NOVASUB

# PROTEUS-C1

## PDC-3D4H-3DRVL-DSP-DVR3-M1.0 Diver Gas, Communication, Video recorder, Camera & Light

### PROTEUS-C1 | All in one portable case with 3 diver gas control, communication, video & light control and Digital Depth gauges

The PROTEUS-C1 is a portable all-in-one case. It consists of a case that has a base and a lid. A diver gas panel (BOREAS-C10 or BOREAS-C11) can be found in the base. In the lid are a DVR3 video system and a THETIS-P1 diver radio. The lid also has light control and a Digital Depth Gauge and a Digital Gas Analyser for each diver.

**PROTEUS-C1 is configured with :**

*NOVASUB* **xDR-DSP** self-contained diver intercom that supports communication between a tender and 2 to 4 divers.

*NOVASUB* **DVR3** 3rd generation video recording software developed by Seascape Subsea. The software is completely redesigned from the ground up to accommodate better ease of use, new features and a better image quality.

*NOVASUB* **DDG** Digital diver depth gauge for dive profile logging

*PROTEUS-C1 comes standard with a headset and wireless keyboard.*

**Features:**

- Portable All-in-One
- Compact & Rugged
- 3 Diver Control

**Applications:**

- Commercial Diving

website link : https://www.novasub.com/product/proteus-c1-portable-diver-radio-video-recorder-and-air-control-system/
product video : https://www.youtube.com/channel/UCRqquqmJy8O7XEabp7S1rpQ

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PROTEUS-C1

## PDC-2D3H-2DRVL-DSP-DVR3-M1.0 Diver Gas, Communication, Video recorder, Camera & Light

### PROTEUS-C1 | All in one portable case with 2 diver gas control, communication, video & light control and Digital Depth gauges

The PROTEUS-C1 is a portable all-in-one case. It consists of a case that has a base and a lid. A diver gas panel (BOREAS-C10 or BOREAS-C11) can be found in the base. In the lid are a DVR3 video system and a THETIS-P1 diver radio. The lid also has light control and a Digital Depth Gauge and a Digital Gas Analyser for each diver.

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*NOVASUB* **DDG** Digital diver depth gauge for dive profile logging

