

Roger™ Earpiece System

User guide



Roger Earpiece

Virtually invisible true-wireless receiver



Roger BaseStation

Stationary transmitter



Roger On

Gateway and Mobile transmitter

Roger Repeater

Range extender
for stationary transmitter



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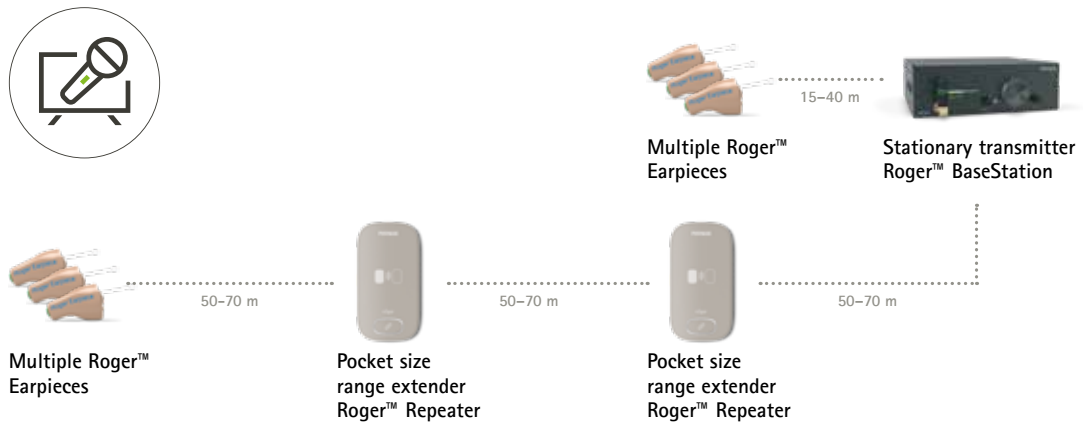
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1 Use cases

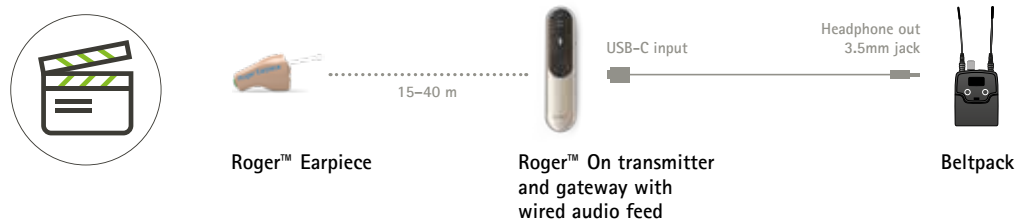
1.1 Broadcasting

The Roger BaseStation, as fix installed transmitter, stream the audio from the analog connected source. To extend the covered area, as many as required Roger Repeater can be added to the setup.



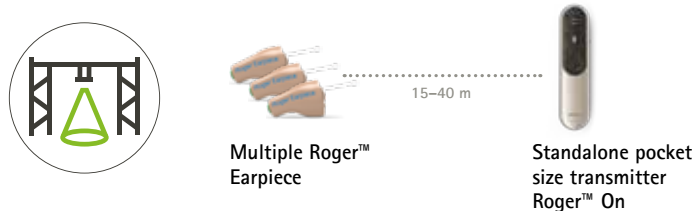
1.2 Movie

The Roger On streams the audio from the cable connected beltpack to the Roger Earpiece. The "3.5mm jack to USB-C adapter", available as accessory, is used for connecting both devices.

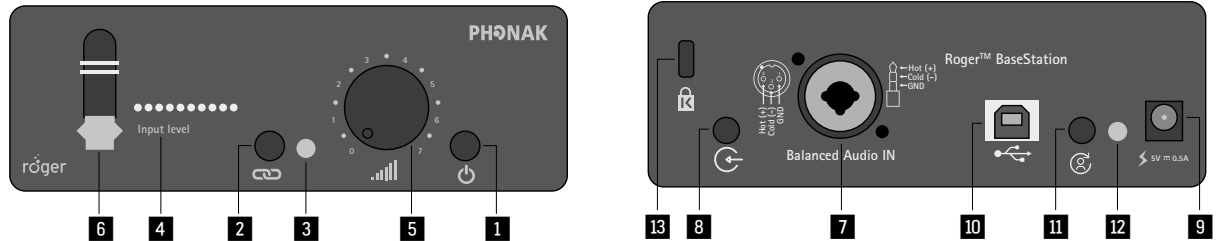


1.3 Stage

The Roger On streams the audio pick-up from its build-in microphones. Clip or hang Roger On near the mouth of the talker and it will pick up only his voice, even in noisy environment.



