**Roger Touchscreen Mic**

**Roger Earpiece**

**Roger Repeater**

**Roger BaseStation**

**Roger Earpiece**

## Roger system, the key points

The Phonak Roger system is a particularly efficient digital wireless earpiece system that operates in the 2.4 Ghz frequency band.
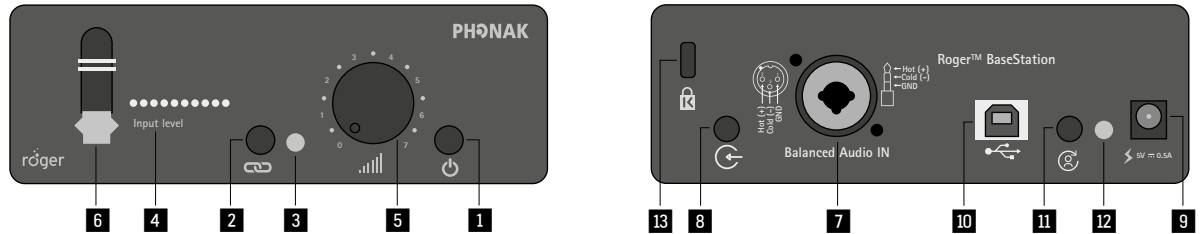
The main characteristics are as follows:

- No interference with other systems working in 2.4 GHz band
- Excellent sound quality with an audio bandwidth of 100 Hz – 7200 Hz
- Distortion < 0.8% to 1 kHz
- No background noise, signal-to-noise ratio of 55 dB
- No more frequency programming
- Fast pairing with the earpiece
- Unlimited number of earpieces on a transmitter
- Low latency

The system consists of four elements: the Roger Earpiece, the Roger BaseStation (stationary transmitter), the Roger Touchscreen Mic (mobile transmitter and remote control) and the Roger Repeater.

**roger**

**PHONAK**

## Table of contents

## 1 Roger BaseStation



### 1.1 Description

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

## 1.2 Installation

### 1.2.1 Installation advice

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.
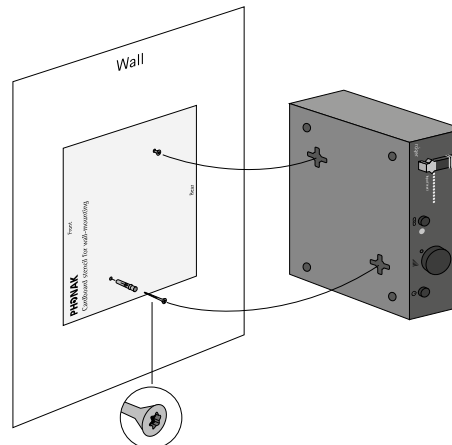
### 1.2.2 In-rack mounting

One or two transmitters can be mounted in a 19'' rack; the single mounting accessories are provided.
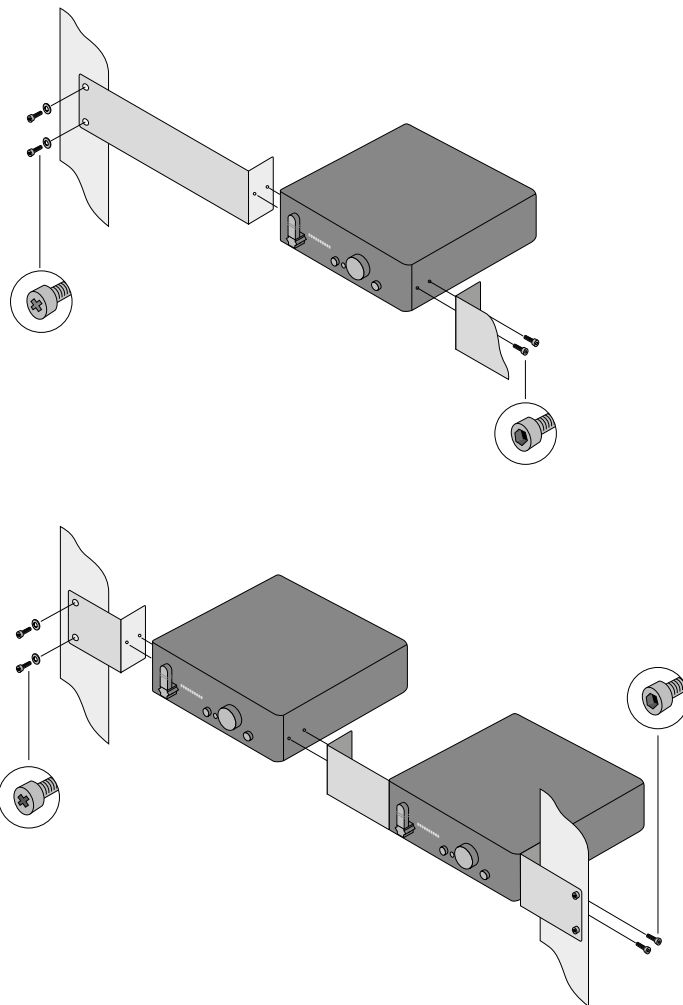
### 1.2.3 Wall mounting

