

crystalsound

DCS-210

Excursion kit

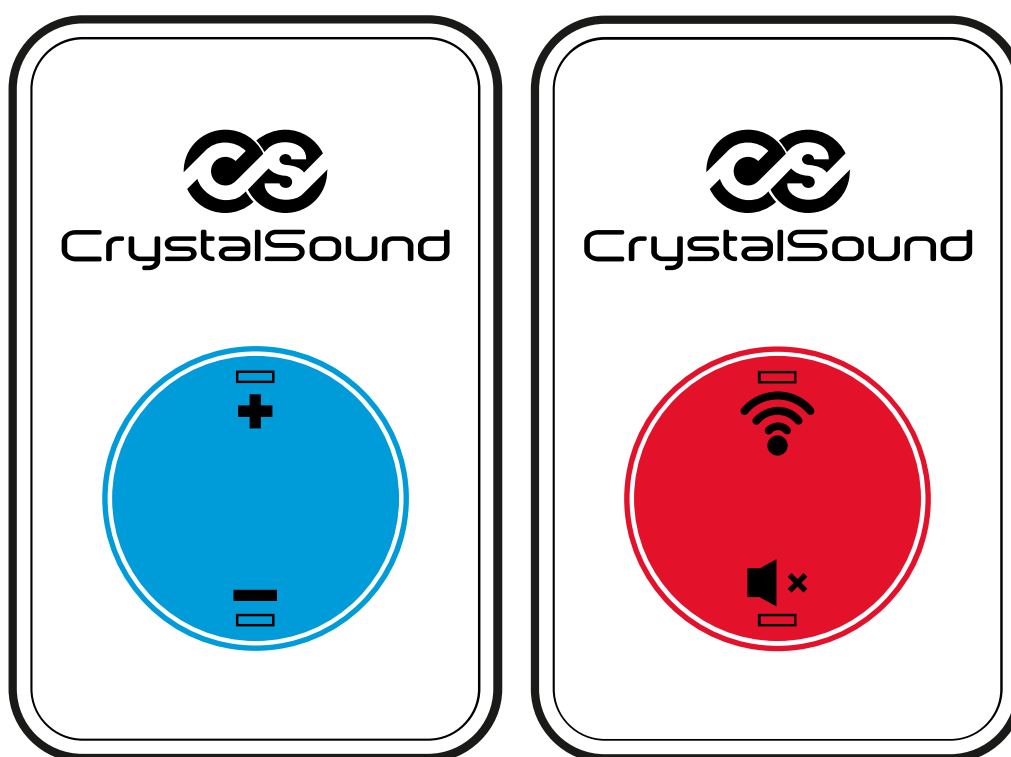


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1. Description of the document

This user manual contains the necessary information to set up, operate and maintain the DCS-210 Excursion Kit. Dimensions, specifications and images in the manual are subject to change without notice.

The DCS-210 excursion kit is a radio equipment for wireless audio transmission over short distances.

The DRR-210 receiver and DRT-210 transmitter included in the excursion kit are designed for:

- tour groups;
- conferences;
- seminars;
- educational events.

2. Capabilities

- Noise cancellation and digital audio processing;
- Communication range up to 150 metres;
- Up to 4 speakers in **Multispeaker** and **Intercom** modes;
- Easy to set up and operate;
- Bluetooth wireless communication;
- Device branding.

2.1. Safety information

Read the user manual carefully and pay attention to all safety warnings.

