


# Sordin Share™

BREAKING TEAMWORK BARRIERS

 Dynamic MESH (DMC™)

 Voice control

 App control

**SORDIN**

Sordin Share by Sordin



**SORDIN**

## Quality by Sweden

Sordin Share is at the frontline of Swedish technology development. It's simply the most advanced electronical hearing protector ever made. Engineering excellence paired with the most sophisticated communications technology available make Sordin Share the first choice among quality-aware professional teams across the globe.



# Breaking teamwork barriers

Great teamwork can do wonders. But what if the team operates in a noisy, harsh environment and members are spread out in the field – yet still must perform optimally together? Like construction workers, miners and numerous other teams of professionals?

There are many technologies for multiuser wireless communications, for example cellular, 2-way radio or Bluetooth<sup>®</sup> Multipoint. Each with their own strengths, but unfortunately also with some crucial weaknesses – all too familiar to anyone attempting to set up a high-quality, seamless communications system for mobile work teams.

We developed Sordin Share to break teamwork barriers. A hearing protector providing all you need for occupational health and safety, professional wireless team communications and personal entertainment. Its ground-breaking capabilities are based on a mesh network solution designed specifically for secure, critical team intercom.

Here are only a few of the benefits that Sordin Share offers team members: Crystal-clear voice communications between up to 15 people, without worrying about poor Wi-Fi connection. No pushing of talk buttons or waiting for others to stop talking before saying your piece. Leaving the team without jeopardizing anyone else's intercom. Automatically reconnecting you when returning after a break, simply by approaching a fellow team member.

There is nothing like Sordin Share today. Which, of course, also offers everything else you'd expect from a state-of-the-art hearing protector – FM radio, Bluetooth and the extreme robustness that has come to characterize a genuine Sordin.

# “Hey Sordin”

Just say “Hey Sordin”. That’s how easy it is to activate one of the many functions in Sordin Share. Advanced and intuitive voice control lets you use both hands for actual work.

With Sordin Share, you can stay focused on the work at hand, even when you are surrounded by noise. It’s as if you and your team were working together in a quiet environment with no challenging obstacles around you. Everyone can hear each other clearly and you can trust your intercom to work flawlessly when you need it the most.

You can easily activate one of the many functions using voice control. Just say “Hey Sordin” followed by the requested command. Having both hands free at all times is key to safety and efficiency, especially in a noisy and hazardous environment. Voice control is one of several features unique to Sordin Share in the world of hearing protection today.

Full duplex support means that everyone in the team can speak at the same time. You

never have to wait for your turn, which is irritating at best and dangerous at worst. Just speak naturally without waving or signaling to your colleagues. Coming across instantly with an important message may prove crucial to personal safety.

Another unique safety function is emergency notification. By saying “Hey Sordin, emergency” any team member can immediately get through to rescue services, without having to take off their gloves to pick up their cellphone to dial the local emergency number in the stressful event of an emergency. The call is shared with all connected group members to alert them about the situation.



Say...	To...
"Hey Sordin, radio on"	Turn on the radio
"Hey Sordin, radio off"	Turn off the radio
"Hey Sordin, next station"	Skip to the next pre-set radio station
"Hey Sordin, previous station"	Skip to the previous pre-set radio station
"Hey Sordin, music on"	Turn on music
"Hey Sordin, music off"	Turn off music
"Hey Sordin, next track"	Play the next music track
"Hey Sordin, previous track"	Play the previous music track
"Hey Sordin, volume up"	Raise volume
"Hey Sordin, volume down"	Lower volume
"Hey Sordin, mute audio"	Mute audio
"Hey Sordin, unmute audio"	Unmute audio
"Hey Sordin, speed dial"	Call the default number (configurable)
"Hey Sordin, redial number"	Redial the last number
"Answer"	Answer an incoming call
"Ignore"	Ignore an incoming call
"Hey Siri"	Access Siri (when connected to an iOS device)
"OK Google"	Access Google (when connected to an Android device)
"Hey Sordin, battery status"	Check the battery status
"Hey Sordin, emergency"	Initiate an emergency call
"Hey Sordin, private chat on"	Initiate private chat
"Hey Sordin, private chat off"	Terminate private chat
"Hey Sordin, what is my channel?"	Current channel number
"Hey Sordin, command list"	Listen to all available commands



# Full control at your fingertips

The Sordin Share app allows you to easily set, adjust and use the many features. It's just as simple and intuitive as you've learned to expect from any modern smartphone app.

