

# **CENS<sup>TM</sup>**

## **CLASSIC**

### **DX SERIES**



## **User Guide**

**Contains important information - do not throw away**

# CENS® Classic

Category III Personal Protective Equipment (PPE) manufactured by Puretone Ltd for protection against the harmful effects of noise.

EU Type Tested to harmonized standards EN352-2:2002, EN352-7:2002 and certified in conformity with the provisions of Regulation (EU) 2016/425 including ongoing surveillance (Module D) by SATRA Technology Europe Ltd, Bracetown Business Park, Clonee, Co. Meath, Ireland D15 YN2P (Notified Body 2777).

EU declaration of conformity can be accessed at [www.puretone.net](http://www.puretone.net)

## Disposal Information

Within the European Union, the marked equipment is covered by "Directive 2002/96/EC of the European Parliament and of the Council of 27 January 2003 on waste electrical and electronic equipment." Amended by "Directive 2003/108/EC" (WEEE).

Recycle CENS® Classic, batteries and accessories according to national regulations.

### Symbols used in this guide

Be aware of information marked with the warning symbol  
**WARNING, CAUTION** or **NOTICE**!



**WARNING** points out a situation that could lead to serious injuries.

**CAUTION** **CAUTION** indicates a situation that could lead to minor and moderate injuries.

**NOTICE** **NOTICE** indicates possible property damage.



Advice and tips on how to handle your device better.

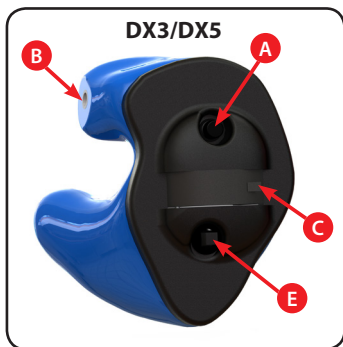
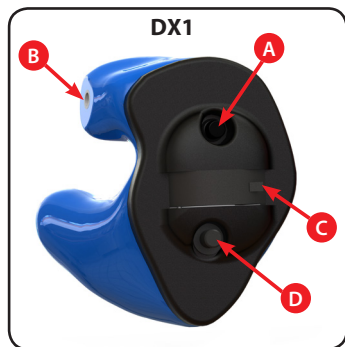


Instruction. Indicates that something has to be done.

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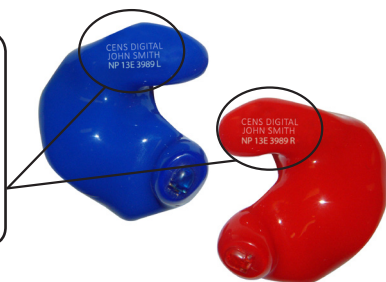
# Your CENS Classic



- A** On/off button
- B** Microphone
- C** Battery tray
- D** Digital push button volume control (DX1)
- E** Digital multi-switch volume control & mode select (DX3/DX5)

Every CENS Classic can be identified by the product ID and serial number located on the shell.

The intended users name (personal ID) will be laser marked onto each earpiece.



This ear-plug is provided with level-dependent attenuation. The wearer should check correct operation before use. If distortion or failure is detected, the wearer should refer to the manufacturers advice for maintenance and replacement of the battery.

# Intended Use

CENS Classic is intended to protect your hearing while being able to communicate normally or hear better. To ensure the best possible protection it has to be used constantly in noisy situations.

CENS Classic are reusable devices with a level dependent function. The volume control function of CENS Classic is designed to allow a small increase in low level ambient sound, affording the user increased awareness in sporting situations.

CENS Classic are not intended or suitable for use as a hearing aid or to provide any correction for hearing loss.

Read and follow the instructions of this user guide before use to avoid possible injuries or damage.

It is recommended that the wearer should ensure the CENS Classic ear-plugs:

- ▶ are fitted, adjusted and maintained in accordance with the manufacturer's instructions.
- ▶ are worn at all times in noisy surroundings.
- ▶ are regularly inspected for serviceability.



If the above recommendations are not adhered to, the protection afforded by the CENS Classic will be severely impaired.



For optimal protection CENS Classic should be inserted correctly as described on page 12.