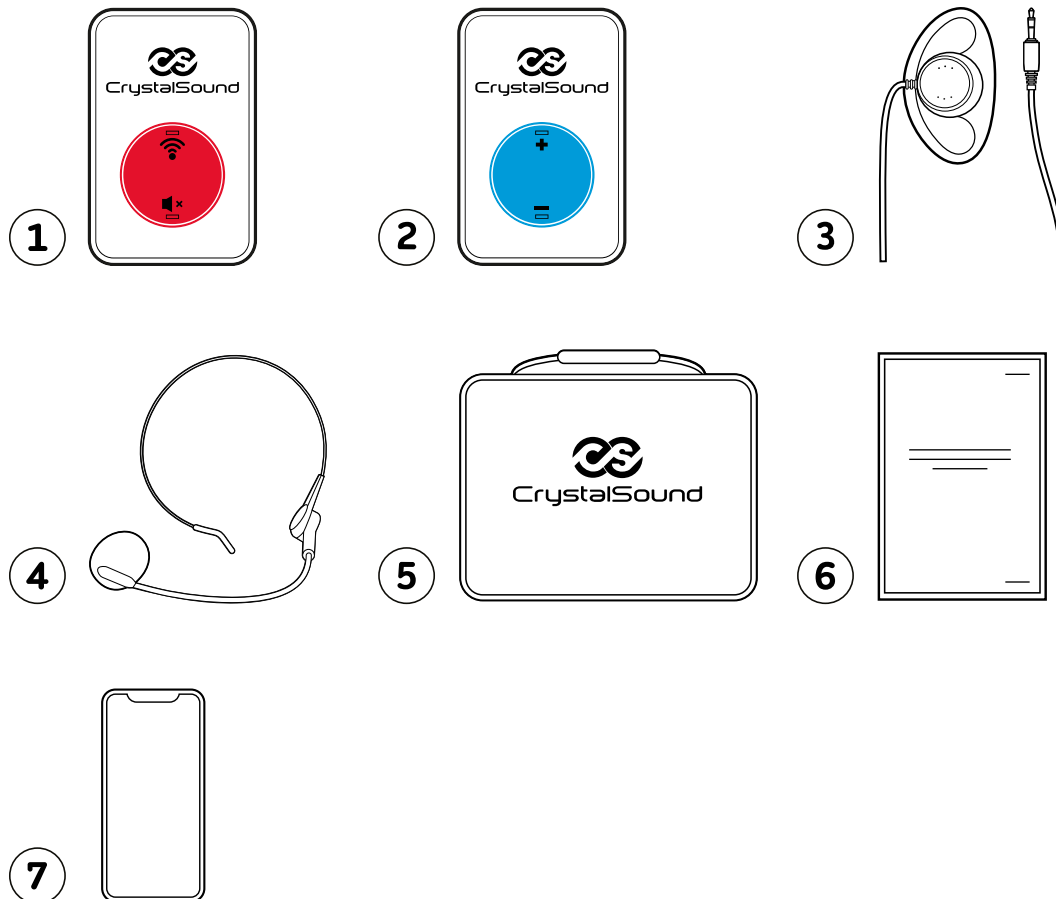
- When setting up and synchronising devices, follow the recommendations in the instructions.
- Switch off the device in places marked with the appropriate signs to avoid interference.
- Do not install the equipment near heat sources such as radiators, electric heaters, cookers, etc.
- Do not install the equipment near heat sources.
- Only CrystalSound specialists should repair the equipment.
- Avoid listening at high volume to prevent hearing damage.
- Listening to music at high volume for long periods of time may cause temporary or permanent hearing loss.
- Clean the devices only with a dry cloth.

IMPORTANT!

Do not use ammonia, petroleum solvents or abrasive cleaners to clean the devices.

3. Kit

The basic kit includes:



1. DRT-210 transmitter;
2. Receiver DRR-210;
3. Earphone MIT000684;
4. Microphone MIT000685.

5. Charging case;
6. Instruction manual;
7. CrystalSound software;

3.1. Characteristics

- **Output power:** 10 mW;
- **Power supply voltage:** 2.6 - 4.1 V;
- **Battery continuous operation time:**
 - Standard mode = 100 hours;
 - Multispeaker and Intercom mode = 50 hours;
- **Charging case or station power supply:** from 220 V mains supply;
- **Energy efficiency=** 2400 hours (100 days).

3.2. Dimensions and terms of use

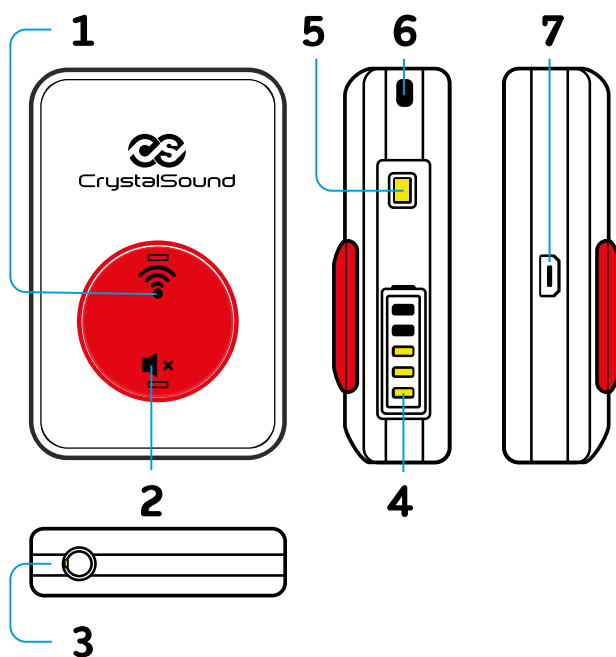
- **Receiver/transmitter dimensions:** 68 x 45 x 15 mm;
- **Weight with batteries:** 43 g;
- **Dimensions of the charging case:** 350 x 260 x 110 mm;
- **Weight of the charging case:**
 - empty - 2.7 kg;
 - when fully loaded - 4.8 kg;
- **Operating temperature range:** -10°C to +45°C.

