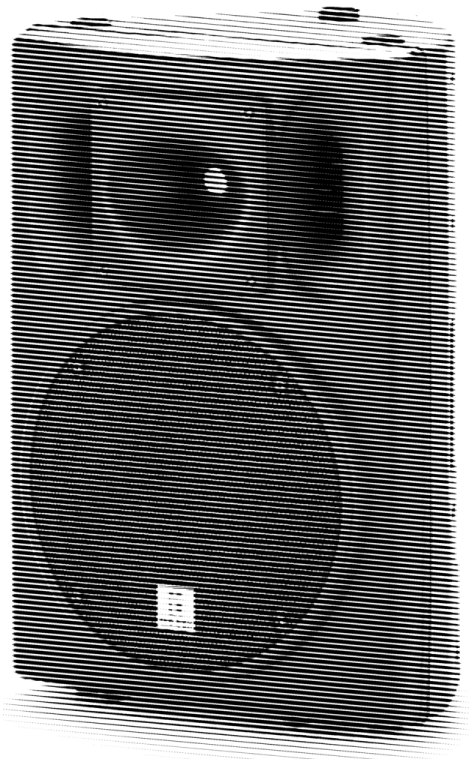

the box

PA202A

full-range-speaker

th•mann
MUSIC IS OUR PASSION

user manual

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Table of contents

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
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
	Warning – high-voltage.

Warning signs	Type of danger
	Warning – suspended load.
	Warning – danger zone.

2 Safety instructions

Intended use

This device is intended to be used in a sound reinforcement system. This device is designed for professional and not household use. 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.

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!

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.

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!

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.

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.

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.

3.1 Tips on handling speakers

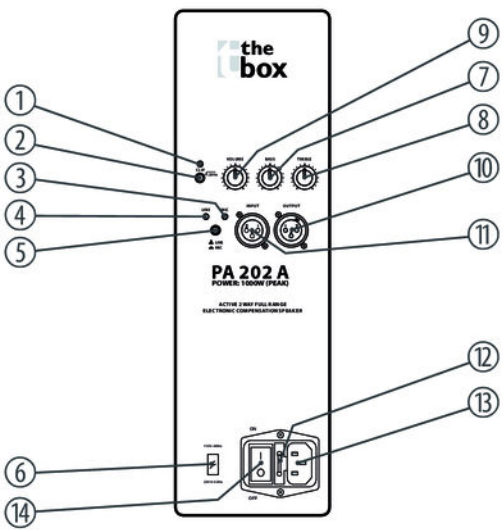
We recommend you to set up the speakers in a way, that the sound signals can reach the audience unobstructedly. It will often be helpful to mount the speakers on tripods. Thus, the sound will be evenly spread with maximum range throughout the audience area.

Always use high grade cable to connect your equipment. Otherwise you won't reach maximum sound quality.

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 Connections and controls



1	*[CLIP]* The LED is illuminated when distortion occur at input level.
2	*[LOW CUT @ 120 Hz]* Push this button to lower the frequencies below 120 Hz. This function reduces impact noise and maximize the life-time of the woofer.
3	*[MIC]* Indication for a fitted microphone signal.
4	*[LINE]* Indication for a fitted LINE signal.
5	*[LINE/MIC]* Switches input sensivity for microphone or LINE signals. As soon as the signals get microphone level, deeply push the control with a pen. For safety reasons, it only snaps in then. Do not push the control when the signals got LINE level.

6	*[115 V / 230 V]* 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.
7	*[Low-frequencies control]* Bass control. Turn the control clockwise to increase the bass. Turn the control counter-clockwise to lower the bass part.
8	*[TREBLE-control]* Treble control. Turn the control clockwise to increase the bass. Turn the control counter-clockwise to lower the bass part.
9	*[VOLUME-control]* Turn this control clockwise to increase the volume. Turn it counter-clockwise to reduce the volume. Caution: At first, reduce the volume to a minimum value before activating the device and start to transmit signals. Adjust the desired volume.
10	*[Output]* You can connect further LINE inputs of other active monitors at this LINE output.

11	*[Input]* Connect to supply mains power.
12	*[Mains fuse]* If the fuse blows, replace it with a new fuse of the same type. You must first disconnect the device from the power supply.
13	*[Connection for the power supply]* Make sure that the mains control (6) ist in the right position, **BEFORE** connection power supply.
14	*[ON/OFF]* Use this mains switch to turn the device on or off.

5 Technical specifications

System	2 way full-range active box with built-in crossover
Housing material	Polypropylen, trapezoid
Housing colour	Black
Configuration	1 × 12" (woofer), 1 × 1,4" driver
Tweeter dispersion angle (H × V)	55° × 55°
Frequency response	50 Hz - 18 kHz (-3dB)
Sound pressure level (in 1 m distance)	120 dB (free field)
Level adjustment	±12 dB (10 kHz) - treble ±12 dB (100 Hz) - bass
Output power	200 W (RMS, Bass) + 50 W (RMS, Treble)
Distortion	Line - 0,02 %, Mic - 0,04 %
Load impedance	Treble - 8 Ω, Bass - 8 Ω

Input impedance	balanced: 20kΩ, unbalanced 10 kΩ
Connections	XLR-In-/output
Operating supply voltage	AC 115230 V ~ 50/60 Hz
Fuse	115 V 5 mm × 20 mm, 5 A, 250 V, slow blow 230 V 5 mm × 20 mm, 2.5 A, 250 V, slow blow
Dimensions (W × H × D)	417 × 620 × 382 mm
Net weight	21.0 kg

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

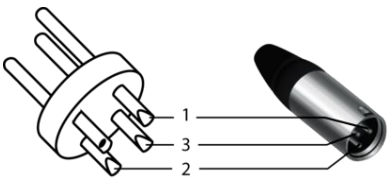
Unbalanced transmission is mainly used in semi-professional environment and in hifi use. Instrument cables with two conductors (one core plus shielding) are typical representatives of the unbalanced transmission. One conductor is ground and shielding while the signal is transmitted through the core.

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°.

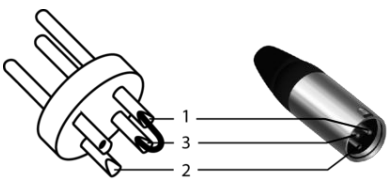
Since the interference affects both cores equally, by subtracting the phase-shifted signals, the interfering signal is completely neutralized. The result is a pure signal without any noise interference.

XLR plug (balanced)



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

XLR plug (unbalanced)



1	Ground, shielding
2	Signal
3	Bridged to pin 1

7 Cleaning

Cleaning plastic housing Do not use aggressive cleaners. Wipe the casing only with a slightly damp cloth.

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). 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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