Roger™ Covert 2.0 User Guide





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1 Roger Earpiece C

1.1 Components



Roger Earpiece C - beige or brown



Transportation pouch containing batteries, cerumen filters and Q-tips

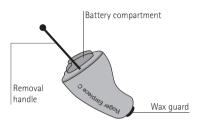




Cleaning tools

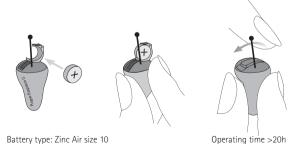
Softwraps

1.2 Device description



1.3 Set up

1.3.1 Switching On/Off



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



Its strongly recommended to exchange the battery before each mission

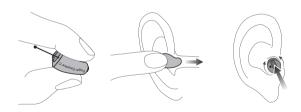


When the earpiece is not used for a certain period of time, remove the battery due to possible battery leakage



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

1.3.2 Inserting earpiece

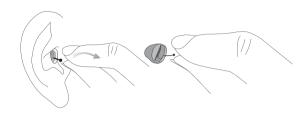




Before insertion, check wax guard is not obstructed with earwax that will reduce sound level.

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.

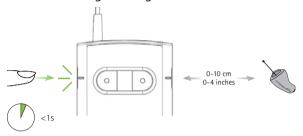
See section 1.5 if exchanging the wax guard is necessary

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





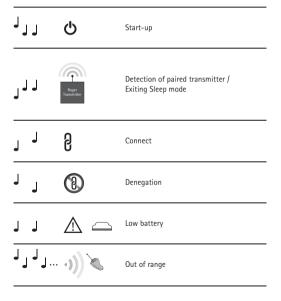
All receivers in range will be connected at the same time when pressing «sync» button for more than 2 seconds.



If a synchronised earpiece is outside the range of the Roger CarKit C when a Sync is made, this earpiece will no longer be connected when back in range.

1.4 Beeps summary

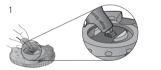
Table below summarize beeps generated by the Roger Earpiece C. Refer to the dedicated section for beeps generated by the Roger Covert main unit.

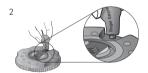


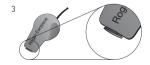
1.5 Cleaning



- 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.

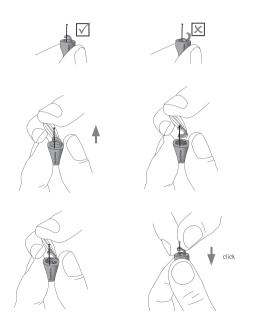






1.6 Exchange battery door

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



2 Roger Covert main unit

2.1 Components



2.2 System description

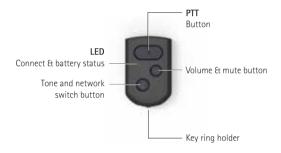
2.2.1 Roger Covert C - Device description



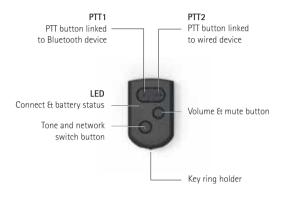
2.2.2 Roger Covert Dual C separable - Device description



2.2.3 Roger Remote C - Device description

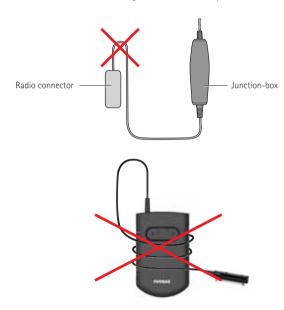


2.2.4 Roger Remote Dual C - Device description



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% : \sim 2.5h Operating time >13h



- Charging
- Fully charged
- Battery defective

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

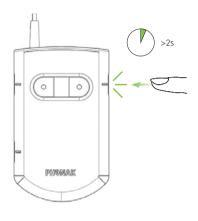
Fully charge new device and recharge every 4 months if not used

2.3.2 Activate remote control battery



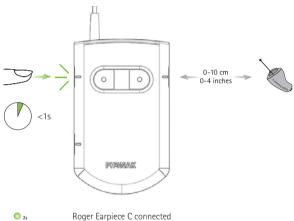
Battery lifetime > 3 months

2.3.3 Switching On/Off



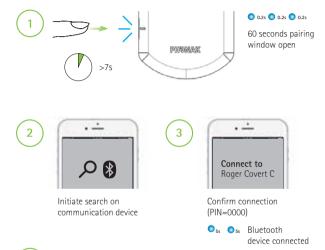


2.3.4 Connecting a Roger Earpiece C



- Roger Earpiece C connected
 Is Solis
 No Roger Earpiece C in range
- o 15 15 15 Not a compatible receiver
- Keep a distance of at least 2m to other Roger Earpiece C to avoid mixing at connection.
- (i) Quantity of paired earpieces isn't limited.

