



free 300 HT 823/548, free 300 PT 823/548

UHF Wireless System

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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 ➔ www.thomann.de.

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.
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 – danger zone.
	Warning – high-voltage.

2 Safety instructions

Intended use

This device is intended to be used for the wireless transmission of audio signals from microphones or instruments to amplifiers or active speakers. 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.



NOTICE

Damage to the external power supply due to high voltages!

The device is powered by an external power supply. The external power supply 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 external power supply matches the local power grid before plugging in the power supply. Only operate the external power supply from professionally installed mains sockets that are protected by a residual current circuit breaker (FI). Ensure that the power cord plug is easily accessible at all times if it is the only device to safely disconnect the device from the mains supply. As a precaution, disconnect the power supply from the power grid when storms are approaching or if the device will not be used for a longer period.



NOTICE

Damage to the device due to use of unsuitable external power supplies!

If the device is operated with an unsuitable external power supply, the device can be damaged by overvoltage or incorrect polarity. If things go badly, using an unsuitable power supply can also cause a risk of injury and fire. Only use the external power supply designated for the device or an equivalent external power supply with identical parameters. If in doubt, compare the voltage specifications on the external power supply and the polarity (+/-) with the specifications in this manual and printed on the device. Voltage and polarity must always match.

**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****Possible staining due to plasticiser in rubber and foam feet!**

The plasticiser in the feet of this product may react with the coating of the floor, resulting in permanent dark stains after a while. If necessary, use a suitable mat or felt pads to prevent direct contact between the product's feet and the floor.

3 Features

The UHF wireless system is particularly suitable for professional audio transmission, for example at events, on rock stages and in concert halls, theatres, musicals or night clubs.

The UHF wireless system consists of the following components:

- 9.5" diversity receiver:
 - Two antennas for optimum reception quality
 - Automatic frequency scanning
 - Infrared interface for transmitting the settings from the receiver to the transmitter
 - Switching possible between handheld microphone and bodypack transmitter (no parallel operation possible)
 - Adjustable gain
 - Outputs: XLR, 6.35 mm jack socket
 - Suitable for mounting in a 19" rack (1 RU)
 - Power supply: 12 V $\overline{\text{AC}}$, a suitable plug-in power supply is included
 - Including Rack mount
- Transmitter:
 - Battery-powered handheld cardioid microphone (HT series)
 - Battery-powered bodypack transmitter (PT series)

Overview of the individual transmitters

Type	Item no.
the t.bone free 300 Handheld 823	613187
the t.bone free 300 Bodypack 823	613189
the t.bone free 300 Handheld 548	613188
the t.bone free 300 Bodypack 548	613190

When using multiple systems, use an antenna splitter (P/N 314056).

Scope of delivery

Item no.	System	Scope of delivery
613183	the t.bone free 300 HT 823	1 × receiver, 1 × handheld microphone, 1 × plug-in power supply, 3 × rack-mounting material, 1 × 6.35 mm jack cable, 2 × antenna, 2 × plastic caps
613184	the t.bone free 300 HT 548	
613185	the t.bone free 300 PT 823	1 × receiver, 1 × bodypack transmitter, 1 × plug-in power supply, 3 × rack-mounting material, 1 × 6.35 mm jack cable, 2 × antenna, 2 × plastic caps
613186	the t.bone free 300 PT 548	

The system works with three pre-programmed frequency groups, each with ten available channels.



The frequency lists are available for download on the product page at
➡ www.thomann.de.

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

Fire hazard due to incorrect polarity and incorrect battery type!

Incorrectly inserted batteries can cause fires and destroy the device as well as the batteries.

To extend the life of batteries, use rechargeable batteries if possible. Only use batteries of the battery type specified in the "Technical specifications" chapter.

Observe the markings on batteries and on the device. Ensure that proper polarity (+/-) is observed when inserting battery.



NOTICE

Possible damage to the device due to leaking batteries when not in use!

Batteries may leak and permanently damage the device.

If you are not using the device for a long time, remove the batteries from the device. Store batteries in their original packaging in a cool dry place.

