

**the**  
**box** **pro**

Achat 110 MA  
Active speaker

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

02.03.2021, ID: 230511 (V3)

# Table of contents

<b>1</b>	<b>General information</b> .....	<b>4</b>
	1.1 Further information.....	5
	1.2 Notational conventions.....	6
	1.3 Symbols and signal words.....	6
<b>2</b>	<b>Safety instructions</b> .....	<b>9</b>
<b>3</b>	<b>Features</b> .....	<b>14</b>
<b>4</b>	<b>Installation</b> .....	<b>15</b>
	4.1 Tips on handling speakers.....	16
	4.2 Installation.....	17
	4.3 Connections.....	21
<b>5</b>	<b>Connections and operating elements</b> .....	<b>22</b>
<b>6</b>	<b>Technical specifications</b> .....	<b>24</b>
<b>7</b>	<b>Plug and connection assignment</b> .....	<b>29</b>
<b>8</b>	<b>Protecting the environment</b> .....	<b>32</b>

# 1 General information

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

Our products and user manuals are subject to a process of continuous development. We therefore reserve the right to make changes without notice. Please refer to the latest version of the user manual which is ready for download under [www.thomann.de](http://www.thomann.de).

## 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>WARNING!</b>	This combination of symbol and signal word indicates a possible dangerous situation that can 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 – suspended load.

Warning signs	Type of danger
	Warning – danger zone.

## 2 Safety instructions

### Intended use

This device is designed as a PA system. The device is designed for professional use only and is not suitable for use in households. 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.



#### **WARNING!**

##### **Consequences of faulty mounting**

Faulty mounting may lead to lethal injuries or property damage.

Please ensure that the norms and regulations valid in your country are always observed when mounting and operating your product. In Germany: BGV C1, "Event and Production Sites for Stage Presentations". Only expertly trained staff may mount speakers.



**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.

Only operate the device within the ambient conditions specified in the chapter 'Technical specifications' of this user manual. Avoid heavy temperature fluctuations and do not switch the device on immediately after it was exposed to temperature fluctuations (for example after transport at low outside temperatures).

Dust and dirt inside can damage the unit. When operated in harmful ambient conditions (dust, smoke, nicotine, fog, etc.), the unit should be maintained by qualified service personnel at regular intervals to prevent overheating and other malfunction.



**NOTICE!**

**Possible damage due to installation of a wrong fuse**

The use of different types of fuses can cause serious damage to the unit. Fire hazard!

Only fuses of the same type may be used.

### 3 Features

Special features of this device:

- Connections: XLR/1/4" combo socket for signal input, XLR mounting plug for signal output
- Volume control
- Switchable low-cut filter to eliminate low frequencies
- Power supply switch
- 36 mm pole flange on the bottom
- M10 rigging points
- Black textured coating
- Optionally available accessories:
  - Vertical bracket the box pro Achat 110M U-bracket (item no. 258813: black)
  - Safety rope Stairville Safety 80 cm / 4 mm / 15 kg (item no. 328043)

## 4 Installation

Unpack and check carefully 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. Take care when running the cables to prevent tripping hazards.

## 4.1 Tips on handling speakers

We recommend you to set up the speakers in a way, that the 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 cable to connect your equipment. Otherwise you won't reach maximum sound quality.

If you notice distortion during operation, the active speaker is overloaded. This may permanently damage the device. Always reduce the volume as soon as you hear distortion.

## 4.2 Installation



### **WARNING!**

#### **Consequences of faulty mounting**

Faulty mounting may lead to lethal injuries or property damage.

Please ensure that the norms and regulations valid in your country are always observed when mounting and operating your product. In Germany: BGV C1, "Event and Production Sites for Stage Presentations". Only expertly trained staff may mount speakers.



### **NOTICE!**

#### **Possible staining**

The plasticiser contained in the rubber feet of this product may possibly react with the coating of your parquet, linoleum, laminate or PVC floor and after some time cause permanent dark stains.

