

Harley Benton

bass combo



user manual

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

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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 <u>www.thomann.de</u>.



## **1.1 Further information**

On our website (<u>www.thomann.de</u>) 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 pos- sible dangerous situation that can result in minor injury if it is not avoided.	
NOTICE!	This combination of symbol and signal word indicates a pos- sible dangerous situation that can result in material and environmental damage if it is not avoided.	
Warning signs	Type of danger	
	Warning – high-voltage.	
<u>//</u>		



## 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.

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### 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.





#### **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.



#### **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.

Only operate the device within the ambient conditions specified in the chapter 'Technical specifications' of this user manual. Avoid heavy temperature fluctuations and do not switch the device on immediately after it was exposed to temperature fluctuations (for example after transport at low outside temperatures).

Dust and dirt inside can damage the unit. When operated in harmful ambient conditions (dust, smoke, nicotine, fog, etc.), the unit should be maintained by qualified service personnel at regular intervals to prevent overheating and other malfunction.

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#### 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

Bass head SolidBass 300H, SolidBass 600H Special features of the device:

- Output power:
  - SolidBass 300H, item no. 477611: 300 watt (4 Ω)
  - SolidBass 600H, item no. 477615: 600 watt (4 Ω)
- 4-band equalizer
- Smart compressor with on / off switch
- Built-in chromatic tuner with easy-to-read LED display and mute function
- Effects loop
- Inputs:
  - 2 different instrument inputs for active / passive bass guitars
  - Line input with level control for silent rehearsing
- Outputs:
  - DI (balanced)
  - 2 ×Speaker Twist
  - Headphones

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#### Bass combo SolidBass 150C, Sol-Special features of the device: idBass 300C

- Output power:
  - SolidBass 150C, item no. 477638: 150 watt (4 Ω) \_
  - SolidBass 300C, item no. 477640: 300 watt (4  $\Omega$ ) \_
- Speakers:
  - SolidBass 150C, item no. 477638,  $1 \times$  controllable 12-inch woofer,  $1 \times$  controllable 3-\_ inch tweeter
  - SolidBass 300C, item no. 477640, 1 × controllable 15-inch woofer, 1 × controllable 3inch tweeter
- 4-band equalizer
- Smart compressor with on / off switch
- Built-in chromatic tuner with easy-to-read LED display and mute function
- Effects loop
- Inputs:
  - 2 different instrument inputs for active / passive bass guitars
  - Line input with level control for silent rehearsing
- Outputs:
  - DI (balanced) \_
  - $1 \times \text{speaker twist}$
  - Headphones



## 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.

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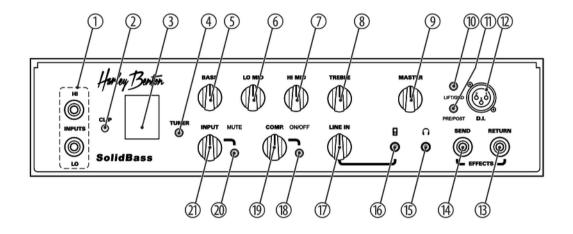
#### Possible property damage by magnetic fields

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**



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1	[INPUTS][HI][LO]	$2 \times 1/4$ " phone jack socket for connecting active bass guitars ([HI]) or passive bass guitars ([LO]).		
2	[CLIP]	LED indicator The LED lights up green when the device is turned on. The LED lights up red when the signal is clipping. Then turn <i>[INPUT]</i> counter-clockwise until the LED turns green again.		
3	Built-in chromatic tuner			
4	[TUNER]	Button to activate the built-in chromatic tuner		
5	[BASS]	Control for boosting / attenuating the low frequencies.		
6	[LO MID]	Control for boosting / attenuating the lower mid frequencies.		
7	[HI MID]	Control for boosting / attenuating the upper mid frequencies.		
8	[TREBLE]	Control for boosting / attenuating the high frequencies.		
9	[MASTER]	Overall volume control		



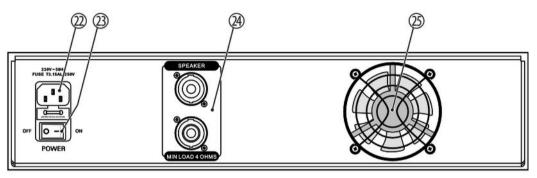
10	[LIFT/GND]	Ground potential switch to suppress ground loop noise.		
		Position [LIFT] (button released): Ground disconnected		
		Position [GND] (button pressed): Ground connected		
11	[PRE/POST]	Position [PRE]: The DI signal is tapped before the tone control and the compressor.		
		Position [POST]: The DI signal is tapped behind the tone control and the compressor.		
12	[D.I.]	Balanced XLR output (female) for connecting the amplifier to a mixer.		
13	[EFFECTS]	1/4" phone socket		
	[RETURN]	Input of the effect loop for feeding back the processed signal.		
14	[EFFECTS]	1/4" phone socket		
	[SEND]	Output of the serial effect loop for connecting sound processors such as compressors, etc.		
		The connection can also be used as a line output since the internal signal path is only inter- rupted by plugging in a plug into the <i>[RETURN]</i> socket.		
15	Headphones	3.55 mm phone jack socket to connect headphones		
16	Smartphone	3.55-mm phone jack socket for connecting a line-level player, e.g. MP3 player or smartphone		
17	[LINE IN]	Volume control for the Smartphone input.		

