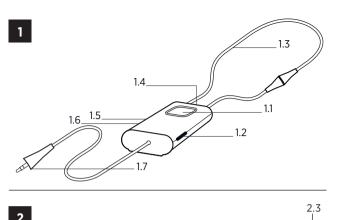
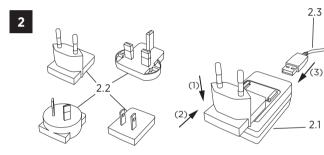


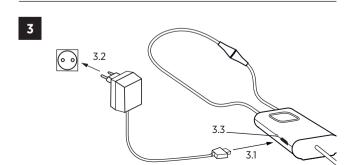


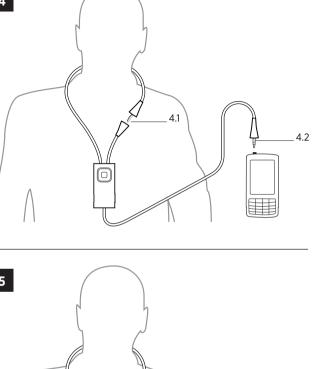
# **AUDIO CONTROL**

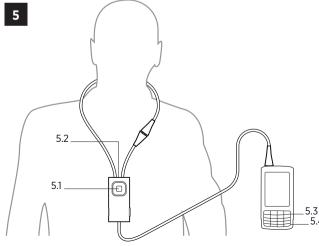














## **DESCRIPTION OF DEVICE** - See illustration 1

- 1.1 Push button
- 1.2 Room Off button
- 1.3 Neck loop
- 1.4 Microphone
- 1.5 Charging indicator
- 1.6 Charger connector
- 1.7 Jack plug



Read these instructions carefully before you start using the device

#### Intended use

This device is intended for use in transmitting audio from a mobile phone to wireless hearing aids during a phone conversation, and for listening to music from an audio source. The device can also be used as a headset.

**Note:** The device uses a standard 4-pole jack which is common in newer mobile phones. If your mobile phone or audio source uses a different configuration, it may not work with this product.

# **ACCESSORIES** - See illustration 2

- 2.1 Charger
- 2.2 Plug (four region-specific versions)

Place the appropriate plug version on top of the charger as illustrated (1) and slide it on (2).

#### CHARGING - See illustration 3

- 3.1 Connect charger to device
- 3.2 Plug charger into wall socket
- 3.3 Red light: charging, green light: fully charged

Battery life: 40 hours streaming, 4 months standby.

# **HOW TO USE** - See illustration 4

- 4.1 Join the two neck loop parts
- 4.2 Plug the jack cable into the mobile phone or an appropriate audio device







## Incoming calls - See illustration 5

- 5.1 Answer: Press push button
- 5.2 Speak into microphone
- 5.3 End call: Press key on mobile phone

## Outgoing calls- See illustration 5

5.4 Dial from phone

#### Sound adjustment during use

Volume is adjusted at the audio source.

To mute surrounding sounds: press Room Off button.

## MAINTENANCE

- Clean with a damp cloth. Do not use chemicals.
- Do not expose to extreme temperatures or high humidity.
- · Do not immerse in liquids.
- When the device is not in use keep it in a dry location out of reach of children and pets.
- Never try to open or repair the device yourself. This may only be done by authorized personnel.

# **TROUBLESHOOTING**

Problem	Possible cause	Solution
The device does not work	a) Device battery low b) The mobile phone is set to silent mode c) Hearing aid battery low	a) Charge device battery     b) Set to normal mode     c) Change hearing aid's battery
No sound	a) Jack not fully inserted	a) Make sure the jack is cor- rectly connected
No sound when used with mobile phone	b) Mobile phone does not use standard jack plug	b) Contact hearing care pro- fessional

If the problems persist, contact your hearing care professional.