Sordin Share is full of features ranging from selecting a work team to customizing your personal audio environment. To help you benefit fully from the extensive functionality, we developed the Sordin Share app, which allows you to set up and control your hearing protector.

You can change the predefined settings by customizing Sordin Share according to your personal preferences. One important safety feature is adjusting the ambient sound level – balancing the external noise leakage with your intercom and music volume in your earmuffs – since blocking out external noise entirely reduces your situational awareness and could be a danger in itself.

As a user, you can participate in one or more user groups. Clicking on Intercom displays a list of all your user groups. Select group and you will communicate only with members of that group. This enables a dynamic way of working as you're switching between groups during the day.

As an alternative to voice control, you can use the app to run Sordin Share functions directly, such as making a phone call, turning FM radio on or off, or starting a song from your music service. With constant access to your app, you can quickly change your personal audio environment whenever you like.



**Quick access**  
All sound, voice and music functions are available in one easy-to-use control screen.



**Settings**  
Individualize your Sordin Share environment easily from the Settings screen.



**Phone**  
Access key phone functions without leaving the app. Prioritize selected numbers from your contact list. Share calls with all group members.



**Intercom**  
Select one of your user groups and shift between channels for best audio experience.



**Music**  
Select your favorite tune from your music service and browse between songs.



**FM Radio**  
Choose between six preset channels or scan to find your preferred radio station.



# Easy setup

Using the Windows-based configuration tool that comes with Sordin Share, managers or team leaders can easily predefine user settings for all hearing protectors in each user group.

The configuration tool enables team leaders to predefine settings for each Sordin Share user in your organization. Individualized settings let you differentiate access to features depending on user need and work task.

The tool consists of three main sections – Group manager, General settings and Firmware upgrade – the latter ensuring your employees' hearing protectors are always up to date with the latest software.

Group manager allows you to define and set up different work teams. Once set up, users select teams themselves using the Sordin Share app. Users may be part of several groups, although not simultaneously, and new groups can be set up daily depending on the actual work situation.

General settings let you predefine user settings for each Sordin Share unit, many of which can later be changed by users according to their preferences. Key safety settings include entering the local emergency number, defining microphone sensitivity and setting the ambient sound level.







#### **Configuration tool**

Set up user groups, predefine user default settings, keep the Sordin Share firmware always upgraded. These are only some of the functions available to managers or team leaders to control and configure your team's hearing protector environment, using the Sordin Share configuration tool.



# A living, self-healing network

Sordin Share offers first-class communications for work teams where it is most critical. It provides extensive range and coverage, supporting up to 15 users in a single ad-hoc and 100% autonomous network.

Sordin Share uses Dynamic Mesh Communication (DMC™), a network technology that creates living connections – actively seeking to connect to other units. DMC adapts to the behavior of each unit to ensure intercom is always maintained optimally. Establishing a network is easy, providing connectivity to up to 15 members in just a few seconds.

Team members can move freely and communicate uninterrupted with each other at a range of up to 800 m to the nearest member. Thanks to the mesh network structure, the maximum distance between any two team members, located furthest away from each other, is about 2 km\*.

