

# Roger™ Covert 2.0

## User Guide



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# Contents

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## **1 Roger Earpiece C 5**

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1.1	Components	5
1.2	Device description	6
1.3	Set up	6
1.4	Beeps summary	10
1.5	Cleaning	11
1.6	Exchange battery door	12

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## **2 Roger Covert main unit 13**

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2.1	Components	13
2.2	System description	14
2.3	Set up	19
2.4	Basic functions	25
2.5	Mobile phone Bluetooth functions	28
2.6	Communication	29
2.7	Connecting a new remote control Listening	32
2.8	Operation with Roger CarKit C	34
2.9	Advanced functionalities	35
2.10	SCA - Security Configuration App	38

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2.11	Service	38
2.12	Buttons summary	40
2.13	LEDs summary	42
2.14	Beeps summary	44
2.15	Vibrator summary	45

<b>3</b>	<b>Mini-Microphone MM11</b>	<b>46</b>
----------	-----------------------------	-----------

---

3.1	Overview	46
3.2	Wearing	46
3.3	Exchange filters	48
3.4	How to wear the microphone	49

<b>4</b>	<b>SCA – Security Configuration App</b>	<b>50</b>
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4.1	Where to download	50
4.2	Connection to computer	50
4.3	Usage of SCA	50
4.4	Firmware update	50

---

<b>5</b>	<b>Support</b>	<b>51</b>
5.1	Documents	51
5.2	e-Learning	51
<b>6</b>	<b>Troubleshooting</b>	<b>52</b>
6.1	Roger Earpiece C	52
6.2	Roger Covert C & Roger Covert Dual C separable	54
6.3	Roger Remote C & Roger Remote Dual C	55

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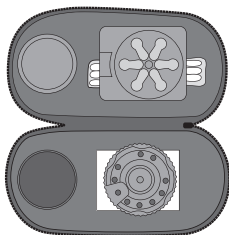
# 1 Roger Earpiece C

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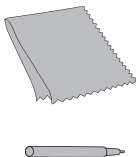
## 1.1 Components



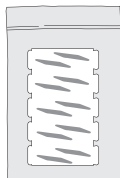
Roger Earpiece C  
- beige or brown



Transportation pouch containing  
batteries, cerumen filters and Q-tips



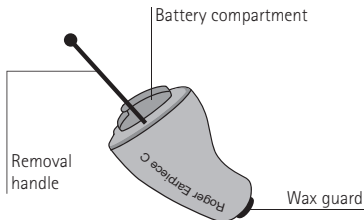
Cleaning tools



Softwraps

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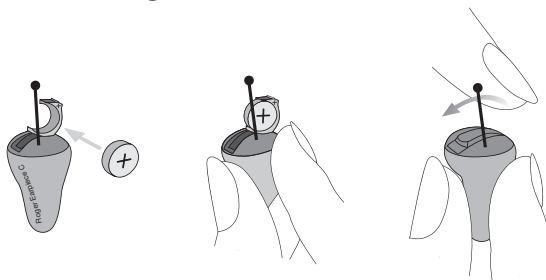
## 1.2 Device description



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## 1.3 Set up

### 1.3.1 Switching On/Off



Battery type: Zinc Air size 10

Operating time >20h

To switch the device off, open the battery compartment entirely.



It's strongly recommended to exchange the battery before each mission

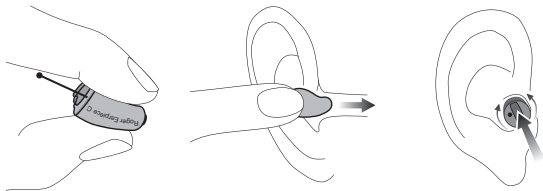


When the earpiece is not used for a certain period of time, remove the battery due to possible battery leakage



Handle the battery door with care (do not open excessively and insert battery from side)

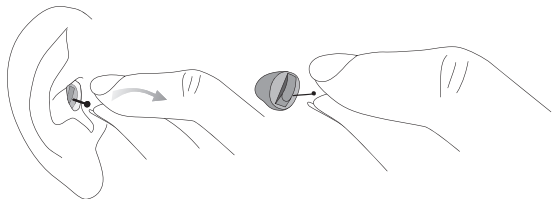
### 1.3.2 Inserting earpiece



Before insertion, check wax guard is not obstructed with earwax that will reduce sound level.

See section 1.5 if exchanging the wax guard is necessary

### 1.3.3 Removing earpiece

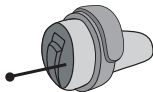
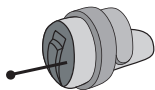


After removing the earpiece check the wax guard is not obstructed with earwax that will reduce sound level.

