

CrystalSound
PRIME (DCS-210)

EXCURSION KIT

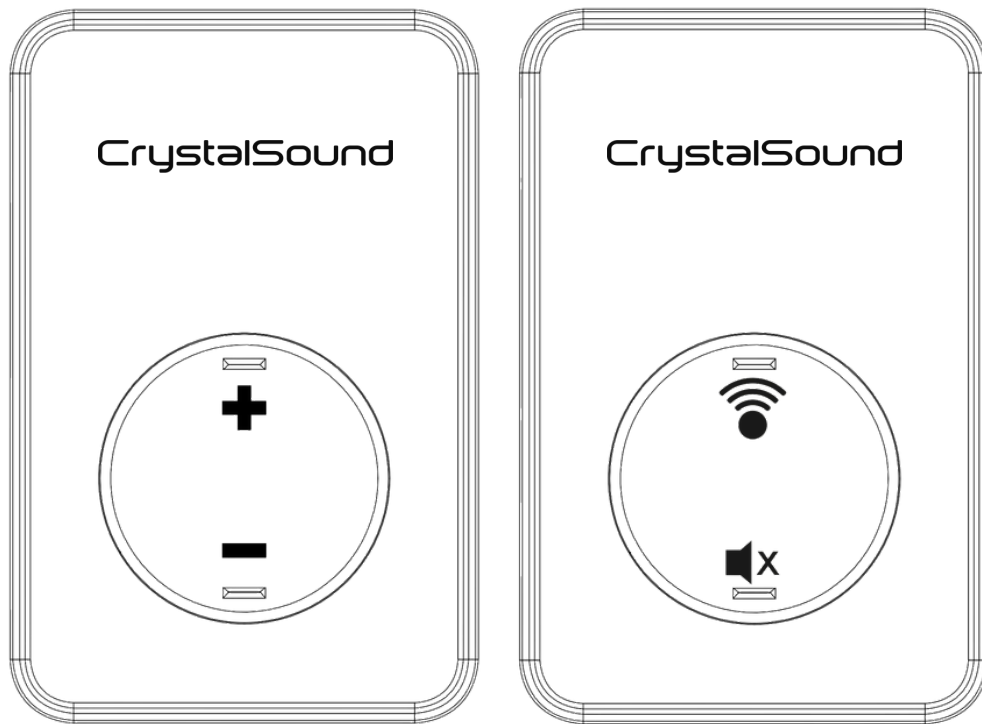


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1. Document description

This User Manual provides the necessary information for setting up, operating, and maintaining the Prime (DCS-210) excursion kit.

Dimensions, specifications, and illustrations in this manual are subject to change without notice.

The *PRIME (DCS-210) excursion kit* is a set of wideband radio communication devices designed for tours and business events. The kit includes a transmitter and receivers that can be tuned to one of the available free channels.

The devices included in the kit are intended for use in organizing guided tours, conferences, workshops, and educational events.

2. Capabilities

- Radio reception and radio transmission.
- Connecting the microphone/earphone via a 3.5 mm jack connector.
- Noise canceling, automatic microphone gain, and digital sound processing.
- Ability to mute the transmitter microphone using the *Mute* button.
- Device synchronization via a button on the transmitter.
- Compatibility with previous device versions.
- Customizable housing for branding.

3. Safety information

Please read the user manual carefully and observe all safety warnings.

- Avoid exposing the device to moisture.
- To prevent harmful interference, turn off the device where required by posted signs.
- Do not place the device near heat sources such as radiators, heaters, stoves, etc.
- In case of malfunction, repairs may only be performed by *Crystal Sound* technicians.
- Avoid excessive volume levels to prevent hearing damage. Prolonged listening at high volume can cause temporary or permanent hearing loss.
- If the device is dirty, clean it with a soft, dry cloth.

