

WLHEADSET4 Wireless Headset

WLHEADSET4 | Wireless headset for Diver Radio

The WLHEADSET4 is a wireless headset that can be used in combination with the xDR-DSP radio from Novasub. It is an extremely ruggedized and fully seawater-proof headset. The headset uses 2.4 GHz Bluetooth 5.0 to connect to a Novasub radio and can simultaneously connect to your mobile phone to answer calls. The headset is equipped with a Push-to-talk button that can be used for using a half-duplex system. The headset has a battery for 15 hours of use and has fast charging capabilities. When the battery is empty, you can charge it to a 1-hour operation within 5 minutes. The headset is fully charged within almost 2 hours.

The headset also has a hear-through mode that can be activated using the dedicated button. This uses an external microphone to send the external audio to the speakers of the headset. The hear-through mode supports 3D spatial audio. The headset is available with an headband or as an helmet mount.

The headset can only be connected to a NOVASUB product that has the "Wireless Headset Ready" feature



Configurations :

- WLHEADSET4 (Headband)
- WLHEADSET4.1 (Helmet)

Features:

- Fully Waterproof (IPX7)
- Long Range
- Bluetooth 5.0
- 3D Spatial Audio

Applications:

- Commercial Diving



website link : <https://www.novasub.com/product-tag/wireless-headset/>

product video : <https://www.youtube.com/channel/UCRqqqmJy8O7XEabp7S1rpQ>

WLHEADSET4 Wireless Headset | FEATURES

Revolutionary Design

With its unique and patented design the headset is engineered to provide best in class audio quality under extreme conditions. The use of high-grade silicone and stainless steel in combination with a completely sealed construction make the headset the ideal choice for those working in noisy, wet and salty environments.

Wireless Connectivity

The headset uses encrypted, spread-spectrum data communication in the 2.4GHz band, and is Bluetooth 5.0 compatible. It supports multiple, simultaneous wireless connections.



Mobile Phone Connectivity

Pairing mode one is intended for connection of a cell phone making it possible to answer calls using the headset. Incoming calls can be answered on the headset itself by a push of a button. There is support for both HS and HFP profiles. Music streaming is also possible via the A2DP protocol.

Wireless PTT

The headset has an Push to talk button that can be used over the wireless connection. When you push the PTT button then the headset sends a signal over the wireless connection to the radio. If the radio is set up as half duplex then the sound from the microphone of the headset will only be heard if the PTT button is pushed. If the system is set up as full-duplex then the sound is always heard.

PUSH-TO-TALK

Peer-to-Peer Functionality

Pairing mode three is used for P2P functionality. P2P enables two headsets to be wirelessly connected, forming a stand-alone full-duplex intercom system.

P2P

Speed Charge | *Gain another hour in just 5 minutes!*

The build-in Lilon battery typically provides continuous operation for 15 hours or more depending on actual use case, and due to the Speed Charge function, the battery will regain 80% capacity after less than 2 hours charging.

SPEED CHARGE

Voice Prompts

The headset provides audible, human voice responses to commands, guides the user through pairings and setup, and alerts in case of incoming calls, low-battery condition, loss of wireless connectivity etc.

Range

The headset is designed for short to medium range wireless connectivity, and typical range is up to 25m line-of-sight. The actual achievable range will vary depending on local factors.

25M

Hear-Through Mode

Hear-Through mode makes it possible to have a "local" conversation and hear what is happening around you without removing the headset. When Hear-Through mode is enabled, sound from the intercom system or connected radio is attenuated by 24dB. This allows for monitoring intercom or radio traffic while engaging in "local" conversation. This mode uses 3D spatial audio so the headset also reflects the direction of a sound for an optimal functionality.

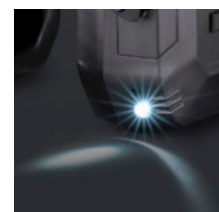


3D GEL Ear-pads

To increase the passive noise attenuation of the headset as well as improve the physical fit, it is equipped with a 3D GEL Ear-pad. The design of the Ear-pad ensures a closer fit against the cranium around the ear. This option provides up to an extra 5dB of passive noise attenuation.