See section 1.5 if exchanging the wax guard is necessary

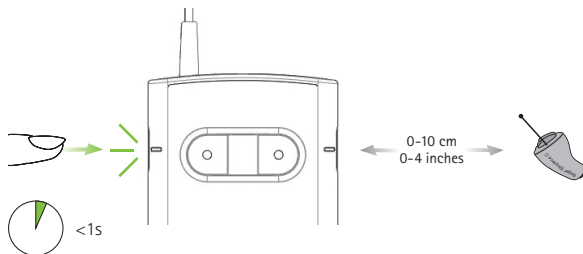
### 1.3.4 Softwraps

Softwraps are used to reduce ambient noise or increase earpiece retention.



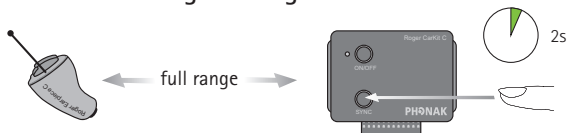


### 1.3.5 Connecting to a Roger Covert main unit



Keep any other Roger device out of range during this process.














### 1.3.6 Connecting to a Roger CarKit C



All receivers in range will be connected at the same time when pressing «sync» button for more than 2 seconds.

## 1.4 Beeps summary

Table below summarize beeps generated by the Roger Earpiece C. Refer to the dedicated section for beeps generated by the Roger Covert main unit.

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

## 1.5 Cleaning



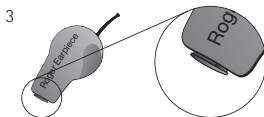
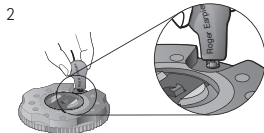
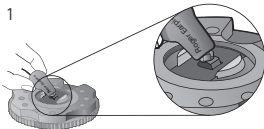
Clean the Roger Earpiece C after each usage with the cleaning spray and cloth provided.



Opening the battery compartment entirely will avoid humidity to remain within the Roger Earpiece C.

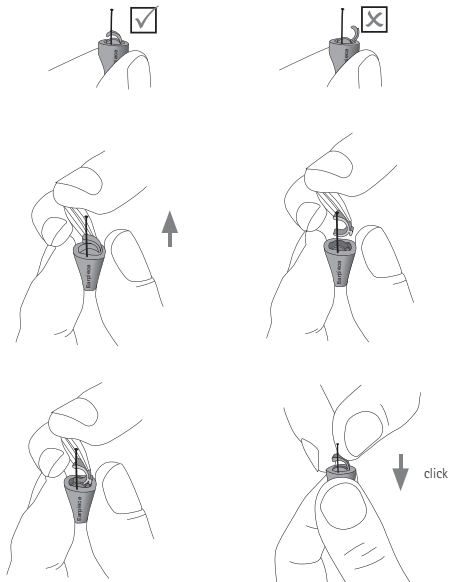


The wax guard avoids earwax to impair the audio amplifier. Regularly exchange it following the provided instruction.



## 1.6 Exchange battery door

In case the battery door got broken, you can order it as spare part to replace it.



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## 2 Roger Covert main unit

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### 2.1 Components



Roger Covert C



or

and



Roger Covert Dual C separable



Roger Remote C

or



Roger Remote Dual C



Power supply



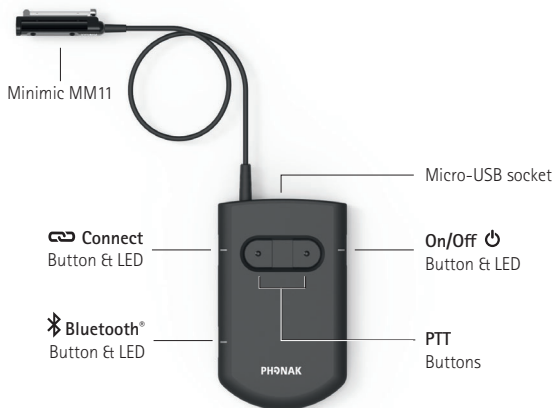
MM11 supports



Adapter Micro-USB to jack socket

## 2.2 System description

### 2.2.1 Roger Covert C – Device description

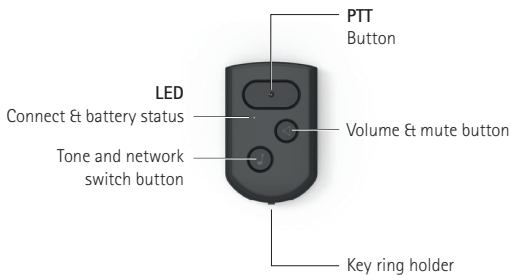


## 2.2.2 Roger Covert Dual C separable – Device description



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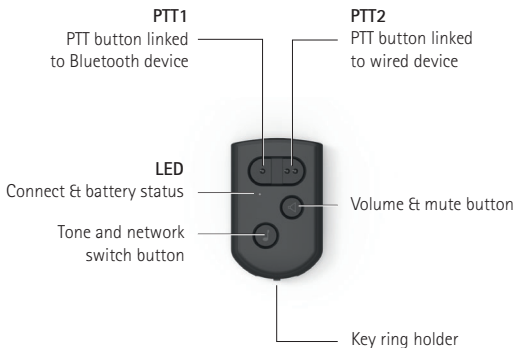
## 2.2.3 Roger Remote C – Device description