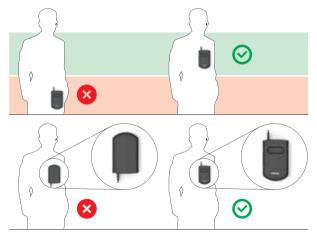
2.3.5 Pairing a bluetooth device



- (i) The Roger Covert main unit can memorize up to 3 Bluetooth devices
- Bluetooth name, by default "Roger Covert C" or "Roger Covert 2C", can be edited with SCA Security Configuration App
- Keep a distance of at least 10m to other Bluetooth devices to avoid mixing at connection.

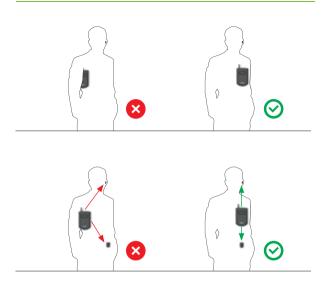
2.3.6 Recommended device positioning

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.

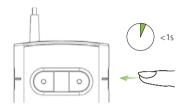


It is recommended to thoroughly test the equipment in different conditions and surroundings, to find the optimal wearing solution for you, before using it for live operations.

2.4 Basic functions

2.4.1 Display system status

Status is displayed for 15s



- LED On/Off **(b)**2.5s

 2.5s

 1s

 1s
- 1s1s25s25s
- 2.5s2.5s1s1s
- 2.5s2.5s
- 1s 0 1s
- 100 61%
- 60 50% 49 - 31%
- **D** 30 20%
- 19 11%
- 10 0%

LED Connect 🖘



Reception unmuted Reception muted

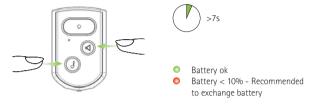
LED Bluetooth ≵



No Bluetooth connection

●5s ●5s Bluetooth device connected

2.4.2 Remote control battery check



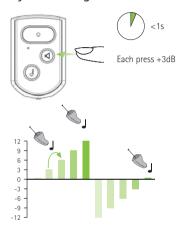
2.4.3 Sending covert beep



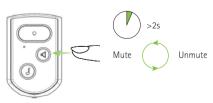
2.4.4 Switching between Roger Covert / CarKit networks



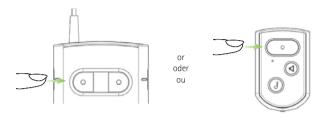
2.4.5 Adjust listening volume



2.4.6 Mute / Unmute listening



2.5 Mobile phone Bluetooth functions



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

^{*} 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
→ D _V	New incoming communication		

→ Rx New incoming communication

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

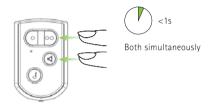
In example above, Bluetooth communication has priority and simultaneous beep on



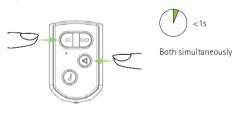
Priority can be changed permantely with SCA or temporarely (see next chapter)

2.6.1.2 Roger Covert Dual C separable - Priority channel switch

Change to wired device



Change to Bluetooth device



(i)

Changes apply until next device's restart

2.6.2 Transmission

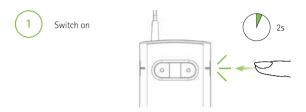
2.6.2.1 Roger Covert C

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.

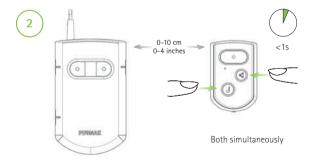
2.6.2.2 Roger Covert Dual C separable

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



(i) After power on, a 30 seconds pairing window is open







O 25 Remote control connected

O 15 O 15 No Roger Covert main unit in range

O 15 O 15 Not a compatible device

2.8 Operation with Roger CarKit C

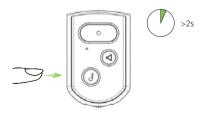
2.8.1 Synchronization

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)



2.9 Advanced functionalities

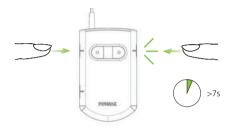
2.9.1 Define a new Roger network (NewNet)

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.



2.9.4 Initiate Bluetooth reconnection

Initiate reconnection to the last connected Bluetooth device.



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.

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

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.

2.12 Buttons summary

2.12.1 Roger Covert C

Button	Name	Short press	Long press	Very long press
Ф	On/Off	Status	Switch On/Off	-
ලා	Connect	Connect	-	NewNet
*	Bluetooth	3x initiate reconnection	-	Pairing mode

Bu	tton	Short press	Long press	Very long press
ტ	ලා	-	-	Forced reboot
ტ	*	-	-	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	-
٩	Tone	Send covert beep	Switching Roger Covert / CarKit networks	-

Button	Short press	Long press	Very long press
4 + 9	Pair remote control	-	Display battery status
4 + •	Switching pri- ority to CH1	-	-
4 +	Switching pri- ority to CH2	-	-