*PROTEUS-C1 comes standard with a headset and wireless keyboard.*

**Features:**

- Portable All-in-One
- Compact
- 2 Diver Control

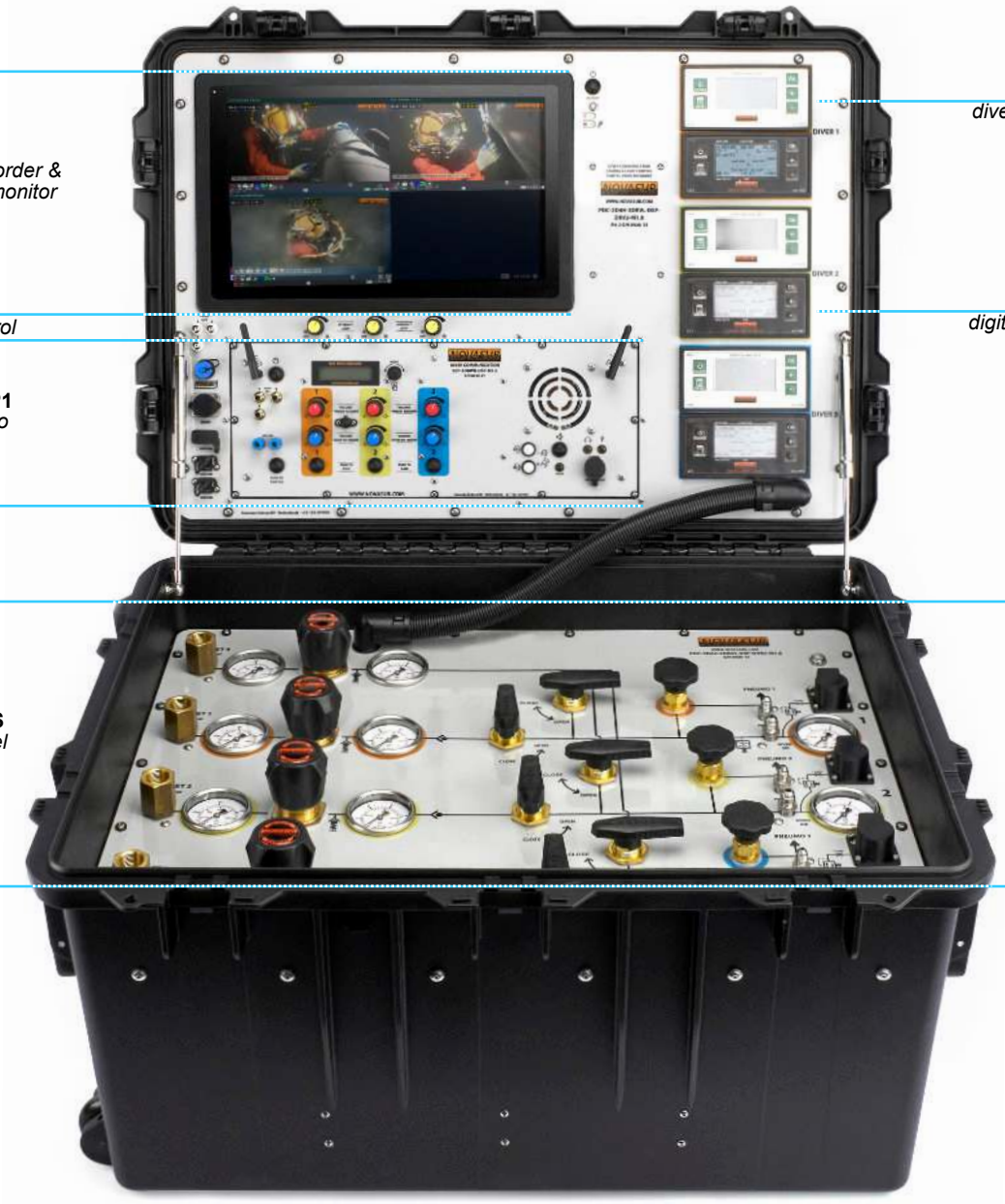
**Applications:**

- Commercial Diving

website link : https://www.novasub.com/product/proteus-c1-portable-diver-radio-video-recorder-and-air-control-system/
product video : https://www.youtube.com/channel/UCRqquqmJy8O7XEabp7S1rpQ

NOVASUB PROTEUS-C1

## PDC-xDxH-xDRVL-DSP-DVR3-M1.0 NOVASUB Products incorporated in PROTEUS-C1

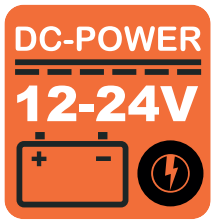



*PROTEUS-C1 3-Diver case*


## PROTEUS-C1 Available options:

### 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.




### DC Power

The system can be expanded with a DC power inlet. This inlet uses a high-grade connector that accepts 12-24 Vdc. The product will have a 2 meter charging cable with either an open-end or a client-specific connector included.