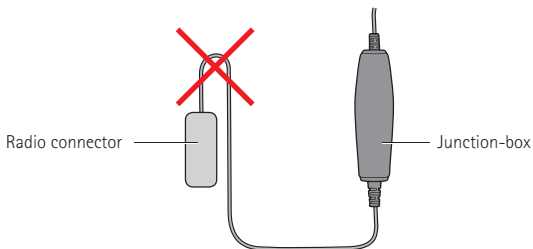
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## 2.2.4 Roger Remote Dual C – Device description



## 2.2.5 Caution

Excessive bending over 90 degrees or applying of strong pull forces on the cables might lead to cable defects and hence a malfunctioning of the device, such as loss of communication or sound coming out of the radio loudspeaker.

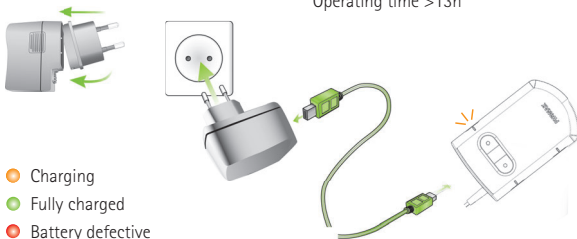


## 2.3 Set up

### 2.3.1 Charging

Charging time 0 to 100% : ~2.5h

Operating time >13h



LED will light steadily only when charging with device OFF

Charging with a powerback while on mission is possible

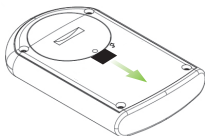


It's mandatory to use exclusively the cable delivered for charging



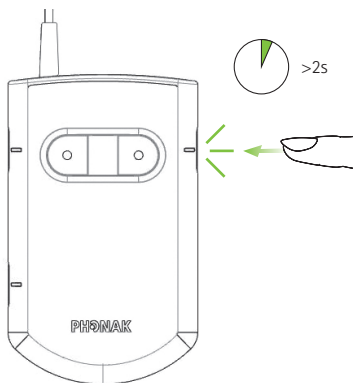
Fully charge new device and recharge every 4 months if not used

### 2.3.2 Activate remote control battery



Battery lifetime > 3 months

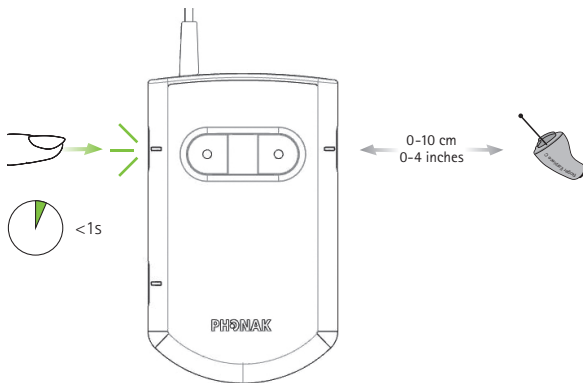
### 2.3.3 Switching On/Off



 Switched on | Einschaltet | Allumé

 Switched off | Ausgeschaltet | Eteint

## 2.3.4 Connecting a Roger Earpiece C



2s

Roger Earpiece C connected



1s



1s

No Roger Earpiece C in range



1s



1s



1s

Not a compatible receiver

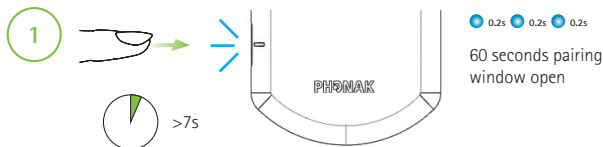


Keep a distance of at least 2m to other Roger Earpiece C to avoid mixing at connection.

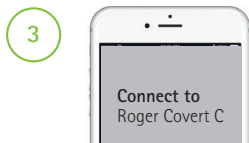


Quantity of paired earpieces isn't limited.