Notes on wireless transmission

- This device utilizes frequencies that are not harmonized within the European Union (EU) and therefore may only be used in certain EU member states. In all European countries, the frequencies used for the transmission of audio signals are strictly regulated. Before you start, make sure the frequencies are allowed in the respective country and check whether the operation must be reported to the appropriate authority.
For more information, please visit ➔ <http://www.thomann.de>.
- Make sure that transmitter and receiver are both tuned to the same channel.
- Never set multiple transmitters to the same channel.
- Make sure that there are no metal objects between the transmitter and receiver.
- Avoid interference from other radio or in-ear systems.

4.1 Receiver

Rack mounting

The rack-mounting material is included.

To mount two receivers in one rack unit (RU), screw the short plates onto the outer sides of the receivers. Connect the two receivers on the underside using the metal plate.

It may be useful to remove the rubber feet on the receiver so it occupies only one rack unit (RU).

Connecting the power supply

1. ➤ Connect the cable of the plug-in power supply to the receiver.
2. ➤ Plug the mains plug into a properly connected mains socket.

Attaching the antennas

1. ➤ Attach the supplied antennas to the back of the receiver.
To improve the transmission quality and to adapt to the spatial conditions, the antennas are rotatable and swivelling.
2. ➤ If there is not enough space on the receiver for direct assembly of the antennas, for example because there is not much space in the rack, you can use the optionally available coaxial cable (item no. 177448) to assemble the antennas separately from the receiver.



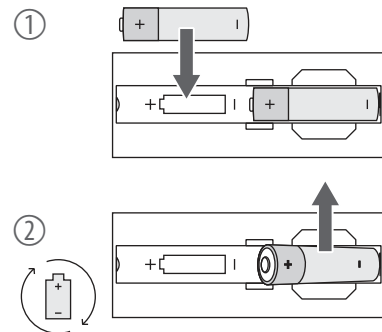
If several receivers are used, each device may have to be connected to the power supply with its own plug-in power supply.

Connecting audio and starting up

1. ➤ Connect one of the audio outputs of the receiver to your mixer or your amplifier.
Only use one of the two outputs of the receiver at a time, because interference might occur otherwise.
2. ➤ Set the volume of the receiver to "Minimum".
3. ➤ Press *[POWER]* to switch on the receiver.

4.2 Handheld microphone (HT series)

Inserting and replacing batteries



The following illustrations serve as an example and may differ from the real use case.



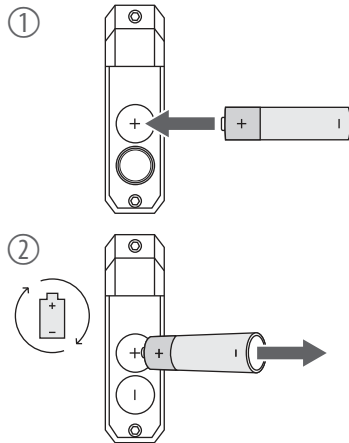
Do not use new and used batteries at the same time. Only use batteries of the same type and from the same manufacturer.

1. ➤ Unscrew the lower housing part.
2. ➤ Insert the batteries with the correct polarity (+/-) (1).
3. ➤ Screw the lower housing part tight.
➡ The batteries have been inserted.
4. ➤ To replace the batteries, unscrew the lower housing part.
5. ➤ Remove the old batteries (2).
6. ➤ Insert the new batteries with the correct polarity (+/-) (1).

7. ➤ Screw the lower housing part tight.
➡ The batteries have been replaced.

4.3 Bodypack transmitter (PT series)

Inserting and replacing batteries



The following illustrations serve as an example and may differ from the real use case.



Do not use new and used batteries at the same time. Only use batteries of the same type and from the same manufacturer.

1. ➤ Open the battery compartment cover.
2. ➤ Insert the batteries with the correct polarity (+/-) (1).
3. ➤ Close the battery compartment cover until it engages.
➡ The batteries have been inserted.
4. ➤ To replace the batteries, open the battery compartment cover.
5. ➤ Remove the old batteries (2).
6. ➤ Insert the new batteries with the correct polarity (+/-) (1).
7. ➤ Close the battery compartment cover until it engages.
➡ The batteries have been replaced.

