



Achat 110 MA active full-range speaker

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	Safety instructions Features



1 General notes

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 are subject to a process of continuous development. We therefore reserve the right to make changes without notice.

Symbols and signal words

This section gives an overview of the symbols and signal words used in this user 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 – suspended load.
	Warning – danger zone.



2 Safety instructions

Intended use

This device is intended to be used in a sound reinforcement system. 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.



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.



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.



3 Features

Special features of the 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
- Selectable operating voltage
- Pole mount flange, 36 mm, on bottom side
- Rigging points M10
- 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 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.

Establish all connections as long as the unit is switched off. Use the shortest possible high-quality cables for all connections.



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!

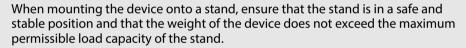
Possible property damage by magnetic fields

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





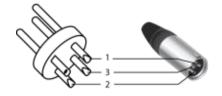
4.1 Pin assignment

You can use XLR and 1/4" plugs with balanced or unbalanced wiring. In the following we will give you an overview of the various possibilities.

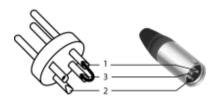
XLR connections for signal inputs and outputs

XLR mounting sockets are used for signal inputs. XLR mounting plugs provide the output signals. Drawing and table indicate the XLR pin assignment.

Balanced wiring:



1	Ground, shielding
2	Positive signal (+)
3	Negative signal (–)



Unbalanced wiring:

1	Ground, shielding
2	Signal
3	Bridged to pin 1

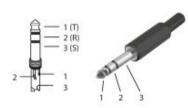
1/4" socket for signal inputs and outputs



Drawing and table indicate the pin assignment for a 1/4" TS phone jack to be used. Unbalanced wiring (1/4" TS plug):

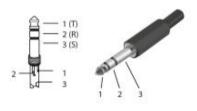
1	Signal
2	Ground, shielding





Unbalanced wiring (1/4" TRS plug):

1	Signal
2, 3	Ground, shielding



Balanced wiring (1/4" TRS plug):

1 (Tip)	Positive signal (+)
2 (Ring)	Negative signal (–)
3 (Sleeve)	Ground, shielding

4.2 Tips on handling speakers

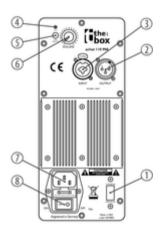
We recommend you to set up the speakers in a way, that the sound signals can reach the audience unobstructedly. It will often be helpful to mount the speakers on tripods. Thus, the sound will be evenly spread with maximum range throughout the audience area.

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.



5 Connections and operating elements



1 115V / 60Hz ~ 230V / 50Hz

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**

XLR mounting plug for line signal output.

3 **INPUT**

XLR/1/4" combo socket for line signal input.

4 CLIP

Indicates overloading (Clipping). In this case the level of the input signal is too high.

5 120Hz LOW CUT

Use this switch to attenuate the low frequencies below 120 Hz.



VOLUME
Volume control.
Connection for mains supply voltage
IEC chassis connector with fuse holder for operating voltage supply.
If this fuse blows, you have to replace it by a new one with same specifications.
Before you must disconnect the unit from the mains power.
I/O (ON/OFF)
Use the mains switch to power the unit on or off.



6 Technical specifications

Input	XLR/1/4" combo socket
Input impedance	20 kΩ (balanced), 10 kΩ (unbalanced)
Input sensitivity	Line: 775 mV
	Mic: 20 mV
Output	XLR mounting plug
Frequency response	70 Hz20 kHz
System	2-way full-range active speaker box with built-in crossover
Speakers	$1\times10"$ woofer, $1\times1"$ mid-high driver with $3"$ voice coil
Dispersion $(H \times V)$	90°×60°
THD	Line: < 3%
Output power	140 W (RMS)
Maximum SPL	119 dB



Operating voltage supply	AC 115 / 230 V \sim , 50/60 Hz
Dimensions (B \times H \times T)	$300 \text{ mm} \times 290 \text{ mm} \times 450 \text{ mm}$
Weight	13.5 kg



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 these materials with your normal household waste, but make sure that they are fed to a recovery. Please follow the notes and markings on the packaging.

Disposal of your old device



This device is subject to the European directive 2002/96/EC.

Do not dispose the device with your normal household waste.

Dispose 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.



