



Achat 110 MA MKII Achat 112 MA MKII Achat 115 MA MKII

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 <u>www.thomann.de</u>.



## 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.	
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.	
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.	



Warning signs	Type of danger
	Warning – suspended load.
$\triangle$	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.





#### **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**





## 3 Features

#### Achat 110 MA MKII

### Special features of the device:

- Powered multifunction loudspeaker
- 10" ferrite woofer and 1" compression driver, (woofer with 3" voice coil)
- 140 W RMS, 550 W peak output power
- 2 × XLR / 1/4" jack combo mic / line input
- 1 × XLR line output (mix)
- Switchable presets (bass boost / flat / 120 Hz HPF)
- 2-band EQ
- Power Twist in and outputs
- Black structure paint
- 36 mm tripod flange socket
- M 10 rigging points
- matching protective cover optionally available (item number 243783)
- matching Flight Case optionally available (item number 280588)
- developed in Germany



#### Achat 112 MA MKII

## Special features of the device:

- Powered multifunction loudspeaker
- 12" ferrite woofer and 1.75" ferrite driver, (woofer with 3" voice coil)
- 350 W RMS, 1400 W peak output power
- 2 × XLR / 1/4" jack combo mic / line input
- 1 × XLR line output (mix)
- Switchable presets (bass boost / flat / 120 Hz HPF)
- 2-band EO
- Power Twist in and outputs
- Black structure paint
- 36 mm tripod flange socket
- Aeroquip rail on the top side
- Attachment eyelet on the rear side
- matching protective cover optionally available (item number 243017)
- developed in Germany



#### Achat 115 MA MKII

## Special features of the device:

- Powered multifunction loudspeaker
- 15" woofer and 3" ferrite mid-range / tweeter
- 350 W RMS, 1400 W peak output power
- 2 × XLR / 1/4" jack combo mic / line input
- 1 × XLR line output (mix)
- Switchable presets (bass boost / flat / 120 Hz HPF)
- 2-band EO
- Power Twist in and outputs
- Black structure paint
- 36 mm tripod flange socket
- Aeroquip rail on the top side
- Attachment eyelet on the rear side
- matching protective cover optionally available (item number 249422)
- matching U bracket optionally available (item number 258815)
- matching Flight Case optionally available (item number 451589)
- developed in Germany



# 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.



#### **DANGER!**

Electric shock caused by high voltages at the power amplifier output

The output voltages of modern high-performance amplifiers may result in death or serious injury.

Never touch the bare ends of loudspeaker cables when the amplifier is on.





#### 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.



#### 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.



## 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.

For optimum results both impedance and power handling of the speakers must match the requirements of the amplifier. Always follow the technical specifications of the speakers! The overall impedance of the connected loudspeakers must not deceed the minimum output impedance of the amp. The amps max. RMS output power should be 50 % above the power handling capacity of the connected speakers.

If you notice distortion during operation, either the amp or the speaker is overloaded. This may permanently damage the amp or the speaker. Always reduce the volume when you hear distortion.



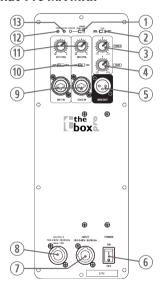
# 4.2 Mounting bracket

Using the optional mounting brackets (U brackets) for vertical and horizontal mounting, the speaker can stably and securely mounted to the wall, the ceiling or a pipe clamp (half coupler), and, thus, secured to trusses.



# 5 Connections and operating elements

#### Achat 110 MA MKII



1 [STANDBY | CONDITION]

Slide switch to enable or disable the power saving mode.

If the speaker box is in power save mode and receives no signal for 60 minutes, it switches to standby mode. As soon as the unit receives a signal, it switches automatically back to normal mode.

The CONDITION LED lights up continuously in normal operation and turns off when the box - on activated power save mode - switches to standby mode.

2 [BASS BOOST | FLAT | 120Hz HPF]

Preset switch

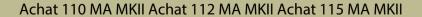
[BASS BOOST]: Increasing the low frequencies.