3.3. Additional parameters

- **Bluetooth LE 4.2 support;**
- **Frequency range:** 2.4 - 2.483 GHz;
- **Signal reception range:** up to 150 metres;
- Charging up to **36 devices** simultaneously;
- Short-circuit protection;
- Protection against **critical battery levels;**
- Automatic power saving switch on / off;
- Device status and charge level indication.

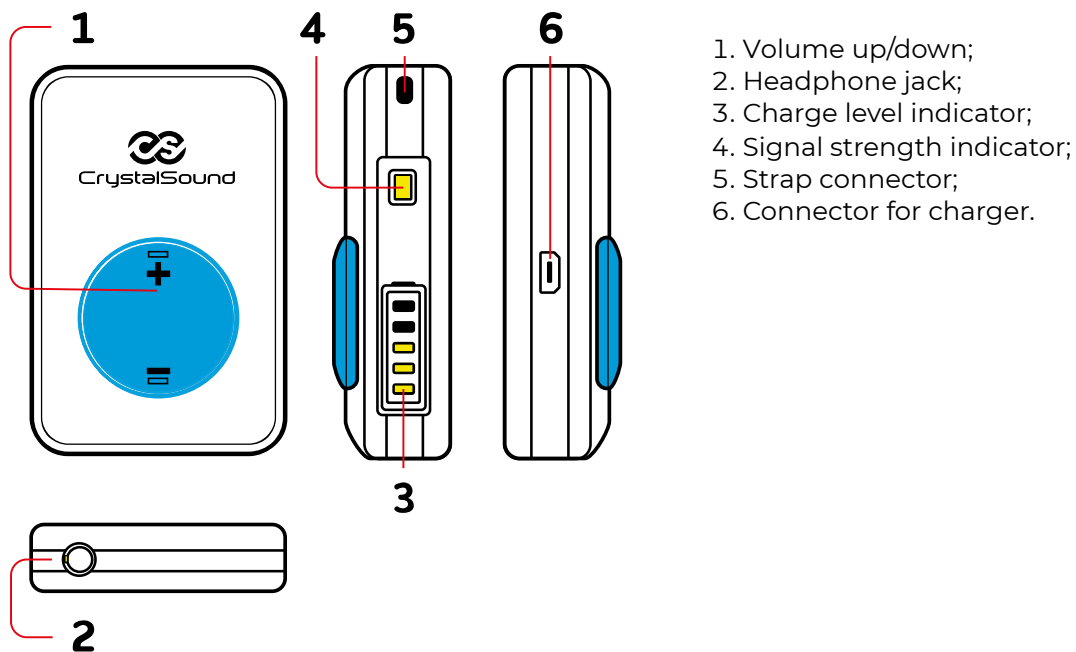
4. Connectors and control

Transmitter



1. Synchronisation button;
2. Mute button;
3. Microphone jack (mini-jack 3.5mm);
4. Charge level indicator;
5. Microphone indicator;
6. Strap connector;
7. Charger slot.


Receiver




4.1. Light indication

 Battery level


- When you briefly press any button on the receiver, the charge level is displayed.

 Green LED on the receiver flashes


- Headphones are connected (receiver is ready for use);
- Audio is being received from the transmitter.

 Green LED on the transmitter is flashing

- Audio is being transmitted to the receiver.

 Red LED on the receiver blinks

- Headphones are connected but no transmitter is connected.

 Red LED on the transmitter is on continuously

- The microphone is switched off with the Mute button. The connection is active (receivers can see the transmitter).

- Button backlight illuminates
- Pressing the button;
- Connecting the charger / microphone / headphones.

