

swi**sonic**

SA 33
mixer amplifier



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

15.02.2016, ID: 277393

Table of contents

1	General notes	4
2	Safety instructions	6
3	Features	12
4	Installation and starting up	13
	4.1 Pin assignment.....	14
	4.2 Screw terminal bar.....	16
5	Connections and operating elements	18
6	Technical specifications	23
7	Cleaning	25
8	Protecting the environment	26



1 General notes

This user manual contains important information on 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 other users, be sure that they also receive this manual.

Our products are subject to a process of continuous development. We therefore reserve the right to make changes without notice.

Symbols and signal words

This section provides an overview of the symbols and signal words used in this user manual.

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.
CAUTION!	This combination of symbol and signal word indicates a possible dangerous situation that can result in minor 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 – high-voltage.
	Warning – danger zone.

2 Safety instructions

Intended use

This device is intended to be used for amplification, mixing and playback of signals from musical instruments and microphones. 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 high voltages at the power amplifier output

The output voltages of modern high-performance amplifiers may result in death or serious injury.

Never touch the bare ends of loudspeaker cables when the amplifier is on.



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

With loudspeakers or headphones connected, the device can produce volume levels that may cause temporary or permanent hearing impairment.

Do not operate the device permanently at a high volume level. Decrease the volume level immediately if you experience ringing in your ears or hearing impairment.



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.



NOTICE!

Possible damages by using an external battery

Improper handling may cause an arc or short circuit between the bare ends of a live power cable to an external battery. This can destroy the battery and there is a fire hazard!

If you use an external battery for power supply, connect the power cord to the screw terminal on the rear panel first. Then connect the free ends of the cables to the battery poles. Pay attention to the polarity marking! To disconnect the battery, unscrew the cables on the battery first, then on the terminals of the device.

Also pay attention to the safety instructions of the battery manufacturer.

3 Features

- Two front panel microphone inputs
- AUX/PHONO input
- Input for an external preamp
- Output for an external power amp
- Screw terminals for the connection of speakers and off-grid voltage supply

4 Installation and starting up

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.

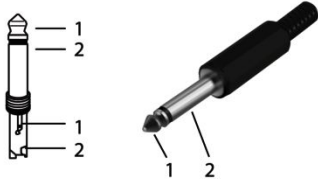
Establish all connections as long as the unit is switched off. Use the shortest possible high-quality cables for all connections.

4.1 Pin assignment

Phone sockets for signal inputs

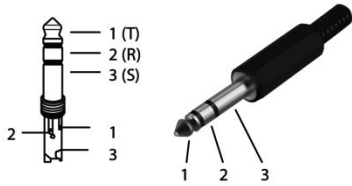
Drawings and tables indicate the pin assignment of 1/4" phone plugs to be used.

Unbalanced wiring of a TS plug:



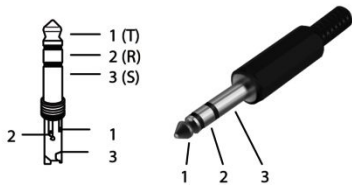
1	Signal
2	Ground, shielding

Unbalanced wiring of a TRS plug:



1	Signal
2, 3	Ground, shielding

Balanced wiring of a TRS plug:

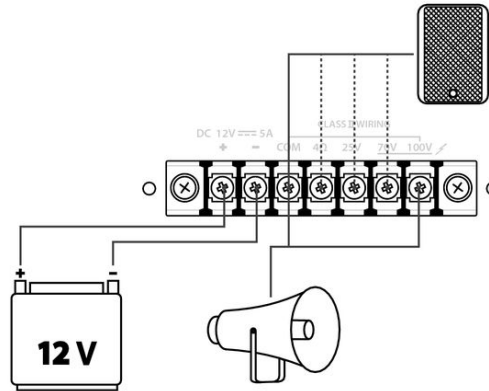


1	Positive signal (+)
2	Negative signal (-)
3	Ground, shielding

4.2 Screw terminal bar

All speakers and the battery for the off-grid voltage supply are connected via a screw terminal bar on the rear panel of the unit.

