the t.bone
audio experience

GigA Pro Body Set

User Manual

Wireless System

Thomann GmbH
Hans-Thomann-Straße 1
96138 Burgebrach
Germany
Telephone: +49 (0) 9546 9223-0
Internet: www.thomann.de

04.04.2024, ID: 313903 (V7)

Table of contents


GigA Pro R
CH
01
SET
POWER

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.
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
	Warning – dangers due to batteries.
	Warning – danger zone.

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.

WARNING!

Incorrect handling of lithium batteries can result in injury!

In the event of a short circuit, overheating or mechanical damage, lithium batteries can cause severe injuries. Handle lithium batteries in a correct and professional manner. Store lithium batteries in a cool and dry place in their original packaging. Keep lithium batteries away from sources of heat. Never open lithium batteries. Only charge rechargeable lithium batteries with a suitable charger. Remove the lithium batteries before disposing of the device. Cover the poles of used lithium batteries with adhesive tape to prevent short circuits. Electrolyte can escape from damaged lithium batteries. Put the damaged lithium battery in air-tight packaging. Collect the electrolyte with absorbent paper. Wear rubber gloves while doing so.

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!

Risk of fire due to incorrect polarity!

Incorrectly inserted batteries may cause fires and destroy the device and the batteries. Observe the markings on the batteries and on the device. Ensure that proper polarity is observed when inserting batteries.

NOTICE!

Possible damage due to leaking batteries!

Batteries can leak and cause permanent damage to the device. Take the batteries out of the device if it is not going to be used for an extended period of time.

NOTICE!

Possible damage to lithium-ion batteries through incorrect storage!

Deep discharge can permanently damage lithium-ion batteries or cause them to lose some of their capacity. Charge the lithium-ion batteries before longer breaks in use and before storage. Ensure that the device is switched off for storage. Store the device at room temperature or cooler in an environment as dry as possible. Recharge the lithium-ion batteries about every three months if they are stored for a longer period of time to avoid permanent damage due to too deep self-discharge. Fully charge the lithium-ion batteries only shortly before use at room temperature.

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

The Wireless System GigA Pro Body Set consists of the following components:

- 9.5-inch Diversity receiver:
  - Two antennas for optimum reception quality
  - Automatic frequency scan, four to six frequencies in parallel
  - Infrared interface for sending the frequency selection from the receiver to the transmitter (ACT sync)
  - Outputs: XLR, 6.35-mm jack socket
  - Power supply: 12 V ⎓, a suitable power adapter and mounting accessories for installation in a rack are included
- Bodypack transmitter:
  - Pushbutton and external input for muting
  - Operated with replaceable lithium-ion rechargeable battery
  - Charging contacts for battery charging station GigA Pro BC2
  - Three-digit display for battery capacity
  - Mini XLR (TQG) input
  - Flexible stub antenna
  - Belt clip
  - Infrared interface for ACT sync
- Battery charging station GigA Pro BC2
- Instrument cable

The system operates at 2.400 GHz … 2.4835 GHz worldwide at no charge and without registration.

4 Installation and starting up

4.1 General Information

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.

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.

4.2 Receiver

Rack mounting

The device is designed for mounting in a standard 19-inch rack; it occupies one rack unit (RU). The fixing material required for assembly is included.

Connecting the power supply

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).

As a precaution, disconnect the power supply from the power grid when storms are approaching or it the device will not be used for a longer period.

First, connect the power supply to the receiver and then plug the power supply into the power outlet.