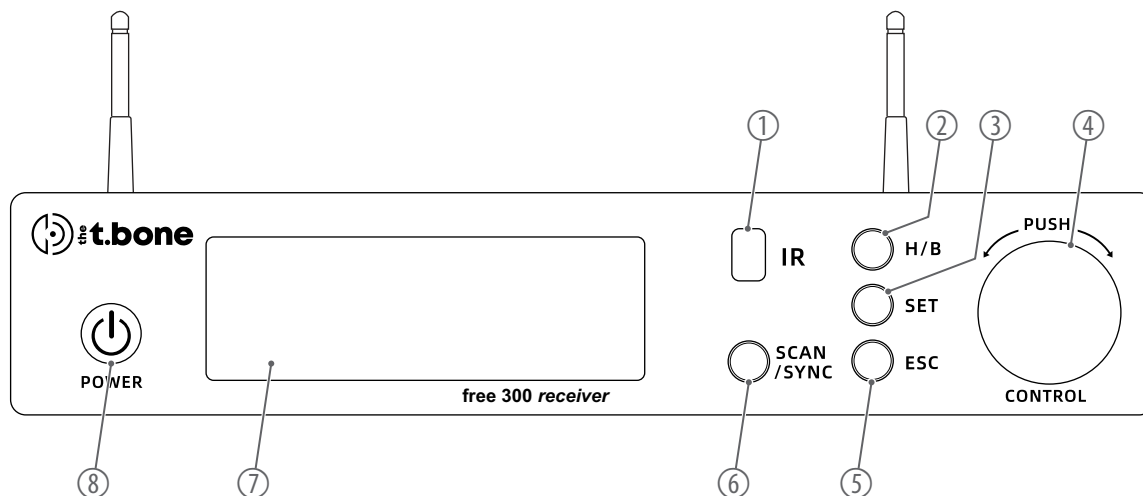
Connecting a microphone

- 1.** ➤ Make sure that the bodypack transmitter is switched off.
- 2.** ➤ Connect the microphone cable to the input of the bodypack transmitter (mini-XLR panel connector).
- 3.** ➤ Switch on the transmitter using the main switch.
- 4.** ➤ Test the transmission with the microphone.

