

BDC-2D2H1L-2DR-DSP Diver air panel with communications

ZELOS-C3 | Portable case 2 diver air panel and diver radio

The ZELOS-C3 is an advanced combination of a diver air panel and a built-in diver intercom radio, designed to ensure both safety and seamless communication during underwater operations. The air panel features two high-pressure reducers, each equipped with pressure relief valves, providing independent high-pressure inputs for two divers. The divers also share a common low-pressure input. All three inputs are protected by one-way check valves for added safety. The divers share a 4-inch depth gauge, which can be easily switched between divers using a 3-way valve. Each diver has a dedicated low-pressure alarm, which can be deactivated individually, and a sample point for conducting air quality checks.



At the heart of the ZELOS-C3 is the THETIS-P2, a self-contained, high-performance digital intercom radio. The communication system allows connection via banana connectors or a multipin connector on the case side, ensuring flexible and reliable communications. The radio is securely mounted within the panel using an O-ring seal to prevent water ingress, while also allowing for easy removal or replacement during maintenance.



Features:

- Air panel and Radio in one
- 2 high-pressure inputs
- IMCA compliant
- Digital Radio

Applications:

- Commercial Diving

website link : <https://www.novasub.com/>

product video : <https://www.youtube.com/channel/UCRqqqmJy807XEabp7S1rpQ>

ZELOS-C3 Available options:



Wireless Ready

Equip the system with a Bluetooth print and antennas to be able to connect wireless headsets to the radio. This upgrade can be done post-production.



Bluetooth™



Depth Display

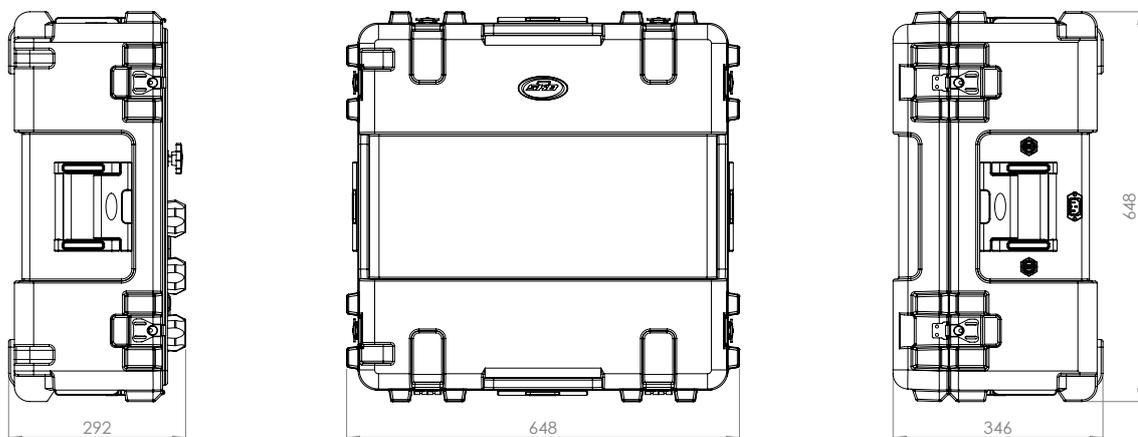
The system can be expanded with depth displaying capabilities. This option will integrate a depth reading PCB (Printed Circuit Board) into the system and requires the UDS-3-x depth sensor.



Client Specific Umbilical Connectors

The system can be equipped with the umbilical connectors that you need. This makes combining our system with your current equipment more convenient.

Dimensions (mm)



* Please contact NOVASUB. All options, unless otherwise specified, need to be clarified when ordering.

* Features and specifications are subject to change without prior notice due to continuous developments

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Specifications Air Panel

System	Description	Type / Parts
Divers	2x	
HP Input	2x	
LP Input	1x	
Depth Gauge	1x	4" gauge 0-60 MSW & 0-200 FSW cl 0.25
Control		
Input open/close	2-way ball valve	
Pneumo open/close	Needle valve	
Pneumo selector	3-way ball valve	
HP to LP reducer	Reducer 0-300 / 0-17 bar	2500 lpm at 50 Bar input & 15 Bar output
HP pressure relief valve	16 bar	
Monitoring		
Diver	LP pressure	2 1/2" gauge 0-25 bar cl 1.6
	Depth	4" gauge 0-70 MSW & 0-230 FSW cl 0.25
Inlet	HP pressure	2 1/2" gauge 0-400 bar cl 1.6
	LP pressure	2 1/2" gauge 0-25 bar cl 1.6
Audio Alarm	Low pressure diver air supply, set to 5.5 bar	Battery powered by radio battery
Inlets/Outlets		
HP inlet	1/4" NPT, max 300 bar	standard supplied with DIN G5/8" 300 bar
LP inlet	1/2" NPT, max 16 bar	
Diver air supply	1/4" NPT	standard supplied with JIC06 Coupling
Diver pneumo	1/4" NPT	standard supplied with JIC04 Coupling
Diver gas sample	MIGNON D5	set to 1.5L/min @ 1 bar
Materials		
Case	HDPE	
Plate	Epoxy coated Aluminium	
Reducer	Brass	
Gauges	Stainless Steels & Safety Glass	
Valves	Brass / Stainless Steel	
Fittings	Brass / Stainless Steel	
Piping	Stainless Steel	
Size		
Height	648 mm	
Width	648 mm	
Depth	346 mm	
Weighth	40 kg	

Specifications Radio

System	Description	Type / Parts
Name	SCPxs-2DR-DSP-M2.0	THETIS-P2
Channels	2x	
Wireless Connections	2x optional	
Connectors		
Umbilical :		
<i>Multipin</i>	2x optional	UTS712E10S or other
<i>Banana</i>	2 Channels	4x Banana for each channel
External Speaker	1x	2x Banana binding posts
Power	1x, 100-240Vac	C14
Wired Headset :		
<i>Multipin</i>	1x, With Earphone, Mic & PTT	Lumberg 0271-07
<i>Earphone</i>	1x	Jack 3.5mm (Mono/Stereo)
<i>Mic</i>	1x	Jack 3.5mm (Mono)
Audio Out	2x	RCA
Aux In	1x	Jack 3.5mm (Mono/Stereo)
Battery		
Run time	8 hours	
Charging time	5 hours	

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 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 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

ACCESSORIES Compatible with ZELOS-C3

NSHEADSET5



Single Ear Headset
with dual Jack
(Included with TRITON)

NSHEADSET1



Headset with PTT
and noise cancellation

NSHEADSET4



Heavy Duty Single Ear Headset
with PTT

NSHEADSET6



Heavy Duty Double Ear Headset
with PTT

WLHEADSET1



Wireless Headset
with PTT / waterproof
needs 'Wireless Ready' option

WLHEADSET2



Wireless Headset
with PTT for helmet mount /
waterproof
needs 'Wireless Ready' option

WLHEADSET3



Wireless Headset
with PTT and Hear-Trough
mode / waterproof
needs 'Wireless Ready' option

NSEXTSPK33



Waterproof External Speaker
23 watt

TMIC3-2L



Table Microphone
2 channels

HHMIC3-4L



Handheld Microphone

NOVASUB Available products that can be used in combination with ZELOS :

THALLASA



VIDEO RECORDERS

ARGOS



CAMERAS

HELIOS



LIGHTS

HERMES



COMMS

DUx



UMBILICALS

DLRx & CDURx



CABLES
for video & comms

UDS



Depth Sensor