



MBA1 active 2-way speaker



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Table of contents

1	General information	4
	1.1 Further information	
	1.2 Notational conventions	
	1.3 Symbols and signal words	
2	Safety instructions	•
3	Features	1:
4	Installation and starting up 1	
	4.1 Dealing with lithium batteries	1
5	Connections and controls	ı
6	Technical specifications	<u>></u>
7	Plug and connection assignment	2(
8	Cleaning	3(
9	Protecting the environment	3



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 to 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.

DisplaysTexts and values displayed on the device are marked by quotation marks and italics.

Examples: '24ch', 'OFF'.

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
<u>^</u>	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 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.



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.



WARNING!

Incorrect handling of lithium batteries can result in injury

In the event of a short circuit, overheating or mechanical damage, lithium batteries can cause severe injuries. Follow the advice on the correct handling of lithium batteries in the present section.



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!

Risk of fire due to incorrect polarity

• Incorrectly inserted batteries may destroy the device or the batteries. Ensure that proper polarity is observed when inserting batteries.

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 by leaking batteries

Leaking batteries can cause permanent damage to the device. Take batteries out of the device if it is not going to be used for a longer period.



Safety instructions

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 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.

NOTICE!

Possible damage to lithium-ion batteries through incorrect storage

By deep discharge, lithium-ion batteries can be permanently damaged or lose some of their capacity. Before long breaks, charge the batteries to around 50 % of their capacity and then switch off the device. Store the device at room temperature or cooler in an environment as dry as possible. If the batteries are stored for a longer period, recharge them to 50 % every three months. Fully charge the batteries only shortly before use at room temperature.



3 Features

The device is characterized by the following features:

- mobile battery-powered 2-way active speaker box
- 8" woofer
- 1" full-range tweeter
- Class-D power stage
- 150 W RMS output power
- 3 preset modes: Music, speech and guitar
- 2 × XLR / 1/4" phone jack combo socket for adjustable MIC / Line input
- $1 \times RCA$ socket pair $/ 1 \times 3.5$ mm phone socket for stereo input
- 1 × XLR output socket
- Bluetooth



4 Installation and starting up

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.



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.



The unit can be mounted on a tripod or set up on the floor or a sufficiently sized and stable surface, e.g. a wall bracket.



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.



Comply with regulations

When installing and operating, make sure to follow the standards and regulations that apply in your country.

The speaker box has two 35 mm flanges for tripod mounting at different angles.

- The flange with 0° angle (rear position) is suitable for use in front of standing audiences.
- The flange with 7° angle (front position) is suitable for use in front of sitting audiences.



4.1 Dealing with lithium batteries



WARNING!

Incorrect handling of lithium batteries can result in injury

In the event of a short circuit, overheating or mechanical damage, lithium batteries can cause severe injuries.

Follow the advice on the correct handling of lithium batteries in the present section.

When handled correctly and appropriately lithium batteries pose no risk.

Store lithium batteries in a cool, dry place, ideally in the original packaging.

Store lithium batteries away from heat sources (e.g. radiators or sunlight). Lithium batteries are hermetically sealed. Never attempt to open a lithium battery.

If the battery housing is damaged small amounts of the electrolyte may leak out. If this should happen, seal the lithium battery in airtight packaging and wipe up the traces of electrolyte using absorbent paper towels. You must wear protective rubber gloves when doing so. Clean your hands and the affected surface thoroughly with cold water.



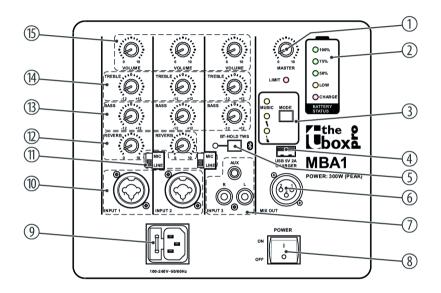
Never attempt to recharge non-rechargeable lithium batteries. When charging lithium batteries you must use a suitable charging device intended for the purpose.

Before disposing of the device remove the lithium batteries. Protect used lithium batteries against potential short circuits, e.g. by covering the poles with adhesive tape.

Only use powder extinguishers or other suitable extinguishing agents to extinguish a burning lithium battery.



