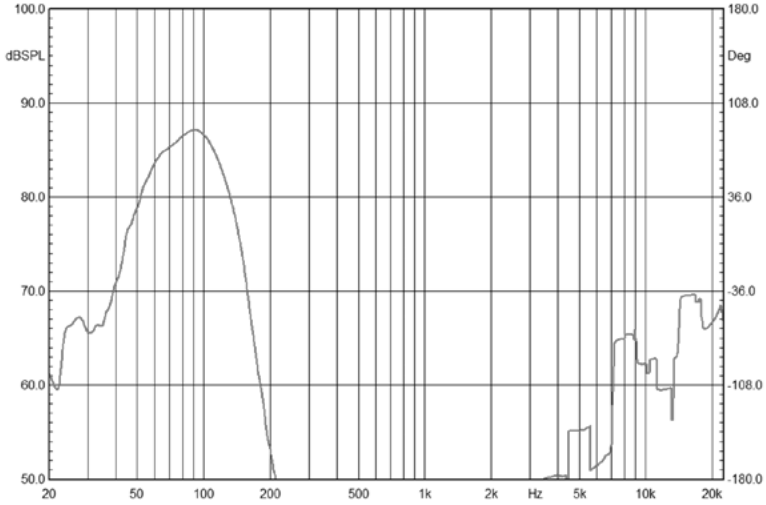


S5WA

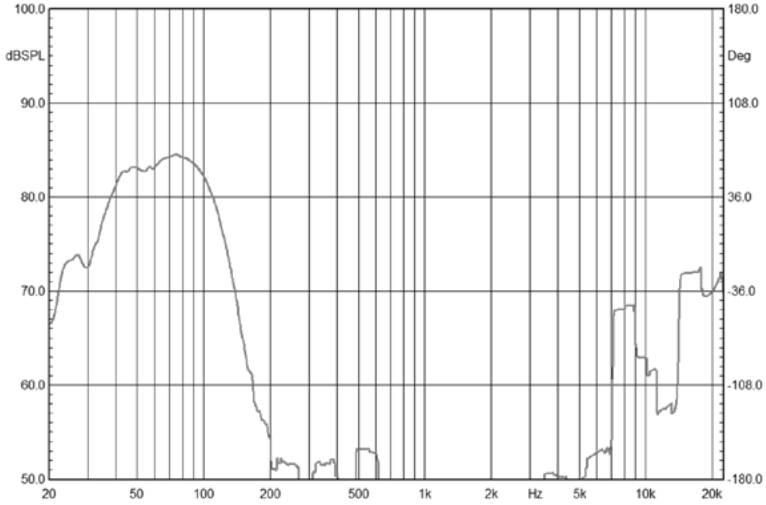
Configuration	15-inch-neodymium-woofer
Power handling	1000 W (RMS)
Maximal sound pressure	126 dB (1 m) 132 dB (peak)
Frequency range	50 Hz … 120 Hz (–3 dB)
Dimensions (W × H × D)	590 mm × 4400 mm × 550 mm
Weight	30 kg



Frequency response S4WA



Frequency response S5WA



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 follow these tips, because special care is required when dealing with sound and light: 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

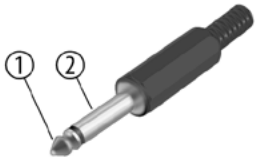
Unbalanced transmission is mainly used in semi-professional environment and in Hi-Fi use. Instrument cables with two conductors (one core plus shielding) are typical representatives of the unbalanced transmission. One conductor is ground and shielding while the signal is transmitted through the core.

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°.

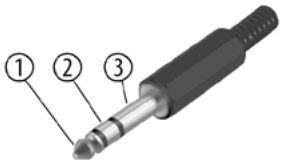
Since the interference affects both cores equally, by subtracting the phase-shifted signals, the interfering signal is completely neutralized. The result is a pure signal without any noise interference.

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



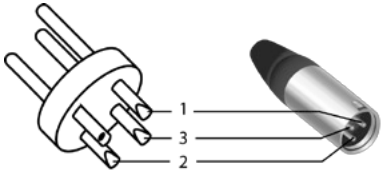
1	Signal
2	Ground

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



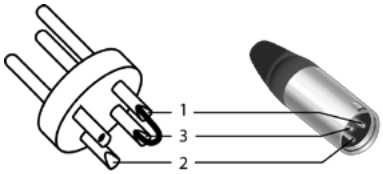
1	Signal (in phase, +)
2	Signal (out of phase, –)
3	Ground

XLR connector (balanced)



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

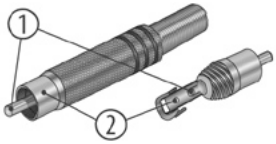
XLR connector (unbalanced)



1	Ground, shielding
2	Signal
3	Jumpered with pin 1

RCA connections

The figure and the table show the pin assignment of an RCA connector.



1	Signal
2	Ground

8 Protecting the environment

Packaging

For the 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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