2 Roger BaseStation



2.1 Overview

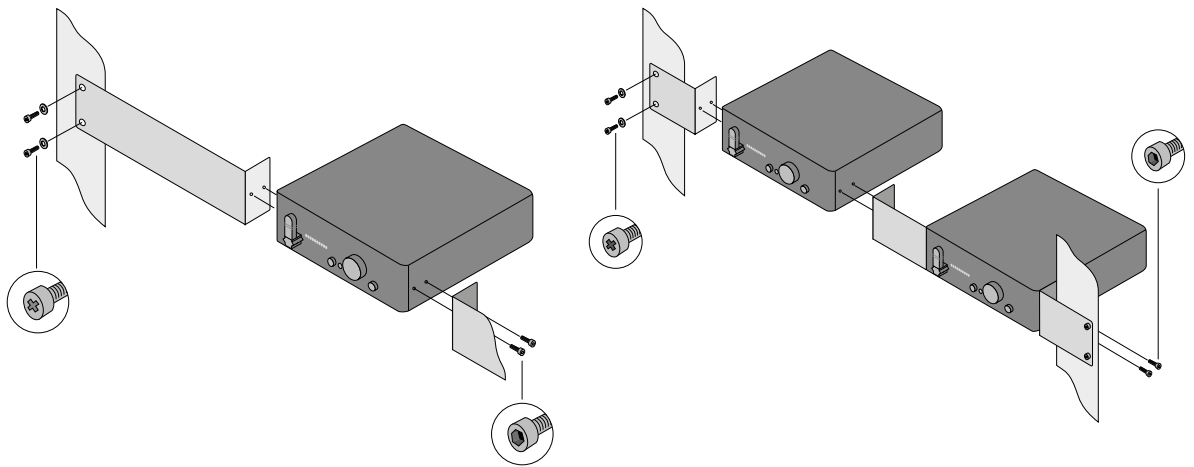
- 1 On/off button
- 2 Connect button
- 3 Connect indicator LED
 - 2s Earpiece connected
 - 1s ● 1s no earpiece in range
 - 1s ● 1s ● 1s incompatible receiver
- 4 Audio input monitoring before volume setting
- 5 Volume setting
- 6 Antenna
- 7 Balanced audio input connector (XLR and 6.35 jack)
 - Nominal 0 dBu / 0.77 VRMS
 - Max +20 dBu / 7.75 VRMS
- 8 Non-balanced audio input connector 3.5 mini-jack
 - Nominal -27 dBu / 0.035 VRMS
 - Max 0 dBu / 0.77 VRMS
- 9 Power supply socket
- 10 USB connector (for maintenance)
- 11 NewNet button (Define a new Roger network, erase all paired devices)
 - 2s NewNet successful
- 12 NewNet indicator LED
- 13 Anti-theft lock

2.2 Installation

The given theoretical range of the transmitter is from 15 to 40 m. Ideally, it should be positioned at the centre of the area to be covered. In view of the transmission frequency (2.4 GHz), absorption by the human body is substantial and the transmitter needs to be positioned high up to ensure a better range

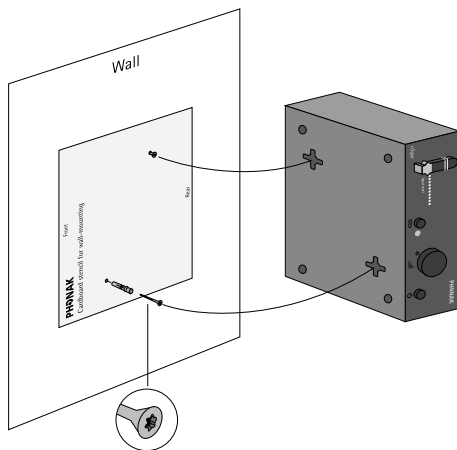
2.2.1 In-rack mounting

One or two transmitters can be mounted in a 19" rack; the single mounting accessories are provided.



2.2.2 Wall mounting

The transmitter must be positioned vertically, with the antenna connector at the top and the antenna remaining horizontal. The mounting frame is provided.