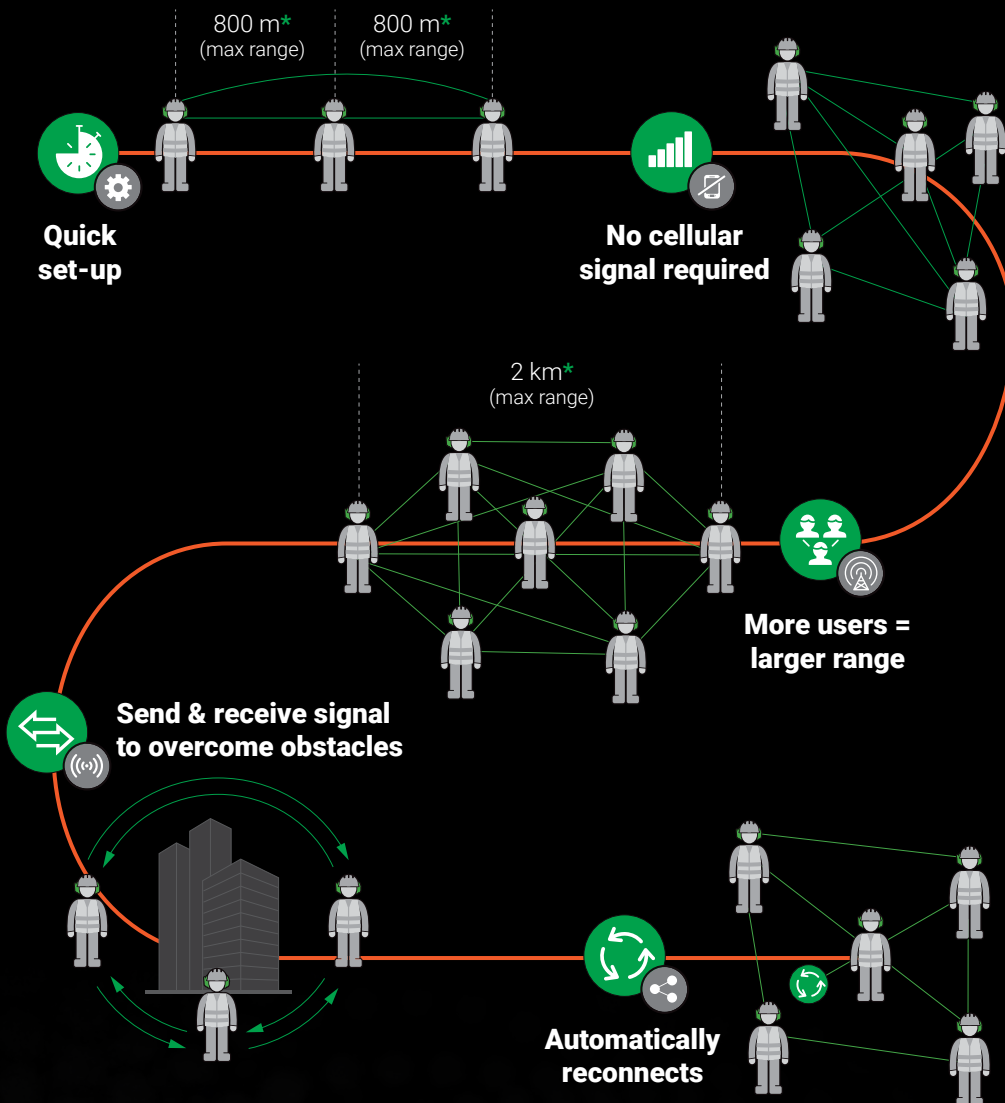
The network will heal itself in a split second, whenever a user loses connection or wishes to re-join the network. If a unit leaves the network, all other units work together to leapfrog that signal. Once a unit comes back within range, it automatically re-joins the group, enabling a self-healing, robust and dynamic network.

The intercom network can instantly split into sub-networks. For example, if a group of three users leaves the network, they can continue to communicate with each other, without affecting the original larger group.

In addition, the system supports a peer-to-peer mode, where two users can communicate privately. A mute mode is also supported, which allows muting the system and avoiding distractions while providing the user with peace of mind.



\* Range may be affected by local regulations, terrain surface conditions and the number of units connected to the intercom network.



**Self-healing**

Unlike Bluetooth, where one unit may cause the entire network to collapse, the DMC network will heal itself in a split second whenever a unit disconnects or wishes to re-join.

**Quick setup**

Setting up the network only takes a few seconds and needs to be done only once. The system saves the settings for future use.

**Strong communications**

The more members in a group, the stronger the communications, with each member serving as a signal hub.

**Superior audio**

Users get to enjoy crystal clear and always-on audio for fluid communications.

**Medium-range connectivity**

Members of the group can communicate at a range of up to 2 km\* (for the whole group) depending on environment.

**Independent**

There is no need for cellular coverage, so teams can communicate effectively wherever they are.

**Cellular extension**

Using Sordin Share's bridging capability, it is possible to connect two remote groups to a single intercom network (for up to 30 users) via a cellular network.