5 Connections and controls

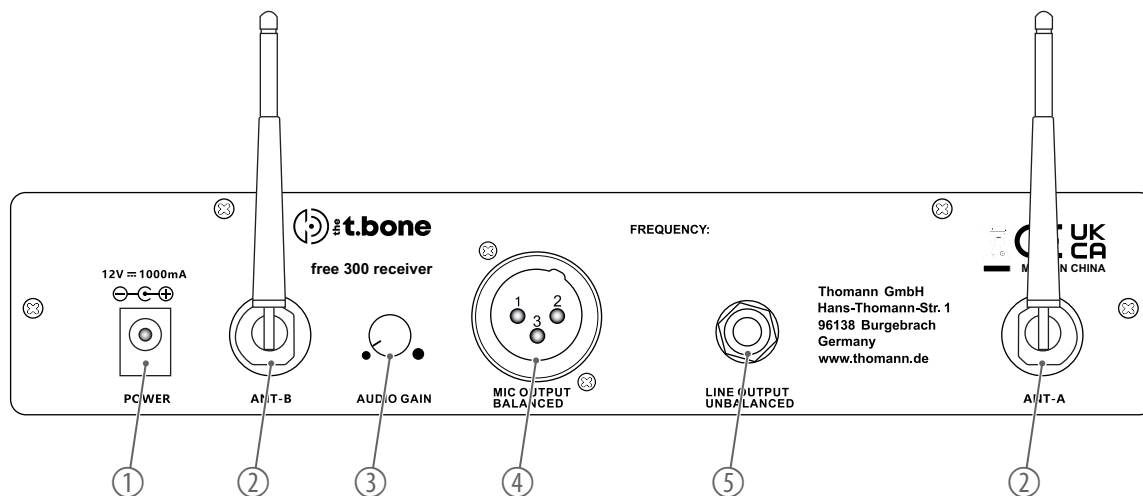
5.1 Receiver

Front panel



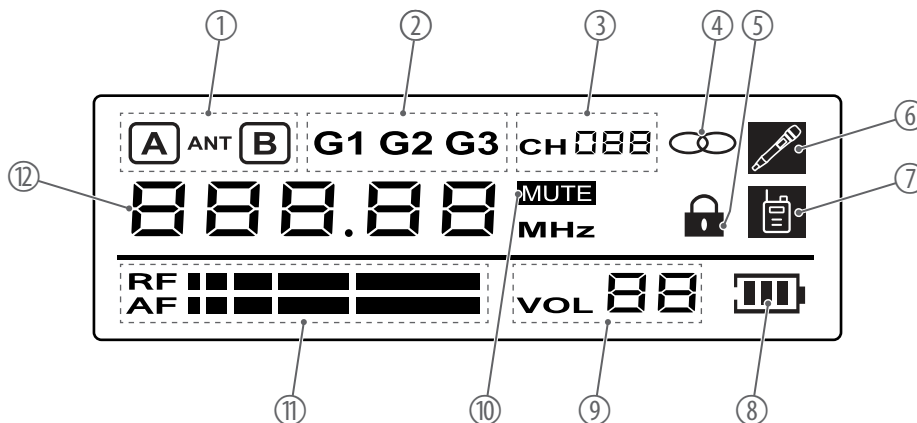
1	Infrared receiver
2	[H/B] Toggles between handheld microphone (H) and bodypack transmitter (B).
3	[SET] Opens the menu.
4	[CONTROL] Selects the frequency and adjusts the volume.
5	[ESC] Saves the settings made and closes the menu.
6	[SCAN / SYNC] Starts synchronisation with the transmitter. Scans the frequency and transmits it to the transmitter.
7	Display
8	[POWER] Main switch. Turns the device on and off. All previous settings are retained even when you switch off the receiver and disconnect it from the mains.

Rear panel



1	<i>[POWER]</i> Socket for connecting the supplied plug-in power supply
2	<i>[ANTA-B]/[ANT-A]</i> Tuned UHF antennas The receiver evaluates the radio signal coming from both antennas and selects the signal with the higher quality for further processing.
3	<i>[AUDIO GAIN]</i> Sets the transmission gain.
4	<i>[MIC OUTPUT BALANCED]</i> XLR panel connector as a balanced audio signal output with microphone level for direct connection to a microphone input of a mixer, a power amplifier or an active speaker
5	<i>[LINE OUTPUT UNBALANCED]</i> 6.35 mm jack socket as an unbalanced audio signal output with line level for direct connection to the line input of a mixer, a power amplifier or an active speaker

Display



1 [ANT A/B] | Indicates which of the two antennas is currently being used for signal transmission.

2 [G1]...[G3] | Indicates the set frequency group.

3 [CH] | Shows the set channel.

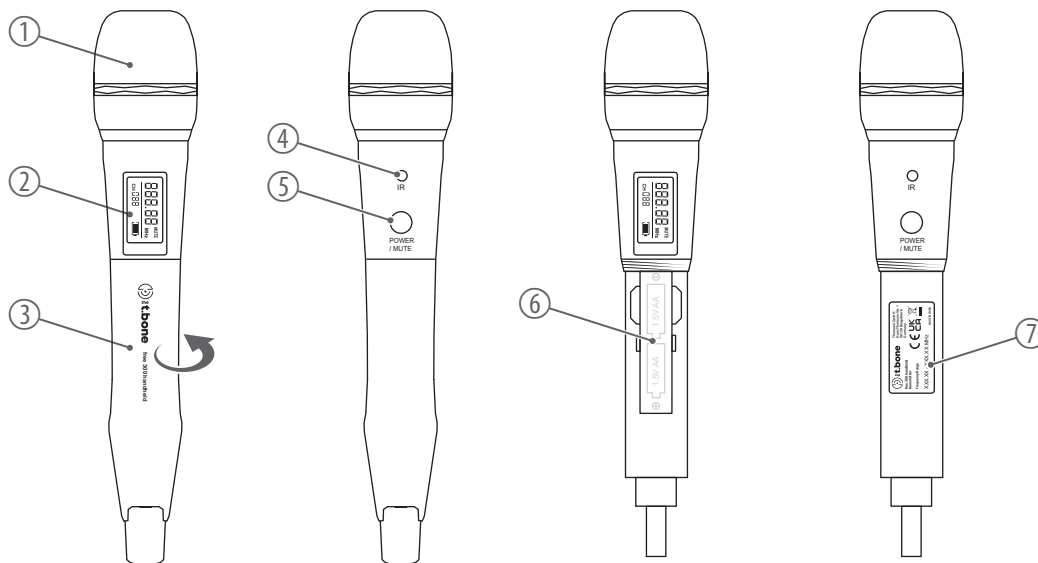
4  | Indicates that the transmitter is connected to the receiver.