## 2.3.5 Pairing a bluetooth device



Initiate search on communication device



Confirm connection (PIN=0000)

5s 5s Bluetooth device connected

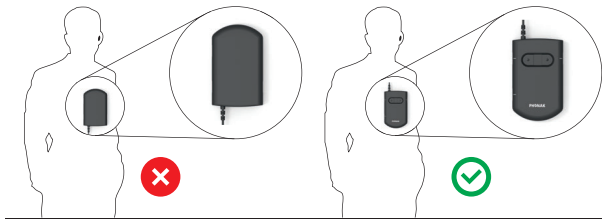
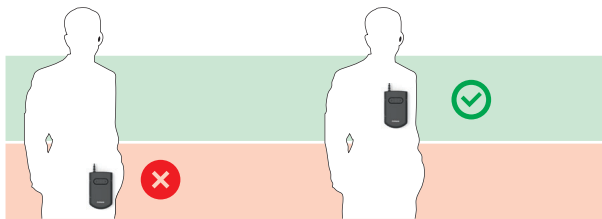
i The Roger Covert main unit can memorize up to 3 Bluetooth devices

i Bluetooth name, by default „Roger Covert C“ or „Roger Covert 2C“, can be edited with SCA - Security Configuration App

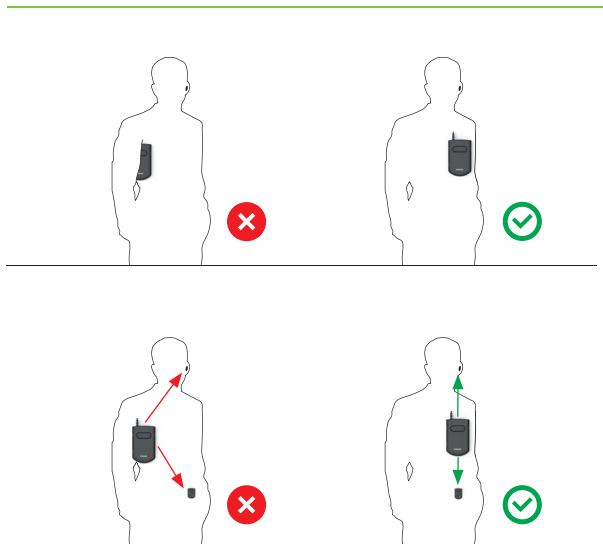
i Keep a distance of at least 10m to other Bluetooth devices to avoid mixing at connection.

## 2.3.6 Recommended device positioning

Transmission range for devices using the 2.4GHz spectrum is highly dependent upon the surroundings (inside, outside, etc...) and absorption by the body.



Not wearing the Roger Covert unit as recommended will drastically impact performance.



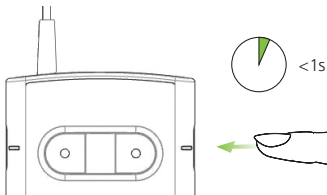
It is recommended to thoroughly test the equipment in different conditions and surroundings, to find the optimal wearing solution for you, before using it for live operations.














## 2.4 Basic functions

### 2.4.1 Display system status

Status is displayed for 15s






LED On/Off 

 2.5s	 2.5s	 100 - 61%
 1s	 1s	 60 - 50%
 2.5s	 2.5s	 49 - 31%
 1s	 1s	 30 - 20%
 2.5s	 2.5s	 19 - 11%
 1s	 1s	 10 - 0%

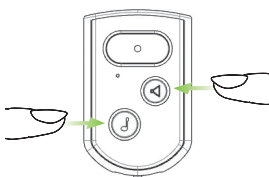
LED Connect 



	Reception unmuted
	Reception muted

LED Bluetooth 

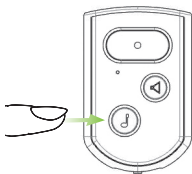
	No Bluetooth connection
 5s  5s	Bluetooth device connected

## 2.4.2 Remote control battery check

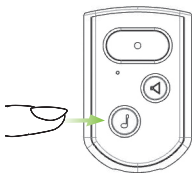


-  Battery ok
-  Battery < 10% - Recommended to exchange battery

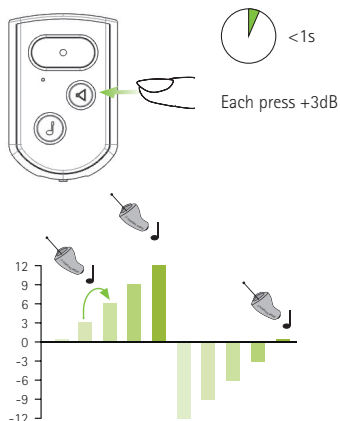
## 2.4.3 Sending covert beep



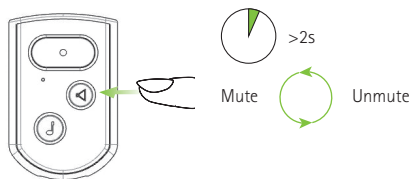
## 2.4.4 Switching between Roger Covert / CarKit networks



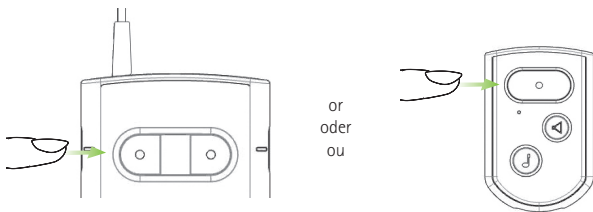
## 2.4.5 Adjust listening volume



## 2.4.6 Mute / Unmute listening



## 2.5 Mobile phone Bluetooth functions



		Function Funktion Fonction	Feedback Rückmeldung Feedback
< 1s	1x	Pick up call	+
< 1s	4x	End call	+
< 1s	2x	Redial last number *	
> 2s	1x	Reject incoming call *	+

\* If activated, configurable with SCA

## 2.6 Communication

### 2.6.1 Listening



Audio signal can be listened either through the Roger Earpiece C or headphones using the adapter Micro-USB to jack socket.