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

### 1.2.4 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

### 1.2.5 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.



0-10 cm
0-4 inches
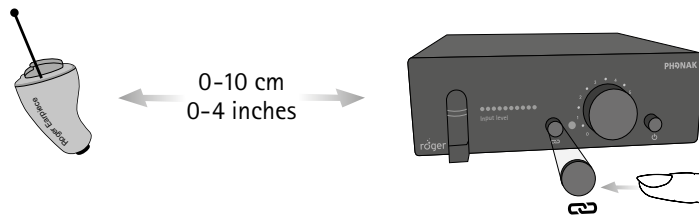
**N.B.:**
- Only one earpiece can be connected at a time. Once connected a new earpiece can be added to the network.
- An unlimited number of earpieces can be connected.
- The earpiece remains connected even after a battery change.
- After connect, check the volume in the earpiece and set it with the 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 Touchscreen Mic (see below).
- 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.
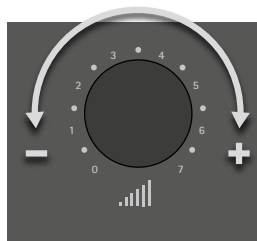


### 1.2.6 Roger Network Clone Tool

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.

**Restriction :** This solution can be applied only to Roger non-overlapping areas. For a continuous coverage where several transmitters are in use, the Roger Repeater is the solution to be implemented. The Roger Repeater ensure a reliable transition of the Roger Earpiece between each zone and no artefacts in spots where several Roger networks are available.

To download the software go to: www.roger-studio.com/

## 2 Roger Earpiece

### 2.1 Description

1   Battery compartment
2   Removal handle
3   Wax guard - Anti-cerumen filter
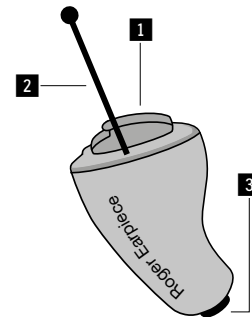
### 2.2 Battery – Important note

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.
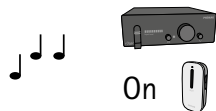
It can then be installed in the earpiece.

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.

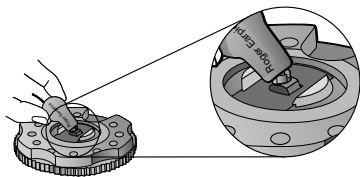The best performance is guaranteed with an original Phonak battery.
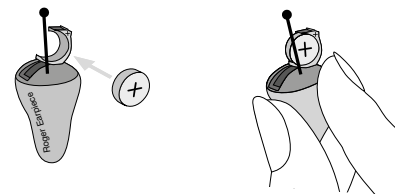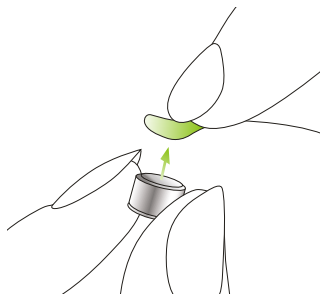
## 2.3 Meaning of the beeps

| | | |
|---|---|---|
| ♩ ♩ ♩ ⏻ | | Start-up |
| ♩ ♩ ♩ On ▯ | | Detection of paired transmitter / Exiting Sleep mode |
| ♩ ♩ ◙ | | Connect |
| ♩ ♩ ⊘ | | Denegation |
| ♩ ♩ ⚠ ▭ | | Low battery |
| ♩ ♩ ♩ ♩ … ))) | | Out of range |

## 2.4 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.
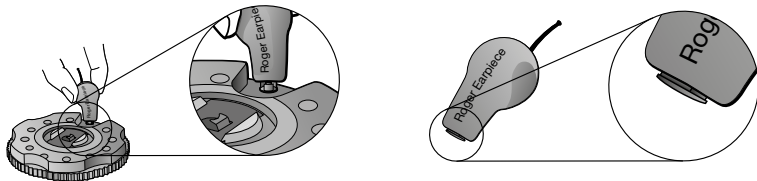
### 2.5 Special functions

#### 2.5.1 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.

#### 2.5.2 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.

## 3 Roger Touchscreen Mic

### 3.1 Description

The Roger Touchscreen Mic enables three main functions:

- use as a pocket transmitter
- registering a name on the earpiece
- individual volume setting for each earpiece

1  Battery compartment
2  Removal handle
3  Indicator light
4  Microphones
5  Mute button
6  Touchscreen
7  Micro-USB socket
8  3.5 jack socket
9  Feet
10  Lanyard: clip/remove button
11  Belt clip (optional accessory)
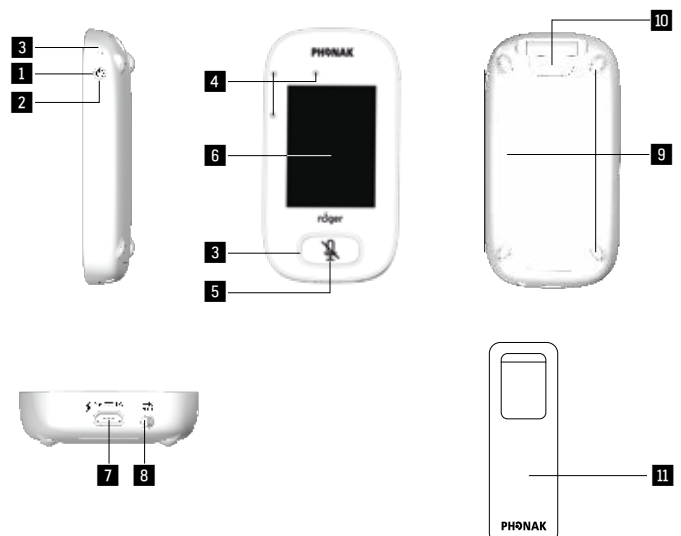
### 3.2 Icons descriptions

The touchscreen enables you to access the functions by pressing on an icon or to change screen by swiping your finger.

| | Icon | Function |
|---|---|---|
| **Home screen** | Connect | Connecting the earpiece to same network as Roger Touchscreen Mic (not necessary when used as remote control, only in his transmitter function) |
| | Network | Returns to Roger Touchscreen Mic network from a SubNet |
| | SubNet | Creates a temporary subnetwork |
| **Screen 2** | List devices | List of connected Roger devices |
| | Check | Checking the parameters of an earpiece |
| | SoundField | Setting the parameters of a Phonak Soundfield loudspeaker |
| | Disconnect | Disconnect an earpiece from the Roger Touchscreen Mic's network |
| **Screen 3** | NewNet | Creating a new Roger Touchscreen Mic network (do not use in normal usage). |
| | Settings | Access to settings |
| | JoinNet | Enables you to join another network (do not use in normal usage) |
| | Mic mode | Access to the Roger Touchscreen Mic settings |

### 3.3 Main function

#### 3.3.1 Assigning a name to a Roger Earpiece

- Place the earpiece less than 10 cm from the Touchscreen;
- Go to the Settings menu then Roger receiver settings,
- Select Name,
- Push the Confirm button

#### 3.3.2 Checking the parameters of a Roger Earpiece

- Place the earpiece less than 10 cm from the Touchscreen;
- Push the Check icon
- The following information is available: type of earpiece, name, serial number

#### 3.3.3 Setting the listening volume of a Roger Earpiece

- Place the earpiece less than 10 cm from the Touchscreen;
- Go the Settings menu then Roger receiver settings;
- Select EasyGain level;
- Adjust the level (+/- 8 dB in 2 dB steps).

#### 3.3.4 Using the Roger Touchscreen Mic as an independent transmitter

- Select the Subnet mode
- Place the earpiece less than 10 cm from the Touchscreen;

- Push Connect
- The earpiece is then connected with the Roger Touchscreen Mic transmitter; if it was connected with the Roger BaseStation, it is no longer connected with the latter.

#### 3.3.5 Using the Roger Touchscreen Mic as a transmitter connected with a Roger BaseStation

- Select the Network mode
- Place the Touchscreen less than 10 cm from the BaseStation
- Push the Connect button on the BaseStation

The Touchscreen is then in the same network as the BaseStation. The BaseStation has priority over the Touchscreen, as soon as there is no longer an audio input signal to the BaseStation, transmission to the earpiece is from the Touchscreen. Transmission from the BaseStation returns as soon as an input signal is detected.

#### 3.3.6 Quick menu

In the Quick menu mode, only the following functions and icons are active:

Connect    Check    Disconnect    Settings

- Go to Settings;
- Then Quick menu;
- And enter a password.
- This password will then be needed to go into the Settings mode and to go out of the Quick menu mode.
- If the device is already in the Quick menu mode, the password is usually 1 2 3 4

#### 3.3.7 Other functions

Many other functions are available, please refer to the full manual in English.