## NOTICE

Always transport and store your CENS Classic in the protective case supplied.

# General Notes On Safety

**NOTICE** Your CENS Classic is sensitive to extreme heat, high humidity, strong magnetic fields ( $>0.1T$ ), X-rays and mechanical stress.

- ▶ Do not expose your CENS Classic to extreme temperatures or high humidity.
- ▶ Do not leave your CENS Classic in direct sunlight.
- ▶ Do not wear your CENS Classic in the shower or when you apply make-up, perfume, aftershave, hairspray or suntan lotion.
- ▶ Do not wear your CENS Classic when you are exposed to short-waves, a strong magnetic field, a high frequency field or X-rays.
- ▶ Do not place your CENS Classic in a microwave oven.



Choking hazard posed by small parts.






Performance may deteriorate with battery usage. The typical period of continuous use that can be expected from the earpiece is up to 200 hours (see page 8 for more information).






The output of the level-dependent circuit of this hearing protector may exceed the daily limit sound level.

- ▶ Keep CENS Classic, batteries and accessories out of children's reach.
- ▶ If swallowed consult a physician or hospital immediately.
- ▶ If infants, small children or disabled persons need to wear CENS Classic ensure adequate supervision.

## NOTICE


-  Leaking batteries will damage the CENS Classic.
-  Turn the CENS Classic off when not in use to preserve the battery.
-  Remove batteries when the instruments are not in use for a prolonged period of time.

## NOTICE

-  Batteries contain harmful substances that pollute the environment.
-  Do not throw used batteries into household waste.
-  Dispose batteries according to national regulations or return them to your supplier.




Hazard of explosion!

-  Do not use your CENS Classic in areas where there is a danger of explosions (e.g. mining).



These are reusable devices, and it is strongly recommended that they are regularly inspected to ensure correct fit and functionality. If in doubt, return them for a service and check.

-  Puretone recommend CENS Classic electronic modules should be returned for manufacturer service and inspection annually.

# Handling Batteries

Your CENS Classic uses a size 312 Zinc-Air battery. The packaging/tab for this size battery will usually be identified by the colour brown.



Typical battery life is up to 200 hours, but will vary depending on ambient sound levels and environmental conditions such as humidity.

Please note: Once a Zinc-Air battery tab has been removed, battery life will not typically exceed 45 days. The battery will dry out and no longer be effective.



- ▶ Always use the correct size of batteries, as supplied with your CENS Classic model.
- ▶ Remove the tab on your batteries only when you are ready to use them.
- ▶ The positive (+) side of the batteries is always the smooth side.
- ▶ Always keep spare batteries with you.



## Low Battery Warning

**DX1** you will hear a series of 3 beeps repeated every 5 minutes until the device shuts down or the battery is replaced.

**DX3/DX5** you will hear a vocal warning "battery low" every 10 minutes. When the battery reaches low you will hear a series of 6 double beeps, this will be followed by the device shutting down.

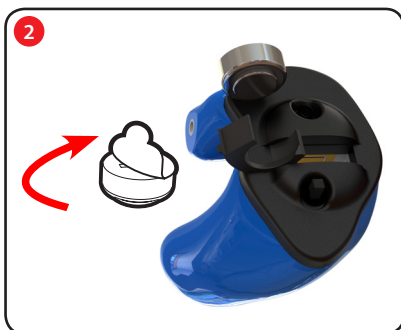
If the battery fails during use and is not replaced, your protection will not be compromised, but the ambient awareness will deteriorate.



# Setup

## Inserting The Battery

- ▶ Open the battery tray using the finger nail notch, as shown in the diagram.
- ▶ Remove the battery tab insert the the battery into the tray bottom first, as shown in the diagram.
- ▶ Finally, close the battery tray.



## Removing The Battery

- ▶ Open the battery tray and remove the battery directly out.

# Cleaning & Disinfection

It is recommended that you clean your CENS Classic after every use to keep them in perfect working condition.

Use the brush to clean the sound hole.

Face the sound hole downwards, so debris falls away from the device when cleaning.



Your CENS Classic is a highly sensitive system. Proper care and handling will ensure the best possible performance. Clean the instrument regularly to prevent damage to the CENS Classic and to avoid health problems.