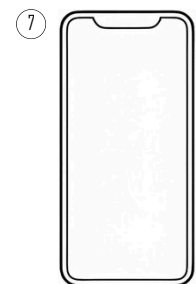
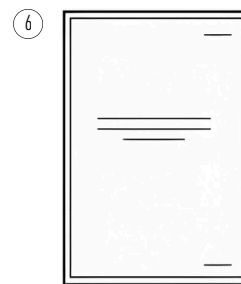
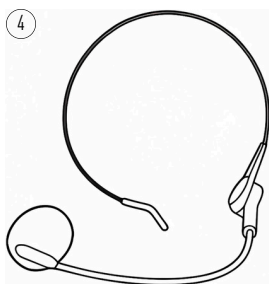
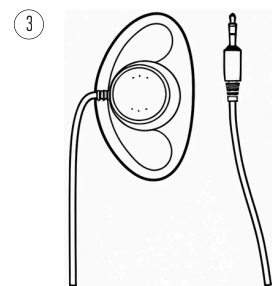
Warning!

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

4. Kit components

The basic kit includes:

1. Transmitter DRT-210
2. Receiver DRR-210
3. Earphone
4. Microphone
5. Charging case
6. User manual
7. Crystal Sound software



a. Specifications

- **Output** : 10 mW.
- **Battery voltage**: 3.2 – 4.1 V.
- **Transmitter continuous operation time**: up to 70 hours.
- **Receiver continuous operation time**: up to 100 hours.
- **Full battery charging time**: 2.5 hours.
- **Built-in 920 mA-h lithium battery**.
- **The charging case/station power supply**: from 220–240 VAC 50 Hz mains.
- **Supported audio output formats**: mono sound.
- **Cable type supported**: three-pin TRS plug.
- **Continuous operation time in energy saving mode**: 2400 hours (100 days).

b. Dimensions and operating conditions

- *Receiver/transmitter dimensions:* 68 × 45 × 15 mm.
- *Receiver/transmitter weight with batteries:* 43 g.
- *Charging case dimensions:* 350 × 260 × 110 mm.
- *Charging case weight:*
 - 2.7 kg (empty).
 - 4.8 kg (fully loaded).
- *Operating temperature range:* from -20°C to +45°C.

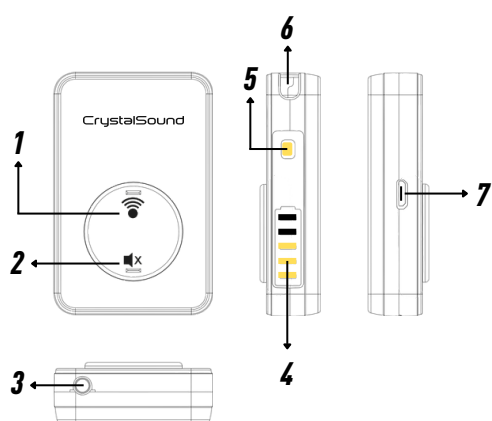
C. Additional parameters

- Supports bluetooth LE 5.0.
- Automatic energy saving on/off.
- *Frequency band:* 2.4–2.483 GHz.
- *Signal reception range:* up to 150 m.
- Charging up to 36 devices simultaneously.
- Short circuit protection.
- Battery under-discharge protection.

5. Connectors and controls

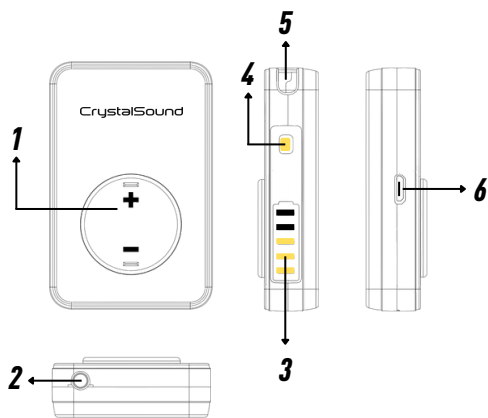
a. General view of devices

Transmitter










1. Sync button
2. Mute
3. Microphone connector (3.5 mm jack)
4. Charge level indicator
5. Status indicator
6. Strap hole
7. Charger connector (micro-USB)