2.3 Starting up

- Connect the power supply.
- Connect an audio source to the XLR connector or the mini-jack socket; if both are connected, the signal on the mini-jack socket has priority.
- Push the 'on' button.
- Check that the audio signal modulates normally on the monitoring LEDs.



Too weak



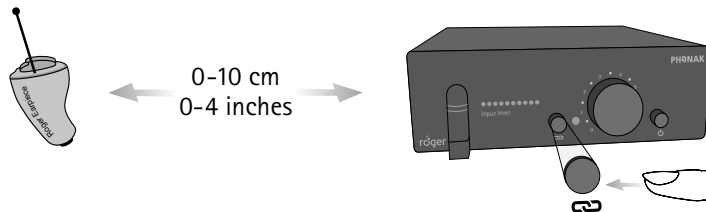
Adequate



Too strong

2.4 Connect a Roger Earpiece

- Place a Roger Earpiece less than 10 cm from the antenna.
- Push the Connect button.
- The LED should light up in green for 2 seconds



Notes :

- Only one earpiece can be connected at a time. Once connected a new earpiece can be added to the network.
- An unlimited number of earpieces can be connected.
- The earpiece remains connected even after a battery change.
- After connect, check the volume in the earpiece and set it with the potentiometer of the transmitter.

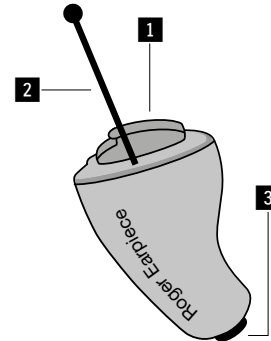


- The volume setting can be altered in a range from -14 dB to +12 dB in steps of 2 dB.
- All the earpieces connected with the transmitter will be affected by the volume setting.
- To set the volume individually on each earpiece, use the Roger On.
- To disconnect the BaseStation from all the connected earpieces, push the NewNet button on the back for more than 7 seconds; the corresponding LED will light up in green for 2 seconds.

3 Roger Earpiece

3.1 Overview

- 1 Battery compartment
- 2 Removal handle
- 3 Wax guard - Anti-cerumen filter



3.2 Maintenance and care

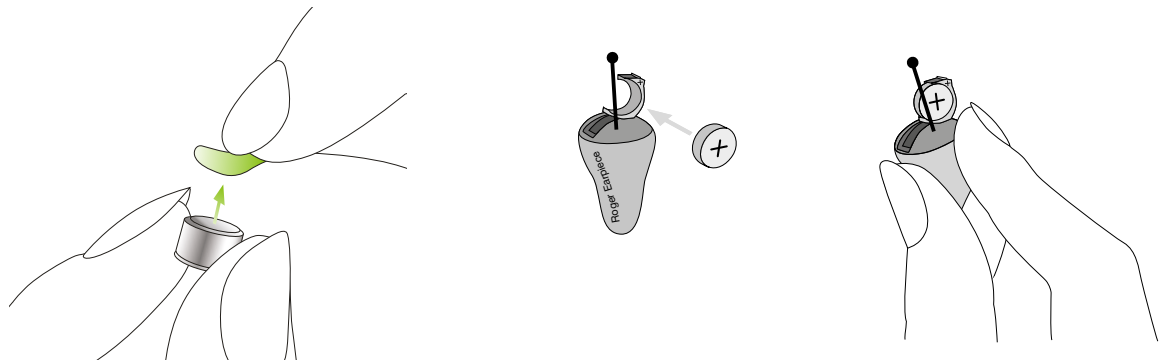
3.2.1 Battery – Important notice

The Roger Earpiece uses a zinc-air battery that offers the best performance in a reduced size. This battery uses the ambient air to activate the chemical process and generate electricity. The adhesive label closes the air inlet aperture in the battery.

Once this label has been removed, it is necessary to wait for about 2 minutes for the battery to reach its maximum capacity.

It can then be installed in the earpiece.

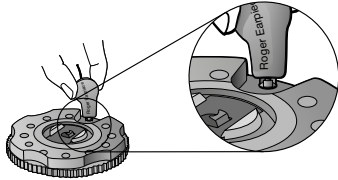
Once the door of the battery compartment has been opened, remove the battery protective foil and insert the battery with the + side facing towards you, with the door to the right. The earpiece is switched on by closing the compartment.



