

# the **box**

Achat 112 SubA active subwoofer



user manual

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## 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.
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
Â	Warning – high-voltage.



Warning signs	Type of danger
	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.



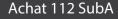
## DANGER!

## **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.







## 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!

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 this powerful active subwoofer:

- XLR/1/4" combo socket for signal input
- XLR mounting plug for signal output
- Selectable operating voltage
- Pole mount flange, (M20), on topside
- 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 highquality cables for all connections.



#### 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 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

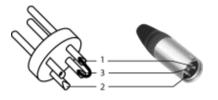
XLR mounting sockets are used for signal inputs. XLR mounting plugs provide the output signals. Drawing and table indicate the XLR pin assignment.

Balanced wiring:

	1	
	2	
	3	
2 2		

Ground, shielding
Positive signal (+)
Negative signal (–)





Unbalanced wiring:

1	Ground, shielding
2	Signal
3	Bridged to pin 1

1/4" socket for signal input

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):



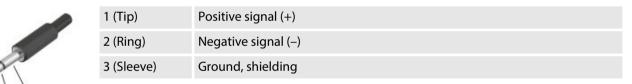
1 (T) 2 (R)

3 (5)

 Signal

 3
 Ground, shielding

Balanced wiring (1/4" TRS plug):





## 4.2 Tips on handling speakers

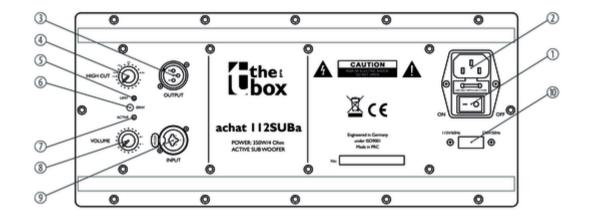
We recommend you to set up the speakers in a way, that the sound signals can reach the audience unobstructedly. It will often be helpful to mount the speakers on tripods. Thus, the sound will be evenly spread with maximum range throughout the audience area.

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 Operating elements





1 I / O (ON/OFF)
------------------

Use the mains switch to power the unit on or off.

## 2 Connection for mains supply voltage with fuse holder

IEC chassis connector for operating voltage supply, fuse holder.

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.

## 3 OUTPUT

XLR mounting plug for line signal output to connect further speakers.

## 4 HIGH CUT

Low pass filter control. Use this control to adjust the upper cut-off frequency for the signal to the built-in amplifier.

## 5 LIMIT

This LED indicates on overloading (Clipping) of the amplifiers input. In this case reduce the level of the input signal.



6	INV

If necessary, this switch shifts the phase of the subwoofer signal by 180°. Thus, unwanted extinction effects in the interaction with other speakers can be avoided.

#### 7 ACTIVE

This LED indicates that the unit is switched on.

## 8 VOLUME

Volume control

9 INPUT

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

## 10 AC 115 V / 230 V $\sim$

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!



# **6** Technical specifications

Speakers	1 × 12" woofer
Frequency response	40 Hz 250 Hz
THD	Line: 0.02%
Maximum SPL	124 dB
Output power	350 W (RMS)
Load impedance	4 Ω
Input impedance	20 kΩ
Operating voltage	AC 115 / 230 V $\sim$ , 50/60 Hz
Dimensions (W $\times$ H $\times$ D)	$450 \text{ mm} \times 340 \text{ mm} \times 456 \text{ mm}$
Weight	22 kg



## 7 Protecting the environment

Disposal of the packaging material



## Disposal of your old device



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

chosen that can be supplied to normal recycling.

Do not dispose the device with your normal household waste.

Ensure that plastic bags, packaging, etc. are properly disposed of.

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.

For the transport and protective packaging, environmentally friendly materials have been

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.





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