# WARNINGS



- Do not attempt to change the battery yourself. Contact your hearing care professional.
- Do not carry your device with you if you are having an X-ray or MRI scan, or other scans or radiation treatment and never place it in a microwave oven
- Keep the device and its parts and accessories out of reach of children and anyone else who might swallow parts of the device, or otherwise cause injury to themselves with these items. In case of ingestion, contact a physician immediately.
- Do not use the device on aircraft or in hospitals without permission.
- Do not use the device in mines or other areas with explosive gases.
- This device is charged by an external power charger.

Only connect a charger that is compatible with the device.

The charger must have an output rating of 5VDC and a micro USB connector.

The charger input rating voltage and wall plug must be compatible with the AC wall outlet in your region.

The charger must have the certification marks showing certification by a safety agency acceptable in your region.

Use only the charger supplied by the Manufacturer to ensure safe and efficient use of your device.

- When the device is connected to external electrical equipment such as a PC, audio source or similar, this equipment must comply with IEC 60065, IEC 60950-1, IEC 60601-1 or equivalent safety standards.
- Interference with active Implants.

In order to show caution, we advise to follow the guidelines recommended by manufacturers of defibrillators and pacemakers regarding use of mobile phones:







If you wear an active implantable device keep the Wireless Hearing Aids and Hearing Aid Accessories such as wireless remote controls or communicators at least 15 cm/6 inches away from the implant.

If you experience any interference, do not use the hearing aids and contact the manufacturer of the implant. Please note that interference can also be caused by power lines, electrostatic discharge, airport metal detectors etc.

If you have an active brain implant, please contact the manufacturer of the implant for risk evaluation.

If you have an implantable device, we advise keeping magnets\* at least 15 cm/6 inches away from the implant. (\*= can be specified as Autophone magnet, hearing instrument case, magnet in a tool, etc.)



Hereby, Coselgi A/S declares that this Audio Control is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.

A copy of the Declaration of Conformity can be found at: http://www.coselgi.com/doc



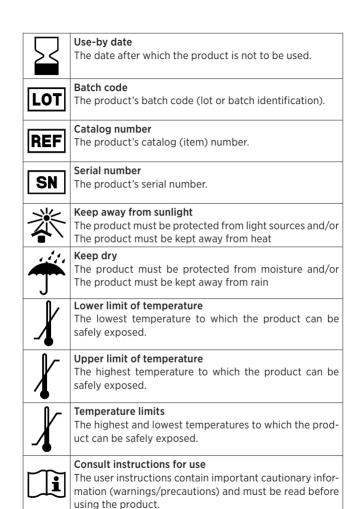
# **SYMBOLS**

Symbol	Title/Description
	Manufacturer The product is produced by the manufacturer whose name and address are stated next to the symbol. If appropriate, the date of manufacture may also be stated.
$\overline{\mathbb{Z}}$	Date of manufacture The date when the product was manufactured.

















## Caution/Warning

Text marked with a caution/warning symbol must be read before using the product.



#### WEEE mark

#### "Not for general waste"

When the product is to be discarded, it must be sent to a designated collection point for recycling and recovery.



## CE mark

The product is in conformity with the requirements set out in European CE marking directives.



#### Alert

The product is identified by R&TTE Directive 1999/5/EC as an equipment Class 2 product with some restrictions on use in some CE member states.



#### C-Tick mark

The product complies with electrical safety, EMC and radio spectrum regulatory requirements for products supplied to the Australian or New Zealand market.



#### Interference

Electromagnetic interference may occur in the vicinity of the product.



#### Do not re-use

The product is intended for use by a single user.

The six-digit number on the product is the serial number.







## Radio transmitter/cables/transducers

The Audio Control contains a radio transmitter/receiver with the following:

#### Radio transmitter parameters:

- Frequency (range): 10.6 MHz (10.2 11.0 MHz)
- Bandwidth (-15dB): 660 kHz
- · Channel: Single channel radio
- Modulation: FSK
- Radiated Output Power: -85.2 dBm/ 3.02pw(ERP effective radiated power
- Magnetic field strength: -26.9 dBµA/m (at 10 m distance)
- Duty Cycle: Up to 100% (averaged over 1 hour of operation)
- Simplex capability





#### Cables and transducers:

The Audio Control uses a fixed 4-pole, 3.5 mm jack cable for audio input signal.