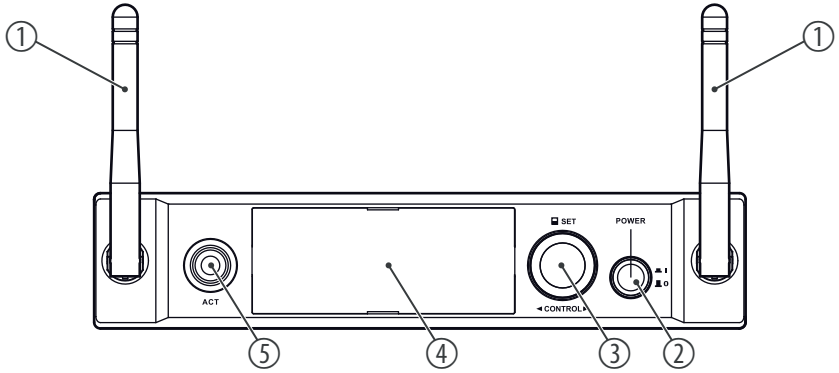
Connecting audio and starting up

Connect one of the audio outputs of the receiver to your mixer or your amplifier. Ensure that only one of the two outputs is ever used at a time, because faults might occur otherwise.

5 Connections and controls

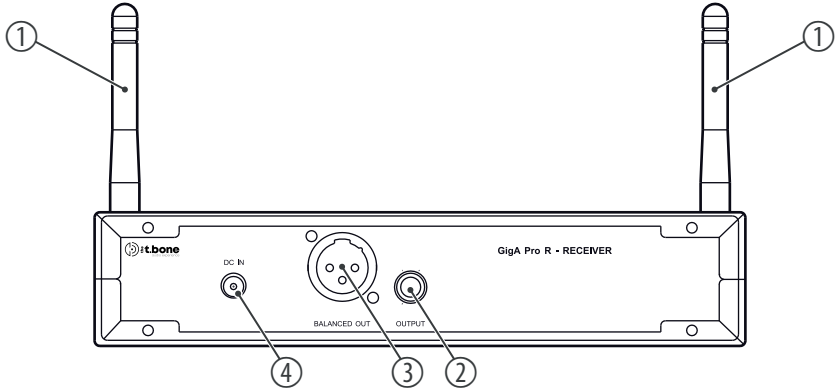
5.1 Receiver

Front



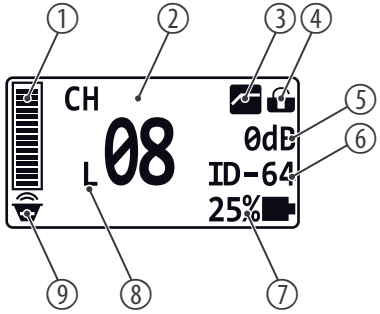
1	Antennas
2	*[POWER]* | Press the switch to turn the device on or off. All previous settings are retained even when you switch the device off and disconnect it from the mains.
3	*[CONTROL]* | Press the jog wheel to open the menu and rotate it to select a menu item. Press the jog wheel again to call up the menu item.
4	Display
5	*[ACT]* | Starts the synchronisation of the settings with the transmitter.

Back



1	Antennas
2	*[OUTPUT]* | 6.35-mm jack socket as unbalanced audio signal output for direct connection to a mixer, power amplifier or recording device.
3	*[BALANCED OUT]* | XLR panel plug as balanced audio signal output for direct connection to a mixer, a power amplifier or a recording device.
4	*[DC IN]* | Socket for connecting the supplied power adapter. If you are using a different power supply, observe the correct voltage, the polarity of the plug and the power consumption.

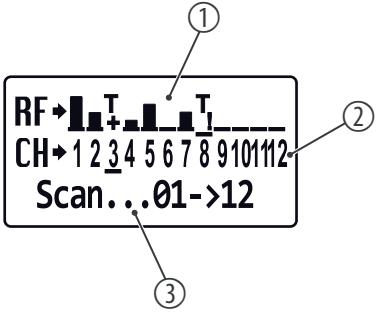
Display



1	Audio signal level
2	*[CH]* | Display of the set channel
3	Bass filter ■ Symbol visible: Bass filter active ■ Symbol invisible: Bass filter not active
4	Write protection ■ Lock icon open: Write protection not active ■ Lock icon closed: Write protection active
5	Gain
6	*[ID]* | Displays the set ID
7	Displays the battery status of the transmitter from which the device just received a signal. ■ *'10%'*: Battery change required ■ *'T×OFF'*: The transmitter is turned off.