5 Connections and controls





1	[MASTER]	Overall volume control
2	[BATTERY STATUS]	Indicator LEDs for the battery charge level
	[100%], [75%], [50%]	LED lights green: Charge level 100%, 75% or 50%
	[LOW]	LED lights yellow: Charge level low
	[CHARGE]	LED flashes red: Charge level below 25% Recharge the battery.
3	[MODE]	Selection button for the playback mode according to the audio source
		Press the button to switch between the three different preset modes (music, speech, guitar). The LED of the selected mode lights up.
4	[USB 5V 2A CHARGER]	USB charge socket 5 V, 2 A
5	[BT HOLD TWS]	Bluetooth connection button (Bluetooth pairing)
		Press the button to establish a Bluetooth connection with other Bluetooth-enabled devices.
		If there is a Bluetooth connection between the speaker and a Bluetooth-enabled device, additional speakers of the same type are automatically recognized and connected after switching on.



6	[MIX OUT]	XLR mounting socket, 3-pin, for the output of line-level signals and for looping through several active loudspeakers
7	[INPUT 3] [AUX], [R], [L]	RCA socket pair (L / R) / 3.5 mm phone socket, unbalanced, for connecting stereo input signal sources
8	[POWER] [ON OFF]	Main switch. Turns the device on and off.
9	[100- 240 V~ 50/60 Hz]	IEC panel plug for the mains cable with fuse holder and for charging the battery
10	[INPUT 1], [INPUT 2]	XLR / 1/4" jack combo sockets for connecting a mixer or an instrument
11	[MIC/LINE]	Input signal switch. With this switch you toggle between a microphone and a signal source with line level.
12	[REVERB]	Control for the intensity of the reverb applied to the audio signal
13	[BASS]	Control to adjust the low frequencies
14	[TREBLE]	Control to adjust the high frequencies
15	[VOLUME]	Input level control



6 Technical specifications

Speaker		8" woofer
		1" full-range tweeter
Amp class		Class-D power stage
Input connections	MIC/Line	$2 \times XLR / 1/4$ " phone combi socket
	Stereo	$1 \times pair of RCA sockets (L/R)$
	AUX	$1 \times 3.5 \text{ mm jack socket}$
	USB charge socket	1 × USB-A, 5 V, 2 A
Output connections	MIX output	XLR chassis socket, 3-pin
Output power		RMS: 120 W
		Peak: 300 W
Frequency range		50 Hz 20 kHz
Sound pressure level (SPL), max		120 dB



Technical specifications

Power consumption		210 W	
Bluetooth®	Frequency of operation	2.400 GHz 2.4835 GHz	
	Max. transmission power	10 mW	
Supply voltage		100 - 240 V ∼ 50/60 Hz	
Fuse		5 mm × 20 mm, 2 A, 250 V, slow-k	olow
Battery	Battery type	Lithium-ion	
	Voltage	26 V	
	Capacity	3600 mAh	
	Charging time in the device	approx. 2.5 h	
Runtime at RMS		approx. 4 h	
Mounting option		35 mm pole mount flange	0°
			7°
Dimensions (W \times H \times D)		288 mm × 362 mm × 335 mm	
Weight		8.3 kg	



active 2-way speaker

Ambient conditions	Temperature range	0 °C40 °C
	Relative humidity	20 %80 % (non-condensing)



Further information

Simultaneous inputs	3
Mic Preamp	2
Tone control / Ch.	Yes
Master tone control	No
Effect	Yes
Wireless microphone	No
opt. wireless	No
Remote control	No
Line Out	Yes
CD player	No
Bluetooth player	Yes
USB play	No
SD card play	No



Tuner	No
Colour	Black
Trolley	No
Cover	No

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)



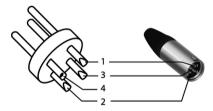
1	Signal (in phase, +)
2	Signal (out of phase, –)
3	Ground

Three-pole 1/8" mini phone jack (stereo, unbalanced)



1	Signal (left)
2	Signal (right)
3	Ground, shielding

XLR plug (balanced)



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

RCA connection



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

1	Signal
2	Ground, shielding

8 Cleaning

Device components

Clean the device components that are accessible from the outside regularly. The cleaning frequency depends on the operating environment: damp, smoky or particularly dirty environments can cause greater accumulation of dirt on the device components.

- Clean with a dry soft cloth.
- Stubborn dirt can be removed with a slightly dampened cloth.
- Never use solvents or alcohol for cleaning.



9 Protecting the environment

Disposal of the packaging material



For the 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 batteries



Batteries do contain some hazardous chemicals so they should not be thrown away with the normal household waste. They should be returned to the manufacturer for disposal or recycled elsewhere in accordance with your local regulations.

Dispose lithium batteries only in discharged condition. Remove lithium batteries from the device before disposal. Protect used lithium batteries against potential short circuits, e.g. by covering the poles with adhesive tape. Dispose the built-in lithium batteries together with the device. Please check for an appropriate reception facility.



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.







