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HBAC-20
guitar combo

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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 www.thomann.de.

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.
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 – danger zone.

2 Safety instructions

Intended use

This device is intended to be used for amplification and playback of signals from musical instruments with electromagnetic pickups. 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!

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.

3 Features

Special features of this device:

- 20 watt output power
- 8" woofer plus tweeter
- Outputs
 - XLR microphone / line input with dedicated volume control
 - RCA CD / line input
 - 1/4" guitar input, active / passive switchable
- 3-band EQ with parametric mids
- Reverb and chorus switchable and adjustable
- Line out
- Energy-saving mode

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.

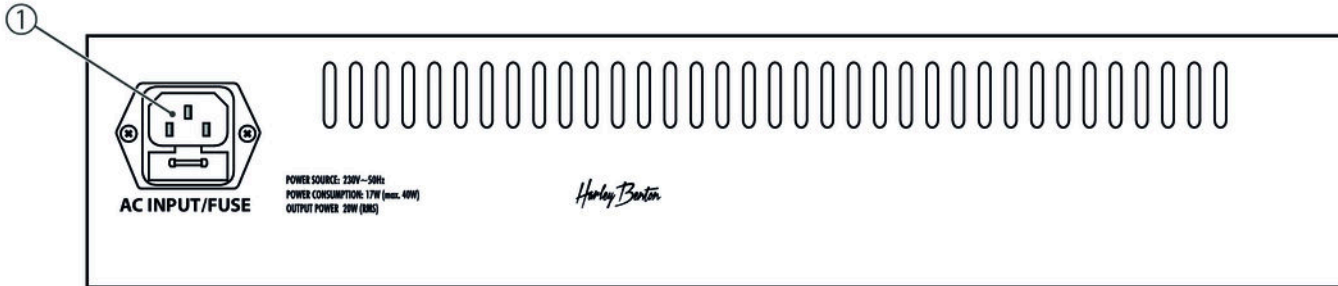
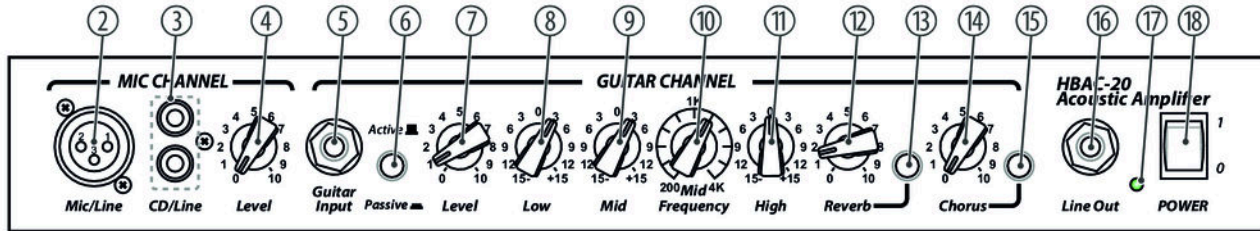


NOTICE!

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.

5 Connections and controls



1	Mains chassis plug with fuse holder.
2	<i>[Mic/Line]</i> XLR input for dynamic microphones or other balanced signals.
3	<i>[CD/Line]</i> RCA sockets for additional signal input, e.g. a CD player or other devices with line level output.
4	<i>[Level]</i> Mic/Line channel volume control. This control does not affect the CD/Line input.
5	<i>[Guitar Input]</i> 1/4" jack socket to connect the instrument.
6	<i>[Active/Passive]</i> Toggle switch to adapt the input sensitivity to the pickup type used in the instrument.
7	<i>[Level]</i> Guitar channel volume control.

8	<i>[Low]</i> Low frequency level control for the guitar channel.
9	<i>[Mid]</i> Mid frequency level control for the guitar channel.
10	<i>[Mid Frequency]</i> Low frequency level control for the guitar channel.
11	<i>[High]</i> High frequency level control for the guitar channel.
12	<i>[Reverb]</i> Reverb control for the guitar channel.
13	<i>[Reverb]</i> Toggle switch to turn the reverb effect for the guitar channel on and off.
14	<i>[Chorus]</i> Chorus control for the guitar channel.

15	<i>[Chorus]</i> Toggle switch to turn the chorus effect for the guitar channel on and off.
16	<i>[Line out]</i> 1/4" phone socket to feed the signal to another amp, mixing console or similar device.
17	Standby indicator If the device does not receive a signal on any of the inputs for 30 minutes, it switches to standby mode (green LED). As soon as the device receives a signal at one of the inputs, it automatically switches back to normal operation (red LED).
18	<i>[POWER]</i> Mains switch. Turns the device on and off.

6 Technical specifications

Speaker	1 × 8" woofer and tweeter	
Input connections	Supply voltage	IEC chassis plug C14
	Microphone input	XLR chassis socket, 3-pin
	Instruments	1/4" jack socket
	CD player or other devices with line signal	RCA jacks
Output connections	Amplifier or mixer	1/4" jack socket
Input impedance	510 kΩ	
Output power	20 W (RMS)	
Frequency range	40 Hz to 10 kHz	
Signal-to-noise ratio	-60 dB at rated power	
Total harmonic distortion (THD)	0.5%	
Power consumption	max. 40 W	

Technical specifications

Maximum input level	0.7 V (RMS)	
Max. gain	51 dB	
Supply voltage	AC 230 V ~ 50 Hz	
Fuse	5 mm × 20 mm, 250 mA, 250 V, slow-blow	
Dimensions (W × H × D)	423 mm × 360 mm × 250 mm	
Weight	10 kg	
Ambient conditions	Temperature range	0 °C...40 °C
	Relative humidity	50 %, non-condensing

Further information

Channels	2
Reverb	Yes
Effects processor	Yes
External effects loop	No
Line input	Yes
Microphone input	Yes
Battery operation	No
Foot switch socket	No
Incl. foot switch	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.

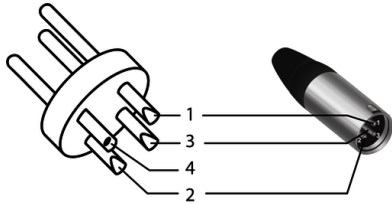
Please note these advices, because especially in 'Sound & Light' caution is indicated: Even if a plug fits into the socket, an incorrect connection may result in a destroyed power amp, a short circuit or 'just' in poor transmission quality!

1/4" TS phone plug (mono, unbalanced)



1	Signal
2	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 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.



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