Roger™ Covert 2.0

The Roger™ Covert C is the central unit of Roger™ Covert 2.0, the unique digital covert communication system offering crystal-clear digital communication to ensure successful missions. The main unit connects wirelessly to the Roger™ Earpiece C and the Roger™ Remote C. It offers a Bluetooth® interface to connect to the user's communication device. Roger™ Covert Dual C offers in addition a detachable connection to a second communication device.

Wired to the main unit, the MM11 microphone applies beam-forming and noise canceling technology offering world-beating voice pick-up even in noisy conditions.

To control discreetly the main unit, Roger™ Remote C and Roger™ Remote Dual C offer, beside push-to-talk, lots of functionalities like mute, adjust the volume of the Roger™ Earpiece C, accept and reject telephone phone calls and more.

Description

Roger™ Covert main units
1 Mini-Microphone MM11
2 Micro-USB socket
3 Radio connection [B]
4 On/Off button & LED
5 Connect button & LED
6 PTT button link to Bluetooth device
7 PTT button link to Bluetooth device [A]
   or PTT button link to wired device [B]
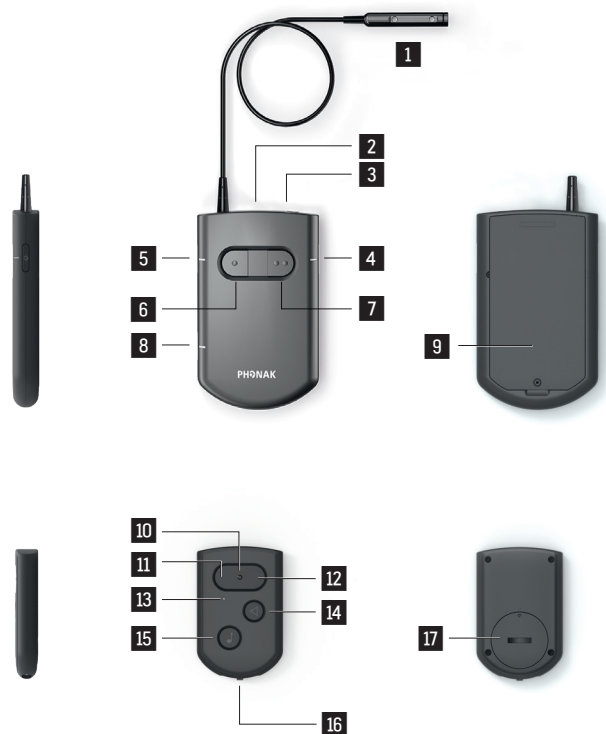8 Bluetooth button & LED
9 Battery compartment

Remote control
10 PTT button link to Bluetooth device [A]
11 PTT button link to Bluetooth device [B]
12 PTT button link to wired device [B]
13 LED Connect & battery status
14 Volume & mute button
15 Covert beep button
16 Key ring holder
17 Battery compartment

Caption
[A] Roger™ Covert C and Roger™ Remote C
[B] Roger™ Covert Dual C separable and Roger™ Remote Dual C

Features

Roger™ Covert main units	**Remote control**
▪ No neck loop	▪ License free Roger™ protocol
▪ Intuitive usability including seamless pairing procedure	▪ Small size and intuitive handling
▪ Slim and ergonomic design	▪ Multiple functions
▪ System upgrade with Security Configuration App	▪ Designed for sightless operation
▪ Integrated rechargeable battery	▪ Easily exchangeable battery

PHONAK
communications

General information

Roger™ Covert C / Roger™ Covert Dual C separable

Dimensions (L x W x H)	92 x 56 x 12.5 mm (3.6" x 2.0" x 0.5")
Weight	75 g (2.65 oz)
Color	Black
Operating conditions	-10° to +60° Celsius (+14° to +140° Fahrenheit) and relative humidity of <95% (non condensing)
Charging conditions	0° to +45° Celsius (+32° to +113° Fahrenheit) and relative humidity of <90% for a long period
Transport and storage conditions	-20° to +60° Celsius (-4° to +140° Fahrenheit) and relative humidity of <90% for a long period