Receiver



1. Volume up/down
2. Earphone (3.5 mm jack)
3. Charge level indicator
4. Status indicator
5. Strap hole
6. Charger connector (micro-USB)

b. Light indication

| | | |
|---|---|--|
|  | Green status indicator (steady). | Battery charge is above 80%. |
|  | Red status indicator (steady). | <ul style="list-style-type: none"> • Battery charge is 80% or lower. • Mute mode (on transmitter) is enabled. • Charging in progress. |
|  | From 1 to 5 bars of the charge level indicator. | Current battery charge level (1 bar = 20%). |
|  | Battery charging animation on the charge level indicator. | Device is charging. |
|  | The button backlight flashes and the device charge indicator remain steady. | Device synchronization in progress. |
|  | Transmitter green status indicator (flashing, microphone connected). | Audio is being transmitted. |
|  | Transmitter red status indicator (flashing, microphone connected). | Incorrect channel setting. |

| | | |
|---|---|---|
|  | Receiver green status indicator (flashing, earphone connected). | Radio signal is being received. |
|  | Receiver red status indicator (flashing, earphone connected). | No connection to the transmitter. |
|  | All transmitter indicators (steady). | <ul style="list-style-type: none"> • Button is pressed. • Microphone is connected. |
|  | All receiver indicators (steady). | <ul style="list-style-type: none"> • Button is pressed. • Earphone is connected. • Microphone is connected to the transmitter while earphone is disconnected from the receiver. • Earphone is disconnected from the receiver while the microphone remains connected to the transmitter. |

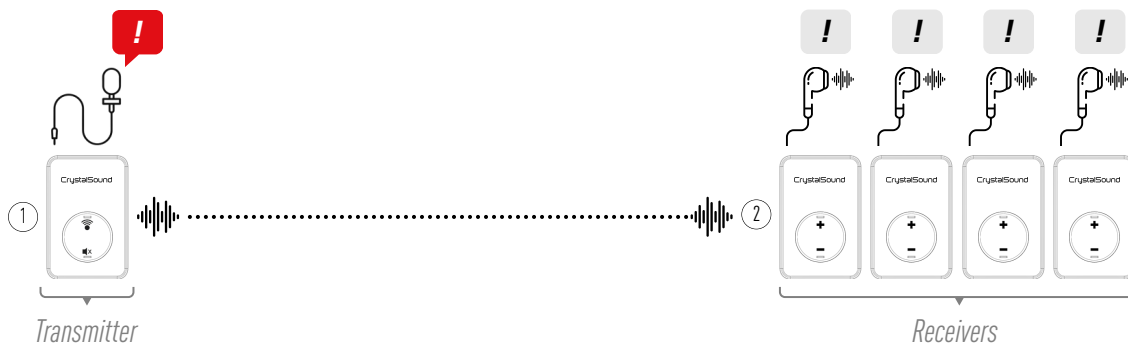
6. Operation

a. How the radio guide mode works

The **radio guide** is designed to support guided tours and events with a guide or speaker.

- The speaker uses a transmitter with connected microphone to *continuously broadcast* speech to the participants' receivers.
- A single transmitter can work with an *unlimited* number of receivers.


Workflow diagram



7. Operational procedure

a. Synchronization

Before starting, synchronize the receivers with the transmitter.

1. Press and hold *the sync button*  on the transmitter.
2. Hold the transmitter close to receivers (within 5 cm).
3. If synchronization is successful, the button and charge indicator on the side of the housing will blink.
4. Release *the sync button* on the transmitter.

Attention!

- Press any button on the transmitter once to verify synchronization. The synchronized receivers will confirm with a light indicator.
- Synchronization between transmitters and receivers only needs to be done **once** for the group.



b. Preparing for use

1. To start transmission, connect **the microphone** to the 3.5 mm jack connector of **the transmitter**.
2. To start reception, connect **the earphone** to the 3.5 mm jack connector of **the receiver**.
3. Adjust the receiver volume using *the +/- buttons*.

Important!

When the microphone is disconnected from the transmitter, the receivers automatically switch to sleep mode. It will automatically turn back on once a signal from the transmitter is detected.