In case of doubt, do not put the rubber feet directly on the floor, but use felt-pad floor protectors or a carpet.



### **NOTICE!**

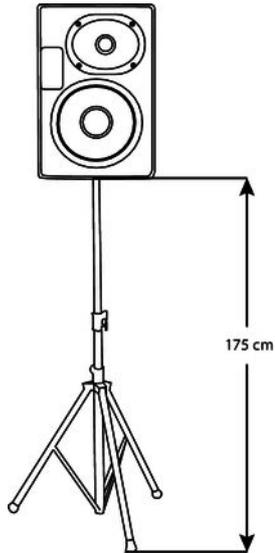
#### **Possible property damage by magnetic fields**

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.

### **Mounting options**

You can install the device standing or hanging upside down. When in use, the device must be mounted at a solid surface or clamped to an approved truss.

## Standing mounting



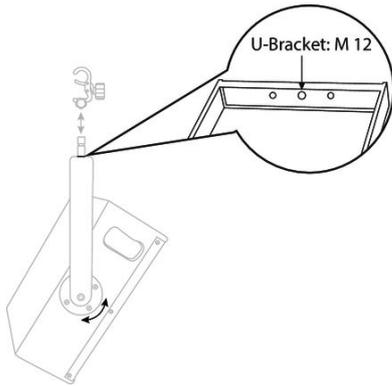
### NOTICE!

#### 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.

We recommend that the speaker be set up so that the lower edge is located 175 cm above the floor.

## Suspended mounting



### **WARNING!**

#### **Risk of injury caused by falling objects**

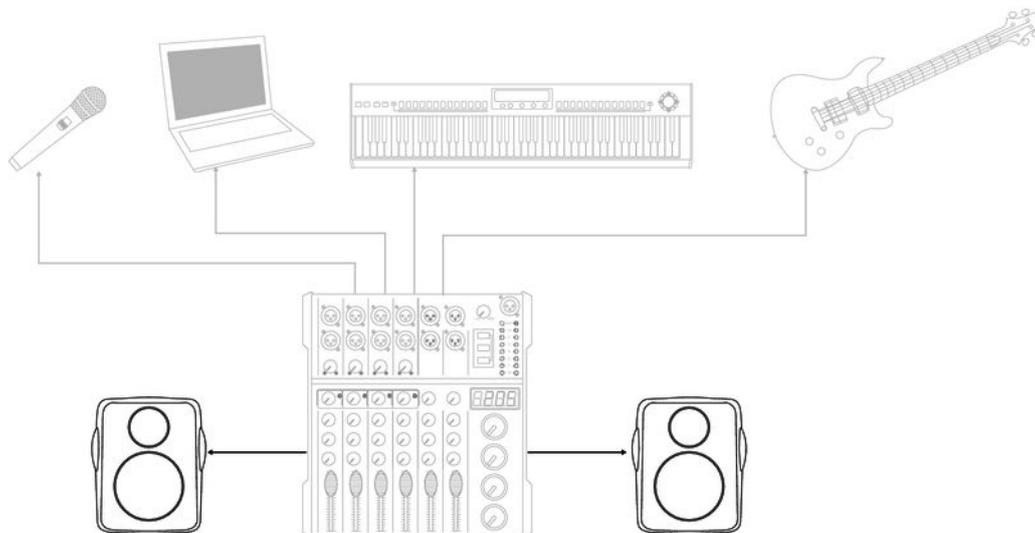
Portable PA systems should be secured from falling using two independently working devices, for example, safety ropes.

The load capacity of trusses or other fixtures must be sufficient for the intended number of devices. The personnel in charge of mounting the suspension system are responsible for ensuring that the systems are set up and used safely.

Always work from a stable platform whenever installing, moving or servicing the unit. Block access under the work area. Only persons directly involved in set-up and removal are authorized to be in the assembly area.