Electromagnetic emissions

The Audio Control is intended for use in the electromagnetic environment specified below. The customer or the user of a Audio Control should assure that it is used in such an environment.

Emissions test	Compliance	Electromagnetic environment - guidance
RF emissions CISPR 11	Group 1	The Audio Control uses RF energy only for its internal function. Therefore, its RF emissions are very low and are not likely to cause any interference in nearby electronic equipment.
RF emissions CISPR 11	Class B	The Audio Control is suitable for use in all establishments, including domestic establishments and those directly
Harmonic emissions IEC 61000-3-2	Not applicable *)	connected to the public low-voltage power supply network that supplies buildings used for domestic purposes.
Voltage fluctua- tions/ flicker emissions IEC 61000-3-3	Not applicable *)	

<sup>\*)</sup> Battery powered equipment







The Audio Control is intended for use in the electromagnetic environment specified below. The customer or the user of a Audio Control should assure that it is used in such an environment.

Immunity Test	IEC 60601 Test level	Compliance level	Electromagnetic environ- ment - guidance
Electro- static discharge (ESD) IEC 61000-4-2	± 6 kV contact ± 8 kV air	± 6 kV contact ± 8 kV air	Floors should be wood, concrete or ceramic tile. If floors are covered with synthetic material, the relative humidity should be at least 30 %.
Electrical fast transients/ burst IEC 61000-4-4	± 2 kV for power line supplies ± 1 kV for input/ output lines	Not applicable *) Not applicable *)	Not applicable *)
Surge IEC 61000-4-5	± 1 kV line(s) to line(s) ± 2 kV line(s) to earth	Not applicable *)  Not applicable *)	Not applicable *)







Voltage dips, short inter- ruptions and voltage variations on power supply input lines IEC 61000-4-11	$<5\% \ U_{\tau}$ $(>95\% \ dip)$ in $U_{\tau}$ ) for 0.5 cycle $40\% \ U_{\tau}$ $(60\% \ dip)$ in $U_{\tau}$ ) for 5 cycles $70\% \ U_{\tau}$ $(30\% \ dip)$ in $U_{\tau}$ ) for 25 cycles $<5\% \ U_{\tau}$ $(>95\% \ dip)$ in $U_{\tau}$ ) for 5 s	Not applicable *)	Not applicable *)
Power frequency (50/60 Hz) magnetic field IEC 61000-4-8	3 A/m	3 A/m	Power frequency magnetic fields should be at levels characteristic of a typical location in a typical commercial or hospital environment

NOTE  $U_T$  is the a.c. mains voltage prior to the application of the test level.





<sup>\*)</sup> Battery powered equipment

# Electromagnetic immunity - cont.

The Audio Control is intended for use in the electromagnetic environment specified below. The customer or the user of a Audio Control should assure that it is used in such an environment.

Immunity Test	IEC 60601 Test level	Compli- ance level	Electromagnetic environment - guidance
			Portable and mobile RF communications equipment should be used no closer to any part of the Audio Control, including cables, than the recommended separation distance calculated from the equation applicable to the frequency of the transmitter.
			Recommended separation distance
Conducted RF	3 Vrms	3 Vrms	d = 1.2 √ <i>P</i>
IEC 61000-4-6	150 kHz to 80 MHz		







Radiated RF	3 V/m	3 V/m	d = 1.2 $\sqrt{P}$ 80 MHz to 800 MHz
IEC 61000-4-3	80 MHz to 2.5 GHz		d = $2.3 \sqrt{P}$ 800 MHz to $2.5 \text{ GHz}$
			Where P is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer and d is the recommended separation distance in metres (m).
			Field strengths from fixed RF transmitters, as determined by an electromagnetic site survey a, should be less than the compliance level in each frequency range b.  Interference may occur in the vicinity of equipment marked with the following symbol:

