Harley Benton

HBAC-20 guitar combo

Musikhaus Thomann

Thomann GmbH

Hans-Thomann-Straße 1

96138 Burgebrach

Germany

Telephone: +49 (0) 9546 9223-0

E-mail: info@thomann.de

Internet: www.thomann.de

20.12.2017, ID: 117741 (V2)

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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
A	Warning – high-voltage.
$\triangle$	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.



## 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 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.



#### NOTICE!

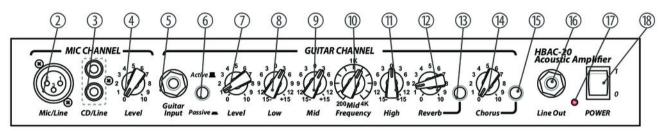
### Possible property damage by magnetic fields



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	IEC chassis plug with fuse holder.
	Find technical data on spare fuses and power supply below or next to the fuse holder.
2	[Mic/Line]
	XLR input for dynamic microphones or other balanced signals.
3	[CD/Line]
	RCA sockets for additional signal input, e.g. a CD player or other devices with line level output.
4	[Level]
	Mic/Line channel volume control. This control does not affect the CD/Line input.
5	[Guitar Input]
	1/4" phone socket to connect the instrument.
6	[Active/Passive]
	Toggle switch to adapt the input sensitivity to the pickup type used in the instrument.
7	[Level]
	Guitar channel volume control.



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



15	[Chorus]
	Toggle switch to turn the chorus effect for the guitar channel on and off.
16	[Line out]
	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	[POWER]
	Mains switch. Turns the device on and off.

# **6** Technical specifications

Output power	20 W (RMS)
Transmission range	40 Hz to 10 kHz
THD	0.5 %
Signal-to-noise ratio	-60 dB at rated power
Input impedance	510 kΩ
Power consumption	max. 40 W
Maximum input level	0.7 V (RMS)
Max. gain	51 dB
Operating supply voltage	AC 230 V ∼ 50 Hz
Fuse	5 mm × 20 mm, 250 mA, 250 V, slow-blow
Dimensions (W $\times$ H $\times$ D)	423 mm × 360 mm × 250 mm
Weight	10 kg



guitar combo

## 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.

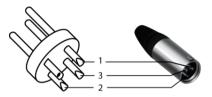
Please note these advices, because especially in 'Sound & Light' caution is indicated: Even if a plug fits into the socket, an incorrect connection may result in a destroyed power amp, a short circuit or 'just' in poor transmission quality!

# 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.