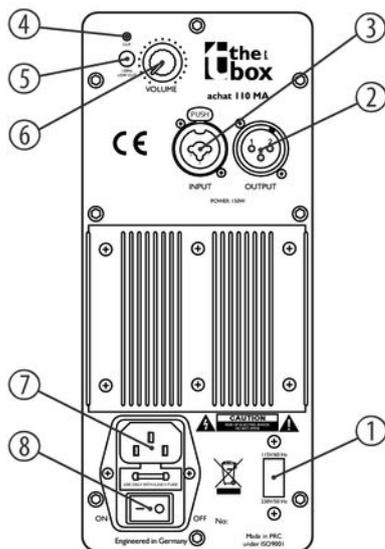
## 4.3 Connections

### Installation methods



Achat 110 MA

## 5 Connections and operating elements



1 [115 V / 230 V] ~ (AC)

Mains voltage selector. Make sure this selector is set correctly for the actual supply voltage at the operating location. Use this switch only when the device is switched off. Use a suitable screwdriver.

2 [OUTPUT]

Signal line output, designed as XLR socket.

3 [INPUT]

Line signal input, designed as XLR / 1/4" combo socket.

4 [CLIP]

Indicates overload (clipping). In this case, the level of the line input signal is too high.

5 [120Hz LOW CUT]

Use this switch to attenuate the low frequencies below 120 Hz.

6	<i>[VOLUME]</i> Volume control.
7	<i>[Connection for the power supply]</i> IEC chassis plug with fuse holder for the power supply.
8	<i>[ON/OFF]</i> Use this switch (power switch) to turn the unit on and off.

## 6 Technical specifications

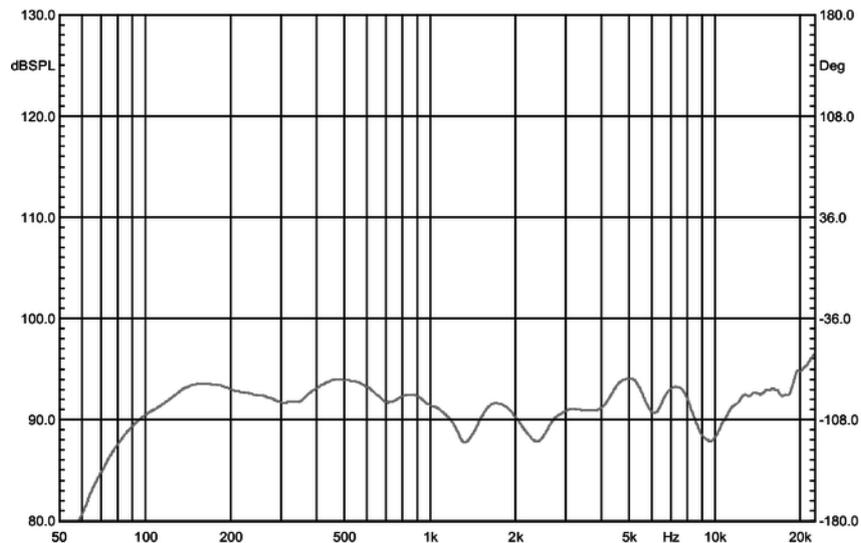
Speaker	1 × 10" woofer, 1" mid-range transducer with 3" voice coil	
System	2-way full-range active speaker with built-in crossover	
Input connections	Line	XLR / 1/4" combo jack
	Power supply	IEC chassis plug C14
Input impedance	20 kΩ (balanced), 10 kΩ (unbalanced)	
Input sensitivity	Line: 775 mV	
	Mic: 20 mV	
Output connections	Line	XLR chassis plug
Output power	140 W (RMS)	
Frequency range	70 Hz...20 kHz	
Dispersion angle (H × V)	90° × 60°	
Distorsion	Line: < 3%	