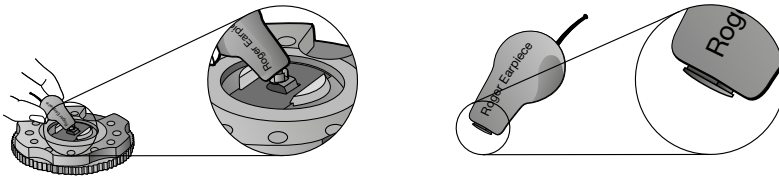
It is recommended to open the battery compartment door to switch off the earpiece when it is not in use; the battery will nevertheless continue to discharge, even the foil is put back. The best performance is guaranteed with an original Phonak battery.

3.2.2 Changing the anti-cerumen filter












The anti-cerumen filter must be replaced regularly. To do so, remove the green filter using the tool supplied.



Then fit a new filter and check that the filter is properly in place



3.3 Meaning of beeps

		Start-up
		Detection of paired transmitter / Exiting Sleep mode
		Connect
		Denegation
		Low battery
		Out of range

3.4 Input signal detection

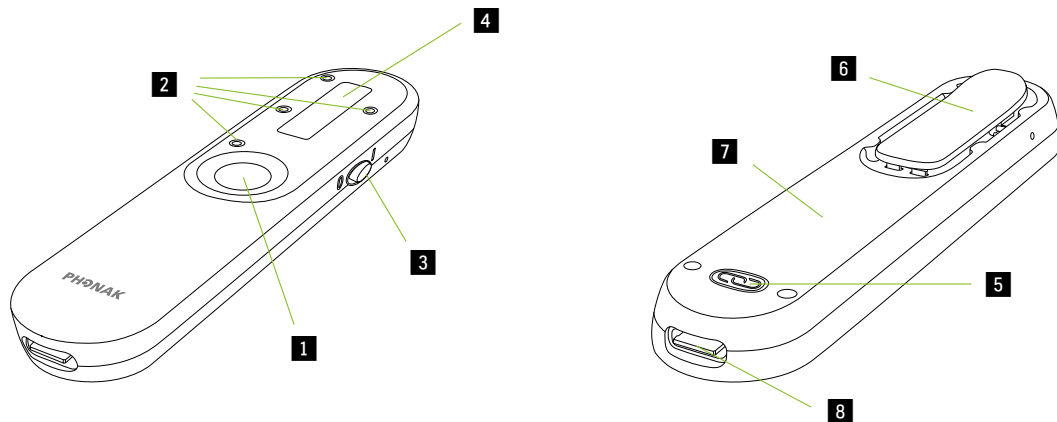
If the BaseStation detects no incoming audio signal for more than 5 seconds, the earpiece volume will be reduced by 6 dB. It will return to the previous volume as soon as the audio signal is detected again.

3.5 Leaving the coverage area

If the earpiece falls out of range, it will emit a soft beep repeatedly. If the earpiece leaves the coverage area for less than 30 minutes, when it returns to the area it reconnects automatically with no audible beep. The earpiece goes into standby mode after 30 minutes.

In standby mode, the earpiece searches for a signal from a known network. As soon as this network is detected, the earpiece exits the standby mode in a few seconds. A beep is then audible.