*** 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*

## PDC-xDxH-xDRVL-DSP-DVR3-M1.0 Diver Gas, Communication, Video recorder, Camera & Light

**Specifications :**

| System | Description | Type / Parts |
|---|---|---|
| Name | PDC-xDxHx-DVRL-DSP-DVR-M1.0 | |
| Channels | 2x or 3x | |
| Light Control | Regulated | 32vdc 0-1,7Ah |
| Camera control | Balanced or unbalanced | 32vdc (optional 12-32vdc) |
| **xDR** | Yes | G4 |
| Wireless Connections | 2x optional | |
| | | |
| **DVR** | Yes | G3 |
| DVR Screen size | 15,6” | 1000 nits daylight screen |
| Storage | SSD | 120 GB / 90 GB free for recording upgradable to 240/480/512 GB |
| **Connectors** | | |
| ***Umbilical :*** | | |
| *Multipin* | 2x or 3x, With Comms, Video, Light & Depth | UTS712E10S or UTS714E19S |
| External Speaker | 1x | 2x Banana binding posts |
| Power | 1x, 100-240Vac | C14 |
| NovaBus (Data in/out) | 1x | Bulgin, PX0412/08S |
| ***Wired Headset :*** | | |
| *Multipin* | 1x, With Earphone, Mic & PTT | Lumberg 0271-07 |
| *Earphone* | 1x | Jack 3.5mm (Mono/Stereo) |
| *Mic* | 1x | Jack 3.5mm (Mono) |
| Audio Out | 2x or 3x | RCA |
| Aux In | 1x | Jack 3.5mm (Mono/Stereo) |
| External monitor | 1x | HDMI |
| Ethernet | 1x | RJ45 |
| USB | 4x | USB 2.0 |
| Video Out | 2x or 3x | BNC |
| **Couplings / *INLET*** | | |
| High Pressure | 1/4” NPT, max 350 bar, standard supplied with DIN G5/8" 300 bar | |
| **Couplings / *OUTLET*** | | |
| Diver Air Supply | 1/4” NPT, standard supplied with JIC06 Coupling | |
| Diver Pneumo | 1/4” NPT, standard supplied with JIC06 Coupling | |
| **Battery** | | |
| Run time | 20-45 min. | Serves only as UPS backup |
| Charging time | 12 hours | |
| **Size** | | |
| Length | 787 mm | |
| Width | 559 mm | |
| Height | 500 mm | |
| Weight | 2 Diver 60 kg / 3 Diver 80 kg | |

# DVR3 Digital Video Recording Software with Camera & Light control

## DVR3 Video Recording Software

*NOVASUB* DVR3 is the 3rd generation video recording software developed by Seascape Subsea. The software is completely redesigned from the ground up to accommodate better ease of use, new features, and better image quality.

The software now includes support for touchscreens apart from keyboard and mouse. It also has a new user interface with a taskbar to control all different functions for each diver. These functions include:

- **Camera control**
- **Light control**
- **Recording**
- **Clip Recording**
- **Snapshot**
- **Quick overlay changes**

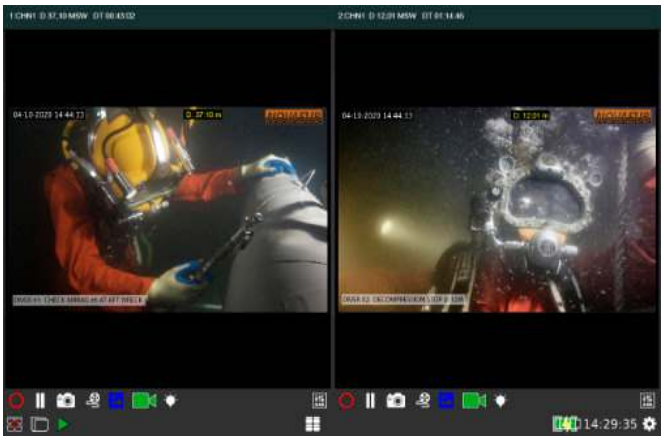
The system has support for extensive overlay functions, such as text, images, and data. These overlay functions can be configured for each diver separately to accommodate every situation. The configurations can be saved and restored to make switching between conditions as smooth as possible.

The system can record in SD and 960H and has an audio input for every channel, recorded within the video file.

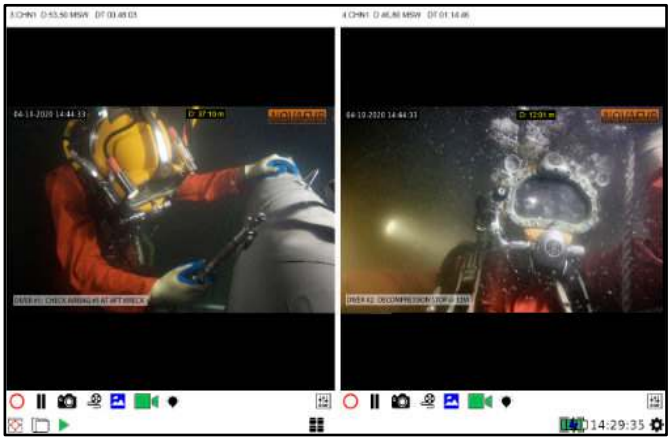
Different channels can be displayed in various ways to ensure you have your operation's best sight. That also includes the ability to connect to an external monitor on which you can select the channels you want to view.