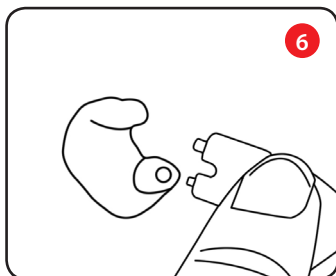
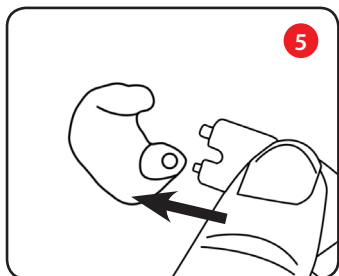
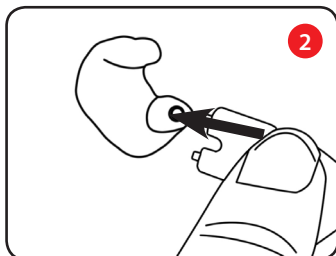
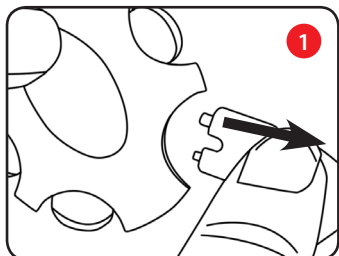
## NOTICE

- ▶ Do not put the CENS Classic in water.
- ▶ Clean your CENS Classic with a soft, damp cloth, as necessary.
- ▶ Ask your supplier for special care packs and further information on how to keep your CENS Classic in good condition.
- ▶ This product may be adversely affected by certain chemical substances. Further information should be sought from the manufacturer, *e.g insect repellents containing DEET.*

**NOTICE** Always transport and store your CENS Classic in the protective case supplied.

# Changing The Wax Guard

To minimise the risk of blocking and damage caused by the build-up of earwax, your CENS Classic has been fitted with an acoustically transparent 'NoWax' wax guard. Replacement wax guards can be purchased from your supplier.



## Earpiece Insertion



It is important that each device is fitted correctly to ensure safe and effective use. To check the fit is correct, clap your hands near each ear (ensure the electronic modules are switched off). You should hear the sound but at a lower level.



Rotate the earpiece forward 45°–90°.



Place the earpiece into your ear canal. Pull the top of your ear with your opposite hand for easier insertion.



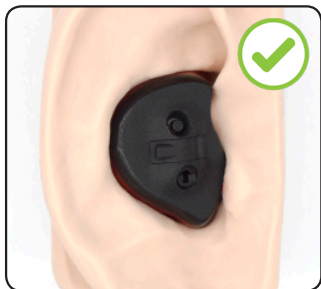
Rotate the earpiece backward & inward into its upright position to fully seat the earpiece in your ear canal. Make sure the top portion of the earpiece fits into the helix lock of your ear.



You will feel the earpiece lock into place once properly fitted.

# Earpiece Fitting

## Correct Fitting



Earpiece is flush and helix is securely in the ear.

## Incorrect Fitting

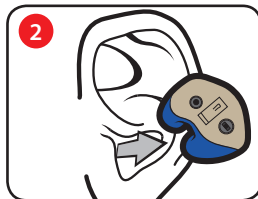


Earpiece is not flush and helix is not correctly in the ear.

# Earpiece Removal



Grasp the earpiece and rotate it forward while pulling outward. Do not grasp the module. Pulling the top of the ear slightly may ease removal.



Remove the earpiece and store safely.

## NOTICE

Never pull on the battery tray or volume controls to remove the CENS Classic, as this could cause damage.



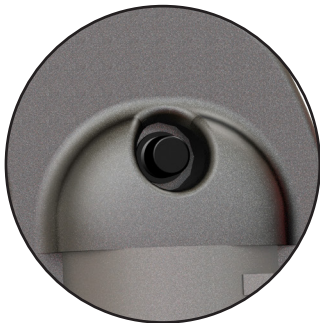
Sudden or fast removal of ear-plugs from the ear canal may damage the ear drum.

## Turning Your CENS Classic On & Off



All controls must be operated with the battery tray closed.