High-Bright LED

This feature provides three very useful light modes. Dimmed mode provides sufficient light for reading a map held in your hands without causing too much disturbance of your night vision or the people in your vicinity. High-beam mode lights up the path in front of you, and makes it possible to move around and navigate in total darkness. In Strobe mode the LED continuously emits powerful flashes at a constant frequency helping others locate you in the dark. Even a mile or two away a helicopter without FLIR equipment will be able to easily locate your position.



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Specifications :

| | |
|-----------------------|----------------------------------|
| System | |
| Range | 25 m line of sight |
| Waterproof | IPX7 |
| Wireless connectivity | Bluetooth 5.0 |
| Audio | |
| Frequency Range | 120 - 18.000 Hz |
| Microphone | Noise Cancelling Boom Microphone |
| Sampling | 16-bit |
| DSP | Integrated |
| Battery | |
| Run time | 15 hours |
| Charging time | 2 hours |
| Speed charge | 1 hour life in 5 minutes |
| Weight | 495 g |

WLHEADSET 4.1



Wireless Headset
helmet mount / waterproof
needs 'Wireless Headset Ready' option

WLHEADSET 4



Wireless Headset
waterproof
needs 'Wireless Headset Ready' option

xDR-DSP xDR-DSP Diver Intercom with Digital Signal Processing (DSP)

Self-contained Diver Intercom that supports communication between a tender and 2 to 4 divers

NOVASUB xDR-DSP is a self-contained diver intercom that supports communication between a tender and 2 to 4 divers. It is an innovative system that includes in-house written software in combination with industrial hardware. Because of this software, the system has a massive amount of configurability. To achieve this it uses Digital Signal Processing (DSP).



Software:

This DSP makes the xDR-DSP an adjustable diver intercom in which you can, for example, select which channels you want to hear on an output or adjust its volume levels. The xDR-DSP can also operate in half duplex tender to diver as well as full duplex between divers (Round Robin). By default settings, the xDR-DSP will work as a standard 2 Diver intercom you will be used to.

Hardware:

The xDR-DSP is equipped with a 2 line translatable display. This display is used to scroll through the menu and adjust the required settings. The xDR-DSP is always equipped with push to talk buttons, Volume control and a microphone connection. The audio in- and outputs can be configured as needed.

Features:

- Fully audio configurable, select on each Diver, Tender and output what it may hear
- Each Diver, input and output has a gain level adjustment
- Separate amplifiers for Divers, Internal speaker and External speakers
- Transformer Isolated on all Divers, inputs and outputs
- 3,5 mm jacks to connect any media / gaming headset with mic

Options:

The system is per default 'Wireless Headset Prepared' for 2 connections, this means that the connectors for the antennas and the buttons are already integrated in the the system. This can be upgraded anytime to 'Wireless Headset Ready' to be able to connect to wireless headsets. On order, the number of connections can be expanded up to 4 wireless connections.



'Wireless Ready' option installed

| | | | |
|-------------------------------|--------------------|---|-------------------------------|
| Input Impedance (Each Input) | 250 Ohms | Headset Mic Sensitivity | 159 mVpp |
| Frequency Response | 300 - 10000 Hz | Inputs audio (Aux&DVR in) | 2,82 Vpp |
| Common Mode Rejection | 40 dB Minimum | Outputs Audio (Rec, Out & Aux) | 2,82 Vpp |
| Power Drain | 0.2 – 0.5 Ah (12v) | Headset speaker | |
| Output Impedance | 4 Ohm | Diver Output Power (RMS @ 4 Ohm Load, 12 Vdc) | 7 watt audio |
| Diver Mic Sensitivity (Input) | 15 mVpp | Speaker Output Power (4 Ohm) | 15 watt audio |
| | | Inputs and outputs Isolation | Transformer galvanic Isolated |

NOVASUB Available products that can be used in combination with WIRELESS HEADSET :

PROTEUS



DIVING AIR / COMMS / LIGHT & VIDEO PANEL
All-in one rack

TRITON



DIVER COMMUNICATION & VIDEO RECORDER

THETIS



DIVER COMMUNICATION & VIDEO RECORDER

DUx



UMBILICALS

DLRx & CDURx



CABLES
for video & comms

HERMES



COMMS