[FLAT]: Even frequency response.

[120Hz HPF]: Attenuation of frequencies below 120 Hz (high pass filter).



3	[TREBLE]
	Controller to increase or decrease the treble by up to 15 db.
4	[BASS]
	Controller to increase or decrease the bass by up to 15 db.
5	[MIX OUT]
	Line output for the mixed input signal from both channels.
6	[POWER ON/OFF]
	Use this mains switch to turn the device on or off.
7	[INPUT]
	Power Twist connector for powering the device.
8	[OUTPUT]
	Power Twist connector for powering another device.
9	[CH1 IN   CH2 IN]
	Signal input, designed as XLR / ¼" jack combo socket.

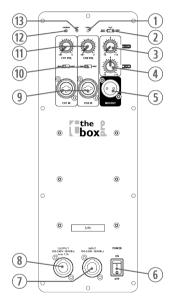




10	[LINE - MIC]		
	Switch for toggling the sensitivity of the respective input between microphone and line level.		
11	[CH1 VOL   CH2 VOL]		
	Volume control for the respective channel.		
12	[POWER]		
	This LED lights up when the device is turned on.		
13	[SIG/PEAK]		
	This LED flickers or lights up green when a signal is present in at least one of the two channels. If the colour changes to red, this indicates that the permissible input level has been exceeded. Then reduce the volume in the relevant channel.		



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1 [PEAK]
This LED indicates that the permissible input level has been exceeded. Then reduce the volume in the relevant channel.

2 [BASS BOOST | FLAT | 120Hz HPF]

Preset switch

[BASS BOOST]: Increasing the low frequencies.

[FLAT]: Even frequency response.

[120Hz HPF]: Attenuation of frequencies below 120 Hz (high pass filter).

3 [TREBLE]

Controller to increase or decrease the treble by up to 15 db.

4 [BASS]

Controller to increase or decrease the bass by up to 15 db.

5 [MIX OUT]

Line output for the mixed input signal from both channels.



6	[POWER ON/OFF]
	Use this mains switch to turn the device on or off.
7	[INPUT]
	Power Twist connector for powering the device.
8	[OUTPUT]
	Power Twist connector for powering another device.
9	[CH1 IN   CH2 IN]
	Signal input, designed as XLR / 1/4" jack combo socket.
10	[LINE - MIC]
	Switch for toggling the sensitivity of the respective input between microphone and line level.
11	[CH1 VOL   CH2 VOL]
	Volume control for the respective channel.



12	[POWER]
	This LED lights up when the device is turned on.
13	[SIG]
	This LED lights up when a signal is present in at least one of the two channels.



# 6 Technical specifications

#### Achat 110 MA MKII

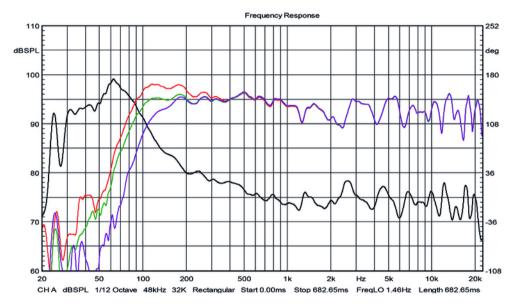
Inputs	2 × XLR / 1/4" jack combo socket		
Input sensitivity	Line: 1 V (RMS) ± 10 %		
	Mic: 20 mV ± 10 %		
Output connections	Line output	XLR chassis plug	
	Power supply	Lockable Power Twist Socket	
		Output current max. 12 A	
Frequency range	75 Hz20 kHz		
System	2-way full-range powered speaker box with built-in crossover		
Speakers	1× 10" ferrite woofer, 1" compression driver		
Dispersion angle $(H \times V)$	$100^{\circ} \times 100^{\circ}$		
Output power	Woofer	$120 \text{ W} \pm 10 \text{ %, THD} \le 1 \text{ %, f} = 630 \text{ Hz}$	