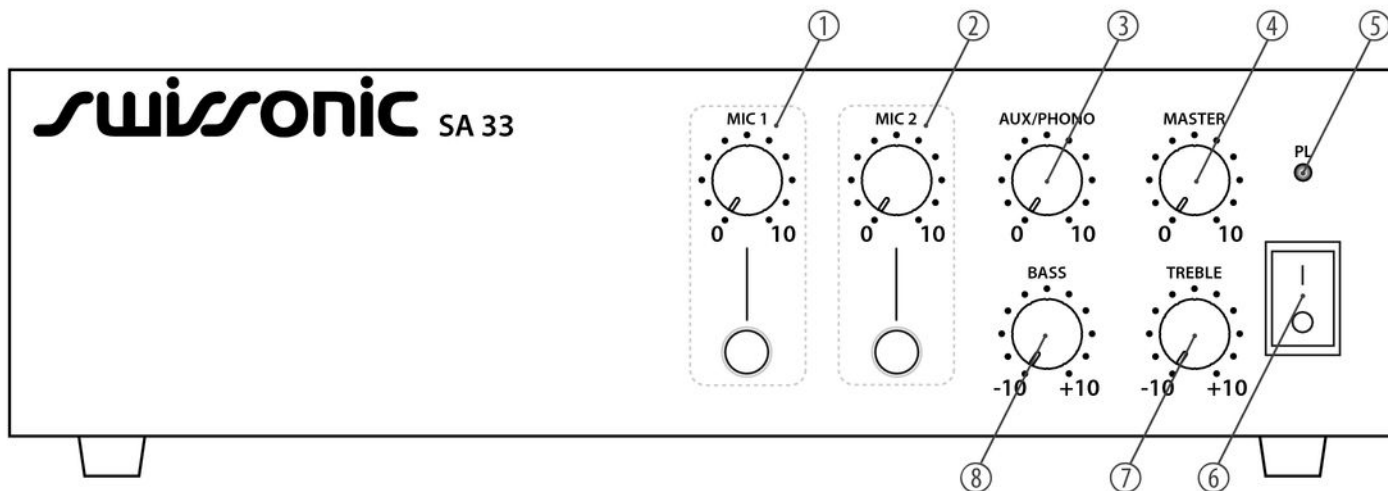
First, remove the cover of the screw terminal using a suitable screwdriver. Loosen the terminal screws required (see wiring diagram) and attach the desired cables with the screwdriver.



Finally, check all cable connections for tightness and replace the cover of the screw terminal on the unit.

5 Connections and operating elements

Front panel



1 / 2	MIC 1 / 2 Microphone inputs 1 and 2 (1/4" phone socket) with volume control. MIC 1 signal has priority, so the MIC 1 signal superimposes the MIC 2 signal.
3	AUX/PHONO Volume control for the AUX/PHONO input on the rear panel of the unit.
4	MASTER Volume control for the signal output of the mixer amplifier.
5	PL LED Lights up when the device is switched on and operational.
6	Mains switch to turn the device on and off.