#### 2.6.1.1 Roger Covert Dual C separable – Priority matrix

Listening to both communication devices at the same time is not possible. By default Bluetooth device has priority.

##### Caption

Ø	No communication	CH1	Bluetooth device
Rx	Communication ongoing	CH2	Wired device
→ Rx	New incoming communication		

CH1	CH2	Listen to
Rx	Ø	CH1
Ø	Rx	CH2
Rx	→ Rx	CH 1 +  
→ Rx	Rx	Switch to CH1

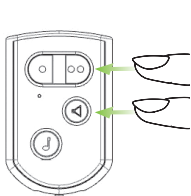
In example above, Bluetooth communication has priority and simultaneous beep on



Priority can be changed permantly with SCA or temporarily (see next chapter)

## 2.6.1.2 Roger Covert Dual C separable– Priority channel switch

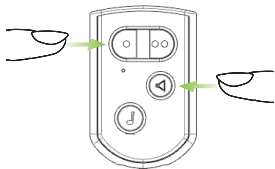
Change to wired device



<1s

Both simultaneously

Change to Bluetooth device



<1s

Both simultaneously



Changes apply until next device's restart

---

## 2.6.2 Transmission

### 2.6.2.1 Roger Covert C

To transmit press the PTT button on the remote control or 1 of the 2 of the Roger Covert C buttons, both having the same function.

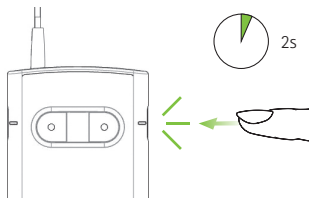
### 2.6.2.2 Roger Covert Dual C separable

To transmit press the PTT button on the remote control or the Roger Covert Dual C separable corresponding to the channel you want to communicate to.

## 2.7 Connecting a new remote control

1

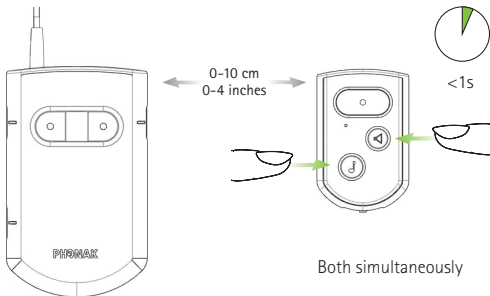
Switch on



i

After power on, a 30 seconds pairing window is open

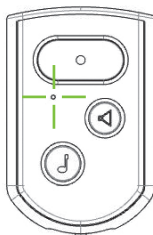
2





---

3



2s

Remote control connected



1s



1s

No Roger Covert main unit in range



1s



1s



1s

Not a compatible device

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## 2.8 Operation with Roger CarKit C

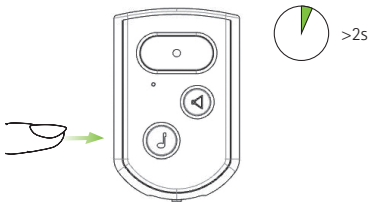
### 2.8.1 Synchronization

On Roger CarKit C, press the Sync button for at least 2 seconds. The sync process lasts about 4–5 seconds. Refer to Roger CarKit C user manual for further information. After this operation, the Roger Earpiece C and the Roger Covert main unit are synchronized with the Roger CarKit C.

The earpiece will now receive audio directly from the CarKit. The Roger Covert main unit will remain active to handle remote control and Bluetooth link but without transmitting to the earpiece.

### 2.8.2 Switching network

User can at any time switch between both stored networks (Roger Covert main unit or CarKit networks)

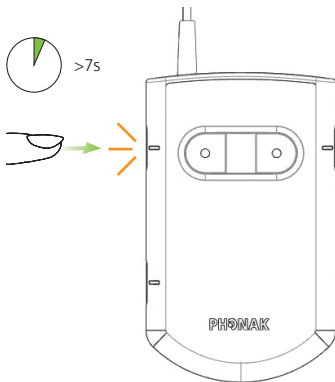


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## 2.9 Advanced functionalities

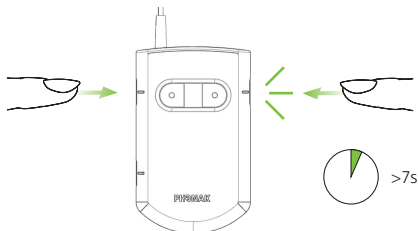
### 2.9.1 Define a new Roger network (NewNet)

After this operation a new Roger network and a new encryption key are created.  
After this operation the earpiece and the remote control are disconnected from the Roger Covert main unit.