5  | Indicates that the receiver is locked to prevent accidental changes.

6	 Indicates that the handheld microphone is working as a transmitter.
7	 Indicates that the bodypack transmitter is working as a transmitter.
8	 Indicates the battery status of the transmitter from which the receiver is currently receiving a signal.
9	[VOL] Indicates the set volume.
10	[MUTE] Indicates that the transmitter is muted.
11	[RF] Shows the level of the received radio signal.
	[AF] Shows the level of the audio signal.
12	Indicates the frequency assigned to the set combination of frequency group and channel.

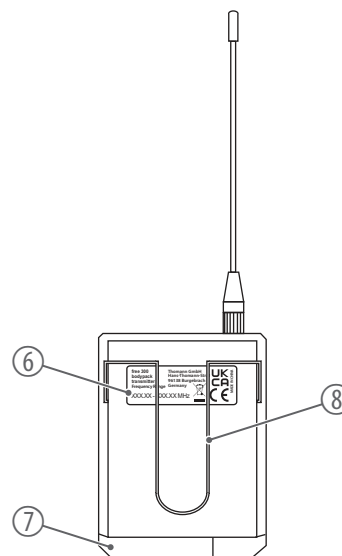
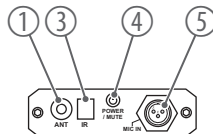
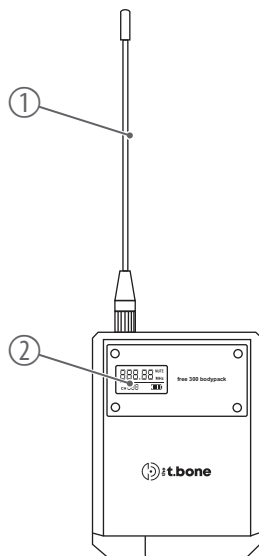
5.2 Transmitter

5.2.1 Handheld microphone



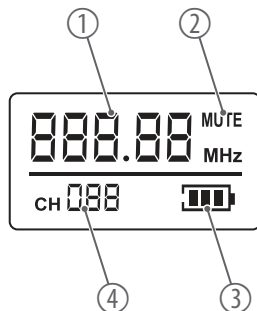
1	Microphone head grill to prevent damage and to reduce wind and breathing noises.
2	Display
3	Lower housing part. Unscrew to open.
4	Infrared sensor
5	[POWER / MUTE] Main switch. Press the switch for several seconds to turn the transmitter on and off. Press the switch briefly to mute or unmute the transmitter.
6	Battery holder for two batteries (AA)
7	Indication of the frequency range in which the transmitter operates. The information must match the information on the back of the receiver.

5.2.2 Bodypack transmitter



1	[ANT] Antenna
2	Display
3	[IR] Infrared sensor
4	[POWER / MUTE] Main switch. Press the switch for several seconds to turn the transmitter on or off. Press the switch briefly to mute or unmute the transmitter.
5	[MIC IN] Mini XLR panel connector for connecting a microphone
6	Indication of the frequency range in which the transmitter operates. The information must match the information on the back of the receiver.
7	Battery holder for two batteries (AA)
8	Clamping bracket for attachment to a belt or similar.