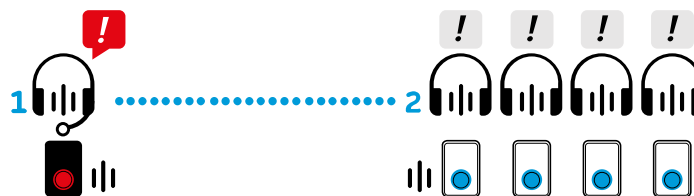
5. Device and operation

5.1. Working principle of the Radioguide mode

The radioguide is designed for conducting excursions and events with the participation of a guide or speaker. The devices allow to conduct excursions for several groups simultaneously.

Scheme of operation

- The transmitter broadcasts the speaker's speech.
- Event participants hear the speaker's speech through headphones.



The kit consists of several elements:

- listeners' receivers with headphones;
- and a guide transmitter with microphone.

One transmitter can work with an unlimited number of receivers.

Stages of operation:

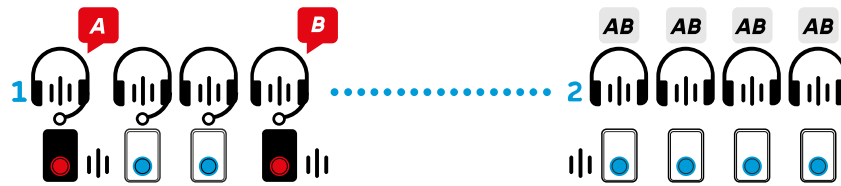
1. The transmitter and receivers automatically select a free channel;
2. The transmitter broadcasts the voice of the speaker or guide to the receivers;
3. The listeners hear it in their headphones.

5.2. How the Multispeaker mode works

The **Multispeaker** mode allows to organise events with several presenters, in the receivers of listeners the sound will be summed up from all switched on transmitters.

Scheme of operation

- The presenter's and assistants' transmitters broadcast the speech.
- The participants of the event hear the speech of the host and assistants.



A maximum of four devices can transmit voice messages at the same time.

The kit for each group includes:

- A main transmitter and up to three additional transmitters;
- The number of participants with receivers is unlimited;
- 4 microphones;
- Headphones for each receiver.

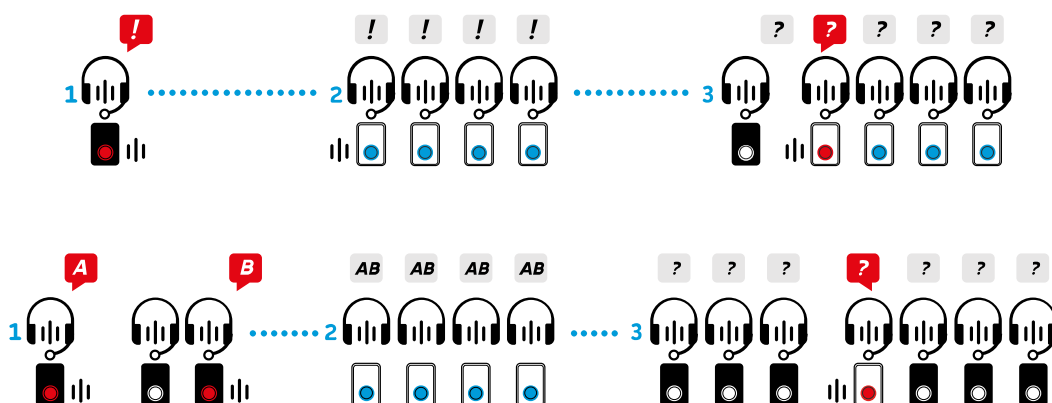
Switching off the main transmitter also switches off the additional transmitters. Any transmitter that has been synchronised with the receivers and additional transmitters can act as the **main transmitter**.

5.3. Operating principle of the Intercom mode

Intercom mode allows users of receivers to broadcast speech to the devices of all other participants of the event.

Scheme of operation

All participants must have headphones with a microphone (headset) to work in Intercom mode.



Transmitter users can hear voice transmitted from receivers and other transmitters. Speech transmission is available for a maximum of four devices at a time.

The kit for each group includes:

- A main transmitter and up to two assistant transmitters;
- The number of event participants with receivers is unlimited.

Voice transmission mode:

1. Group participants with a main transmitter and assistant transmitters can broadcast speech continuously.
2. Group participants with receivers can only speak alternately by holding down any button on their receiver.
3. Switching off the main transmitter interrupts the ability to broadcast speech to band members.

Options are not included in the basic package. Please contact your CrystalSound manager for connection.

6. Intended use

6.1. Starting work

Receiver and transmitter

1. To switch on the receiver, plug an earphone into the appropriate jack.
2. To switch on the transmitter, plug the microphone into the appropriate jack.
3. To switch off, disconnect the earphone/microphone from the receiver/transmitter.