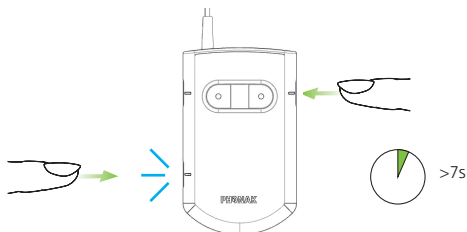
## 2.9.2 Force a reboot

If the system is stuck in an undetermined state, it might be required to force a reboot.



## 2.9.3 Clear the list of known Bluetooth devices

The known Bluetooth devices (up to 3 devices) will be cleared.



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## 2.9.4 Initiate Bluetooth reconnection

Initiate reconnection to the last connected Bluetooth device.



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## 2.10 SCA – Security Configuration App



A MS-Windows application is available to configure all variants of Roger Covert main unit as well as to update firmware of remote control. The application can be downloaded on our website.

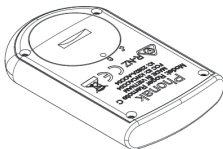
Refer to the dedicated section of this document for further information about SCA.

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## 2.11 Service

### 2.11.1 Exchange remote control battery

Open rear compartment with a coin and exchange CR2032 battery



Not to exert too much force to avoid damaging the compartment



Battery door available as spare part if lost

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## **2.11.2 Exchange MM11 microphone**

The microphone can be ordered as spare part and replaced by your technical service.

## **2.11.3 Exchange Roger Covert main unit battery**

Trained partners can order Roger Covert main unit's battery and proceed with replacement by local technical service.








## **2.11.4 Sending a device for repair**

When a device is sent by air freight for repair and you are unsure of the defectiveness of the battery, it's mandatory to remove it to proceed (compliance with IATA dangerous good regulations). If necessary, contact your sales representative for support.

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## 2.12 Buttons summary







### 2.12.1 Roger Covert C


Button	Name	Short press	Long press	Very long press
	On/Off	Status	Switch On/Off	-
	Connect	Connect	-	NewNet
	Bluetooth	3x initiate reconnection	-	Pairing mode
Button		Short press	Long press	Very long press
 		-	-	Forced reboot
 		-	-	Erase known Bluetooth devices



## 2.12.2 Roger Remote C





















Button	Name	Short press	Long press	Very long press
	Audio	Volume control	Mute / Unmute listening	-
	Tone	Send covert beep	Switching Roger Covert / CarKit networks	-

Button	Short press	Long press	Very long press
 + 	Pair remote control	-	Display battery status
 + 	Switching priority to CH1	-	-
 + 	Switching priority to CH2	-	-

Button	Name	Short press	Long press	Very long press
	PTT1	1x Pick up call 2x Redial last number 4x End call	Reject call	-






## 2.13 LEDs summary

### 2.13.1 Roger Covert C & Roger Covert Dual C

LED	Color	Status	Meaning
On/Off		Progressive	Turn On
		Degressive	Turn Off
		Solid	Battery charged
		Solid	Battery charging
		Solid	Battery defective
		Blink slow	Battery between 100-61%
		Blink fast	Battery between 60-50%
		Blink slow	Battery between 49-31%
		Blink fast	Battery between 30-20%
		Blink slow	Battery between 19-11%
		Blink fast	Battery between 10-0%
		Blink fast	USB connection with SCA detected
Connect		Blink 2x	Roger Earpiece C connected
		Blink 2x	Roger Earpiece C not detected / out of range
		Blink 3x	Roger receiver not compatible
		Blink 1x	NewNet defined
		Solid	Earpiece Muted
Bluetooth		Blink fast	Roger Covert C in pairing mode
		Blink slow	Roger Covert C is paired
		Blink 3x	List of known Bluetooth devices erased

















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## 2.13.2 Roger Remote C & Roger Remote Dual C

Color	Status	Meaning
	Blink fast	Battery check → battery ok
	Blink fast	Battery check → battery low
	Blink 2x	Roger Covert C connected
	Blink 2x	Roger Covert C not detected / out of range
	Blink 3x	Roger Covert C not compatible