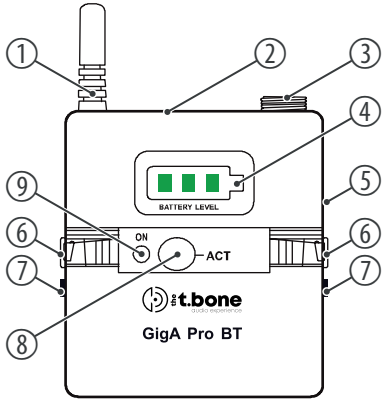
8	Current radio signal frequency ■ *'L'*: low level ■ *'H'*: high level
9	Transmitter status indicator ■ Speaker symbol: The transmitter is not muted ■ Speaker symbol crossed out: The transmitter is muted

Display during automatic channel evaluation



1	*'RF'* | Current evaluation result. Here the vertical bars indicate how strong the interferences on the respective channel are. The *'T+'* symbol indicates the currently used channel. The *'T!'* symbol is displayed for channels that are occupied by other devices. The symbols flash for the channel currently being tested.
2	*'CH'* | Available channel numbers. The channel currently selected with the jog wheel is highlighted.
3	*'Scan'* | Scanned channels

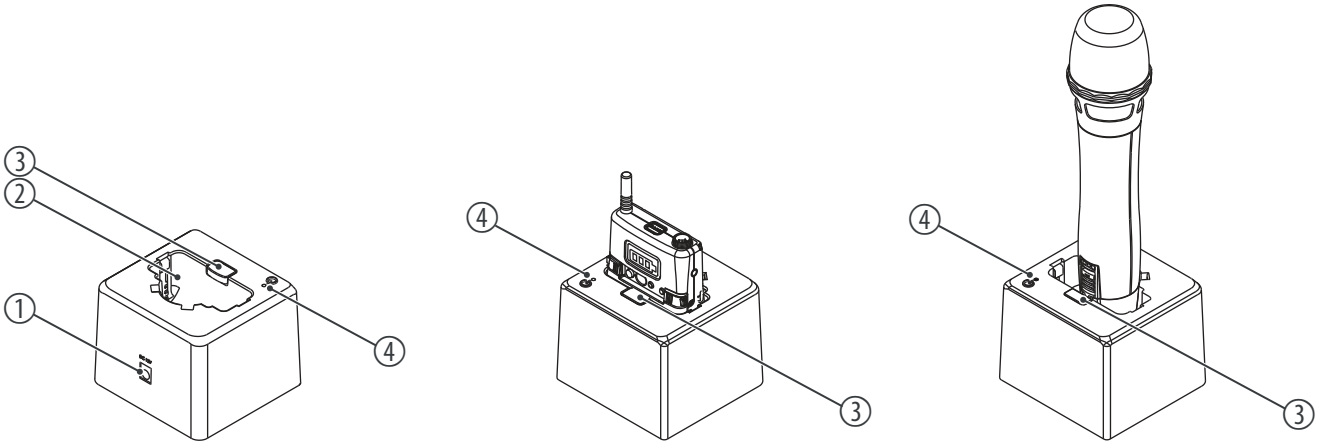
5.2 Bodypack transmitter



1	Antenna
2	*[AF]* | Button for muting the transmitter. The switch lights up when the transmitter is active. Press the button to mute the transmitter.
3	Mini-XLR panel plug for connecting a microphone or instrument.
4	Battery status indicator. If the last remaining segment lights up red, at most 25% of the battery capacity remains.
5	3.5-mm jack socket for connecting an optionally available external mute button.
6	Snap locks for the battery compartment
7	Charging contacts
8	*[ACT]* | Infrared sensor
9	*[ON]* | Main switch. Press the switch for several seconds to switch the device on or off.

