

## Sordin Supreme X2

Electronic hearing protector for hunting and shooting

Headband version | Neckband version



### DESCRIPTION

Sordin Supreme X2 is a first-class hearing protector for hunting and shooting. Every component is new and designed to perfection to maximize the quality, reliability and comfort of X2. This product is based on the SordinFLEX™ modular design platform, allowing you to reconfigure your hearing protector using X2 accessories.

X2 has a very high noise attenuation (SNR=29/NRR=23) for its slim cup design. This gives you safe hearing protection and comfort even in high-noise environments.

AVAILABLE IN

Green

Black



## KEY FEATURES

<b>Cup design</b>	Slim cups to fit both left-handed and right-handed shooters and wearers of eyeglasses.
<b>Maximum 82 dB</b>	Loud impulse noise automatically compressed to maximum 82 dB.
<b>Audio system</b>	SordinHEAR2 offers excellent sound quality and four audio profiles – Hunter, Shooter, Focus and Ambient off.
<b>Decay time</b>	Short decay time, restoring normal sound instantly after a shot.
<b>Ambient sound</b>	High amplification and natural sound reproduction with compression of dangerous sounds. Amplifying harmless ambient sound while protecting against harmful noise.
<b>AUX input</b>	3,5 mm AUX port for connecting external audio sources.
<b>Audio quality</b>	High audio quality, natural ambient sound reproduction.
<b>Voice feedback</b>	Yes (helps you to easily control the functions of the hearing protector).
<b>SordinFLEX</b>	The SordinFLEX modular design platform includes accessories as different suspensions (headband, neckband), headband covers and cushions.
<b>Keypad</b>	Ergonomic easy-to-use push buttons to operate the electronic functions.
<b>Dual protection</b>	Yes (see attenuation data for more information). SNR:40 / NRR:35
<b>Impuls noise tested</b>	Yes (see attenuation data for more information).
<b>Waterproof microphones</b>	Yes, The externally mounted microphones are water proof
<b>Auto power off</b>	Single-battery solution with auto shutdown (4 h).
<b>Low battery warning</b>	Voice feedback for low battery warning (when 10% remains).
<b>Robust electronics</b>	The electronic circuits are encapsulated in multiple layers of lacquer for increased robustness.

## MATERIALS

<b>Cups and foam rubber liner</b>	ABS and PU foam
<b>Suspension</b>	Stainless steel and plastic
<b>Headband cover</b>	Leather or colored textile
<b>Cushions</b>	ABS, PVC foil, memory foam or silicone gel cushions

## TECHNICAL INFORMATION

<b>Batteries</b>	1 x standard AA 1.5V (Sordin Power 14500 rechargeable 3.7 V also supported)
<b>Operating time:</b>	Approximately 70 hours (100h for rechargeable)
<b>Level Dependent microphone frequency response</b>	100 Hz – 10 KHz
<b>Operating conditions:</b>	-32°C to +55°C / -25,6°F to +131°F
<b>Max audio signal allowed from the connected radio to not exceed 82 dB(A) through the speakers</b>	239 mVrms
<b>Complies with following environmental directives</b>	RoHS, WEEE
<b>Immersion tested</b>	Yes, Relevant part of the product met the requirements of IP67

# EU TYPE EXAMINATION CERTIFICATE

## Product Assessments: Supreme X2

The product assessments were based on the following standards:

EN 352-1:2020 hearing protectors - ear-muffs

EN 352-2:2020 hearing protectors - earplug

EN 352-4:2020 hearing protectors - level-dependent ear-muffs

EN 352-6:2020 hearing protectors - ear-muffs with safety related audio input

# HEADBAND

## ATTENUATION DATA (EN 352)

### Memory foam cushions

WEIGHT = 309 g

H	M	L	SNR
32 dB	27 dB	20 dB	29 dB

Frequency (Hz)	63	125	250	500	1000	2000	4000	8000
Mean attenuation, $M_f$ (dB)	19.3	17.5	19.8	26.2	33.1	31.5	41.3	41.4
Standard Deviation, $s_f$ (dB)	3.0	2.6	2.4	2.2	2.0	2.6	2.5	3.4
APV ( $M_f - s_f$ ) (dB)	16.2	14.9	17.5	24.0	31.1	28.9	38.8	38.1

### Silicone gel cushions

WEIGHT = 367 g

H	M	L	SNR
31 dB	27 dB	22 dB	29 dB

Frequency (Hz)	63	125	250	500	1000	2000	4000	8000
Mean attenuation, $M_f$ (dB)	20.5	19.7	21.1	26.2	30.7	31.1	41.1	42.2
Standard Deviation, $s_f$ (dB)	2.2	2.2	2.4	2.8	2.8	2.7	3.2	2.7
APV ( $M_f - s_f$ ) (dB)	18.4	17.6	18.8	23.4	27.8	28.4	37.8	39.6

