



## SORDIN SUPREME PRO - PRODUCT FEATURES

*Durable headband, for high requirements  
on sound reproduction and comfort.*

Sordin Supreme is a hearing protector equipped with electronics for listening to ambient sound. The sound is reproduced by speakers inside the hearing protector. The sound reproduction is limited to a maximum of 82 dB(A) to prevent damage to hearing. Sordin Supreme is included in a series of products developed to improve your working environment or leisure time, whenever exposed to noise. To be really satisfied with the product it is important that you read through all the user's instructions, and save for future reference.

### IMPORTANT INFORMATION ABOUT LEVEL DEPENDENT/ RETURN GUARANTEE (fig. A)

This hearing protector is equipped with level-dependent function. The electronics consists of two externally mounted microphones that pick up the ambient sound (A1). The level dependent sound is reproduced inside the hearing protector at a safe level (max. 82 dB(A)). The sound is reproduced in stereo to maintain or improve the sense of direction. The function is designed for use in environments where it is desirable that ambient sounds can be heard, e.g., warning signals, conversation, traffic, etc.

If this product does not meet your expectations, please return it without delay to the point of sale and your money will be refunded. NOTE. This possibility will become void if the product has been in regular use.

## USER'S INSTRUCTIONS

### ACTIVATING THE HEARING PROTECTOR / BATTERY INSTALLATION / REPLACEMENT (fig. B)

The product is equipped with two standard 1.5 V AAA/LR03 batteries. Rechargeable batteries, for example NiMH 1.2 V or NiCd 1.2 V, should not be used as they may significantly reduce the operation life of the product. The batteries, which are completely enclosed to protect against moisture and dirt, are housed in the unique battery compartment located in the cup, which does not feature the keyboard. When installing or replacing batteries follow the instructions below (fig. B):

- Hold the cup upside down. Unscrew the battery cover (fig. B1).
- Insert the first battery with the (-) pole facing inwards (fig. B2).
- Shake the cup lightly so that the battery falls into place and may not be visible (fig. B3).
- Insert the second battery with the (+) pole facing inwards (fig. B4).
- Refit the battery cover (fig. B5).

**Note!** Ensure the battery poles (+ /-) are correctly aligned.

### FUNCTION KEYS (figure C)

#### On and off, (O)

Press key (O) to activate the electronic functions. To switch off, hold the same key (O) pressed in for 2 seconds.

#### Volume adjustment, (+) (-)

Volume of the level dependent function is adjusted by short presses on the volume keys, down (-) or up (+). The volume starts in the mode at which it was switched off. The volume can be adjusted in five steps. The output signal from the sound reproduction system of the product will not exceed known risk levels for damage to hearing. Sound via the speakers is limited to maximum 82 dB(A) equivalent sound level.

#### Battery-saving mode

This product is provided with a battery economy function to ensure maximum life of the batteries. The function automatically switches off the level dependent mode after 4 hours if no key is activated during this period. To restart, push the key located at the middle of the keypad (O).

#### Amplification

At the two highest volume stages Sordin Supreme Pro amplifies the ambient sound by up to 12 dB.

#### Battery-saving function – warning before switching off

About 2 minutes before automatic switch-off a tone will be heard as a warning that sound will be switched off. Press any key to delay the switch-off by a further 4 hours.

#### Battery warning

A tone will be heard when about 40 hours battery life remains. The battery warning will be heard after 10 seconds in connection with starting up the electronics.

### FITTING INSTRUCTIONS (fig. D)

The Supreme is designed to be worn in over-the-head mode and adjusted for size by pulling the headband (fig. D1). Brush excess hair out from beneath the cushions with your hand. Place the cups over your ears and adjust the headband and cups to a comfortable position (fig. D2). Be certain that the cushions seal tightly around the ears with no interference from objects such as respirator headband or arms of glasses in order to obtain the best performance. Make sure the headband is not stored in a stretched position and that the cushions are not pressed together when the earmuffs are not in use.

### UNFOLDING AND FOLDING THE EAR MUFFS (fig. E)

To unfold, pull the headband up to its maximum position whilst holding the cups (fig. E1). To fold, press on top of the headband until the headband touches the top of the cups (fig E2).

## MAINTENANCE

The outside of the muff and the sealing ring can easily be cleaned with soap and water. Ear muffs and in particular cushions may deteriorate with use and ageing and should be inspected regularly for cracks and leakage. The cushions are filled with foam and are replaceable. Worn or damaged parts are easily replaced (figure F). Use only hygiene kits from the manufacturer, designed for electronics, order number 60089. The hygiene kit should be replaced at least twice a year for standard use to ensure that the noise attenuation performances are maintained. Certain chemical substances may adversely affect this product. Further information should be sought from the manufacturer.

The user must ensure that the hearing protectors or hearing protector:

- fit properly and are adjusted and maintained in compliance with our instructions

- is used all the time in noisy environments

- is inspected regularly to ensure good condition.

If the above recommendations are not adhered to, the protection afforded by the earmuffs can be severely impaired. Moisture may occur inside the cups if used for long periods. To avoid long-term affects of moisture on the electronic components it is recommended that the acoustic absorbent be regularly removed to allow the muffs to dry, e.g., overnight (figure F) When removing the sealing ring and absorbent take great care not to touch the electronics board or cables. Changes in position of cables could cause disturbance in the system. Do not subject the hearing protector to rough handling, which can damage the electronics.