## 2.14 Beeps summary

Refer to section 1.4 for beeps generated at earpiece level

Tone	Meaning
	PTT press*
	PTT release*
	Simultaneous communication on CH1 and CH2*
	Priority switch confirmation or Network switch confirmation
	Listening muted
	Listening unmuted
	End of call*
	Bluetooth devices disconnected (link loss)*
	Bluetooth devices reconnected or call , from Roger Covert, accepted*
	Successful pairing of remote control
	Less than 10% of battery remaining, repeated every 10 minutes
	Less than 5% of battery remaining, repeated every 10 minutes
	Volume control step*
	Medium volume step*
	Maximum volume step*
	Feedback covert beep*





 → Short tone

 → Long tone

\*If activated, configurable with SCA

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## 2.15 Vibrator summary

Vibrator	Meaning
 5x (short)	End of call*, repeated 3 times
 5x (long)	Call from Roger Covert accepted*, repeated 3 times
 5 sec.	Less than 10% of battery remaining*, repeated every 10 minutes
 2 x 5 sec.	Less than 5% of battery remaining*, repeated every 10 minutes

\*If activated, configurable with SCA

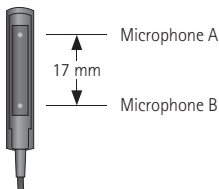
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## 3 Mini-Microphone MM11

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### 3.1 Overview

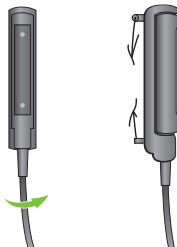
MM11 is made of two microphones separated with a given distance allowing to perform sound processing.



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### 3.2 Wearing

#### 3.2.1 Needle support

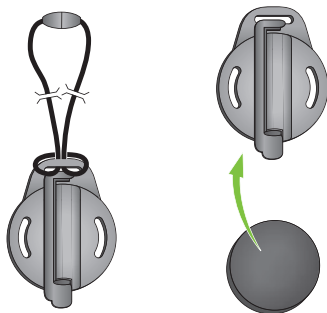


Once attached the MM11 will turn, avoiding microphones openings to be blocked by clothes.

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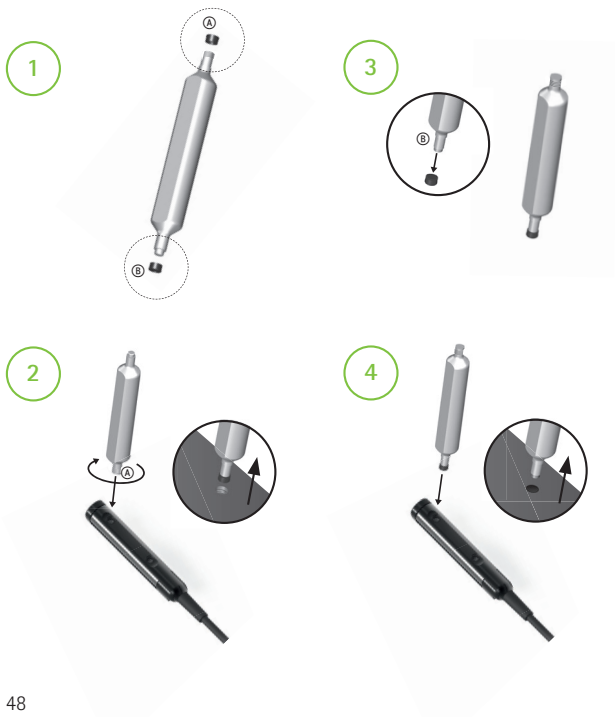
### 3.2.2 Multifunctional support

Multifunctional support can be used with the lanyard or the magnet delivered along. It offers as well openings to stitch it.



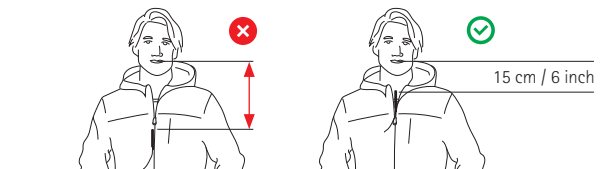
## 3.3 Exchange filters

Regularly check that microphone openings are not obstructed. If necessary exchange the filters, filters and tool are available in a set as spare part.





## 3.4 How to wear the microphone



Waterproof clothes will drastically reduce voice pick-up.

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## 4 SCA – Security Configuration App

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### 4.1 Where to download

SCA can be downloaded from our website, you only have to fill in the contact form in order to be informed in case of new release :

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

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### 4.2 Connection to computer

Connection to computer is made with a USB-A to Micro-USB cable, the cable delivered can be used for that purpose.

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### 4.3 Usage of SCA

SCA can be used to configure or update firmware of Roger Covert main unit and Roger Remote control. Roger Earpiece C cannot interact with SCA. Parameters to configure or update procedure are described in SCA.

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### 4.4 Firmware update

Firmware for Roger Covert main unit or Roger Remote control are embedded in SCA. In case we release new firmware, you will have to upload and install a new version of SCA. Anybody who downloaded SCA will be informed in case a new version of SCA is released.