5.2.3 Display



- | | |
|---|--|
| 1 | Indicates the frequency assigned to the set combination of frequency group and channel. |
| 2 | [MUTE] Indicates that the transmitter is muted. This is the case if you have muted the transmitter by briefly pressing the main switch. |
| 3 |  Indicates the state of the batteries. Replace the batteries when only one flashing bar is displayed. If the battery voltage drops any further the transmitter is switched off automatically. The battery status is also shown on the receiver. |
| 4 | [CH] Shows the set channel. |

6 Operating

6.1 Receiver

Automatic frequency selection

- 1.** ➤ Press *[SET]* repeatedly until the display for the frequency group ('G1'...'G3') flashes on the display.
- 2.** ➤ Use *[CONTROL]* to select the frequency group ('G1'...'G3').
- 3.** ➤ Wait 5 seconds until the indicator for the frequency group ('G1'...'G3') on the display stops flashing.
 - ➡ The selected frequency group is confirmed.
- 4.** ➤ Hold down *[SCAN / SYNC]* until the display shows 'SC'.
 - ➡ The search for a free channel within the frequency group is started.
 - ➡ When the search for a free channel is completed, '1A' flashes on the display.
 - ➡ Automatic synchronisation via infrared is active.
- 5.** ➤ Within 10 seconds, hold the infrared sensor of the transmitter close to the infrared sensor of the receiver.
 - ➡ Once synchronisation is successfully completed, the display shows the frequency, channel, RF level and battery state of the synchronised transmitter.
 - ➡ After a few seconds, the display shows the basic state and the ∞ indicator lights up.
- 6.** ➤ Press *[ESC]* to save the selection and exit the menu.

Selecting a frequency manually

1. ➤ Press **[SET]** repeatedly until the display for the frequency group ('G1'...'G3') flashes on the display.
2. ➤ Use **[CONTROL]** to select the frequency group ('G1'...'G3').
3. ➤ Press **[SET]** repeatedly until the channel indication ('CH 001'...'CH 010') flashes on the display.
4. ➤ Use **[CONTROL]** to select the channel ('CH 001'...'CH 010') within the set frequency group.
 - ➡ The display shows that the receiver is being tuned to the new frequency. After a few seconds, the display indicates the default state.
5. ➤ Press **[ESC]** to save the selection and exit the menu.



The frequency lists are available for download on the product page at
➡ www.thomann.de.

Synchronising the transmitter and receiver

1. ➤ Briefly press **[SCAN / SYNC]**.
 - ➡ The display shows '1A'.
2. ➤ Within 10 seconds, hold the infrared sensor of the transmitter close to the infrared sensor of the receiver.
 - ➡ Once synchronisation is successfully completed, the display shows the frequency, channel, RF level and battery state of the synchronised transmitter.
 - ➡ After a few seconds, the display shows the basic state and the ∞ indicator lights up.

Selecting a transmitter

Press **[H/B]** to choose between handheld microphone and bodypack transmitter.

If you have selected the handheld microphone as the transmitter, the display will show .

If you have selected the bodypack transmitter as the transmitter, the display will show .



Please note that the handheld microphone and the bodypack transmitter cannot be operated in parallel.

The transmitters must be set to different channels to avoid interference.

Adjusting the transmitter volume

You can set different volumes for handheld microphone and bodypack transmitter to compensate for level differences between the transmitters.

- 1.**  Press **[H/B]** to choose between handheld microphone and bodypack transmitter.
- 2.**  Press **[SET]**.
 - ➡ The frequency indicator on the display flashes.
- 3.**  Press **[CONTROL]** twice in a row.
 - ➡ The indicator for the volume ('VOL') on the display flashes.
- 4.**  Use **[CONTROL]** to adjust the volume.
- 5.**  Press **[ESC]** or **[CONTROL]** to save the selection and exit the menu.

Adjusting the output level

Use **[AUDIO GAIN]** to change the output level between 0 dB and 25 dB.

Switching on and releasing the key lock

1. ➤ Hold down *[CONTROL]* until the display shows .
➡ All buttons except *[H/B]* are locked.
2. ➤ Hold down *[CONTROL]* until  disappears from the display.
➡ The buttons have their original function.