**Technology comparison – Why choose Sordin Share over other communications technologies?**

Bluetooth	Walkie-talkie	Cellular	Sordin Share (DMC)
<ul style="list-style-type: none"> <li>• Short-range connectivity.</li> <li>• Time-consuming to establish.</li> <li>• Easily breaks down when users lose connection.</li> <li>• Few users (3-4)</li> </ul>	<ul style="list-style-type: none"> <li>• Medium-range connectivity.</li> <li>• Half duplex only.</li> <li>• Requires a constant push of a button.</li> <li>• Sensitive to physical obstacles.</li> </ul>	<ul style="list-style-type: none"> <li>• Long-range connectivity.</li> <li>• Requires base station connectivity.</li> <li>• Complexity with many users.</li> <li>• Network-quality dependent.</li> </ul>	<ul style="list-style-type: none"> <li>• Medium-range connectivity.</li> <li>• Full duplex – conversational, hands-free.</li> <li>• No pushing of a button.</li> <li>• Autonomous, off-grid.</li> <li>• Multiple users (max 15).</li> <li>• Dynamic, flexible network.</li> </ul>

# Unmatched technology

## Bluetooth® 4.2 connectivity

Easily connect to a cellphone to receive phone calls, which can be re-routed to the entire group, or to stream music.

## Hands-free operation

Team members can operate/activate the system using voice commands such as "Hey Sordin, radio on," allowing team members to keep their hands free and focus on their tasks.

## Headband version

A wide headband with a ventilated padding provides a firm and comfortable fit. Easily adjustable headband for individual fit.

## FM radio

Easy to scan, store and listen to your favorite radio channels.

## Antenna

Small and powerful – ensuring superb connection and audio quality, even at long distances.

## Navigation

Easy-to-use buttons to control your unit, a useful complement to app and voice control.

## Built-in microphones

Microphones for ambient-sound amplification are fully integrated, enabling a slim cup design and unhindered work.

## Accessories

Hygiene kits, textile sleeve (for headband version only) and boom microphone (spare part).

## Boom microphone

Sordin Share comes with a detachable, high-sensitivity boom microphone to enable excellent audio uptake even in extremely noisy environments.



The image below is a collage of different Sordin Share models and configurations. For a detailed product specification, see page 14–15.

### Helmet version

A patented spring design offers excellent comfort. Three distinct wearing positions. Superb grip makes it easy to adjust the cups even when wearing gloves

### Built-in high-quality battery

The Li-ion battery gives you maximum operating time before recharging. Recharge using a standard USB-C cable (included).

### Robust design

Cups of high-performance ABS plastic for light weight and excellent impact strength. Large ear space inside the cups.

### Power saver

Automatic power off, no risk of unintentionally discharging the battery.

### Selectable sealing rings

Choose between foam or gel sealing rings. Replacement parts are available for each ring type as hygiene kits.

### Ambient sound

Reduces impulse noise and allows amplification of ambient sound such as human voice, enabling listen-through capability and ensuring high situational awareness.

### Multiple channel support

Several intercom networks can operate in the same terrain, allowing different teams to communicate simultaneously without interference.

### 100% autonomous network

No base station is necessary, so Sordin Share works anywhere without additional equipment. The intercom network is an 'off-network' solution that can operate anywhere.



# Specifications

## MATERIALS

Cups <sup>1) 2)</sup>	ABS, TPE	Support band <sup>1)</sup>	TPE
Attenuation foam <sup>1) 2)</sup>	PU foam	Adapter, holder <sup>2)</sup>	PA
Foam sealing rings <sup>1) 2)</sup>	ABS, PP, TPE, PU foam	Spring cover <sup>2)</sup>	PP
Gel sealing rings <sup>1b) 2b)</sup>	ABS, PVC foil, silicone gel	Spring <sup>2)</sup>	Stainless steel
Headband <sup>1)</sup>	POM	Screws <sup>1) 2)</sup>	Stainless steel
Cup supporting arm <sup>2)</sup>	PA	Headband padding <sup>3)</sup>	PA + TPU + PE foam

<sup>1)</sup> Sordin Share-1 (headband version)   <sup>2)</sup> Sordin Share-2 (helmet-mounted version)

<sup>1b)</sup> Sordin Share-1B (headband version)   <sup>2b)</sup> Sordin Share-2B (helmet-mounted version)   <sup>3)</sup> Optional accessory

## TECHNICAL INFORMATION

Batteries	Built-in rechargeable Li-ion battery (2,000 mAh). Estimated operating time: 36 hours <sup>1)</sup> . 60 min charging <sup>2)</sup> gives minimum 8 hours usage time. USB-C cable for charging included. <sup>1)</sup> Valid for Bluetooth streaming, operating time dependent on usage mode. <sup>2)</sup> Only charge batteries between temperatures 0°C and +40°C.
Operating conditions	-20°C to +55°C
Weight headband / helmet-mounted version	Foam ring variants: 405 grams / 406 grams. Gel ring variants: 450 grams / 445 grams.
Reach, radio communications	Maximum 800 meter to nearest unit in open terrain
Complies with the following environmental directives	RoHS, WEEE
Bluetooth profiles	Bluetooth 5 certified with A2DP (streaming), and HSP HFP (headset) support
IP class	IP 44 (Sordin Share) IP 67 (noise-cancelling boom microphone)