Under the battery compartment cover is the button for resetting the battery monitor.

5.3 Battery charging station



1	Connection for the supplied power supply
2	Charging slot suitable for handheld microphone and bodypack transmitter.
3	Charging indication for the loading slot. The LED lights up red while charging is in progress. When the device is charged, the LED turns green.
4	Power indicator. Lights up when the device is connected to the power supply.

6 Operating

6.1 Receiver

Switching on the receiver

Requirements: All transmitters are switched off. The volume control of the mixer is set to minimum volume.

- Press *[POWER]* to turn the device on.
  - ⇨ The display shows the current settings.

How to navigate in the menu

1. Press the jog wheel to open the main menu or to open a menu item.
2. Turn the jog wheel left or right to select a menu item.
3. Press the jog wheel to call up the selected menu item.
4. Turn the jog wheel left or right to select a parameter or value.
5. Press the jog wheel to confirm the selected parameter or value.
6. Turn the jog wheel left or right to select the menu item *'Exit&Save'*.
7. Press the jog wheel to to save the settings and return to the home screen.

Selecting channel and ID

In this menu the channel number is selected. The ID adjustable in addition to the channel increases the transmission reliability.

1. Press the jog wheel to open the main menu.
2. Turn the jog wheel until the menu item *'Channel&ID'* appears.

   Press the jog wheel to call up the menu item.

   ⇨ The current channel number and ID are displayed. The cursor is positioned on the channel number.
3. Turn the jog wheel left or right to select the desired channel.

   Press the jog wheel to confirm the selection.

   ⇨ The selected setting is accepted. The cursor is positioned on the ID.
4. Turn the jog wheel left or right to select the desired ID.
5. Press the jog wheel to confirm the selection.
6. Turn the jog wheel left or right to select the menu item *'Exit&Save'*.
7. Press the jog wheel to to save the settings and return to the home screen.

Gain setting

1. Press the jog wheel to open the main menu.
2. Turn the jog wheel until the menu item *'AudioGain'* appears.

   Press the jog wheel to call up the menu item.

   ⇨ The current gain setting is displayed. The cursor is positioned on the dB value.
3. Turn the jog wheel left or right to select a dB value between -10 db and +20 dB. The setting is made in steps of 1 dB.

   Press the jog wheel to confirm the selection.
4. Turn the jog wheel left or right to select the menu item *'Exit&Save'*.
5. Press the jog wheel to to save the settings and return to the home screen.

Enabling / disabling the bass filter

1. Press the jog wheel to open the main menu.
2. Turn the jog wheel until the menu item *'LowCut'* appears.

   Press the jog wheel to call up the menu item.

3. Turn the jog wheel left or right to select *'ON'* if you want to activate the bass filter. The filter is used to suppress annoying hum or rumbling noises.

   or

   Turn the jog wheel left or right to select *'OFF'* if you want to deactivate the bass filter.

   Press the jog wheel to confirm the selection.

4. Turn the jog wheel left or right to select the menu item *'Exit&Save'*.

5. Press the jog wheel to to save the settings and return to the home screen.

Adjusting radio signal level

1. Press the jog wheel to open the main menu.

2. Turn the jog wheel until the menu item *'RFPower'* appears.

   Press the jog wheel to call up the menu item.

   ⇨ The last selected setting is displayed.

3. Turn the jog wheel left or right to select *'High'* if you want to set a high level.

   or

   Turn the jog wheel left or right to select *'Low'* if you want to set a low level.

   Press the jog wheel to confirm the selection.

4. Turn the jog wheel left or right to select the menu item *'Exit&Save'*.

5. Press the jog wheel to to save the settings and return to the home screen.

Automatic channel evaluation

1. Press the jog wheel to open the main menu.
2. Turn the jog wheel until the menu item *'ChannelScan'* appears.

   Press the jog wheel to start the automatic channel evaluation.

