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TUBE5 Head, TUBE15 Head

Guitar Amp Head

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26.10.2023, ID: 552841, 552843

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1 General information

This document contains important instructions for the safe operation of the product. Read and follow the safety instructions and all other instructions. Keep the document for future reference. Make sure that it is available to all those using the product. If you sell the product to another user, be sure that they also receive this document.

Our products and documentation are subject to a process of continuous development. They are therefore subject to change. Please refer to the latest version of the documentation, which is ready for download under <u>www.thomann.de</u>.

1.1 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 document.

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.	
WARNING!	This combination of symbol and signal word indicates a possible dangerous situation that can result in death or serious 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 the amplification of signals from musical instruments with electromagnetic pickups. Use the device only as described in this user manual. 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!

Risk of injury and choking hazard for children!

Children can suffocate on packaging material and small parts. Children can injure themselves when handling the device. Never allow children to play with the packaging material and the device. Always store packaging material out of the reach of babies and small children. Always dispose of packaging material properly when it is not in use. Never allow children to use the device without supervision. Keep small parts away from children and make sure that the device does not shed any small parts (such knobs) that children could play with.



DANGER!

Danger to life due to electric current!

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 when covers, safety equipment or optical components are missing or damaged.



DANGER!

Danger to life due to electric current!

A short circuit could lead to a fire hazard and risk of death. Do not modify the mains cable or the plug! In case of isolation damage, disconnect immediately the power supply and arrange repair. If in doubt, seek advice from a qualified electrician.



WARNING!

Possible hearing damage due to high volumes on speakers!

With loudspeakers connected, 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. Do not operate the device permanently at a high volume level. Decrease the volume level immediately if you experience ringing in your ears or hearing impairment. If this is not possible, keep a greater distance to the speaker or use adequate ear-muffs.



NOTICE!

Risk of fire due to covered vents and neighbouring heat sources!

If the vents of the device are covered or the device is operated in the immediate vicinity of other heat sources, the device can overheat and burst into flames. Never cover the device or the vents. Do not install the device in the immediate vicinity of other heat sources. Never operate the device in the immediate vicinity of naked flames.



NOTICE!

Damage to the device if operated in unsuitable ambient conditions!

The device can be damaged if it is operated in unsuitable ambient conditions. Only operate the device indoors within the ambient conditions specified in the "Technical specifications" chapter of this user manual. Avoid operating it in environments with direct sunlight, heavy dirt and strong vibrations. Avoid operating it in environments with strong temperature fluctuations. If temperature fluctuations cannot be avoided (for example after transport in low outside temperatures), do not switch on the device immediately. Never subject the device to liquids or moisture. Never move the device to another location while it is in operation. In environments with increased dirt levels (for example due to dust, smoke, nicotine or mist): Have the device cleaned by qualified specialists at regular intervals to prevent damage due to overheating and other malfunctions.

NOTICE!

Damage to the device due to high voltages!

The device can be damaged if it is operated with the incorrect voltage or if high voltage peaks occur. In the worst case, excess voltages can also cause a risk of injury and fires. Make sure that the voltage specification on the device matches the local power grid before plugging in the device. Only operate the device from professionally installed mains sockets that are protected by a residual current circuit breaker (FI). As a precaution, disconnect the device from the power grid when storms are approaching or it the device will not be used for a longer period.

NOTICE!

Possible staining due to plasticiser in rubber feet!

The plasticiser contained in the rubber feet of this product may react with the coating of the floor and cause permanent dark stains after some time. If necessary, use a suitable mat or felt slide to prevent direct contact between the device's rubber feet and the floor.

3 Features

Item no. 552841 TUBE5 Head

- Output power: 5 watt @ 8 Ω
- Output for external speaker box
- Preamp tubes: 1 × ECC83/12AX7
- Power tubes: $1 \times 6V6GT$
- Class-D power amp

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- Output power: 15 watt @ 8 Ω
- Footswitch connector (not included)
- Output for external speaker box
- Further connectors: Effects loop
- Preamp tubes: 3 × ECC83/12AX7
- Power tubes: 2 × EL84
- Class-AB power amp

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!

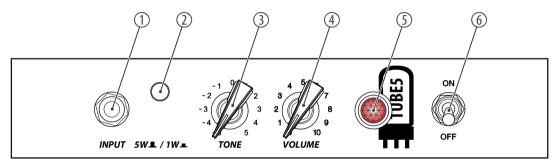
Possible property damage to adjacent devices due to magnetic fields.

Speakers generate a static magnetic field. This magnetic field can affect other neighbouring units and in unfavourable cases damage them.

Ensure that speakers are always a sufficient distance away from sensitive equipment that may be affected by an external magnetic field.

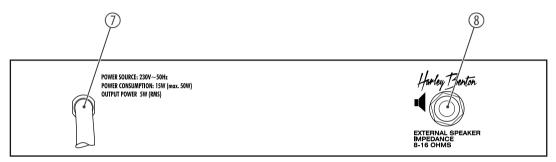
5 Connections and operating elements

Item no. 552841 TUBE5 Head Front panel



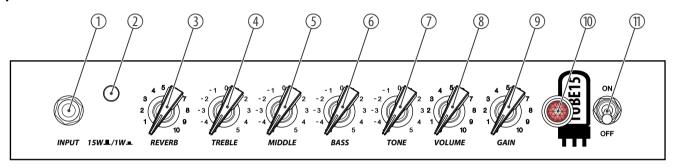
- 1 [INPUT] | 1/4" jack socket to connect an instrument
- 2 [5W/1W] | toggle switch to switch the output level
- 3 [TONE] | control to adjust the tone colour of the input signal
- 4 [VOLUME] | control to adjust the volume
- 5 Status LED. This LED lights when the device is turned on.
- 6 [ON/OFF] | main switch. Turns the device on and off.