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

2.13 LEDs summary

2.13.1 Roger Covert C & Roger Covert Dual C

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

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*
=	Simultaenous communication on CH1 and CH2*
<u> </u>	Priority switch confirmation or Network switch confirmation
-	Listening muted
4	Listening unmuted
3	End of call*
	Bluetooth devices disconnected (link loss)*
	Bluetooth devices reconnected or call , from Roger Covert, accepted*
444	Successful pairing of remote control
	Less than 10% of battery remaining, repeated every 10 minutes
99999	Less than 5% of battery remaining, repeated every 10 minutes
	Volume control step*
=	Medium volume step*
-	Maximum volume step*
	Feedback covert beep*

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

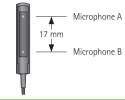
^{*}If activated, configurable with SCA

3 Mini-Microphone MM11

3.1 Overview

MM11 is made of two microphones separated with a given distance allowing

to perform sound processing.



3.2 Wearing

3.2.1 Needle support



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

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.



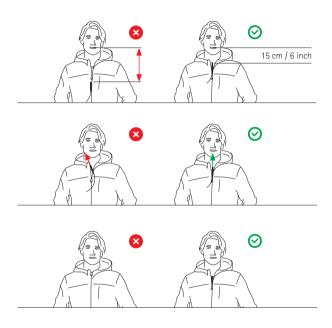


3.3 Exchange filters

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.

4 SCA - Security Configuration App

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-and-support/software/

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.

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.

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.

5 Support

5.1 Documents

Several useful documents are available on the download section of our website: https://www.phonak-communications.com/en/dealers-and-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

6 Troubleshooting

6.1 Roger Earpiece C

The earpiece doesn't react	
The battery is empty	Change the battery
The battery compartment is not totally closed	Gently push on the battery
	compartment until it clicks
There's no sound coming out of the earpiece	
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	Clean the speaker output and
obstructed with wax	exchange wax filter
The earpiece is muted	Unmute earpiece
The Bluetooth headset is not selected	Into mobile phone settings, select
for audio routing	Roger Covert main unit as audio
	device for voice calls
I permanently hear beeps	
The earpiece is not connected to	Follow the "Connect" procedure
the Roger Covert main unit	
The earpiece is out of range of	Ensure to wear the devices as
the Roger Covert main unit	recommended
Earpiece memorize two networks, personal	Switch to the transmitter in
and car networks, and is searching for	range or get closer to the
the one which is out of range	selected transmitter
Audio signal is constantly interrupted and I hea	r short beeps
The earpiece is in limit of range of	Ensure to wear the devices as the
Roger Covert main unit	recommended and if necessary
	reduce distance between both
	devices

Earpiece is not receiving the audio source I expect			
Earpiece memorize two networks, personal and	Switch to the wished transmitter		
car networks, and is connected to the other one			
The volume is too low			
The earpiece output is partially obstructed	Clean the speaker output and		
with wax	exchange wax filter		
The source volume on the communication	Increase the source volume		
device is too low			
The Roger Covert main unit volume is too low	Increase the earpiece volume		
Surroundings noises are very loud	Use softwraps to attenuate		
	surrounding noises		
The volume is too high and saturated			
The source volume on the communication	Decrease the source volume		
device is too high			
The earpiece sounds metallic or robotic			
The Bluetooth link quality is weak on either	Get the Roger Covert main unit		
transmitting or receiving side	closer to the Bluetooth commu		
	nication device. If it doesn't solve		
	the issue, erase known Bluetooth		
	devices on Roger Covert main		
	unit and proceed with pairing		
	again		
The earpiece beeped and stopped working few	minutes later		
The battery is empty	Change the battery		

6.2 Roger Covert C & Roger Covert Dual C separable

The Roger Covert main unit doesn't switch of	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
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	Waterproof or windstopper
block audio waves	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

The Roger Earpiece C cannot be connected	
The Earpiece is too far from the Roger Covert	Follow the "Connect" procedure
main unit	
There're other Roger devices in range	Turn off or take away all other
	Roger devices
Earpiece's battery is empty	Change the earpiece's battery
The remote control cannot be connected	
The remote control is too far from	Follow the "Connect" procedure
the Roger Covert unit	
The "Connect" window is closed	After powering on the Roger
	Covert main unit, there's a
	30 seconds window to proceed
Remote Control battery is empty	Change the remote control
	battery

6.3 Roger Remote C & Roger Remote Dual C

The remote control doesn't operate	
The battery is empty	Change the battery
The remote control is too far from	Get the remote control closer
the Roger Covert main unit	to the Roger Covert unit
For Bluetooth communication device, the PTT functionality doesn't work	
The Roger Covert main unit and	Roger Covert main unit and
or communication device are not	communication device must
correctly configured	be configured to work with each
	other. Note that PTT-Apps
	running on iOS devices are not
	compatible with Roger Covert
	for PTT functionality

Manufacturer:

Sonova Communications AG Herrenschwandweg 4 CH-3280 Murten · Switzerland

