



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

Achat 112 A  
active speaker

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# 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 – high-voltage.

Warning signs	Type of danger
 A yellow triangular warning sign with a black border. Inside the triangle, there is a black silhouette of a person standing next to a rectangular object (representing a load) that is suspended by a hook or cable.	Warning – suspended load.
 A yellow triangular warning sign with a black border. Inside the triangle, there is a large black exclamation mark.	Warning – danger zone.

## 2 Safety instructions

### Intended use

This device is designed for sound reinforcement. 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 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.

**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.

**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.

**CAUTION!****Risk of injury due to heavy weight**

Due to the heavy weight of the device, at least two persons are required for transport and installation.

**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. 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!****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 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.

### 3 Features

Special features of the device:

- 2-way active horn-loaded mid-high speaker with built-in crossover
- 1/4"-XLR input / output
- Flying tracks on top of the housing and an eye on the back for tilting. Mounting for vertical hanging optionally available
- 36 mm pole flange on the bottom
- Black textured coating

## 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.



**WARNING!**

**Risk of injury caused by falling objects**

Make sure that the installation complies with the standards and rules that apply in your country. Always secure the device with a secondary safety attachment, such as a safety cable or a safety chain.



**CAUTION!**

**Risk of injury due to heavy weight**

Due to the heavy weight of the device, at least two persons are required for transport and installation.



**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.

## 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.

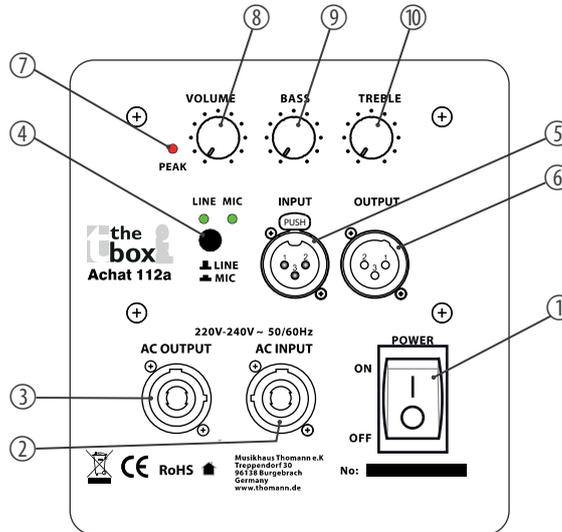
If you notice distortion during operation, the active speaker is overloaded. This may permanently damage the device. Always reduce the volume as soon as you hear distortion.

## 4.2 Hanging the speaker box

To hang the speaker box on special mounting devices (aka 'flying'), the top of the box offers built-in Aeroquip or fly tracks. In these tracks safety eyelets (double studs) can be screwed or latched. Check the secure connection of the safety eyelets with the box carefully, before you use it in 'flying mode'.

Using an additional loop on the back of the box, it is possible to tilt the box. This additional loop must not solely be in charge to secure the entire suspended weight.

## 5 Connections and controls



1	<p><i>[POWER ON/OFF]</i></p> <p>Main switch to turn the device on and off.</p>
2	<p><i>[AC INPUT]</i></p> <p>Blue lockable input socket (Power Twist).</p>
3	<p><i>[AC OUTPUT]</i></p> <p>Grey lockable output socket (Power Twist). This output is looped through from the blue input socket <i>[AC INPUT]</i>. You can use it to feed the power supply to the blue input sockets <i>[AC INPUT]</i> of further elements.</p>
4	<p><i>[LINE/MIC]</i></p> <p>Button to select the input sensitivity of the speaker (line or microphone level).</p> <p>LED <i>[MIC]</i></p> <p>The LED lights in operation when the input sensitivity is set to MIC.</p> <p>LED <i>[LINE]</i></p> <p>The LED lights in operation when the input sensitivity is set to LINE.</p>
5	<p><i>[INPUT]</i></p> <p>Signal input with switchable sensitivity, designed as XLR chassis socket.</p>

6	<i>[OUTPUT]</i> Line output for connecting further powered speakers, designed as XLR chassis plug.
7	LED <i>[PEAK]</i> Indicates overload. If the LED flickers or is lit, the input signal level is too high.
8	<i>[VOLUME]</i> Volume control. Turn the knob clockwise to increase the volume or counterclockwise to decrease the volume.
9	<i>[TREBLE]</i> Treble control. Turn the knob clockwise for a brighter sound. Turn the knob counterclockwise to decrease the treble.
10	<i>[BASS]</i> Bass control. Turn the knob clockwise for a more bassy sound. Turn the knob counterclockwise to decrease the bass.

## 6 Technical specifications

Speaker		1 × 12" woofer, 1,4" mid-high speaker
Input connections	Line	1 × 1/4" jack socket
	Power supply	lockable input socket (Power Twist)
Input impedance	Line	100 kΩ (balanced), 50 kΩ (unbalanced)
	Microphone	50 kΩ
Output connections	Line	1 × 1/4" jack socket
	Power supply of further devices	Lockable output socket (Power Twist)
Output power		600 W (RMS) 2400 W (peak)
Frequency range		63 Hz ... 17 kHz (-10 dB)
Crossover frequency		2 kHz

## Technical specifications

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Signal-to-noise ratio	Woofer	≥90 dB (630 Hz, typical)
	Tweeter	≥88 dB (6.3 kHz, typical)
Sound pressure level (SPL), max.		135 dB
Impedance		8 Ω
Dispersion angle (H × V)		55° × 40° (mid-range transducers)
Supply voltage		230 V ~ 50 Hz
Dimensions (W × H × D)		550 mm × 680 mm × 600 mm
Weight		43 kg
Ambient conditions	Temperature range	0 °C...40 °C
	Relative humidity	20 %...80 % (non-condensing)

**Further information**

Monitor inclination	No
Bluetooth®	No
USB player	No
Fan	Yes
Housing	Wood
Colour	Black
Protective cover	Suitable protective cover optionally available (item no. 222251)
Casters	Suitable casters optionally available (item no. 243578)

## 7 Plug and pin assignments

### 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

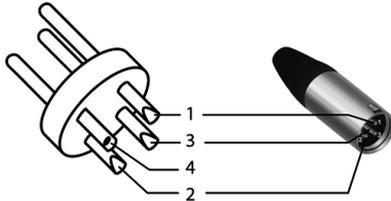
Unbalanced transmission is mainly used in semi-professional environment and in hifi use. Instrument cables with two conductors (one core plus shielding) are typical representatives of the unbalanced transmission. One conductor is ground and shielding while the signal is transmitted through the core.

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°.

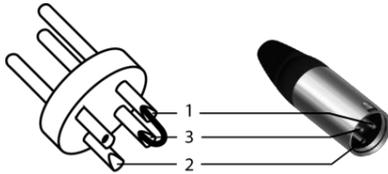
Since the interference affects both cores equally, by subtracting the phase-shifted signals, the interfering signal is completely neutralized. The result is a pure signal without any noise interference.

**XLR plug (balanced)**



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

## XLR plug (unbalanced)



1	Ground, shielding
2	Signal
3	Bridged to pin 1

## 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.



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