**The earmuffs must not be immersed in water!**

## STORAGE

When the hearing protector is not in use, the headband should not be extended or the sealing rings compressed. Keep the muffs dry and clean and keep them in normal room temperature. Do not allow the hearing protector to lie in direct sunlight. If the product is to be stored for a longer period it is recommended that the batteries be removed from the battery holder to prevent damage. Store the product in an unfolded position in order to avoid damage to the cushions.

**If the above recommendations for the hearing protectors are not adhered to the attenuation values ability could deteriorate considerably.**

## LIMITED TROUBLE SHOOTING

If the electronics cease to function please check the following:

- Replace the batteries with new ones.
- Ensure that the batteries are correctly fitted in the hearing protector.
- Ensure that the battery plates make good contact with the batteries.
- Ensure that the battery plates have not become coated with verdigris.

If this does not help, consult the point of sale.

# SORDIN

**Noise Reduction Rating** **18** DECIBELS  
(WHEN USED AS DIRECTED)

THE RANGE OF NOISE REDUCTION RATINGS FOR EXISTING HEARING PROTECTORS IS APPROXIMATELY 0 TO 30. (HIGH NUMBERS DENOTE GREATER EFFECTIVENESS.)

SORDIN AB - SWEDEN #75302

Federal law prohibits removal of this label prior to purchase.  LABEL REQUIRED BY U.S. EPA REGULATION 40 CFR Part 211, Subpart B

**WARNING!**

- This product is provided with electronic reproduction of ambient sound. The user must check the function before use. If distortion or any other fault is detected, follow the instructions for changing and maintenance of the batteries. If this does not help, consult an authorized agent.
- The function may deteriorate with battery usage. In normal use, the estimated life of the batteries is about 600 hours
- The estimated A-weighted sound level inside the muff, with consideration taken to attenuation values (table, figure K), shall not exceed 82 dB(A).
- Remember that hearing protectors generally can shut out ambient sound, such as warning shouts, alarms and other important signals. Be therefore extra cautious of your surroundings when wearing hearing protectors.
- The integrated microphones for reproduction of ambient sound increase safety considerably in your daily work. NOTE. It is possible to disconnect the level dependent function, which means that warning signals and warning shouts would be much more difficult to hear. To minimize the risk of accidents we therefore recommend that the level dependent function be connected as far as possible.
- The output signal from the level dependent function can exceed the actual external sound level.
- The level dependent function may deteriorate in rain or moist conditions and the user should therefore be aware of the possible deterioration. If deterioration occurs, immediately allow the microphones in the hearing protector to dry (with open muffs for 24 h) until the function is fully restored.
- The product and the batteries are to be disposed of in conformance with national regulations.

**Tested according to ANSI Specifications, ANSI S3.19-1974**

**Information required by E.P.A:**

The level of noise entering a person's ear, when hearing protection is worn as directed, is closely approximated by the difference between the A-weighted environmental level and the NNR.

Example: The environmental noise level at the ear is 92 dB(A). The NNR is 23 decibels (dB). The level of noise entering the ear is approximately equal to 69 dB(A).

**CAUTION:**

For noise environments dominated by frequencies below 500 Hz, the C-weighted environmental noise level should be used. Improper fit of this device will reduce its effectiveness in attenuating noise. Although hearing protections can be recommended for protection against harmful effect of impulse noise, the Noise reduction Rating (NRR) is based on the attenuation of continuous noise and may not be an accurate indicator of the protection attainable against impulsive noise, such as gunfire.

**ATTENUATION DATA – Sordin Supreme Pro**

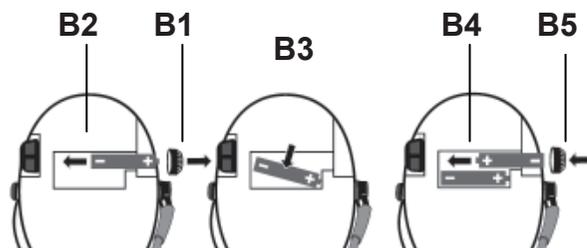
Frequency (Hz)	125	250	500	1000	2000	3150	4000	6300	8000	NRR
Mean (dB)	11,1	16,5	23,1	25,0	29,5	33,9	35,5	38,3	38,7	18
Standard deviation (dB)	2,6	3,0	3,2	2,8	4,1	3,1	3,6	4,0	3,2	

PM274-01

**A**



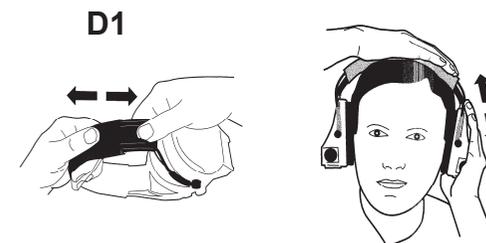
**B**



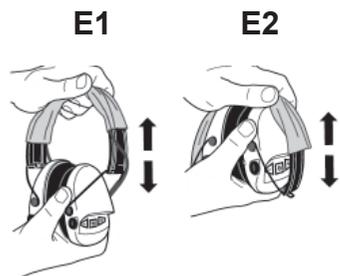
**C**



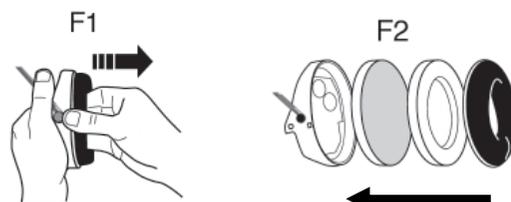
**D**



**E**



**F**



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