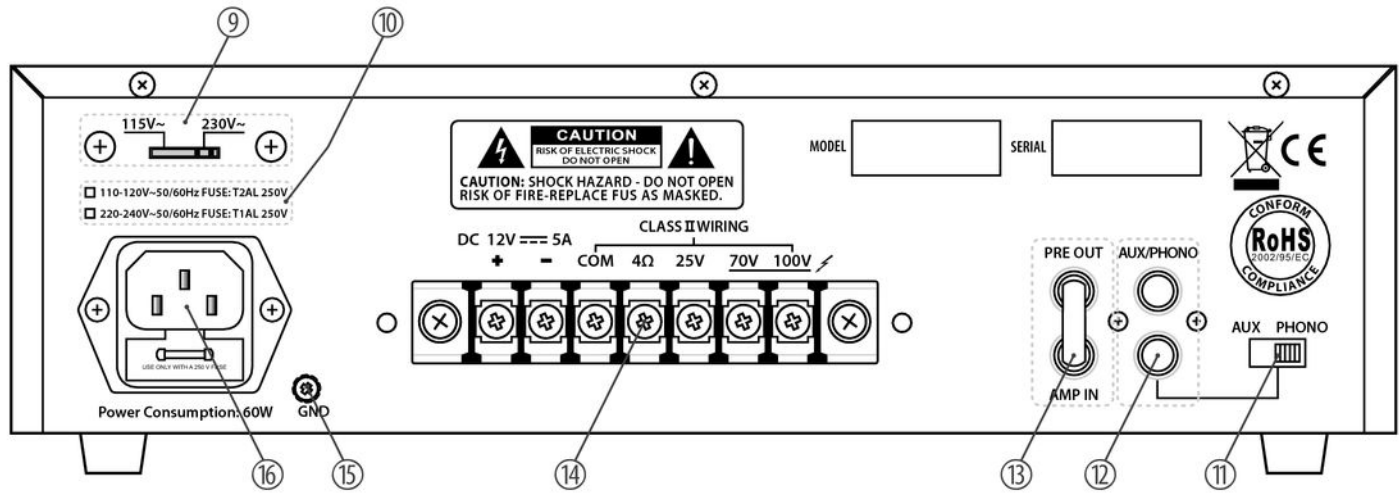
7 **TREBLE**

Control to increase or attenuate the high frequencies. Turn this knob from the middle position clockwise or counter-clockwise to increase or attenuate the high frequencies by up to ± 10 dB.

8 **BASS**

Control to increase or attenuate the low frequencies. Turn this knob from the middle position clockwise or counter-clockwise to increase or attenuate the low frequencies by up to ± 10 dB.

Rear panel



SA 33

9	Operating voltage selector (115 V or 230 V, factory preset).
10	Indication of the factory preset operating voltage of the device (115 V or 230 V).
11	AUX — PHONO Signal level selector for the AUX/PHONO input.
12	AUX/PHONO RCA input sockets to connect an external audio device. Use the AUX — PHONO switch to adjust the signal level.
13	PRE OUT — AMP IN These two RCA sockets are bridged by default. If required, you can use this loop to connect an equalizer or compressor. You can also feed the signal from the PRE OUT socket into an external power amp for further amplification.
14	Screw terminal bar to connect an external power supply and the speaker system(s), see ↗ Chapter 4.2 'Screw terminal bar' on page 16.
15	GND Connection screw for a grounding cable.
16	IEC chassis connector with fuse holder for operating voltage supply.

6 Technical specifications

Output power (RMS)	30 W (mains operation) 23 W (battery operation)
Frequency response	80 Hz ... 18 kHz (± 3 dB)
Input sensitivity	MIC: -50 dB (unbalanced) AUX: -20 dB PHONO: -50 dB
Tone stack	Treble: ± 10 dB, 10 kHz Bass: ± 10 dB, 100 Hz
THD	$\leq 0,5$ %
Signal-to-noise ratio	MIC: ≥ 65 dB AUX: ≥ 75 dB PHONO: ≥ 55 dB

Technical specifications

Output impedance	COM, 4 Ω
Output voltage	COM, 25 V, 70 V, 100 V
Operating voltage supply	115/230 V \sim 50/60 Hz 12 V $\overline{\text{=}}$
Power consumption	60 W (mains operation) 45 W (battery operation)
Fuse	115 V: 5 mm x 20 mm, 2 A, 250 V, slow blow 230 V: 5 mm x 20 mm, 1 A, 250 V, slow blow
Dimensions (W x H x D)	280 mm x 75 mm x 190 mm
Weight	4.5 kg

7 Cleaning

Fan grids

The fan grids of the device must be cleaned on a regular basis to remove dust and dirt. Before cleaning, switch off the device and disconnect AC-powered devices from the mains. Use a lint-free damp cloth for cleaning. Never use solvents or alcohol for cleaning.

8 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.