   ⇨ The evaluation result is displayed. Here, the vertical bars indicate how strong the interferences on the respective channel are. The *'T+'* symbol indicates the currently used channel. The *'T!'* symbol is displayed for channels that are occupied by other devices. The symbols flash for the channel currently being tested.
3. Turn the jog wheel left or right to select the channel with the least interference.

   Press the jog wheel to confirm the selection.
4. Turn the jog wheel left or right to select the menu item *'Exit&Save'*.
5. Press the jog wheel to to save the settings and return to the home screen.
6. Synchronize receiver and transmitter *'Synchronizing transmitter and receiver' on page 30*.

Enable write protection

The settings of the device can be protected against unintentional changes by a write protection.

1. Press the jog wheel to open the main menu.
2. Turn the jog wheel until the menu item *'SetLock'* appears.

   Press the jog wheel to call up the menu item.

3. Turn the jog wheel left or right to select *'NO'* if you you do not want to set write protection.

   or

   Turn the jog wheel left or right to select *'YES'* if you want to set write protection.

   Press the jog wheel to confirm the selection.

4. Turn the jog wheel left or right to select the menu item *'Exit&Save'*.

5. Press the jog wheel to to save the settings and return to the home screen.

Showing firmware version

1. Press the jog wheel to open the main menu.

2. Turn the jog wheel until the menu item *'Version?'* appears.

   Press the jog wheel to call up the menu item.

   ⇨ The current firmware version of the device is displayed.

3. Press the jog wheel to close the display.

4. Turn the jog wheel left or right to select the menu item *'Exit&Save'*.

5. Press the jog wheel to return to the home screen.

Synchronizing transmitter and receiver

1. Turn on the transmitter and point the infrared sensor of the transmitter directly at the *[ACT]* button of the receiver.
2. Press *[ACT]*.

   ⇨ The message *'ACT...'* in the display indicates that the synchronization is running.
3. After successful synchronization, the display appears in the default state. The battery status of the transmitter with which you just synchronized is now displayed here.

   If the synchronization has failed, the message *'FAIL'* appears. In this case, hold the transmitter closer to the receiver and restart the synchronization.

6.2 Bodypack transmitter

Engaging transmitter

1. Connect a microphone or your instrument to the Mini XLR chassis plug before turning on the transmitter. Make sure to screw plug and socket together. If you want to use an available external mute switch, connect it also before turning it on.
2. Press *[ON]*.

   ⇨ The battery level indicator and the *[AF]* button light up.
3. If the last remaining segment of the battery level indicator lights up red, at most 25 % of the battery capacity remains.

   In this case, recharge the transmitter in the charger or replace the empty battery with a charged one.

Turning the transmitter off

Press *[ON]* for several seconds until the battery level indicator goes out.

Mute

Press *[AF]* to mute or unmute the transmitter. When the button lights up, the transmitter is active. You can also use an optionally available external mute switch instead of the button.

Battery replacement

1. Turn the transmitter off.
2. Press the two side latches together to open the battery compartment cover.
3. Remove the empty battery and replace it with a charged one. Observe the correct polarity. Seen from the front, the positive pole is on the right side.
4. Should the transmitter also fail to work with a freshly charged battery, turn the transmitter off. Press the button to reset the battery monitor to 'wake up' the battery.
5. Close the battery compartment and turn the transmitter back on.

7 Technical specifications

7.1 Receiver

Number of systems that can be operated in parallel	8 systems	
Input connections	Power supply	1× Socket for connecting the power adapter
Output connections	Audio signal	1× XLR panel plug, balanced
		1× 6.35-mm jack socket, unbalanced
Output level adjustment	–10 dB … +20 dB	
Frequency range	2.400 GHz … 2.4835 GHz	
Sensitivity	–95 dBm	
Total harmonic distortion (THD)	0.1%	
Signal-to-noise ratio	> 115 dB (A)	
Audio sampling rate	24 bit / 44.1 kHz	
NF frequency response	20 Hz … 20 kHz (–2 dB)	
Power consumption	1.6 W	
Power supply	External power adapter, 100 - 240 V ~ 50/60 Hz	