Item no. 552841 TUBE5 Head Rear panel



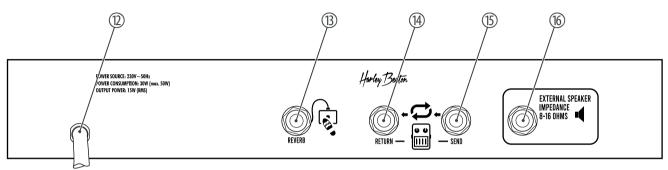
- 7 Power cord
- 8 [EXTERNAL SPEAKER] | 1/4" output socket for connecting an external speaker box (recommended impedance: 8 Ω).

Item no. 552843 TUBE15 Head **Front panel**



- [INPUT] | 1/4" jack socket to connect an instrument
 [15W/1W] | toggle switch to switch the output level
- 3 [REVERB] | control to adjust the intensity of the reverb effect
- 4 [TREBLE] | control to adjust the high frequencies
- 5 [MIDDLE] | control to adjust the mid frequencies
- 6 [BASS] | control to adjust the low frequencies
- 7 [TONE] | control to adjust the tone colour of the input signal
- 8 [VOLUME] | control to adjust the volume
- 9 [GAIN] | control to adjust the signals preamp gain
- 10 Status LED. This LED lights when the device is turned on.
- 11 [ON/OFF] | main switch. Turns the device on and off.

Item no. 552843 TUBE15 Head Rear panel



- 12 Power cord
- 13 [REVERB] | 1/4" jack socket to connect a footswitch for enabling or disabling the reverb effect
- 14 [RETURN] | 1/4" input socket for looping in an effects processor
- 15 [SEND] | 1/4" output socket for looping in an effects processor
- 16 [EXTERNAL SPEAKER] | 1/4" output socket for connecting an external speaker box (recommended impedance: 8 Ω).

6 Technical specifications

Item no. 552841 TUBE5 Head

Amp class	Class A		
Input connections	Instruments	1/4" jack socket	
Output connections	External speaker (impedance min. 8 Ω)	1/4" jack socket	
Input impedance	1 ΜΩ		
Output power	5 W (RMS) @ 8 Ω (external speaker)		
Frequency range	80 Hz10 kHz		
Signal-to-noise ratio	–75 dB		
Total harmonic distortion (THD)	0.5 %		
Power consumption	15 W (max. 50 W)		
Supply voltage	230 V ~ 50 Hz		
Dimensions (W \times H \times D)	$310 \text{ mm} \times 190 \text{ mm} \times 220 \text{ mm}$		
Weight	5.2 kg		
Ambient conditions	Temperature range	0°C40°C	
	Relative humidity	20 %80 % (non-condensing)	

Technical specifications

Further information

Channels	1
Reverb	no
External effects loop	no
Recording output	no
MIDI interface	no
External speaker connector	yes
Headphone connection	no
Foot switch connector	no
Incl. foot switch	no

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Amp class	Class AB		
Input connections	Instruments	1/4" jack socket	
	Effect device	1/4" jack socket	
	Optional foot switch	1/4" jack socket	
Output connections	External speaker (impedance min. 8 Ω)	1/4" jack socket	
	Effect device	1/4" jack socket	
Input impedance	1 ΜΩ		
Output power	15 W (RMS) @ 8 Ω (external speaker)		
Frequency range	80 Hz10 kHz		
Signal-to-noise ratio	-75 dB		
Total harmonic distortion (THD)	0.5 %		
Power consumption	30 W (max. 50 W)		
Supply voltage	$230 \text{ V} \sim 50 \text{ Hz}$		
Dimensions (W \times H \times D)	$435 \text{ mm} \times 200 \text{ mm} \times 245 \text{ mm}$		
Weight	6 kg		

Technical specifications

Ambient conditions	Temperature range	0°C40°C
	Relative humidity	20 %80 % (non-condensing)

Further information

Channels	1
Reverb	yes
External effects loop	yes
Recording output	no
MIDI interface	no
External speaker connector	yes
Headphone connection	no
Foot switch connector	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

1/4" TRS phone plug (mono, balanced)



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

8 Protecting the environment

Disposal of the packing material



Environmentally friendly materials have been chosen for the packaging. These materials can be sent for normal recycling. Ensure that plastic bags, packaging, etc. are disposed of in the proper manner.

Do not dispose of these materials with your normal household waste, but make sure that they are collected for recycling. Please follow the instructions and markings on the packaging.



Observe the disposal note regarding documentation in France.

Disposal of your old device



This product is subject to the European Waste Electrical and Electronic Equipment Directive (WEEE) as amended.

Do not dispose of your old device with your normal household waste; instead, deliver it for controlled disposal by an approved waste disposal firm or through your local waste facility. When disposing of the device, comply with the rules and regulations that apply in your country. If in doubt, consult your local waste management facility. Proper disposal protects the environment as well as the health of your fellow human beings.

Also note that waste avoidance is a valuable contribution to environmental protection. Repairing a device or passing it on to another user is an ecologically valuable alternative to disposal.

You can return your old device to Thomann GmbH at no charge. Check the current conditions on www.thomann.de.

If your old device contains personal data, delete those data before disposing of it.