The on/off button is located at the top of the device.



Push and release once to toggle on and off.



Once the devices are switched on, you will be able to hear sound as normal; however, when a loud sound is detected the device will automatically reduce the volume to a safe and comfortable level. After the loud sound has passed the volume is automatically returned to normal.

Please note:

**DX1** there will be a 0.5s delay followed by a start up melody.

**DX3/DX5** instant start followed by voice indicator prompting the current mode setting.

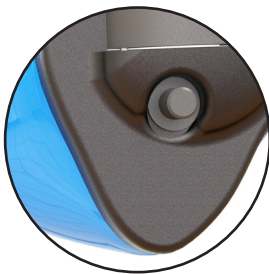
# Adjusting The Volume (DX1)

## CAUTION

- ▶ Never use your device on a higher volume setting than is comfortable.
- ▶ All controls must be operated with the battery tray closed.

**NOTICE** The volume control must only be operated by your finger tips with light pressure. Applying excessive pressure can result in the volume control being damaged. This is a precision miniature device that must be handled with care.

The volume control push button is located at the bottom of the electronic module.



Short press to cycle through the three volume levels.

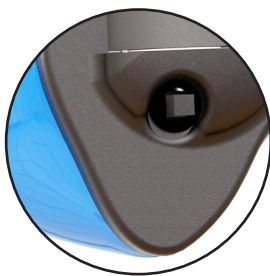
# Adjusting The Volume & Modes (DX3/DX5)

## CAUTION

- ▶ Never use your device on a higher volume setting than is comfortable.
- ▶ All controls must be operated with the battery tray closed.

**NOTICE** The digital multi-switch must only be operated by your finger tips with light pressure. This is a precision miniature device that must be handled with care.

The digital multi-switch is located at the bottom of the electronic module.



Short press up - increases the volume level  
Short press down - decreases the volume level

Long press up - increments mode select  
Long press down - decrements mode select



# Troubleshooting

Use these tips to resolve simple issues.

Problem	Possible Solution
Sound is weak.	Replace empty battery. Increase volume. Clean instrument. Close battery tray completely.
CENS Classic emits whistling sounds.	Reinsert the instrument until it fits securely. Clean instrument.
Sound is distorted.	Replace empty battery. Lower volume. Clean instrument.
CENS Classic emits signal tones.	Gently close battery tray completely. Replace empty battery.
CENS Classic does not work.	Check if the CENS Classic is turned on. Gently close battery tray completely. Replace empty battery. Make sure battery is inserted correctly.
Ambient sound not as expected.	Check same mode selected for left and right device.

**Consult your supplier if you encounter further problems.**

# Technical Information (EN352)

## Electronic Module - Sound Attenuation

Frequency (Hz)	63	125	250	500	1000	2000	4000	8000
Mean Attenuation	26.1	24.6	23.2	23.3	23.4	31.6	31.8	36.4
Standard Deviation	6.4	4.6	3.8	3.5	3.4	3.6	3.3	4.8
Assumed Protection	19.7	20.0	19.4	19.8	20.0	28.0	28.5	31.6

**H=27**

**M=21**

**L=20**

**SNR=25**

## Criterion Levels

Mode No.	H	M	L
1	111	105	105
2	112	106	105
3	111	106	104
4	112	106	105

SNR = Single Number Rating attenuation  
H = High frequency attenuation  
M = Medium frequency attenuation  
L = Low frequency attenuation

## Passive Module - Sound Attenuation

Frequency (Hz)	63	125	250	500	1000	2000	4000	8000
Mean Attenuation	24.2	23.5	22.3	22.8	23.5	32.1	30.4	36.8
Standard Deviation	4.5	3.6	2.8	3.8	3.4	3.8	3.8	5.6
Assumed Protection	19.7	19.9	19.5	19.0	20.1	28.3	26.6	31.2

**H=26**

**M=21**

**L=20**

**SNR=25**

EN352-2:2002, EN352-7:2002, Regulation (EU)2016/425 Module D by  
SATRA Technology Europe Ltd, Bracetown Business Park, Clonee, Co. Meath,  
Ireland D15 YN2P (Notified Body 2777)





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