



MM-3 active studio monitor

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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 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.



#### **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!

### **External power supply**

The device is powered by an external power supply. Before connecting the external power supply, 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 the user.

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



## 3 Features

- 2-way system: 3 1/2" woofer and 3/4" tweeter
- 1/4" and RCA inputs

The package includes one active and one passive speaker box, one power adapter and one suitable connector cable.



## 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.



#### 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.





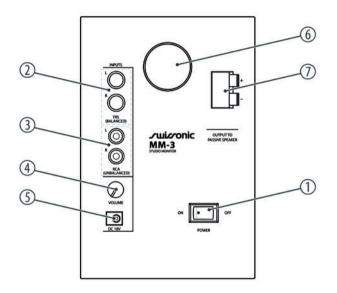
#### NOTICE!

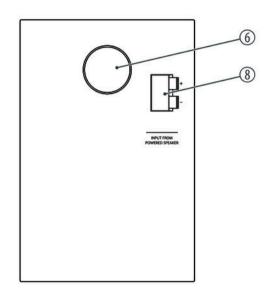
#### Use of stands

When mounting the device onto a stand, ensure that the stand is in a safe and stable position and that the weight of the device does not exceed the maximum permissible load capacity of the stand.



## 5 Connections and controls







## Connections and controls

1	[POWER]
	Main switch. Turns the device on and off
5	[DC 18V]
	Connector for the supplied power supply adapter
2	[TRS (BALANCED)]
	Connection for balanced input signal, designed as 1/4" phone sockets
3	[RCA (UNBALANCED)]
	Connection for balanced input signal, designed as RCA sockets
4	[VOLUME]
	Volume control
6	Bass-reflex opening



7	[OUTPUT TO PASSIVE SPEAKER]
	Cable clamps to connect the passive speaker box
8	[INPUT FROM POWERED SPEAKER]
	Cable clamps to connect the active speaker box

# 6 Technical specifications

Speaker	3 1/2" woofer and 3/4" tweeter
Frequency range	75 Hz 20 kHz
Crossover frequency	2,7 kHz
Inputs	1/4" phone socket (balanced), RCA (unbalanced)
Output power	2 × 30 W (peak)
	2 × 25 W (RMS)
Maximum sound pressure level in 1 m distance	$88 dB \pm dB$
Signal-to-noise ratio	95 dB (typical, A-weighted)
Input impedance	8 kΩ
Input sensitivity	190 mV RMS (–14,4 dBv), 1 m, 90 dB, 1 kHz
Voltage supply	Power adapter (18 V, 2500 mA, centre positive)



Dimensions (B $\times$ H $\times$ T, per box)	140 mm × 200 mm × 165 mm
Weight	Active speaker box: 2.3 kg
	Passive speaker box: 2.1 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 'iust' 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

### **RCA** connection



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

1	Signal
2	Ground, shielding



# 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.
Once the music gets loud, the high frequencies slump	Maybe overheating is imminent. Provide better ventilation or reduce the volume.
Distortion is audible	Excessive input signal. Reduce the signal level.



Symptom	Remedy
Noise and hum occur	1. Make sure that only balanced cables are used.
	2. Make sure that all audio devices are connected to the same power circuit and thus share the same ground reference.

If the procedures recommended above do not succeed, please contact our Service Center. You can find the contact information at <u>www.thomann.de</u>.



## 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.