The system has TeamViewer built into the software so you can share your code with anyone who wants to control the system remotely. TeamViewer also makes technical support more convenient and efficient.

TeamViewer



*Screen 2 divers video overlay in **DARK** mode*

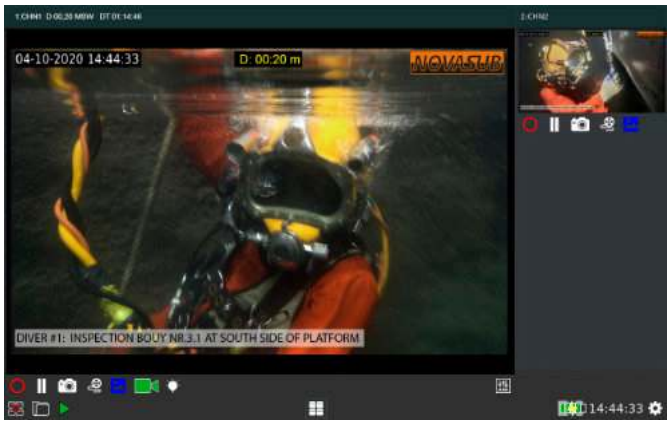


*Screen 2 divers video overlay in **LIGHT** mode*

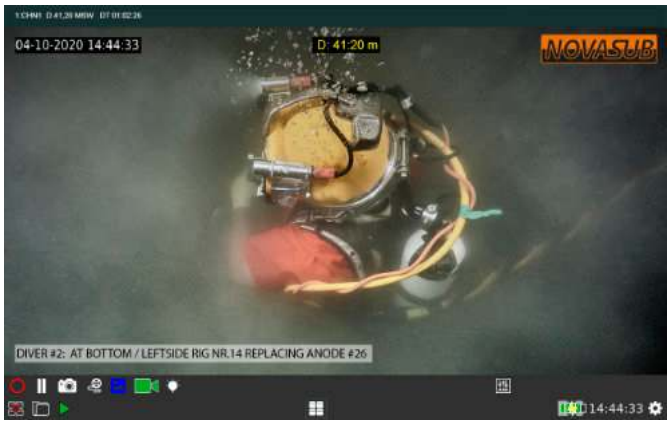
### Recording Specifications

| | | |
|---|---|---|
| **Image Compression** | H.264 | File Format : MP4 |
| **Audio Compression** | MPEG-4 AAC | File Size : 3,5 GB/Hrs |
| **Recording Mode** | Manual | Bitrate(constant): 8 Mbps |
| **Recording Resolution** | PAL: SD (720 x576) \| 960H (960x576) | |
| | NTSC: SD (720x480) \| 960H (960x480) | |
| **Frame rate** | PAL: 25 fps \| NTSC 30 fps | |

**DVR3** has configurable overlay and screen options:




*Screen 2 divers video overlay : main screen with thumbnail for diver 2*




*Screen 1 diver video overlay in **DARK** mode*

## 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 translative 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 are 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 |

# DDG Digital Diver Depth

## DDG | Digital Diver Depth Gauge for dive profile logging

*NOVASUB* **Digital Depth Gauge (DDG)** is a high-end digital pneumo depth gauge. The DDG is developed to replace or supplement the current analog pneumo gauges. However, the DDG is not only a replacement of your standard pneumo depth gauge but a diver depth tool with multiple extra features making diver data registration more accurate and safe.

This gauge is very accurate and can measure depth in two ways:

- ***Using the internal depth sensor connected to the pneumo hose.***
- ***Using the UDS-3 external pressure sensor at the end of the diver umbilical.***

The option with an external pressure sensor ensures a continuous measurement of the actual depth without surface operations.