IMPORTANT!

When disconnecting the microphone from the transmitter, the receiver automatically goes into sleep mode. If there is no signal from the transmitter for more than three minutes, the receiver switches off. The receiver switches on automatically when a signal from the transmitter appears.

Microphone

1. To switch off the microphone on the transmitter, press and hold the **⏏** button until the red LED lights up.
2. To switch on the microphone on the transmitter, press and hold the **⏏** button until the red LED goes out.
3. To switch on the microphone on the receiver in intercom mode, press and hold any button for 3 seconds. Keep the button pressed for the entire time you are speaking.

6.2. Synchronisation


Synchronisation is the adjustment of the receivers to the working channel of the transmitter.

To synchronise the transmitter and receivers:

1. Press and hold the **📶** button on the transmitter.
2. Bring the transmitter within 5cm of the receivers.
3. When synchronisation is successful, the button on the receiver will flash and the charge indicator on the side of the case will flash.
4. Release the synchronisation button on the transmitter.

To switch some of the listeners to another guide/speaker, synchronise using another transmitter with the receivers you want to separate from the main group.

Intercom and Multispeaker mode

1. For **Multispeaker** and **Intercom** with additional transmitters, press the  button on the master transmitter and bring it within 5 cm of the additional transmitters and receivers.
2. When synchronisation is successful, the button and display lights on the side of the case will illuminate on the additional transmitters and receivers.

6.3. Radioguide operating mode

- To use **the radioguide** mode, synchronise the transmitter with the required number of receivers.
- Connect the headphones to the receivers and the microphone to the transmitter.
- Adjust the volume using the +/- buttons on the receivers.
- To finish, disconnect the microphone from the transmitter and the headphones from the receivers. The LEDs on the units should turn off. The receivers switch off automatically if there is no signal from the transmitter for more than three minutes.

6.4. Operation mode Multispeaker

The Multispeaker function is not available as standard, please contact your CrystalSound manager at sales@crystal-sound.com to enable it.

Multispeaker mode allows one master and **three additional transmitters** to operate simultaneously.

- To operate in multispeaker mode, synchronise the master transmitter with the required number of receivers and additional transmitters.
- Connect headphones to the receivers and microphones to the transmitters.
- Be sure to switch on the master transmitter, additional transmitters will only be switched on if the master transmitter is active.
- Adjust the volume using the +/- buttons on the receiver.
- Switch on additional transmitters when needed. The sound from all active transmitters will be summed in the listeners' receivers.
- To disconnect an additional transmitter from the group, synchronise it with any other receiver.
- To terminate, switch off the transmitters and receivers by switching off the microphones and headphones. The LEDs on the units should turn off. The receivers will switch off automatically if there is no signal from the transmitter for more than three minutes.

6.5. Intercom operating mode

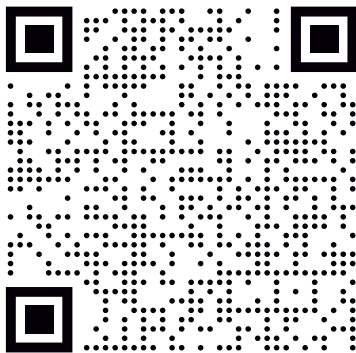
The Intercom function is not available as standard, please contact your CrystalSound manager at sales@crystal-sound.com to enable it.

Intercom mode allows one master transmitter and two additional transmitters to operate simultaneously. It also allows feedback from the users to the receivers to be organised. Users of the transmitter hear the voices of the other transmitters and receivers.

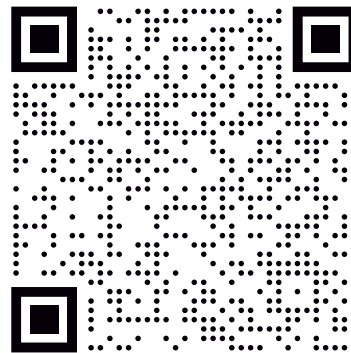
1. Synchronise the main transmitter with the required number of receivers and additional transmitters, if any are used for working in **Intercom** mode operation.
2. Connect headphones with microphone (headset) to the receivers and to the transmitters.
3. Adjust the volume using the +/- buttons on the receiver.
4. Press and hold down any button on the receiver to activate the voice function. Receivers can only broadcast voice one at a time.
5. To disconnect an additional transmitter from the group, synchronise it with any other receiver.
6. To complete your operation, switch off the transmitters and receivers by unplugging the headphones. The LEDs on the units should turn off. The receivers will switch off automatically when there is no signal from the transmitter for more than 3 minutes.