### Dual protection - Memory foam cushions

(and Sordin SoftEar ear plug (M/L))

WEIGHT = 309 g

H	M	L	SNR
38 dB	38 dB	36 dB	40 dB

Frequency (Hz)	63	125	250	500	1000	2000	4000	8000
Mean attenuation, $M_f$ (dB)	32.1	34.7	41.2	50.7	43.3	39.8	48.0	46.9
Standard Deviation, $s_f$ (dB)	5.9	5.7	5.6	5.9	4.5	4.6	4.0	3.9
APV ( $M_f - s_f$ ) (dB)	26.2	29.1	35.6	44.8	38.8	25.3	44.0	42.9

### Dual protection - Silicone gel cushions

(and Sordin SoftEar ear plug (M/L))

WEIGHT = 367 g

H	M	L	SNR
38 dB	39 dB	37 dB	40 dB

Frequency (Hz)	63	125	250	500	1000	2000	4000	8000
Mean attenuation, $M_f$ (dB)	31.6	34.0	43.8	55.8	44.5	41.2	50.1	49.0
Standard Deviation, $s_f$ (dB)	5.3	5.0	5.6	6.1	5.5	5.5	3.7	3.8
APV ( $M_f - s_f$ ) (dB)	26.3	29.0	38.1	49.6	38.9	35.6	46.3	45.1

### Criterion Levels

Model	L	M	H
All variants	Not applicable	107.2 dB	110.0 dB

#### Note!

There is no significant difference between the measured criterion level (L) when the level-dependent function is on or off, meaning the requirement for minimum criterion level (L) does not apply.

# HEADBAND

## ATTENUATION DATA (ANSI S3.19-1974)

### Memory foam cushions

CSA CLASS = **B** WEIGHT = **309 g**

NRR  
**23 dB**

Frequency (Hz)	125	250	500	1000	2000	3150	4000	6300	8000
Mean attenuation dB(A)	17	20.6	25.4	33.2	33.0	39.8	43.2	43.2	41.5
Standard deviation dB(A)	1.5	3.3	1.5	2.6	3.1	3.2	2.4	3.2	3.2

### Silicone gel cushions

CSA CLASS = **B** WEIGHT = **367 g**

NRR  
**23 dB**

Frequency (Hz)	125	250	500	1000	2000	3150	4000	6300	8000
Mean attenuation dB(A)	16.9	19.3	23.8	30.9	30.6	38.4	40.9	42.2	39.6
Standard deviation dB(A)	3.0	1.7	2.0	2.0	2.3	3.1	3.3	2.6	2.6

### Dual protection - Memory foam cushions

(and Sordin SoftEar ear plug (M/L))

CSA CLASS = **AL** WEIGHT = **309 g**

NRR  
**35 dB**

Frequency (Hz)	125	250	500	1000	2000	3150	4000	6300	8000
Mean attenuation dB(A)	36.7	44.2	55.7	42.4	41.2	46.8	50.6	48.7	48.5
Standard deviation dB(A)	4.3	4.1	2.1	3.8	3.6	3.2	3.8	2.1	3.7

### Dual protection - Silicone gel cushions

(and Sordin SoftEar ear plug (M/L))

CSA CLASS = **AL** WEIGHT = **367 g**

NRR  
**35 dB**

Frequency (Hz)	125	250	500	1000	2000	3150	4000	6300	8000
Mean attenuation dB(A)	40.3	48.7	55.2	44.7	40.0	47.3	48.9	48.3	46.6
Standard deviation dB(A)	3.5	2.9	3.7	3.8	3.4	3.2	3.6	3.6	3.7

## PEAK IMPULSE NOISE REDUCTION (ANSI S12.42-2010)

### Memory foam cushions

Impulse peak level (dB)	130	150	168
Impulse peak insertion loss (dB)	29.4	36.5	34.4

### Silicone gel cushions

Impulse peak level (dB)	130	150	168
Impulse peak insertion loss (dB)	26.9	33.4	34.2

#### Caution!

As there can be a large variation in fit and fit ability between users, which may affect noise attenuation, Sordin cannot guarantee that the specified attenuation values will be achieved for all users and in all situations.

