

the
box **pro**

Achat 110 MA

active
full-range speaker

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

27.08.2015, ID: 230511 (V2)

Table of contents

1	General information	4
	1.1 Further information.....	5
	1.2 Notational conventions.....	6
	1.3 Symbols and signal words.....	6
2	Features	8
3	Installation	9
	3.1 Tips on handling speakers.....	10
	3.2 Installation.....	11
	3.3 Connections.....	15
4	Connections and operating elements	16
5	Technical specifications	18
6	Plug and connection assignment	22
7	Protecting the environment	25

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 (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
WARNING!	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.
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 – suspended load.

2 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)

3 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.

3.1 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.

3.2 Installation



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.



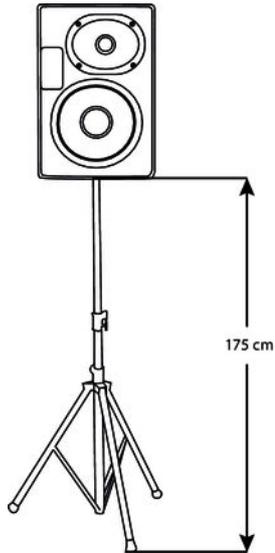
Comply with regulations

When installing and operating, make sure to follow the standards and regulations that apply in your country. In Germany: BGV C1 "Staging and Production Facilities for the Entertainment Industry". Only trained, qualified personnel may hang up speakers.

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



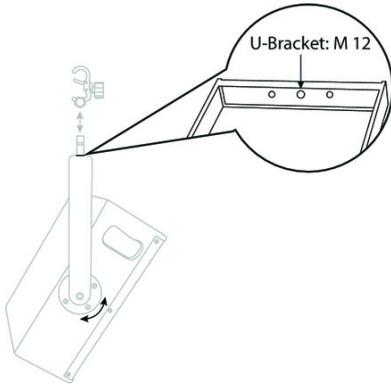
NOTICE!

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

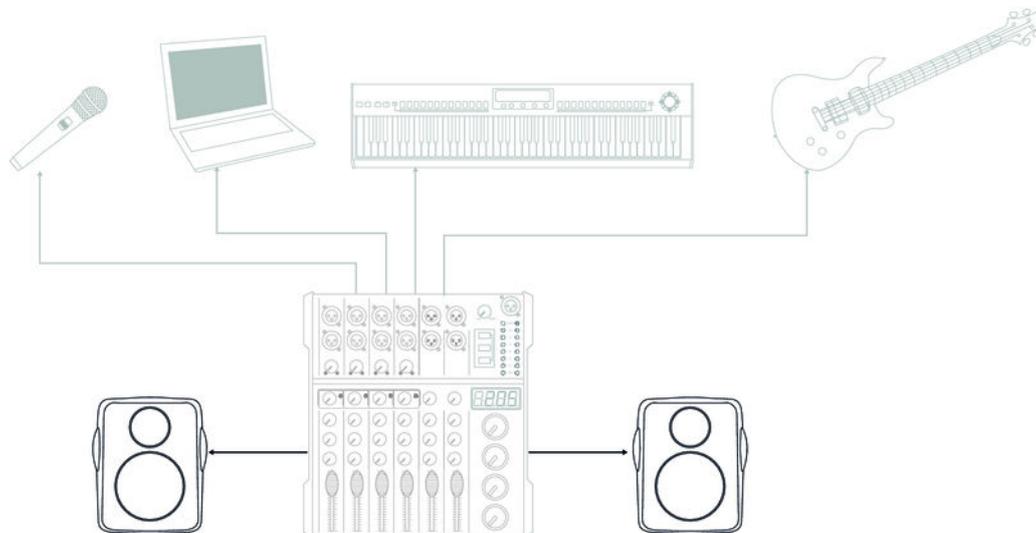
Portable PA systems should be secured from falling using two independently working devices, for example, safety ropes.

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.

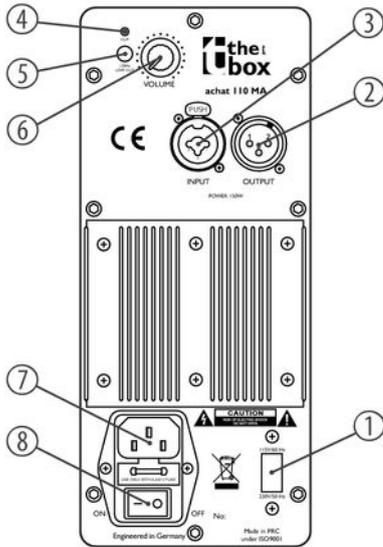
3.3 Connections

Installation methods



Achat 110 MA

4 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.