## PRODUCT VARIANTS

Product no	Version	Cup color	Rings
88000-04-S	Sordin Share Headband	Black	Foam
88000-04-G-S	Sordin Share Headband	Black	Gel
88520-04-S	Sordin Share Helmet, Adapter 20	Black	Foam
88520-04-G-S	Sordin Share Helmet, Adapter 20	Black	Gel

## ACCESSORIES & SPARE PARTS

60050-S	Hygiene kit, foam sealing rings – 1 pair of foam rings, 1 pair of inserts (Foam rings: TPE (thermoplastic elastomer) covered PU (polyurethane) foam. Inserts: PU foam.)
60051-S	Hygiene kit, gel sealing rings – 1 pair of gel rings, 1 pair of inserts (Gel rings: PVC foil covered silicone gel. Inserts: PU foam.)
60125-S	Textile sleeve for Sordin Share headband version
60126-S	Replacement boom microphone

## EN APPROVALS

### TESTS AND CERTIFICATES

Tested and certified to EN 352-1:2020, EN 352-3:2020, EN 352-4:2020, EN 352-6:2020 and EN 352-8:2020.  
IEC 62368-1 (EN 62368-1+A11), IEC 62133-2:2017 and 2014/53/EU Radio Equipment Directive RED  
Certificate: CE 748897 (headband and helmet-mounted versions).  
Notified body: BSI Netherlands (NB 2797)



### ATTENUATION DATA

#### Sordin Share-1, Sordin Share-1C (headband version with foam sealing rings)

H=35 dB | M=27 dB | L=20 dB | SNR=30 dB

Frequency (Hz)	125	250	500	1000	2000	4000	8000
Mean attenuation, $M_f$ (dB)	18.2	18.2	25.3	32.8	36.5	45.1	42.1
Standard deviation, $s_f$ (dB)	3.3	1.8	1.7	3.0	2.8	3.6	3.4
APV ( $M_f-s_f$ ) (dB)	14.9	16.3	23.6	29.8	33.6	41.4	38.7

#### Sordin Share-1B, Sordin Share-1BC (headband version with gel sealing rings)

H=35 dB | M=26 dB | L=20 dB | SNR=29 dB

Frequency (Hz)	125	250	500	1000	2000	4000	8000
Mean attenuation, $M_f$ (dB)	17.5	18.7	25.4	32.0	36.6	44.1	45.1
Standard deviation, $s_f$ (dB)	3.1	2.3	2.1	3.1	3.3	3.4	3.4
APV ( $M_f-s_f$ ) (dB)	14.4	16.4	23.2	28.9	33.4	40.7	41.7

#### Sordin Share-2, Sordin Share-2C (helmet-mounted version with foam sealing rings)

H=34 dB | M=25 dB | L=20 dB | SNR=28 dB

Frequency (Hz)	125	250	500	1000	2000	4000	8000
Mean attenuation, $M_f$ (dB)	18.1	18.7	24.4	30.7	36.5	43.6	41.8
Standard deviation, $s_f$ (dB)	3.0	2.3	2.5	3.3	2.6	4.5	4.4
APV ( $M_f-s_f$ ) (dB)	15.1	16.3	21.9	27.4	33.9	39.1	37.4

#### Sordin Share-2B, Sordin Share-2BC (helmet-mounted version with gel sealing rings)

H=36 dB | M=26 dB | L=20 dB | SNR=29 dB

Frequency (Hz)	125	250	500	1000	2000	4000	8000
Mean attenuation, $M_f$ (dB)	17.5	18.2	25.1	31.4	37.9	47.5	46.5
Standard deviation, $s_f$ (dB)	3.0	1.7	2.1	2.5	2.6	3.6	2.7
APV ( $M_f-s_f$ ) (dB)	14.5	16.5	23.1	29.0	35.3	43.9	43.8

### APPROVED HELMET COMBINATIONS

#### Helmet model

For supported helmet combinations, please contact Sordin.

### CRITERION LEVELS (DB)

#### Model

Sordin Share, all variants

H

M

L

115.4

103.3

97.1



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[www.sordin.com](http://www.sordin.com)