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18	[ON/OFF]	On / off switch for the compressor function.
19	[COMP]	Controller for setting the intensity of the compressor function. The use of this function results in fatter sounding depths, reduces signal peaks from hard string attack and increases the sustain of the notes, i.e. the long lingering of single notes.
20	[MUTE]	Switch to mute the device.
21	[INPUT]	Preamp volume control.
		If the LED [CLIP] lights up red, turn the knob counterclockwise until the LED turns green.



**Rear panel SolidBass 300H** 

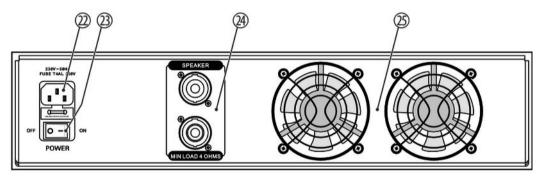


[AC INPUT | FUSE]
IEC chassis plug with fuse holder.
[POWER][ON] [OFF]
Main switch. Turns the device on and off.

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24	[EXTERNAL SPEAKER]
	$2 \times$ lockable output socket (Speaker Twist) for connecting a speaker.
25	Fan

#### **Rear panel SolidBass 600H**

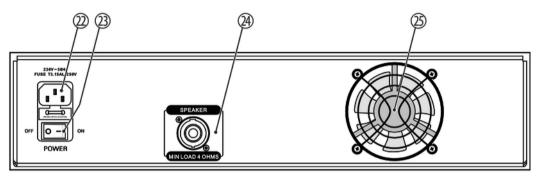




22	[AC INPUT   FUSE]
	IEC chassis plug with fuse holder.
23	[POWER][ON] [OFF]
	Main switch. Turns the device on and off.
24	[EXTERNAL SPEAKER]
	$2 \times$ lockable output socket (Speaker Twist) for connecting a speaker.
25	Fan



Rear panel SolidBass 300C

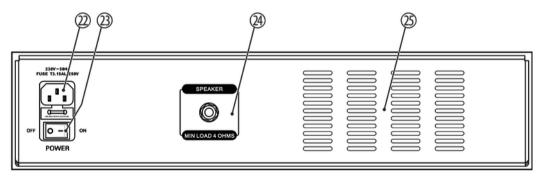


[AC INPUT | FUSE]
IEC chassis plug with fuse holder.
[POWER][ON] [OFF]
Main switch. Turns the device on and off.



24	[EXTERNAL SPEAKER]
	$1 \times$ lockable output socket (Speaker Twist) for connecting a speaker.
25	Fan

### Rear panel SolidBass 150C





22	[AC INPUT   FUSE]
	IEC chassis plug with fuse holder.
23	[POWER][ON] [OFF]
	Main switch. Turns the device on and off.
24	[EXTERNAL SPEAKER]
	$1 \times 1/4$ " phone socket for connecting a speaker.
25	Fan



# **6** Technical specifications

		SolidBass 300H Item no. 477611	SolidBass 600H Item no. 477615
Input connections	Voltage supply	IEC chassis plug C14	
	Instrument input	$2 \times 1/4$ " phone socket	
	Effects device	1/4" phone socket	
	[RETURN]		
	Line level playback devices, e.g. MP3 player or smart- phone	3.55 mm phone jack socket	
Output connections	Headphones	3.55 mm phone jack socket	
	Effects device	1/4" phone socket	
	[SEND]		
	Speaker	$2 \times lockable output socket (Spe$	aker Twist)



		SolidBass 300H	SolidBass 600H
		ltem no. 477611	ltem no. 477615
	[D.I.]	XLR chassis socket, 3-pin	
Input impedance	Instrument input	33 kΩ	33 kΩ
	[HI]		
	Instrument input	1,5 ΜΩ	1,5 ΜΩ
	[LO]		
	Effects device	22 kΩ	22 kΩ
	[RETURN]		
	[LINE]	40 kΩ	40 kΩ
Output power		300 watt (4 Ω)	600 watt (4 Ω)
Output impedance	[SEND]	1.5 kΩ	1.5 kΩ
	[D.I.]	470 Ω	470 Ω
Frequency range	Bass	60 Hz (±12 dB)	60 Hz (±12 dB)



		SolidBass 300H	SolidBass 600H
		ltem no. 477611	ltem no. 477615
	Lo Mid	200 Hz (±12 dB)	200 Hz (±12 dB)
	Hi Mid	1 kHz (±12 dB)	1 kHz (±12 dB)
	Treble	4 kHz (±12 dB)	4 kHz (±12 dB)
Signal-to-noise ratio		80 dB (A-weighted)	80 dB (A-weighted)
Total harmonic distortion (THD)		0.5 %	0.5 %
Power consumption		400 W	650 W
Operating supply voltage		230 V ~ 50 Hz	
Fuse		5 mm $\times$ 20 mm, 3.15 A, 250 V, slow-blow	5 mm × 20 mm, 4.0 A, 250 V, slow-blow
Dimensions (W $\times$ H $\times$ D)		460 mm × 145 mm × 295 mm	
Weight		10.63 kg	11.04 kg



