



4Zone zone mixer

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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 (<u>www.thomann.de</u>) 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
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
A	Warning – high-voltage.
$\triangle$	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.

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

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 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.



## 3 Features

- 3 microphone/line inputs
- 1 microphone input (with priority) on the front panel
- 4 line outs
- AUX input
- Phantom power switchable
- Priority switch
- Built-in media player for USB devices or memory cards
- Built-in FM receiver with external antenna connector
- Prepared for tethered volume remote control



## 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.

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.

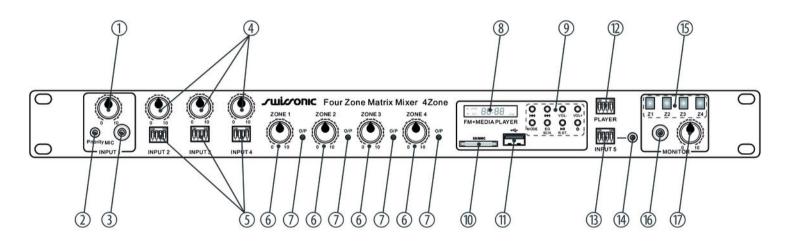
### **Rack mounting**

The unit has been designed for rack mounting in a standard 19-inch rack; it occupies one rack unit.



## 5 Connections and controls

## **Front panel**



1	Volume control for the microphone connected to input 1.
2	[Priority]
	Push button to turn on the priority function. When the switch is pressed, the level of all other channels is lowered when a signal is present at input 1.
3	[MIC]
	Microphone input, designed as 1/4" phone socket.
4	[VOL]
	Level control for inputs 2, 3 and 4.
5	DIP switches for assigning inputs 2, 3 and 4 to outputs 1, 2, 3 and 4.
6	[ZONE 1], [ZONE 2], [ZONE 3], [ZONE 4]
	Volume controls for channels 1, 2, 3 and 4.
7	[O/P]
	Signal indicators for channels 1, 2, 3 and 4.



8 Media player display.

9 Media player control panel.

### **◄◄,** ▶▶

In MP3 mode: Skip to the previous or next track.

In Radio mode: Station scan up or down.

To decrease or increase the volume.

[0 | 1]

Turns the media player on or off.

#### ►II

In MP3 mode: Play / pause button to start / stop playback.

In Radio mode: Calling up a stored station.



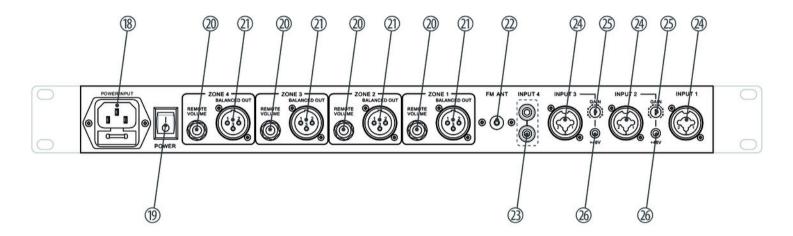
	[EQ]
	In MP3 mode: Selection of five different sound characteristics.
	In Radio mode: Station scan.
	[MODE]
	Switches between playback from memory card, from a connected USB device or radio operation.
10	[SD/MMC]
	Memory card slot.
11	- <del></del>
	USB port for devices like MP3 players.
12	[PLAYER]
	DIP switch for assigning the media player to outputs 1, 2, 3 and 4.
13	[INPUT 5]
	DIP switch for assigning input 5 to outputs 1, 2, 3 and 4.
14	Input 5: Connection for devices like CD players or tuners, designed as 3.5 mm phone socket.



15	[Z1], [Z2], [Z3], [Z4]
	Pushbutton for switching the signal of the sound zone (ZONE 1 to 4) to the monitor output.
16	Monitor output for headphones, designed as 1/4" phone socket.
17	Volume control for the Monitor output.



## **Rear panel**





18	[POWER INPUT]
	IEC chassis plug for operating voltage supply with fuse holder. Before connecting to the power supply, check that the voltage selector on the bottom of the unit is in the correct position.
	Should the fuse have blown, disconnect the unit from the power supply and replace the fuse with a new fuse of the same type.
19	[POWER]
	Mains switch to turn the device on and off.
20	[REMOTE VOLUME]
	Connection for tethered remote volume control of the respective zone (not included). For adjustment, you can switch a potentiometer (10 k $\Omega$ 100 k $\Omega$ ) between pins 1 and 2 of a 1/4" phone plug.
21	[BALANCED OUT]
	XLR output sockets of the sound zone (ZONE 1 to 4) of the zone mixer.
22	[FM ANT]
	External FM antenna connector.



## Connections and controls

23	[INPUT 4]
	RCA input sockets for connecting an external audio device (line level).
24	[INPUT 1], [INPUT 2], [INPUT 3]
	Signal inputs 1 to 3, designed as lockable balanced XLR / 1/4" combo sockets.
25	[GAIN]
	Individual gain controls for signal inputs 2 and 3.
26	[+48V]
	Pushbutton for turning on phantom power for the voltage supply of condenser microphones, which are connected at signal input 2 and 3.
	The phantom power leads to damage to the device if unbalanced cables are connected. Only switch on phantom power while exclusively balanced cables are connected.



# 6 Technical specifications

Frequency range	20 Hz 20 kHz (±3 dB)
Total harmonic distortion (THD)	< 0.3 %
Input sensitivity	INPUT 1, 2, 3: MIC: -50 dB, LINE: -15 dB
	INPUT 4: -20 dB
	INPUT 5: –15 dB
Signal-to-noise ratio	MIC: ≥65 dB
	AUX/LINE: ≥80 dB
Output voltage	11 V
Operating supply voltage	AC 110/230 V ~ 50/60 Hz
Power consumption	9 W
Fuse	110 V: 5 mm × 20 mm, 1.6 A, 250 V, slow-blow
	230 V: 5 mm × 20 mm, 800 mA, 250 V, slow-blow

# Technical specifications

Dimensions (W $\times$ H $\times$ D)	482 mm × 44 mm × 200 mm
Weight	4.4 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" 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

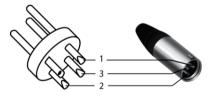


# Three-pole 1/8" mini phone jack (stereo, unbalanced)



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

## XLR plug (balanced)



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

#### **RCA** connection



Drawing and table indicate the pin assignment of an RCA plug.

1	Signal
2	Ground, shielding

# 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.