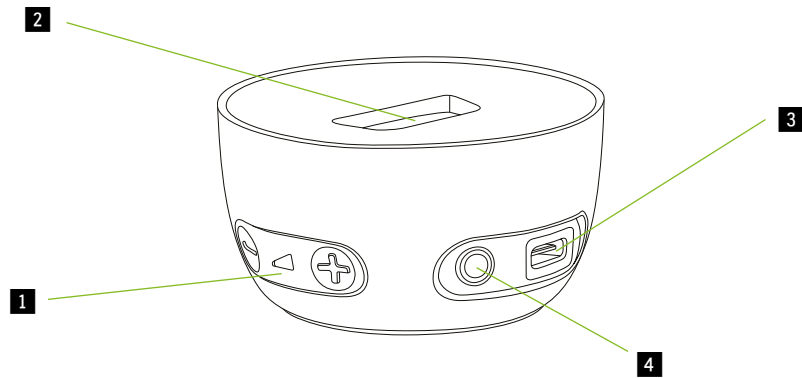
4 Roger On



4.1 Overview

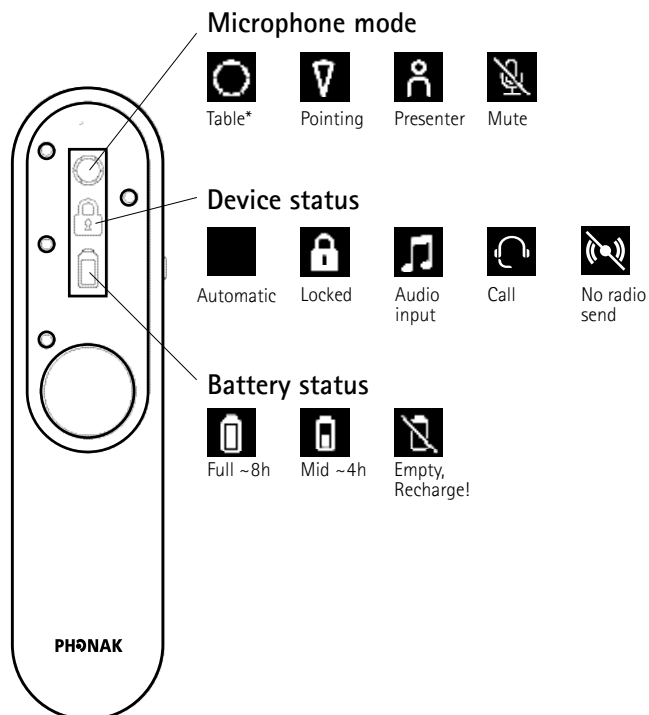
1. Function button
2. 4 microphones
3. On/Off slider
4. Display
5. Connect button
6. Clip
7. Battery inside
8. USB C connector

4.2 Docking station



1. Audio input volume control
2. Slot for Roger On
3. USB C connector
4. 3.5 mm analog and optical digital (Toslink) audio input

4.3 Display icons



4.4 Charging

The Roger On can be charged with original wall outlet adapter and cable or from a computer with provided cable. Alternatively, any adapter or device complying with USB standard and delivering 1A over 5V can be used. Using a cable including thermal protection is recommended.

A fully charged device typically last for 8 hours of streaming with normal range and 6 hours with extended range.

4.5 Streaming with the docking station

The docking station is designed to simultaneously feed audio and power supply to the Roger On. Uses the "3.5mm jack to USB-C adapter" or digital Toslink to connect the audio source and the USB-C cable connected to the main for power supply.

In modes described below in next chapter, this setup corresponds to chapter 6.6.4 "Broadcasting".

4.6 Microphone modes

4.6.1 Mode selection

Roger On is a versatile, intelligent product. It detects which situation you are in and adapts its microphone settings automatically.

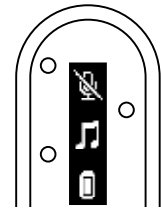
If you want to keep the Roger On in a specific microphone mode independent on how it's positioned, press the function button repeatedly until you have reached the microphone mode you wish to lock the microphone in :



In case the USB-C to 3.5mm jack adapter or USB-C cable is connected to the Roger On, it will automatically switch to "Broadcasting" mode.

4.6.2 Movie

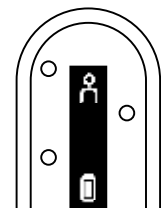
The Roger On streams the audio from the cable connected beltpack to the Roger Earpiece. Uses the "3.5mm jack to USB-C adapter", available as accessory, for connecting both devices. When the adapter is connected, the Roger On's microphone is automatically muted. This mode corresponds to the TV mode in the quick user guide.



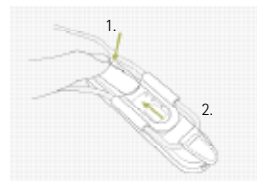
4.6.3 Stage

The Roger On streams the audio pick-up from its build-in microphones. Clip or hang Roger On near the mouth of the talker and it will pick up only his voice, even in noisy environment

This mode corresponds to the Presenter mode in the quick user guide.



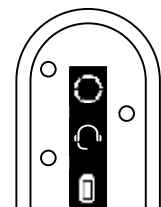
To attach the clip to the Roger On, follow below two steps procedure:



4.6.4 Broadcasting

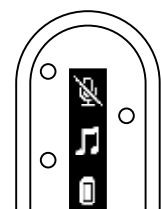


The Roger On streams the audio from the cable connected source to the Roger Earpiece. The source can be connected directly with the "3.5mm jack to USB-C adapter", the docking station or a USB-C/USB-A to USB-C cable. Note that the Roger On is a slave device and requires the USB connected device's to be the master (e.g. computer).