7 Technical specifications

7.1 Receiver

Number of systems that can be operated in parallel	the t.bone free 300 HT 823	6 systems
	the t.bone free 300 HT 548	
	the t.bone free 300 PT 823	
	the t.bone free 300 PT 548	
Input connections	Power supply	Socket for connecting the 12 V plug-in power supply.
Output connections	Audio signal	1 × XLR panel plug, balanced
		1 × 6.35 mm jack socket, unbalanced
Output level adjustment	the t.bone free 300 HT 823	0 dB...–25 dB
	the t.bone free 300 HT 548	
	the t.bone free 300 PT 823	
	the t.bone free 300 PT 548	
Frequency range	the t.bone free 300 HT 823	823 MHz...832 MHz / 863 MHz...865 MHz
	the t.bone free 300 HT 548	548 MHz...572 MHz

Switching bandwidth	the t.bone free 300 PT 823	823 MHz...832 MHz / 863 MHz...865 MHz
	the t.bone free 300 PT 548	548 MHz...572 MHz
	the t.bone free 300 HT 823	11 MHz
	the t.bone free 300 HT 548	24 MHz
Sensitivity	the t.bone free 300 PT 823	11 MHz
	the t.bone free 300 PT 548	24 MHz
	the t.bone free 300 HT 823	11 MHz
	the t.bone free 300 HT 548	24 MHz
Antenna gain	< 105 dBm	
NF frequency response	2 dBi	
Total harmonic distortion (THD)	20 Hz...18 kHz (± 1 dB)	
Signal-to-noise ratio	< 0.5% @1 kHz	
Power supply	≥ 106 dB(A)	
Operating voltage/current	External plug-in power supply, 100 - 240 V $\sim$ 50/60 Hz	
Dimensions (W $\times$ H $\times$ D), without antennas	12 V $\overline{\text{---}}$ / min. 1 A, polarity: centre positive	
Weight	210 mm $\times$ 45 mm $\times$ 164 mm	
Ambient conditions	1.95 kg	
	Temperature range	0 °C...40 °C

	Relative humidity	20%...80% (non-condensing)
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7.2 Handheld microphone

Frequency range	the t.bone free 300 Handheld 823	823 MHz...832 MHz / 863 MHz...865 MHz
	the t.bone free 300 Handheld 548	548 MHz...572 MHz
Max. transmission power	the t.bone free 300 Handheld 823	≤ 10 mW
	the t.bone free 300 Handheld 548	
Max. input level	the t.bone free 300 Handheld 823	+ 10 dBu
	the t.bone free 300 Handheld 548	
Switching bandwidth	the t.bone free 300 Handheld 823	11 MHz
	the t.bone free 300 Handheld 548	24 MHz
Modulation type	Frequency modulation (FM)	
Input impedance	600 Ω	
Range in clear field of vision	Up to 100 m	

Range of the infrared connection for the synchronisation between transmitter and receiver	200 mm	
NF frequency response	20 Hz... 18 kHz (± 1 dB)	
Total harmonic distortion	< 0.3%	
Spurious rejection	> 65 dBc	
Peak deviation	± 5 kHz	
Signal-to-noise ratio	≥ 106 dB(A)	
Battery of the device (available as an option)	Battery type	2 $\times$ non-rechargeable or rechargeable battery (AA)
	Voltage	1.5 V
Dimensions (L $\times$ Ø)	243 mm $\times$ 53 mm	
Weight	301 g	
Ambient conditions	Temperature range	0 °C...40 °C
	Relative humidity	20%...80% (non-condensing)

7.3 Bodypack transmitter

Frequency range	the t.bone free 300 Bodypack 823	823 MHz...832 MHz / 863 MHz...865 MHz
	the t.bone free 300 Bodypack 548	548 MHz...572 MHz
Max. transmission power	the t.bone free 300 Bodypack 823	≤ 10 mW
	the t.bone free 300 Bodypack 548	
Maximum input level	the t.bone free 300 Bodypack 823	+ 10 dBu
	the t.bone free 300 Bodypack 548	
Switching bandwidth	the t.bone free 300 Bodypack 823	11 MHz
	the t.bone free 300 Bodypack 548	24 MHz
Modulation type	Frequency modulation (FM)	
Input impedance	Microphone	600 Ω
Range in clear field of vision	Up to 100 m	
Range of the infrared connection for the synchronisation between transmitter and receiver	200 mm	
NF frequency response	20 Hz...18 kHz (± 1 dB)	