	Tweeter	$38 \text{ W} \pm 10 \%$ , THD $\leq 1 \%$ , f = 6,3 kHz
Maximum SPL	120 dB	
Operating supply voltage	100 - 240 V ∼ 50/60 Hz	
Dimensions (W $\times$ H $\times$ D)	$300 \text{ mm} \times 450 \text{ mm} \times 290 \text{ mm}$	
Weight	12.6 kg	



## **Frequency response**





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Inputs	$2 \times XLR / 1/4$ " jack combo socket	
Input sensitivity	Line: 1 V (RMS) $\pm$ 10 %	
	Mic: $20 \text{ mV} \pm 10 \%$	
Output connections	Line output	XLR chassis plug
	Power supply	Lockable Power Twist Socket
		Output current max. 12 A
Frequency range	60 Hz20 kHz	
System	2-way full-range powered speaker box with built-in crossover	
Speakers	$1\times12$ " ferrite woofer, 1.75" compression driver	
Dispersion angle $(H \times V)$	$80^{\circ} \times 90^{\circ}$ (rotatable horn)	
Output power	Woofer	$320 \text{ W} \pm 10 \%$ , THD $\leq 1 \%$ , f = 630 Hz
	Tweeter	$55 \text{ W} \pm 10 \text{ %, THD} \le 1 \text{ %, f} = 6.3 \text{ kHz}$
Maximum SPL	126 dB	

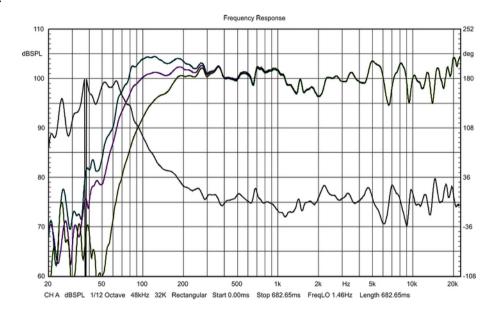
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# Technical specifications

Operating supply voltage	100 - 240 V ∼ 50/60 Hz
Dimensions (W $\times$ H $\times$ D)	360 mm × 600 mm × 365 mm
Weight	20.7 kg



## **Frequency response**





## **Achat 115 MA MKII**

Inputs	$2 \times XLR / 1/4$ " jack combo socket	
Input sensitivity	Line: 1 V (RMS) ± 10 %	
	Mic: 20 mV $\pm$ 10 %	
Output connections	Line output	XLR chassis plug
	Power supply	Lockable Power Twist Socket
		Output current max. 12 A
Frequency range	60 Hz16 kHz	
System	2-way full-range powered speaker box with built-in crossover	
Speakers	1× 15" ferrite woofer, 3" compression driver	
Dispersion angle $(H \times V)$	60° × 60°	
Output power	Woofer	$320 \text{ W} \pm 10 \text{ %, THD} \le 1 \text{ %, f} = 630 \text{ Hz}$
	Tweeter	$55 \text{ W} \pm 10 \%$ , THD $\leq 1 \%$ , f = 6,3 kHz
Maximum SPL	130 dB	

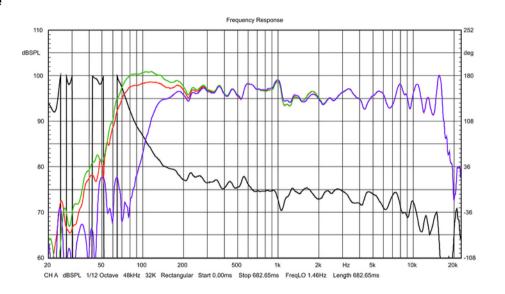


active speaker

Operating supply voltage	100 - 240 V ∼ 50/60 Hz	
Dimensions (W $\times$ H $\times$ D)	436 mm × 766 mm × 438 mm	
Weight	38.7 kg	



## **Frequency response**





# 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) 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.