# NECKBAND

## ATTENUATION DATA (EN 352)

### Memory foam cushions

WEIGHT = 275 g

H	M	L	SNR
29 dB	26 dB	21 dB	<b>28 dB</b>

Frequency (Hz)	63	125	250	500	1000	2000	4000	8000
Mean attenuation, $M_f$ (dB)	18.1	16.9	20.6	26.9	31.9	29.2	38.5	39.6
Standard Deviation, $s_f$ (dB)	3.0	2.0	2.6	3.0	2.8	3.6	3.5	3.9
APV ( $M_f - s_f$ ) (dB)	15.1	14.9	17.9	23.9	29.0	25.6	35.0	35.7

### Silicone gel cushions

WEIGHT = 333 g

H	M	L	SNR
31 dB	27 dB	22 dB	<b>29 dB</b>

Frequency (Hz)	63	125	250	500	1000	2000	4000	8000
Mean attenuation, $M_f$ (dB)	19.1	18.9	20.8	25.6	32.5	30.9	39.8	40.8
Standard Deviation, $s_f$ (dB)	3.1	2.2	2.4	2.8	2.7	3.0	3.1	4.0
APV ( $M_f - s_f$ ) (dB)	16.0	16.8	18.5	22.8	29.8	27.9	36.7	36.8

# NECKBAND

## ATTENUATION DATA (ANSI S3.19-1974)

### Memory foam cushions

CSA CLASS = B WEIGHT = 275 g

NRR
<b>23 dB</b>

Frequency (Hz)	125	250	500	1000	2000	3150	4000	6300	8000
Mean attenuation dB(A)	15.8	20.1	25.7	34.0	30.1	36.0	40.3	42.2	41.1
Standard deviation dB(A)	2.6	1.8	2.0	3.5	3.2	3.6	1.9	2.7	3.2

### Silicone gel cushions

CSA CLASS = B WEIGHT = 333 g

NRR
<b>23 dB</b>

Frequency (Hz)	125	250	500	1000	2000	3150	4000	6300	8000
Mean attenuation dB(A)	16.8	19.8	25.7	31.0	31.9	39.9	42.3	40.7	40.1
Standard deviation dB(A)	3.0	1.9	2.0	2.3	2.3	2.7	2.5	2.5	2.8

#### Caution!

As there can be a large variation in fit and fit ability between users, which may affect noise attenuation, Sordin cannot guarantee that the specified attenuation values will be achieved for all users and in all situations.

## AUDIO PROFILES MODE DESCRIPTION



Our hearing is sensitive to different sound levels and frequencies. The SordinHEAR2 audio profiles are pre-set listening modes, which optimize your sound experience by adapting the gain and frequency to typical hunting or shooting situations. You switch easily between profiles and each selection is confirmed by voice feedback.

### Hunter

The normal audio profile for general purposes. Gain and frequency are set at normal levels in order to mimic natural ambient sound and to balance situational awareness and comfort.

### Shooter

A comfort profile with reduced gain and a narrower frequency spectrum. Perfect at the shooting range when situational awareness and ambient sound are of secondary importance.

### Focus

Increased gain and frequency spectrum, allowing you to pick up weak sounds. Or, use Focus together with Sordin earplugs for extra high attenuation while maintaining a degree of ambient sound (Earplug mode).

### Ambient off

Ambient sound is deactivated and your X2 uses passive hearing protection only. However, communication is still activated, making Ambient off suitable for e.g. motorized transportation.

## ORDERING INFORMATION

### Sordin Supreme X2

Product no	Version	Cup color	Headband	Cushions
301004-10G	Sordin Supreme X2 Headband GEL	Black	Black leather	Silicone gel
301004-10P	Sordin Supreme X2 Headband Memory foam	Black	Black leather	Memory foam
301006-10G	Sordin Supreme X2 Headband GEL	Green	Black leather	Silicone gel
301006-10P	Sordin Supreme X2 Headband Memory foam	Green	Black leather	Memory foam
301004-20G	Sordin Supreme X2 Neckband GEL	Black	n/a	Silicone gel
301006-20G	Sordin Supreme X2 Neckband GEL	Green	n/a	Silicone gel

### Accessories & spare parts

Product no	Version
60193	Sordin Power 14500 rechargeable Li-ion 3.7 V battery
60194	Sordin Power Battery Charger
60197-S	Hygiene kit, memory foam cushions – 1 pair of cushions, 1 pair of inserts
60198-S	Hygiene kit, silicone gel cushions – 1 pair of cushions, 1 pair of inserts
60200	Headband cover, textile (black)
60201	Suspension kit, X2 Neckband
60204	Suspension kit, X2 Headband for Textile
60205	Suspension kit, X2 Headband Leather

### What's In the box?

- 1 x Sordin Supreme X2
- 1 x AA Alkaline battery
- 1 x Quick guide
- 1 x Manual