Sound pressure level (SPL), max.	119 dB	
Power consumption	13,5 W	
Supply voltage	115 / 230 V~, 50/60 Hz	
Fuse	5 mm × 20 mm, 2 A, 250 V, slow-blow	
Dimensions (W × H × D)	300 mm × 290 mm × 450 mm	
Weight	14 kg	
Ambient conditions	Temperature range	0 °C...40 °C
	Relative humidity	20 %...80 % (non condensing)

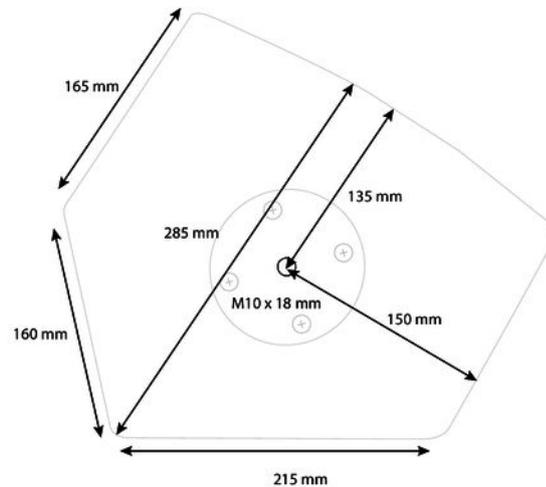
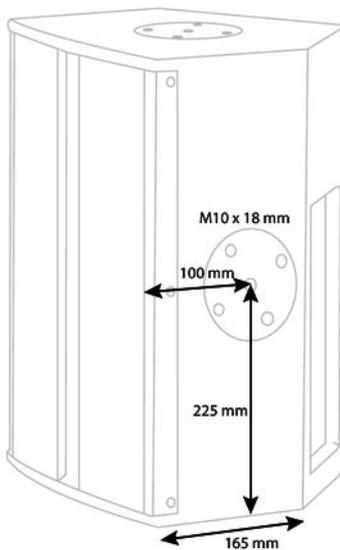
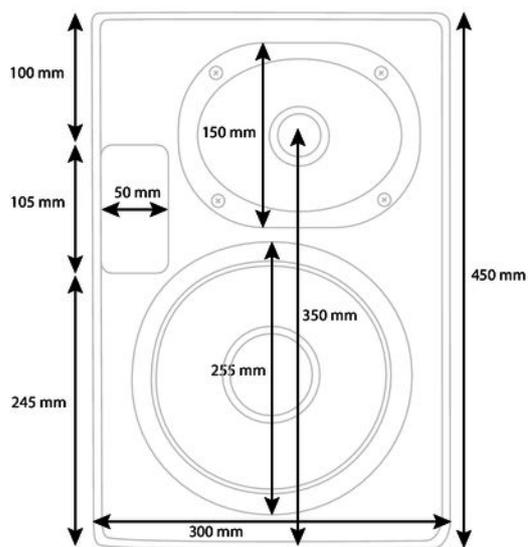
### Further information

Design	standard
Ways	Two-way
Monitor wedge	yes
Simultaneous inputs	1
Mic Preamps	0
EQ per channel	no
Bluetooth play	no
USB player	no
Low Cut	yes
Fan	no
Housing	Wood
Colour	Black

Frequency response



Achat 110 MA



## 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)



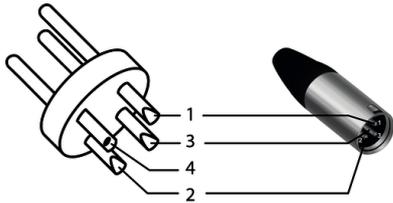
1	Signal
2	Ground, shielding

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



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

**XLR plug (balanced)**



1	Ground, shielding
2	Signal (in phase, +)
3	Signal (out of phase, -)
4	Shielding on plug housing (option)

## 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) 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.

Achat 110 MA