# Roger Earpiece system

## 4 Roger Repeater

### 4.1 Description

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.

**50 – 70 m**

**15 – 40 m**
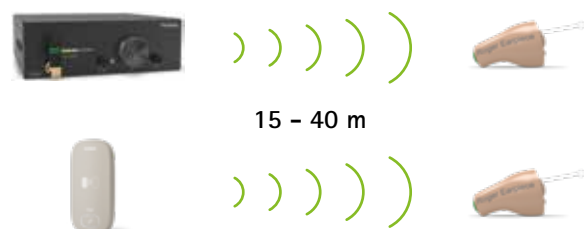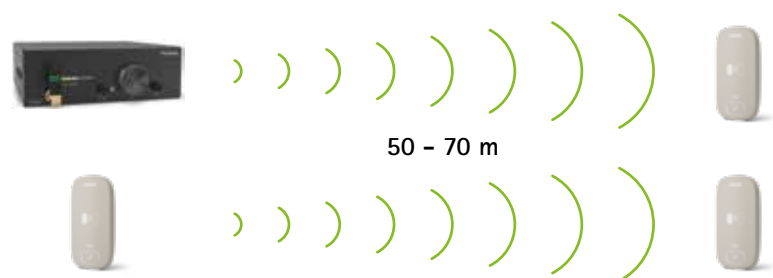
### 4.2 Utilization

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.

0–10 cm
0–4 inches
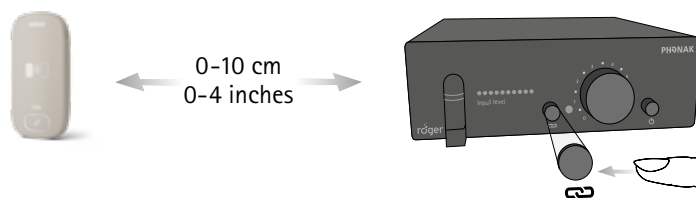
### 4.3 Meaning of the indicator lights

| | | |
|---|---|---|
| ○ ○ ○ | On/Off | |
| ◐ 1s ◐ 1s ◐ 1s | Charging | |
| ▬▬▬▬ | Charged | |
| ◢◣ | On | |
| ∞ ∞ ∞ | Discharged | |

| | | |
|---|---|---|
| ○ ○ ○ | On/Off | |
| ●●●●●● | In connection | |
| ● 2s | Earpiece or repeater connected | |
| ● 1s ● 1s | No device within range | |
| ● 1s ● 1s ● 1s | Incompatible device | |

### 4.4 Installation

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

| | |
|---|---|
| ● 0.2s ● 0.2s ● 0.2s | Too near |
| ● 1s ● 1s ● 1s | Ok |
| ● 1s ● 1s ● 1s | Too far away |
| ● 2s ● 2s ● 2s | Out of range |

### 4.5 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.
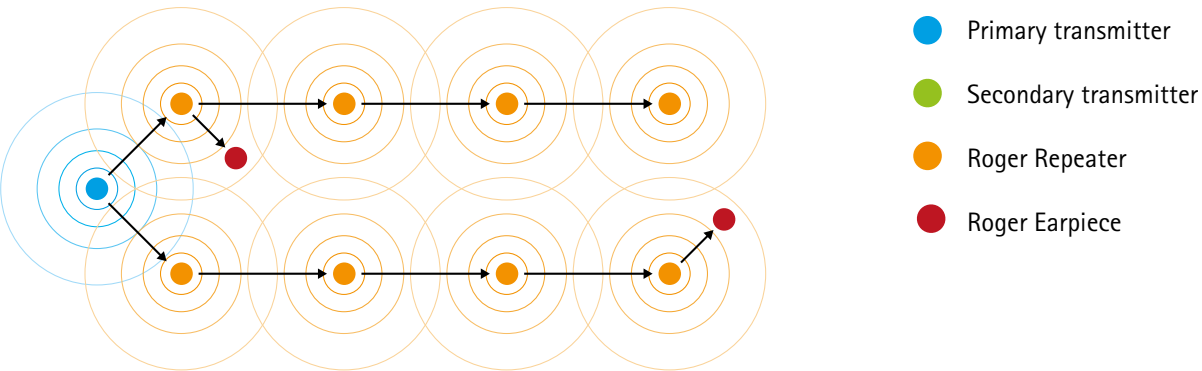
> 1s

PHONAK

0–10 cm
0–4 inches

Different examples of configuration that can be used are shown below.

**Addition of one or two repeaters**



**Coverage of a wide area**



- 🔵 Primary transmitter
- 🟢 Secondary transmitter
- 🟠 Roger Repeater
- 🔴 Roger Earpiece

**4.6 Rebooting**

To reboot the repeater:



> 8s