Mic not muted

The Roger On's microphone can be muted in case voice pick-up is not necessary. This mode corresponds to the TV/Multimedia mode in the user guide.

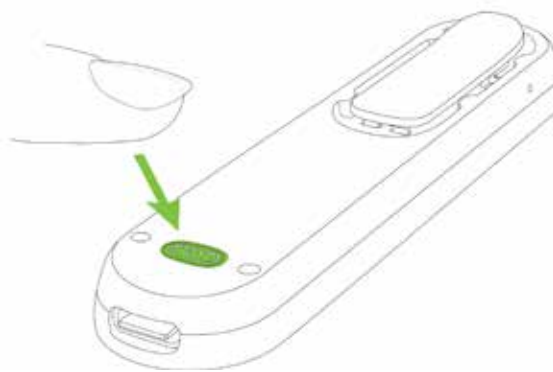


Mic muted

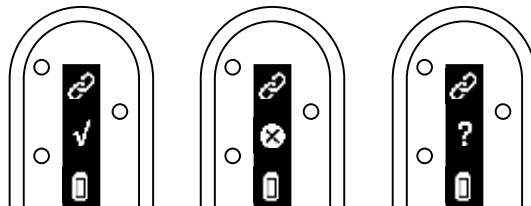
4.7 Main functions

4.7.1 Connect an earpiece

1. Switch on your Roger On and Roger Earpiece.
2. Short press the Connect button on the backside of your Roger On.



3. Hold your Roger On close (within 10 cm/ 4 inches) to the Roger Earpiece.
4. Check the feedback in the display of Roger On:

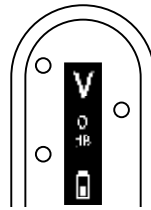


4.7.2 Individual volume control

- In the 30 seconds after powering on the Roger On, make a very long press (>7s) on the function button with the Roger Earpiece in a 10cm range



- The device will enter the dedicated mode and after a few seconds a value a dB is displayed :



- In this mode, each press on the function button will increase by 2dB the earpiece volume. After you selected the desired volume, to exit the menu and store your setting, make a long press (>2s) on the function button.

4.7.3 Mute microphone

To mute the Roger On microphones', press and hold the function button for two seconds:



4.7.4 myRogerMic app

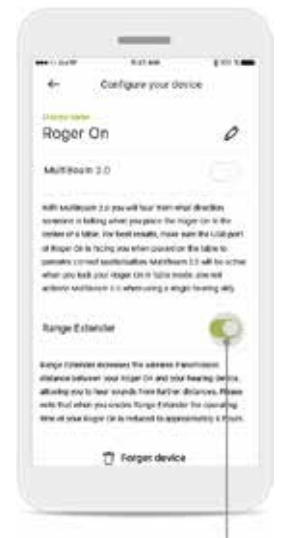
With the myRogerMic app you can control your Roger On remotely from your smartphone. You will be able to:

- Steer the direction of the beam
- Change microphone mode
- Mute / unmute
- Check current device status such as battery level and actual mic mode

Your smartphone needs to support Bluetooth® LE in order to connect to Roger On. myRogerMic app is available for download from Google Play and App Store.

4.7.5 Range selection

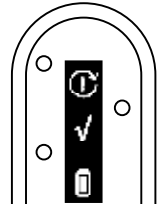
With the myRogerMic app you can choose between two ranges from the Roger On to the Roger Earpiece. By default, normal range is selected. In function of your application, the extended range shall be selected. Note that the selected range directly impact the power consumption, hence the operating time of the device.



Application	Recommended range selection	Use case	Operating time
Gateway between belt-pack and earpiece	normal	Roger On and Roger Earpiece worn by the talent	8h
Roger On as microphone and transmitter	extended	Roger On worn by the person in backstage ("souffleur") and reading the text to the talent	6h

4.7.6 Disconnect

To disconnect your Roger On from any connected receivers or other Roger microphones, hold the 'Connect' button for 8 seconds until you see this display information:

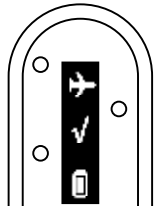


4.7.7 Reset

If your Roger On stops responding to commands, you can reset it by pressing the center and connect buttons together for 10 seconds.