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## 5 Support

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### 5.1 Documents

Several useful documents are available on the download section of our website :

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

Available for download :

- All user guides
- Technical note to set up Bluetooth connection between communication device (Radio or PTT App) and Roger Covert main unit.
- Datasheets
- Safety Information

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### 5.2 e-Learning

A e-Learning module is available. It brings the participant through all relevant aspects of the Roger Covert 2.0 :

<https://www.phonak-communications.com/en/products/roger-covert-2-0>

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## 6 Troubleshooting

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### 6.1 Roger Earpiece C

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<b>The earpiece doesn't react</b>	
The battery is empty	Change the battery
The battery compartment is not totally closed	Gently push on the battery compartment until it clicks

<b>There's no sound coming out of the earpiece</b>	
There's no communication running at the moment	Earpiece is totally silent when no communication is running
The speaker output of the earpiece is totally obstructed with wax	Clean the speaker output and exchange wax filter
The earpiece is muted	Unmute earpiece
The Bluetooth headset is not selected for audio routing	Into mobile phone settings, select Roger Covert main unit as audio device for voice calls

<b>I permanently hear beeps</b>	
The earpiece is not connected to the Roger Covert main unit	Follow the "Connect" procedure
The earpiece is out of range of the Roger Covert main unit	Ensure to wear the devices as recommended
Earpiece memorize two networks, personal and car networks, and is searching for the one which is out of range	Switch to the transmitter in range or get closer to the selected transmitter

<b>Audio signal is constantly interrupted and I hear short beeps</b>	
The earpiece is in limit of range of Roger Covert main unit	Ensure to wear the devices as the recommended and if necessary reduce distance between both devices

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**Earpiece is not receiving the audio source I expect**

Earpiece memorize two networks, personal and car networks, and is connected to the other one	Switch to the wished transmitter
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**The volume is too low**

The earpiece output is partially obstructed with wax	Clean the speaker output and exchange wax filter
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The source volume on the communication device is too low	Increase the source volume
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The Roger Covert main unit volume is too low	Increase the earpiece volume
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Surroundings noises are very loud	Use softwraps to attenuate surrounding noises
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**The volume is too high and saturated**

The source volume on the communication device is too high	Decrease the source volume
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**The earpiece sounds metallic or robotic**

The Bluetooth link quality is weak on either transmitting or receiving side	Get the Roger Covert main unit closer to the Bluetooth communication device. If it doesn't solve the issue, erase known Bluetooth devices on Roger Covert main unit and proceed with pairing again
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**The earpiece beeped and stopped working few minutes later**

The battery is empty	Change the battery
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## 6.2 Roger Covert C & Roger Covert Dual C separable

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### The Roger Covert main unit doesn't switch on

The battery is empty	Charge the Roger Covert main unit
The battery is defective	Battery must be exchanged, get in touch with your local sales representative to know how to proceed

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### The transmitted audio quality/intelligibility is not at level it use to be (feedback from teammates)

The microphone is not well positioned	Ensure to position the microphone as recommended
The microphone is under a cloth that block audio waves	Waterproof or windstopper clothes are by nature impervious, including to audio waves. Voice pick-up is in consequence drastically attenuated
The microphone filters are obstructed	The microphone filters shall be regularly verified and if necessary exchanged
The surroundings are very noisy	The speaker's voice level must be adapted to the surroundings noise level. In very noisy surroundings it's necessary to speak louder
The Bluetooth link quality is weak	Get the Roger Covert main unit closer to the Bluetooth communication device. If it doesn't solve the issue, erase known Bluetooth devices on Roger Covert main unit and proceed with pairing again

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**The Roger Earpiece C cannot be connected**

The Earpiece is too far from the Roger Covert main unit	Follow the "Connect" procedure
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There're other Roger devices in range	Turn off or take away all other Roger devices
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Earpiece's battery is empty	Change the earpiece's battery
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**The remote control cannot be connected**

The remote control is too far from the Roger Covert unit	Follow the "Connect" procedure
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The "Connect" window is closed	After powering on the Roger Covert main unit, there's a 30 seconds window to proceed
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Remote Control battery is empty	Change the remote control battery
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## 6.3 Roger Remote C & Roger Remote Dual C

**The remote control doesn't operate**

The battery is empty	Change the battery
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The remote control is too far from the Roger Covert main unit	Get the remote control closer to the Roger Covert unit
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**For Bluetooth communication device, the PTT functionality doesn't work**

The Roger Covert main unit and or communication device are not correctly configured	Roger Covert main unit and communication device must be configured to work with each other. Note that PTT-Apps running on iOS devices are not compatible with Roger Covert for PTT functionality
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**Manufacturer:**

Sonova Communications AG  
Herrenschwandweg 4  
CH-3280 Murten · Switzerland

[www.phonak-communications.com](http://www.phonak-communications.com)