Total harmonic distortion	< 0.3%	
Spurious rejection	> 65 dBc	
Peak deviation	± 5 kHz	
Signal-to-noise ratio	≥ 106 dB(A)	
Battery of the device (available as an option)	Battery type	2 × non-rechargeable or rechargeable battery (AA)
	Voltage	1.5 V
Dimensions (W × H × D), without antennas	64 mm × 94 mm × 34 mm	
Weight	119 g	
Ambient conditions	Temperature range	0 °C...40 °C
	Relative humidity	20%...80% (non-condensing)

Further information

Transmission technology	Analogue
Transmitter type	Bodypack transmitter, handheld microphone
Receiver type	Stationary
Detachable antenna	BNC
Charging system	No
Built-in battery	No
Suitable antenna converter	Optionally available (item no. 177448)
Accessories	Rack-mounting material, 6.35 mm jack cable and plastic caps included

8 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)



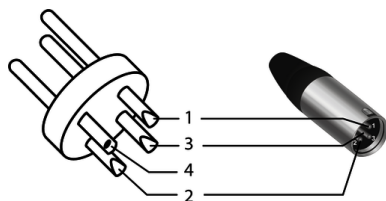
1	Signal
2	Ground, shielding

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



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

XLR plug (balanced)



1	Ground, shielding
2	Signal (in phase, +)
3	Signal (out of phase, -)
4	Shielding on plug housing (option)

Mini XLR



1	Ground
2	Positive signal (+)
3	Negative signal (-)

9 Troubleshooting

In the following we list a few common problems that may occur during operation. We give you some suggestions for easy troubleshooting:

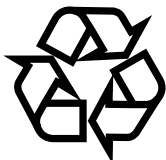
Symptom	Remedy
No sound	1. Check the power supply of the transmitter and receiver.
	2. Make sure that transmitter and receiver are operating in the same frequency range. The frequency range can be found on the devices.
	3. Make sure that transmitter and receiver are set to the same channel.
	4. Check the connection between the receiver and the connected audio device (amplifier, mixer). Is the connected audio device turned on and does the signal level on the output of the receiver match the input requirements of the audio device?
	5. Check if the audio transmission works when you move the transmitter closer to the receiver.
	6. Make sure that no metal objects near the transmitter or receiver are obstructing the transmission.
Transmission is interrupted	1. Modify the orientation of the antennas.

Symptom	Remedy
	2. If you use more than one wireless system at the same time, check the frequencies and channels used.
	3. Check whether the interference is caused by other wireless and in-ear systems.

If the procedures recommended above do not succeed, please contact our Service Center. You can find the contact information at ➔ www.thomann.de.

10 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 batteries



As an end user, you are obliged to dispose of batteries responsibly as they contain hazardous substances that, if improperly handled, can endanger the environment, health and safety. Always pay attention to the symbol of the crossed-out waste container – it indicates that batteries must be collected separately.

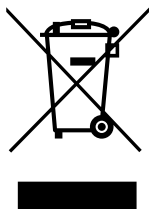
Before disposal, check whether batteries can still be used in other devices. You can pass on used but still functional batteries for reuse. Take advantage of the return options offered so that batteries can be reprocessed or recycled. Check local battery reuse or reprocessing programs.

Never dispose of batteries via household waste or by illegally dumping them in the environment, but always separate them from other waste. Improper disposal can release harmful substances and cause significant hazards to humans and nature.

Only dispose of batteries in line with the local regulations on the disposal of hazardous waste. Use the available collection sites or contact your local waste disposal facility. Remove batteries from the device before disposal if this is possible without destruction.

By following these instructions, you are making an important contribution to the protection of people and the environment.

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. If in doubt, consult your local waste management facility. You can also return the device to a retailer if they offer to take the device back for free or if they are legally obliged to do so. When disposing of the device, comply with the rules and regulations that apply in your country. You can also return your old device to Thomann GmbH at no charge. Check the current conditions on ➔ www.thomann.de.

Proper disposal protects the environment as well as the health of your fellow human beings. This is because the proper handling of old devices negates the potential negative effects of hazardous substances, and because it conserves resources by recycling them.

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. For example, use the classified ads of Thomann GmbH.

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