7. CS.Counter App

The app saves you time and automatically counts the number of devices. It works with radioguides and audioguides of CrystalSound.

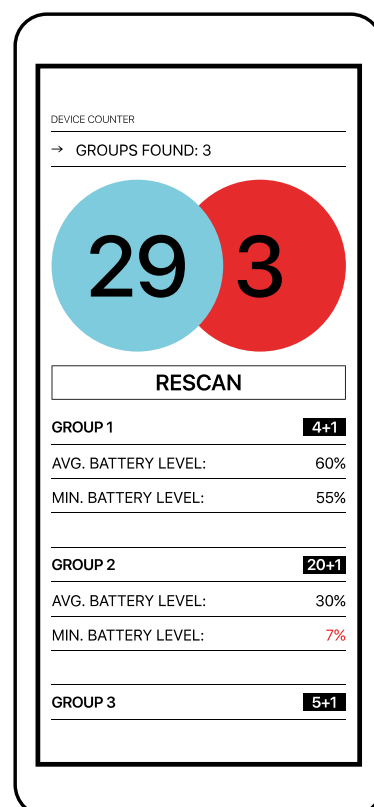


App Store



Google Play

1. Press the **Rescan** button to reset the information and before starting a new count.
2. Press the **Scan** button to start counting.
3. Bring the phone within 30 cm of the radioguides.
4. When the app finishes counting, you will see the number of receivers (in the blue circle) and transmitters (in the red circle) counted: total and by group.
5. You will also see the average and minimum battery level in the group after scanning.



8. Maintenance

8.1. Storage

- It is recommended to charge the devices up to 70 % before long-term storage and to store the equipment in clean, dry and well ventilated rooms.
- The storage temperature regime should be between +5°C and +25°C.
- It is recommended to check the operability of audioguides after long-term storage.

8.2. Troubleshooting

IMPORTANT!

Do not open the case of the product yourself.

If repair is necessary, please contact CrystalSound specialists only.

Repair is necessary if:

- If the product cannot be repaired by yourself;
- The product is damaged in any way;
- If moisture or foreign objects have entered the product.

9. Contacts

Our specialists are always ready to:

- Answer any questions.
- Assist with installation, configuration, and troubleshooting that may arise while using the device.

In case of problems, assistance is provided **by contacting technical support**, offering an explanation, sharing a demonstration video of the issue (if possible), and receiving clarification and solutions following remote diagnosis by the operator.

If the problem cannot be resolved remotely, the customer may ship the defective goods to the provided address, where the support team will conduct testing and further diagnosis. For warranty-covered issues, maintenance or replacement of devices will be performed and returned to the customer. For non-warranty issues, the customer will be informed of the potential repair cost, if applicable.

Contacts for technical support:

+39 389 952 7860. Daily from 12 noon to 6 pm (whatsapp only).

+38 388 729 1127. Mon-Fri 9 am to 6 pm.

support@crystal-sound.com

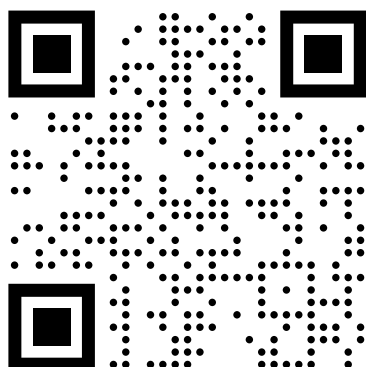
10. Warranty and service life

The warranty period is 2 years from the date of purchase. The service life of the devices is 5 years.

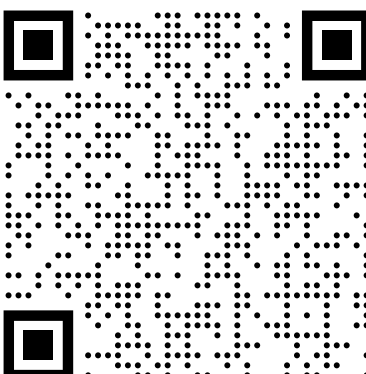
11. Useful links

You can find out all the possibilities using the QR code.

[CrystalSound.it](https://www.crystalsound.it)



[Linkedin](https://www.linkedin.com/company/crystalsound)



[YouTube](https://www.youtube.com/channel/UC...)

