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HB-300B
bass 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.



CAUTION!

Risk of injury due to heavy weight

Due to the heavy weight of the device, at least two persons are required for transport and installation.



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 the device

- Output power 300 watt (4 Ω)
- 1 \times 15" Celestion speaker
- Switchable horn
- Graphic 7-band equalizer
- Compressor
- Effects loop
- Inputs
 - Aux
 - Footswitch
- Outputs
 - DI (balanced)
 - Tuner
 - Line
- Standby function

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.



CAUTION!

Risk of injury due to heavy weight

Due to the heavy weight of the device, at least two persons are required for transport and installation.



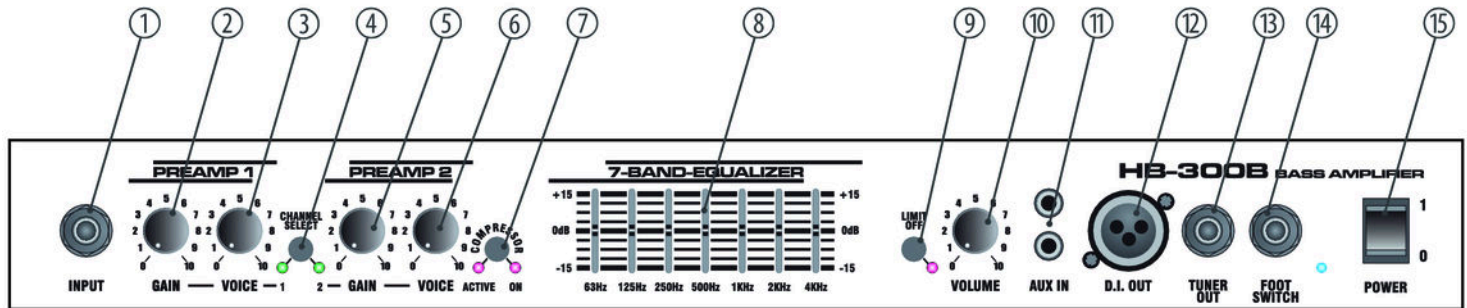
NOTICE!

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

Front panel

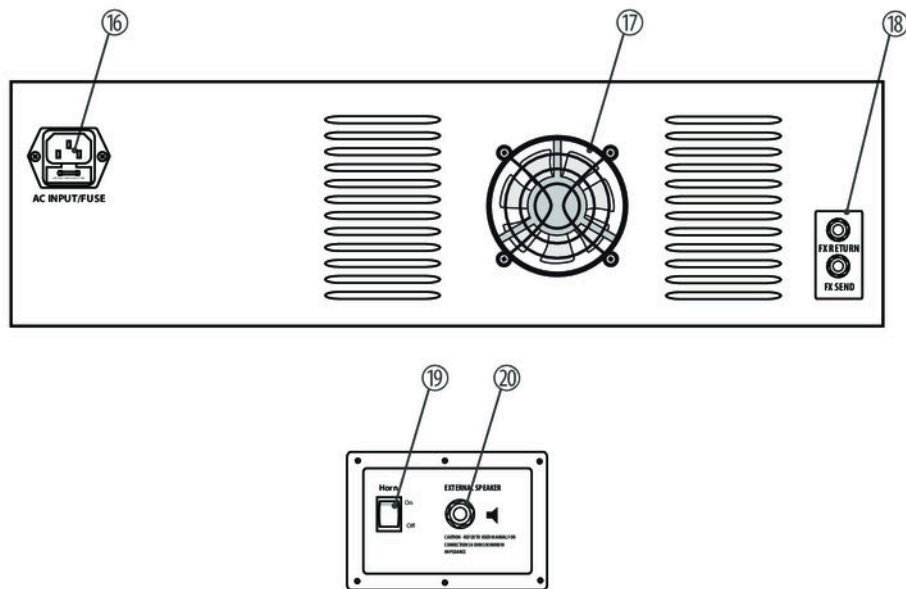


| | |
|---|---|
| 1 | <p><i>[INPUT]</i></p> <p>1/4" jack socket to connect your instrument.</p> <p>You can also connect other active signal sources like CD or MP3 players, keyboards, mixers etc. to this input.</p> |
| 2 | <p><i>[GAIN]</i></p> <p>Control to adjust the preamp gain of the signal (volume) in channel 1.</p> |
| 3 | <p><i>[VOICE]</i></p> <p>Control to adjust the tone colour of the signal in channel 1.</p> |
| 4 | <p><i>[CHANNEL SELECT]</i></p> <p>Channel 1 / 2 select switch. The LED of the active channel lights permanently during operation.</p> |
| 5 | <p><i>[GAIN]</i></p> <p>Control to adjust the preamp gain of the signal (volume) in channel 2.</p> |
| 6 | <p><i>[VOICE]</i></p> <p>Control to adjust the tone colour of the signal in channel 2.</p> |