Control of transmitter's microphone:

1. To *mute the microphone*, press and hold *the Mute button*  on the transmitter for 3 seconds, then release. The status indicator will turn red, indicating the microphone is muted.
2. To *unmute the microphone*, press and hold *the Mute button*  again for 3 seconds, then release. The red indicator will turn off, indicating the microphone is active.

c. Radio guide operating mode

The single-speaker **radio guide mode** is the standard operating mode for the excursion kit. To operate in the radio guide mode:

1. Synchronize **the transmitter** with the desired number of **receivers**.
2. Connect **the earphone** to the receivers and **a microphone** to the transmitter.
3. Adjust the volume using *the +/- buttons* on the receivers.
4. To end the session, disconnect **the microphone** from the transmitter and **the earphone** from the receivers. The device indicators will switch off, and the devices will enter sleep mode.

8. CS.Counter app

App Store

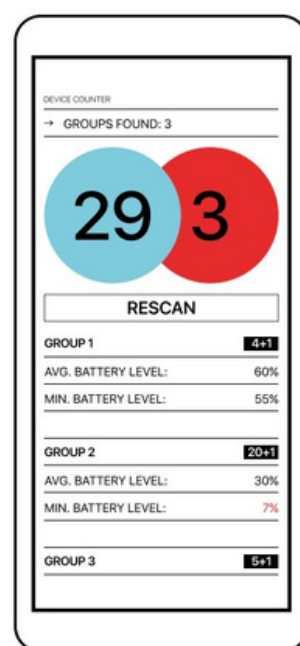


Google Play



The **CS.Counter app** saves time by automatically counting the nearby devices.

1. To reset before starting a new count, press *the Rescan* button.
2. To start counting, press *the Scan* button.
3. Hold your smartphone within 30 cm of the devices.
4. Once the scan is complete, the app will display the number of receivers (in a blue circle) and transmitters (in a red circle), both total and grouped.
5. The average and minimum battery level in the group will also be displayed after scanning.



9. Maintenance

a. Storage

- Charge devices to approximately 70% before long-term storage, and store them in clean, dry, and well-ventilated rooms.
- The storage temperatures shall be between +5°C and +25°C.
- After long-term storage, test the devices to ensure proper functionality.
- Recharge devices to around 70% every three months.

b. Troubleshooting

Warning!

Do not open up the housing.

If repairs are necessary, contact only *Crystal Sound* technicians.

Repair may be required in the following cases:

- Malfunctions cannot be resolved by the user.
- Any physical damage to the device.
- Moisture or foreign objects have entered the device.

| Problem | Possible causes | Solutions |
|---|---|--|
| <i>Charge indicators do not light up when attempting to turn on the device.</i> | <ul style="list-style-type: none">• Battery is low.• Charging station is not connected to a power source.• Charging station malfunction. | <ul style="list-style-type: none">• Ensure the device is fully charged.• Verify that the charging station is properly connected to a power source.• Contact <i>Crystal Sound</i> technical support for diagnostics and repair. |
| <i>No sound or distorted sound in receivers.</i> | <ul style="list-style-type: none">• Receivers are not synchronized with the transmitter.• Earphone faulty or incompatible third-party earphone is being used.• Transmitter microphone is faulty or an incompatible third-party microphone is being used.• Peripheral cable is damaged.• Jack connector is damaged.• Device battery depleted. | <ul style="list-style-type: none">• Verify that the devices are synchronized.• Ensure all devices are fully charged.• Use peripherals recommended by <i>Crystal Sound</i>.• Check peripheral cables for signs of damage.• Contact <i>Crystal Sound</i> technical support for diagnostics and repair. |

| | | |
|--|---|---|
| <p><i>Devices discharge too quickly.</i></p> | <ul style="list-style-type: none"> • Prolonged use at maximum volume. • Battery wear. | <ul style="list-style-type: none"> • Reduce the volume to lower battery consumption. • Contact <i>Crystal Sound</i> technical support for diagnostics and repair. |
|--|---|---|

10. Contacts

Our specialists are always ready to answer your questions and assist with installation, setup, or troubleshooting of the equipment.

Technical Support

 support@crystalsound.eu

 +34 695 080 862

11. Warranty and service life

Warranty period is 2 years from the date of purchase. Service life of the devices is 5 years.

12. Useful links

Website



Youtube