NOTE 1 At 80 MHz and 800 MHz, the higher frequency range applies

NOTE 2 These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.





a. Field strengths from fixed transmitters, such as base stations for radio (cellular/ cordless) telephones and land mobile radios, amateur radio, AM and FM radio broadcast and TV broadcast cannot be predicted theoretically with accuracy. To assess the electromagnetic environment due to fixed RF transmitters, an electromagnetic site survey should be considered. If the measured field strength in the location in which the Audio Control is used exceeds the applicable RF compliance level above, the Audio Control should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as re-orienting or re-locating the Audio Control.

b. Over the frequency range 150 kHz to 80 MHz, field strengths should be less than 3 V/m.

## Recommended separation distances

Recommended separation distances between portable and mobile RF communication equipment and the Audio Control.

The Audio Control is intended for use in the electromagnetic environment in which RF disturbances are controlled. The customer or the user of the Audio Control can help prevent electromagnetic interference by maintaining a minimum distance between portable and mobile RF communications equipment (transmitters) and the Audio Control as recommended below, according to the maximum output power of the communications equipment.

Rated maximum output power of transmitter	Separation distance according to frequency of transmitter m			
W	150 kHz to 80 MHz d = 1.2 √P	<b>80 MHz to</b> <b>800 MHz</b> d = 1.2 √ <i>P</i>	800 MHz to 2.5 GHz d = 2.3 $\sqrt{P}$	
0.01	0.12	0.12	0.23	
0.1	0.38	0.38	0.73	
1	1.2	1.2	2.3	
10	3.8	3.8	7.3	
100	12	12	23	









For transmitters rated at a maximum output power not listed above, the recommended separation distance d in metres (m) can be estimated using the equation applicable to the frequency of the transmitter, where P is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer.

NOTE 1 At 80 MHz and 800 MHz, the higher frequency range applies

NOTE 2 These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.

This Audio Control may be interfered with by other equipment even if that other equipment complies with CISPR emission requirements.





# **EMC/EMI Compliance**

The Audio Control complies with the following EMC/EMI standards:

Standard Test type		Note
47 CFR Part 15, subpart C	RF emissions	USA Federal Communications Commission (FCC) requirements to intentional radiators.
EN 300 330-2 V1.5.1	RF emissions incl. Spurious emission	EMC and radio spectrum matters for Short Range Devices in the frequency range 9 kHz – 25 MHz
IEC 60601-1- 2:2007	EMC emission Immunity, RF and ESD	Medical electrical equipment. General requirements for basic safety and essential performance. Electromagnetic compatibility.
EN 301 489-3 V1.4.1	Immunity, RF and ESD	Standard for Low Power Transmitters in the frequency range 9 kHz – 40 GHz





# **REGULATORY INFORMATION**

FCC ID: TTY-UNID IC: 5676B-UNID

CAN ICES-3 (B)/NMB-3 (B)

#### Federal Communications Commission Statement

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

## NOTE:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

#### NOTF:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.





Changes or modifications to the equipment not expressly approved by Coselgi could void the user's authority to operate the equipment.

Industry Canada Statement / Déclaration d'industrie Canada Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry Canada.

To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that necessary for successful communication

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions:

- (1) this device may not cause interference, and
- (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Conformément à la réglementation d'Industrie Canada, le présent émetteur radio peut fonctionner avec une antenne d'un type et d'un gain maximal (ou inférieur) approuvé pour l'émetteur par Industrie Canada.

Dans le but de réduire les risques de brouillage radioélectrique à l'intention des autres utilisateurs, il faut choisir le type d'antenne et son gain de sorte que la puissance isotrope rayonnée équivalente (p.i.r.e.) ne dépasse pas l'intensité nécessaire à l'établissement d'une communication satisfaisante.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

- (1) l'appareil ne doit pas produire de brouillage, et
- (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement











COSELGI A/S

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Manual no.: 9 514 0261 099 #01