Roger™ Remote C / Roger™ Remote Dual C

Dimensions (L x W x H)	62 x 40 x 11 mm (2.4" x 1.6" x 0.4")
Weight	22 g (0.78 oz)
Color	Black
Operating conditions	-10° to + 60° Celsius (+14° to +140° Fahrenheit) and relative humidity of <95% (non condensing)
Transport and storage conditions	-20° to +60° Celsius (-4° to +140° Fahrenheit) and relative humidity of <90% for a long period

Audio information

Audio bandwidth	100 Hz - 7200 Hz
SNR	55dB (@ 1 kHz)

Microphone information

Microphone type	Directional
Signal processing applied	Adaptative beamforming, Speech source detection, Noise cancelling, Adaptative surrounding noise cancelling

Power and battery information

Roger™ Covert C / Roger™ Covert Dual C separable

Battery type	Lithium polymer
Battery figures	1050 mAh – 3.7 VDC
Charging time	Approx. 2.5 h (Charging time depends on battery state)
Operating time in communication	> 13 h with battery at 80% of initial capacity
Charging input	Input: 100 - 240 VAC | Output: 5 VDC/1 A Connector: Micro-USB
Cable length	1.3 m (4.2 feet) (charging or connection to computer for upgrade, service). The battery cannot be over-charged. It may become warm during charging. Important notice: It is recommended to only use the original Phonak charging unit.

Roger™ Remote C / Roger™ Remote Dual C

Battery type	Button cell CR2032
Battery voltage	3 VDC
Operating time	> 3 month. Operating time depends on usage - Calculated with a 15 s PTT press, 12 times per hour and a 12h mission
Sleep mode current	<22 µA. consumption Remote control is equipped with an accelerometer and automatically turn to sleep mode after 7 min of inactivity

Roger™ information

Roger™ is a patended technology developed by Phonak, which features adaptive, wireless transmission and runs on the 2.4 GHz band. Roger™ audio signals are digitized and packaged into very short digital bursts of codes packets and broadcast several times, each time using different channels between 2.4000 and 2.4835 GHz. Frequency-hopping between channels, in combination with these repeated broadcasts, avoids interference issues and ensures successful transmission. Phonak has developed the proprietary Roger™microchip for dedicated use with miniaturized ear-level receivers.

Transmission technology	2.4 GHz adaptive freq. hopping
Power emission Roger™ Covert C	100 mW (20 dBm)
Power emission Roger™ Remote C	1 mW (0dBm)
On body Operating range to Roger™ Earpiece C	Max 0.5m (20")
On body Operating range of Roger™ Remote C	Max 0.5m (20")
Operating range for Connect feature	10 cm (4")

Encryption

Roger™ encryption	The audio transmission is secured with an AES (Advanced Encryption Standard) encryption where the code is exchanged at the time of on demand synchronization
Bluetooth encryption	E0
Key sizes	128-bits

Compatibility with Roger™ devices

Roger™ Earpiece C, Roger™ Remote C, Roger™ Remote Dual C, Roger™ CarKit C

Bluetooth information

Power emission	Bluetooth Class 2 = 2.5mW(4dBm)
Version	4.2
Profile	HFP or HSP
Compatible communication devices	Most popular professional police radios, POC and devices mobile phones. Mobile phones can be used for phone calls, conference calls or for PTT-Apps.

Standards applied

Electrical safety	IEC EN 62368-1
Radiocom 2.4 GHz	EN 300 328
EMC	EN 301.489-1,-3,-9,-17
SAR (2.4 GHz)	EN 62311

Optional accessories

Power supply adapter	UK, AUS
Carrying solutions	Leather chest pouch, Waiststrap
MM11 spare parts	MM11 with 20, 50 or 75cm cable length Needle or multifunctional support Skin adhesive for multifunctionnal support Replacement filters