4.7.8 Shipping mode

In case you need to return the Roger On for repair it is recommended to put the device in shipping mode. To do that, press and hold the connect button and switch the device off. Shipping mode is confirmed by the following indication in the display:



5 Roger Network Clone Tool

Roger Network Clone Tool allow to share the same Roger logging data between several Roger transmitters. By implementing this solution, it's possible to cover several non-overlapping areas and freely move with the Roger Earpiece between each without the need of making a "Connect" when entering a covered zone.

Advice: This solution is recommended for non-overlapping areas. For a continuous coverage with seamless transition between areas, the Roger Repeater is the solution to be implemented.

To download the software go to :

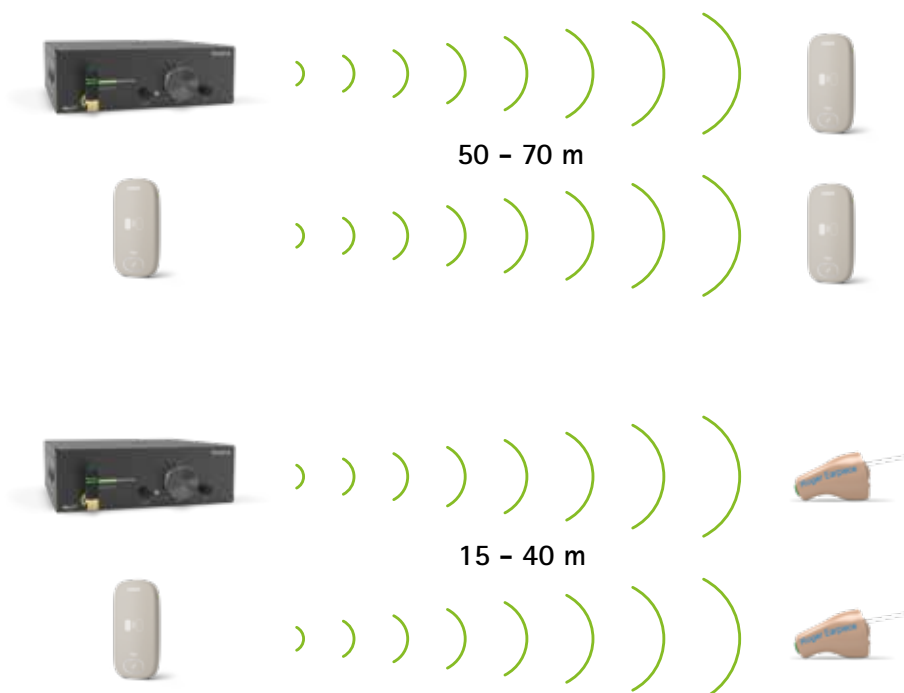
<https://www.phonak-communications.com/en/dealers-and-support/software/>

6 Roger Repeater

6.1 Purpose

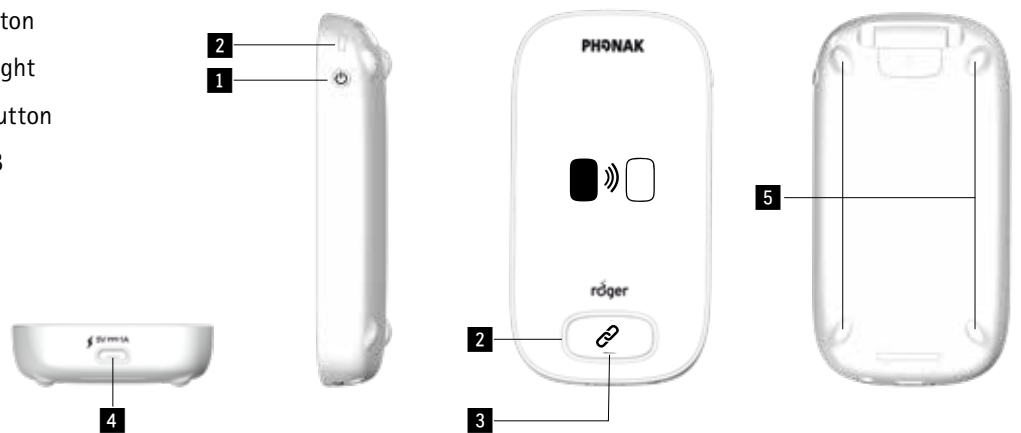
The Roger Repeater makes it possible to extend the coverage of the Roger BaseStation transmitter. Several repeaters can either be linked up or mounted in a star configuration in relation to the BaseStation.

