



Harley Benton

HBAC-20
guitar combo

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1 General notes


This user manual contains important information on 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, include the manual for the next owner.

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 provides 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
	Warning – high-voltage.

Warning signs	Type of danger
	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.



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 cover the device nor any ventilation slots. Do not place 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 device:

- 20 watt output power
- 6.5" 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 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.

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



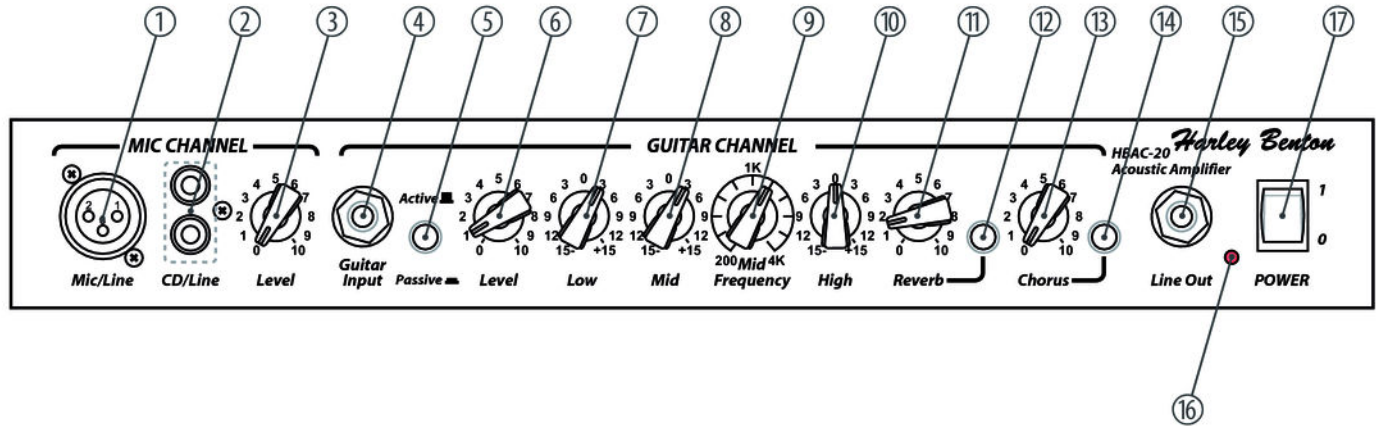
NOTICE!

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 Components and functions

Front panel



HBAC-20

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


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

15	<p><i>[Line out]</i></p> <p>1/4" phone socket to feed the signal to another amp, mixing console or similar device.</p>
16	<p>Pilot LED</p> <p>When turning on the power switch, the amplifier is in standby mode and the power indicator LED should be GREEN. When an audio signal is present at the <i>[Guitar Input]</i>, the power indicator LED will turn RED, indicating that the amplifier is in normal operating mode.</p> <p>When no signal is being received at the <i>[Guitar Input]</i> for more than 30 minutes, the amplifier will automatically enter the standby mode to preserve energy.</p>
17	<p><i>[POWER]</i></p> <p>Mains switch to turn the device on and off.</p>

Rear panel

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AC INPUT/FUSE




FUSE RATING & SUPPLY VOLTAGE.

~115V T750mA L 250V	~230V T750mA L 250V
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POWER SOURCE:


- ~100VAC 50/60Hz
- ~120VAC 50/60Hz
- ~230VAC 50/60Hz
- ~240VAC 50/60Hz


MAXIMUM POWER CONSUMPTION
40 WATTS ~50/60Hz


3085672

CONFORMS TO
UL STD. 60065
CERTIFIED TO
CAN/CSA STD.
C22.2 NO. 60065-03


SERIAL NO:




AVIS: RISQUE DE CHOC ELECTRIQUE - NE PAS OUVRIR.
TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK DO
NOT EXPOSE THIS EQUIPMENT TO RAIN OR MOISTURE.

WARNING - TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.
CAUTION - FOR CONTINUED PROTECTION AGAINST RISK OF FIRE REPLACE ONLY WITH SAME TYPE AND RATED FUSE.
CAUTION - TO REDUCE THE RISK OF ELECTRIC SHOCK DO NOT REMOVE COVERS. NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED PERSONNEL ONLY.
WARNING - THIS EQUIPMENT MUST BE EARTHED.
ATTENTION - REMPLACER LE FUSIBLE SEULEMENT PAR LE MEME TYPE ET LE MEME CALIBRE.
AVIS - RISQUE DE CHOC ELECTRIQUE - NE PAS OUVRIR.
ATTENTION - DESBRANCHER LE CORDON D'ALIMENTATION AVANT TOUTE INTERVENTION.

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18 IEC chassis connector with fuse holder.

Find technical specifications about replacement fuses and operating supply voltage below and next to the fuse holder.

6 Technical specifications

Output power	20 W (RMS)
Frequency response	40 Hz to 10 kHz
THD	0.5 %
Signal-to-noise ratio	-60 dB @ rated power
Input impedance	510 kΩ
Power consumption	max. 40 W
Max. input level	0.7 V (RMS)
Max. gain	51 dB
Operating supply voltage	AC 220 – 240 V ~ , 50/60 Hz
Fuse	250 mA / 250 V, slow-blow
Dimensions (W × D × H)	423 mm × 250 mm × 360 mm
Weight	11.3 kg

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.

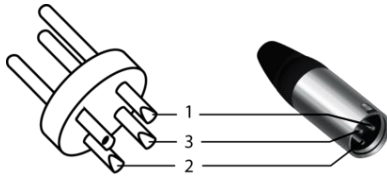
Please note these advices, because especially in 'Sound & Light' caution is indicated: Even if a plug fits into the socket, an incorrect connection may result in a destroyed power amp, a short circuit or 'just' in poor transmission quality!

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, -)

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). 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.