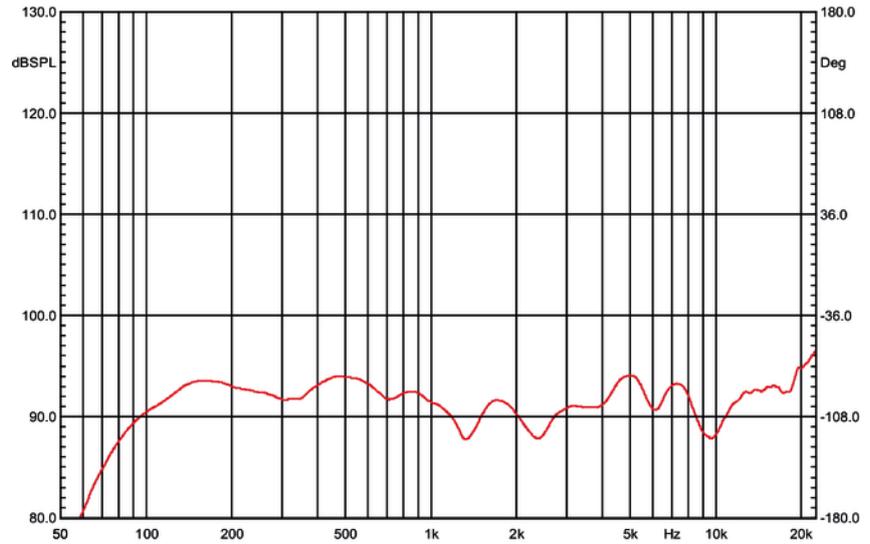
6	<i>[VOLUME]</i> Volume control.
7	<i>[Connection for the power supply]</i> IEC chassis plug with fuse holder for the power supply. If the fuse blows, replace it with a new fuse of the same type. You must first disconnect the device from the power supply.
8	<i>[ON/OFF]</i> Use this switch (power switch) to turn the unit on and off.

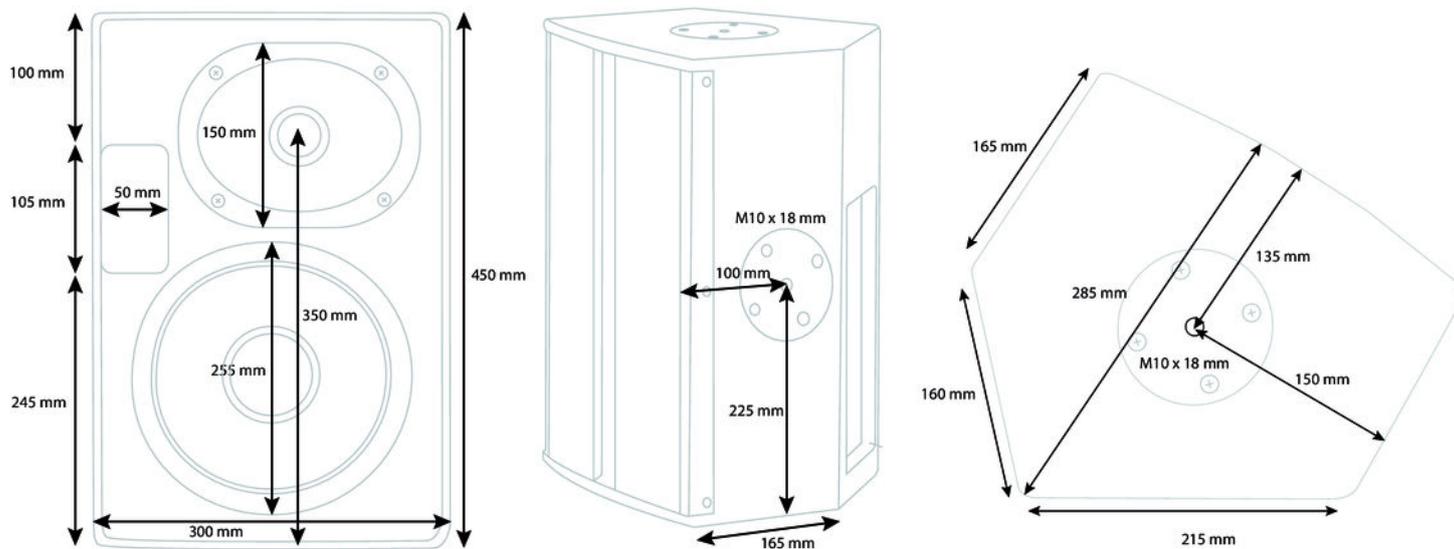
5 Technical specifications

Input	XLR/1/4" combo socket
Input impedance	20 k Ω (balanced), 10 k Ω (unbalanced)
Input sensitivity	Line: 775 mV
	Mic: 20 mV
Output	XLR chassis plug
Frequency response	70 Hz...20 kHz
System	2-way full-range active speaker with built-in crossover
Configuration	1 \times 10" woofer, 1" mid-range transducer with 3" voice coil
Dispersion angle (H \times V)	90° \times 60°
Distortion	Line: < 3%
Output power	140 W (RMS)
Maximum SPL	119 dB

Operating supply voltage	115 / 230 V ~, 50/60 Hz
Dimensions (W × H × D)	300 mm × 290 mm × 450 mm
Weight	13.5 kg

Frequency response





Achat 110 MA

6 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)



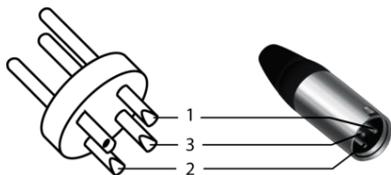
1	Signal
2	Ground, shielding

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, -)

7 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.