Due to better reception, the range between the BaseStation and a repeater or between two repeaters will be from 50 m to 70 m. The range to an earpiece is from 15 to 40 m.



6.2 Overview

- 1 On/Off button
- 2 Indicator light
- 3 Connect button
- 4 Micro-USB
- 5 Feet



6.3 Meaning of indicator lights



- ● ● On/Off
- 1s ● 1s ● 1s Charging
- ▬ Charged
- ▾ On
- ● ● Discharged

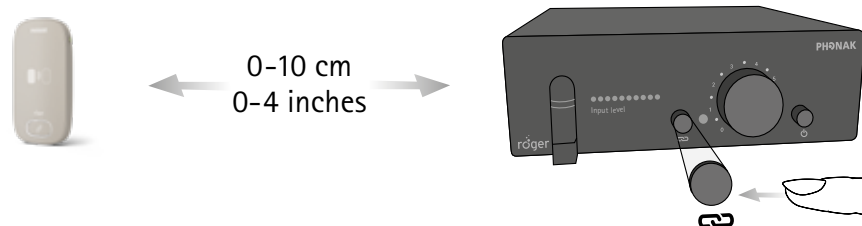


- ● ● On/Off
- ● ● ● ● Connecting
- 2s Repeater or receiver connected
- 1s ● 1s No device to connect in range
- 1s ● 1s ● 1s Not a compatible device

6.4 Setting up

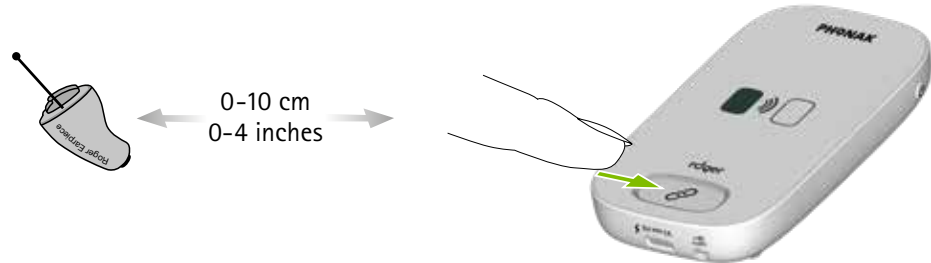
6.4.1 Connect a Roger Repeater

To Connect a repeater to the BaseStation, proceed as for an earpiece by pushing the Connect button on the BaseStation, with the repeater at a maximum distance of 10 cm.



6.4.2 Connect a Roger Earpiece

The earpiece is normally connected by the button on the BaseStation. It is also possible to connect it directly on the repeater, with a repeater previously connected to the BaseStation, by pushing the "Connect" button, with the earpiece at a maximum distance of 10 cm.



6.4.3 Installation – Radiation pattern

When positioning the repeater, pay attention to the radiation pattern and adapt its position to your room and the area you would like to cover.



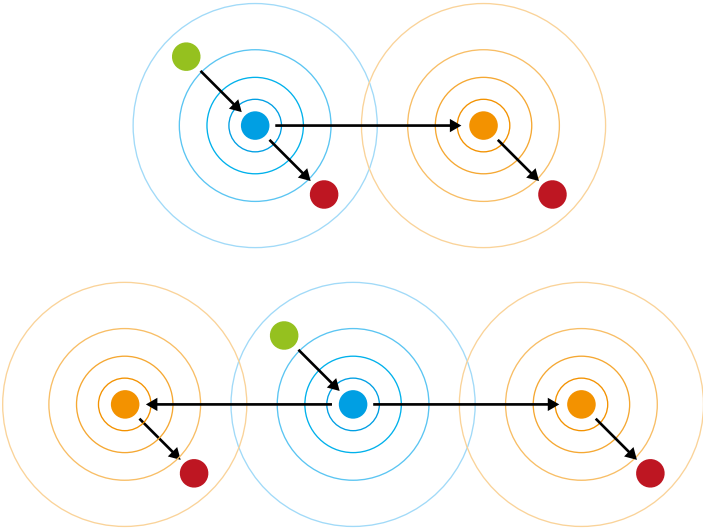
You can check whether the repeater is placed at the right distance by means of the function lights.

		Too near
		Ok
		Too far away
		Out of range

6.5 Topologies

- Primary transmitter
- Secondary transmitter
- Roger Repeater
- Roger Earpiece

6.5.1 Addition of one or two repeaters



6.5.1 Addition of one or two repeaters