Operating voltage	12 – 15 V ⎓ / 1,000 mA, centre positive	
Installation properties	19 inches, 1 RU	
Dimensions (W × H × D), without antennas	210 mm × 44 mm × 180 mm	
Weight	0.75 kg	
Ambient conditions	Temperature range	0 °C…40 °C
	Relative humidity	20%…80% (non-condensing)

7.2 Bodypack transmitter

Frequency range	2.400 GHz … 2.4835 GHz	
Max. transmission power	10 mW	
Maximum input level	6.5 dBV	
Input impedance	1.0 MΩ	
Range in clear field of vision	up to 100 m	
Battery	Battery type	1 × Lithium-ion rechargeable battery ICR-18500
	Voltage	3.7 V
	Capacity	1,400 mAh
	Operating time	> 1 h (after 25 minutes charging time), > 10 h (after 4 hours charging time)
Dimensions (W × H × D), without antenna	63 mm × 70 mm × 25 mm	
Weight	66 g	

Ambient conditions	Temperature range	0 °C…40 °C
	Relative humidity	20%…80% (non-condensing)

7.3 Battery charging station

Charging current	approx. 500 mA	
Power supply	External power adapter, 100 - 240 V ~ 50/60 Hz	
Operating voltage	10 – 15 V ⎓ / 1,000 mA, centre positive	
Current consumption	approx. 138 mA	
Dimensions (W × H × D)	63 mm × 70 mm × 25 mm	
Weight	approx. 66 g	
Ambient conditions	Temperature range	0 °C…40 °C
	Relative humidity	20%…80% (non-condensing)

Further information

Diversity	Yes
Switchable frequencies	Yes
Detachable antennas	No
Pilot tone	No
Max. number of radio links	8
Power supply of the transmitter	1× Lithium-ion rechargeable battery ICR-18500

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.

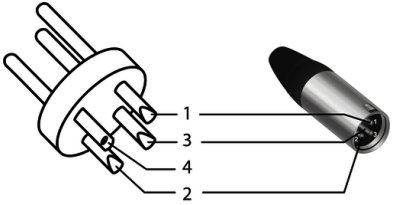
In a professional environment, therefore, the balanced transmission is preferred, because this enables an undisturbed transmission of signals over long distances. In addition to the conductors 'Ground' and 'Signal', in a balanced transmission a second core is added. This also transfers the signal, but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

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:

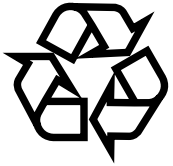
Symptom	Remedy
No sound	1. Check the power supply of the transmitter and receiver.
	2. Make sure that transmitter and receiver are operating in the same frequency range. The frequency range can be found on the devices.
	3. Are the transmitter and receiver set to the same channel and ID?
	4. Test the 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. See 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 are using more than one wireless system at the same time, check the used frequencies and channels.
	3. Interference can also be caused by other radio or 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*.

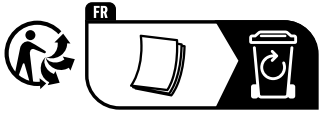
10 Protecting the environment

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.

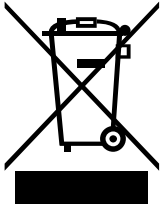
Disposal of batteries

Batteries must not be thrown away or burnt, but must instead be disposed of in line with the local regulations on the disposal of hazardous waste. Use the available collection sites.

Only dispose of lithium batteries when they are empty. Remove lithium batteries from the device before disposal if this is possible without destroying it. Protect used lithium batteries against short circuit, for example by taping the poles. Dispose the built-in lithium batteries together with the device. Check for an appropriate collection facility.

Dispose of the batteries and rechargeable batteries at relevant collection points or through your local waste facility.

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.

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