| | |
|----|--|
| 7 | <p><i>[COMPRESSOR]</i></p> <p>Pressure switch for enabling the built-in compressor.</p> <p>The <i>[ACTIVE]</i> LED lights permanently during operation, when the compressor is enabled. The <i>[ON]</i> LED indicates that the compressor circuit is active and processes the signal. The signal level at which the compressor processes the signal is affected by the gain controls (the higher the gain, the more the signal is compressed).</p> |
| 8 | <p><i>[7-BAND EQUALIZER]</i></p> <p>Use the sliders of the equalizer to shape the sound of the amplifier depending on the frequency. In the zero position, the signal is reproduced unchanged.</p> |
| 9 | <p><i>[LIMIT OFF]</i></p> <p>Pressure switch for enabling or disabling the built-in limiter.</p> <p>The limiter monitors the signal level of the amplifier and detects the impedance of a connected speaker automatically. The protection circuit is automatically activated when the unit is turned on and attenuates an excessive output level to an uncritical level to avoid distortion.</p> |
| 10 | <p><i>[VOLUME]</i></p> <p>Overall volume control.</p> |

| | |
|----|--|
| 11 | <p><i>[AUX IN]</i></p> <p>Aux input for connecting an MP3 or CD player (RCA sockets).</p> |
| 12 | <p><i>[D.I. OUT]</i></p> <p>Balanced XLR output for connecting the amplifier to a mixer. The amplifier signal is supplied unchanged to the connected mixer.</p> |
| 13 | <p><i>[TUNER OUT]</i></p> <p>Output for connecting a tuner (1/4" phone socket).</p> |
| 14 | <p><i>[FOOT SWITCH]</i></p> <p>Connection for an optional foot switch (1/4" phone socket). Use a foot switch to toggle between the channels of the amplifier.</p> |
| 15 | <p><i>[POWER]</i></p> <p>Mains switch. Turns the device on and off.</p> <p>If there is no signal <i>[INPUT]</i> at the INPUT jack for 30 minutes, the device will automatically enter standby mode (LED green). As soon as the <i>[INPUT]</i> jack receives a signal again, the device automatically switches back to normal mode (LED red).</p> |

Rear panel



| | |
|----|--|
| 16 | <i>[AC INPUT FUSE]</i> IEC chassis plug with fuse holder. |
| 17 | Fan. |
| 18 | <i>[FX SEND RETURN]</i> In and output jacks for looping in an effects unit (1/4" jack sockets). |
| 19 | <i>[Horn On Off]</i> Toggle switch for enabling or disabling the built-in horn. |
| 20 | <i>[EXTERNAL SPEAKER]</i> Output jack for connecting an external speaker box (1/4" phone socket). |

6 Technical specifications

| | | |
|--------------------|---------------------------|---------------------------|
| Speaker | 1 × 15" Celestion speaker | |
| Input connections | Voltage supply | IEC chassis plug C14 |
| | Instruments | 1/4" jack socket |
| | AUX | RCA jack |
| | Optional foot switch | 1/4" jack socket |
| | Effect device | 1/4" jack socket |
| Output connections | mixer | XLR chassis socket, 3-pin |
| | Tuner | 1/4" jack socket |
| | Effect device | 1/4" jack socket |
| | external speaker | 1/4" jack socket |
| Input impedance | 220 kΩ | |

| | | |
|---------------------------------|--|----------------------|
| Output power | 300 W (RMS) @ 4 Ω | |
| | 145 W (RMS) @ 8 Ω | |
| Frequency range | 45 Hz to 20 kHz | |
| Signal-to-noise ratio | 56 dB | |
| Total harmonic distortion (THD) | 0.9 % | |
| Power consumption | max. 450 W | |
| Supply voltage | 230 V ~ 50 Hz | |
| Fuse | 5 mm × 20 mm, 3,15 A, 250 V, slow-blow | |
| Dimensions (W × H × D) | 625 mm × 320 mm × 512 mm | |
| Weight | 28 kg | |
| Ambient conditions | Temperature range | 0 °C...40 °C |
| | Relative humidity | 50 %, non-condensing |

Further information

| | |
|------------------------------|--------|
| Channels | 2 |
| High frequency horn | Yes |
| Equalizer | 7-band |
| Compressor | Yes |
| Limiter | No |
| Effect device | No |
| Socket for external speakers | Yes |
| Headphone connection | No |
| CD/MP3 input | Yes |
| Foot switch socket | Yes |
| 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!

Balanced and unbalanced transmission

Unbalanced transmission is mainly used in semi-professional environment and in hifi use. Instrument cables with two conductors (one core plus shielding) are typical representatives of the unbalanced transmission. One conductor is ground and shielding while the signal is transmitted through the core.

Unbalanced transmission is susceptible to electromagnetic interference, especially at low levels, such as microphone signals and when using long cables.

In a professional environment, therefore, the balanced transmission is preferred, because this enables an undisturbed transmission of signals over long distances. In addition to the conductors 'Ground' and 'Signal', in a balanced transmission a second core is added. This also transfers the signal, but phase-shifted by 180°.

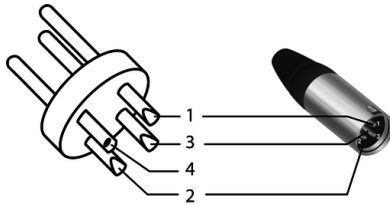
Since the interference affects both cores equally, by subtracting the phase-shifted signals, the interfering signal is completely neutralized. The result is a pure signal without any noise interference.

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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