		SolidBass 300H Item no. 477611	SolidBass 600H Item no. 477615
Ambient conditions	Temperature range	0 °C40 °C	
	Relative humidity	50 %, non-condensing	

S		SolidBass 150C	SolidBass 300C
		ltem no. 477638	ltem no. 477640
		1 × 12-inch custom voiced woofer	1 × 15-inch custom voiced woofer
		$1 \times 3$ -inch custom voiced tweeter	$1 \times 3$ -inch custom voiced tweeter
Input connections	Voltage supply	IEC chassis plug C14	
	Instrument input	$2 \times 1/4$ " phone socket	
Effects device		1/4" phone socket	
	[RETURN]		



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		SolidBass 150C	SolidBass 300C
		ltem no. 477638	ltem no. 477640
Output connections	Line level playback devices, e.g. MP3 player or smart- phone	3.55 mm phone jack socket	
	Headphones	3.55 mm phone jack socket	
	Effects device	1/4" phone socket	
	[SEND]		
	Speaker	1 × 1/4" phone socket	$1 \times lockable output socket (Speaker Twist)$
	[D.I.]	XLR chassis socket, 3-pin	
Input impedance	Instrument input	33 kΩ	33 kΩ
	[HI]		
	Instrument input	1,5 ΜΩ	1,5 ΜΩ
	[LO]		



		SolidBass 150C	SolidBass 300C
		ltem no. 477638	ltem no. 477640
	Effects device	22 kΩ	22 kΩ
	[RETURN]		
	[LINE]	40 kΩ	40 kΩ
Output power		150 watt (4 Ω)	300 watt (4 Ω)
Output impedance	[SEND]	1.5 kΩ	1.5 kΩ
	[D.I.]	470 Ω	470 Ω
Frequency range	Bass	60 Hz (±12 dB)	60 Hz (±12 dB)
	Lo Mid	200 Hz (±12 dB)	200 Hz (±12 dB)
	Hi Mid	1 kHz (±12 dB)	1 kHz (±12 dB)
	Treble	4 kHz (±12 dB)	4 kHz (±12 dB)
Signal-to-noise ratio		80 dB (A-weighted)	80 dB (A-weighted)
Total harmonic distortion (THD	)	0.5 %	0.5 %

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2		SolidBass 150C	SolidBass 300C
		ltem no. 477638	ltem no. 477640
Power consumption		160 W	400 W
Operating supply voltage		230 V ~ 50 Hz	
		5 mm × 20 mm, 1 A, 250 V, slow-blow	5 mm × 20 mm, 3.15 A, 250 V, slow-blow
Dimensions (W $\times$ H $\times$ D)		450 mm × 635 mm × 425 mm	
Weight		20.88 kg	24.55 kg
Ambient conditions Temperature range   Relative humidity		0 °C40 °C	
		50 %, non-condensing	



#### **Further information**

	SolidBass 300H	SolidBass 600H	SolidBass 150C	SolidBass 300C
	ltem no. 477611	ltem no. 477615	ltem no. 477638	ltem no. 477640
HF horn	—	—	Yes	Yes
Equalizer	4-band	4-band	4-band	4-band
Compressor	Yes	Yes	Yes	Yes
Limiter	No	No	No	No
Effects device	—	—	No	No
Effects processor	No	No	—	-
External effects loop	Yes	Yes	Yes	Yes
Headphone connection	Yes	Yes	Yes	Yes
DI output	Yes	Yes	Yes	Yes
Tuner output	No	No	—	—



	SolidBass 300H	SolidBass 600H	SolidBass 150C	SolidBass 300C
	ltem no. 477611	ltem no. 477615	ltem no. 477638	ltem no. 477640
CD/MP3 input	Yes	Yes	Yes	Yes
Rack format	No	No	-	—



# 7 Plug and connection assignment

Introduction	This chapter will help you select the right cables and plugs to connect your valuable equip- ment 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 trans- mission	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 trans- mitted 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 conduc- tors '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)



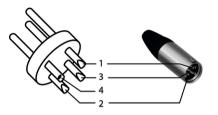
1	Signal
2	Ground, shielding

#### Three-pole 1/8" mini phone jack (stereo, unbalanced)

1	Signal (left)
2	Signal (right)
3	Ground, shielding



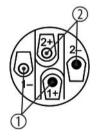
#### XLR plug (balanced)



3 4

Ground, shielding
Signal (in phase, +)
Signal (out of phase, –)
Shielding on plug housing (option)

#### Speaker Twist chassis connector



1,+	Signal 1 (in phase)
1, –	Signal 1 (out of phase)
2, +	Signal 2 (in phase)
2, –	Signal 2 (out of phase)



## 8 Protecting the environment

Disposal of the packaging material



#### Disposal of your old device



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.

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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