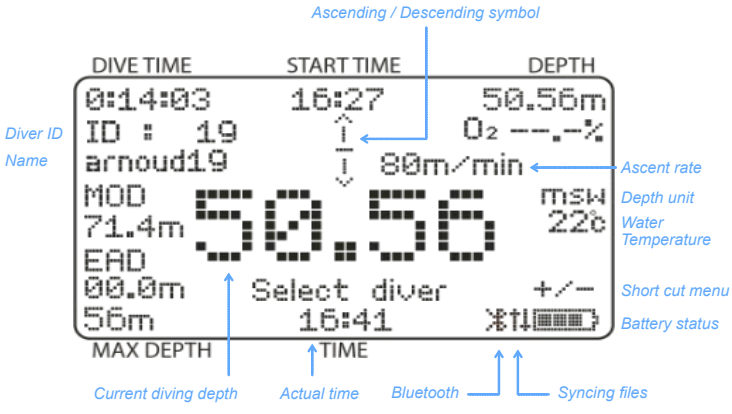
Using the constant depth measurements makes the DDG a complete tool for commercial dive logging. The DDG has the standard basic features of starting the Dive time chronometer; Dive time and Start time are logged along with the maximum reached depth. During the dive, the display also shows the water temperature of the diver's water surrounding. It calculates if the diver is descending or ascending and indicates the speed of ascending.

The DDG has more; the dive can be logged in a user-selectable interval. This log is stored in the DDG internal memory and can be recovered using the Windows-based DDG Visualizer software. Each dive can be logged to a selected diver number to keep track of each diver's dive information. In the DDG Visualizer software, the Dive Profile will be displayed graphically along with all logged data. In this program, the diving profiles can be added commentary and exported for further use.


### Functions:

- **Actual & Maximum Depth**
- **Depth readout shown in large text size**
- **Start time & dive time (manual and auto)**
- **Diver name input**
- **Nitrox equivalent air depth settings**
- **Digital calibration**
- **Adjustable zero-point**
- **Adjustable to MSW or FSW**
- **Adjustable to Fresh or Saltwater**
- **Selectable internal or external pressure sensor use**
- **Configurable for other depth sensor ranges**
- **Alarms: Diver depth, Time, Ascent rate, Max. Operating Depth**
- **Pneumatic valve control relay**
- **Output for alarm relay or buzzer**
- **Low-pressure alarm input**
- **Smart charger with battery capacity indication**
- **Automatic diver logging**
- **Logging of all dives (selectable per diver)**
- **Visualization software for reports of the log-profiles**
- **Firmware upgradable by user**
- **Serial string output to video overlay or another device**

### **DDG** Display Explanation




### **DDG** Specifications

| | |
|---|---|
| **Screen** | Transflective LCD with backlight |
| **Temperature range** | -10 ~ 60 °C |
| **Dive logging start** | At 1m depth |
| **Dive counter** | 20 divers, 255 logs each |
| **Ascent rate** | 0 ~ 20 m/min |
| **pp0$_2$ value range** | 1,4 ~ 1,6 bar |
| **Nitrox value range** | 21 ~ 60 % |
| **Internal depth sensor** | 0 - 60 MSW accuracy ± 0.25% |
| | |
| **Pneumo** | Male ¼“ BSP |
| **Diver sensor (UDS-3)** | 4 ~ 20mADC 2-wir |
| **Data transfer** | USB/RS232 |
| | |
| **Power Supply** | 12-32 vDC |
| **Battery Capacity** | 2200 mAh @ 6V |
| **Battery Run time** | min. 12 hours |

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# ACCESSORIES

## ACCESSORIES Compatible with PROTEUS-C1

### NSHEADSET5

**Single Ear Headset**
with dual Jack
*( Included with PROTEUS )*

### 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 mopunt / waterproof

***needs 'Wireless Ready' option***

### WLHEADSET3

**Wireless Headset**
with PTT and Hear-Trough mode / waterproof

***needs 'Wireless Ready' option***

### TMIC3-2L

**Table Microphone**
2 channels

### K400

**Logitech Wireless Touch Keyboard K400**
U.S. International
*( Included with PROTEUS )*

### NSEXTSPK33

**Waterproof External Speaker**
23 watt

### HHMIC-3

**Handheld Microphone**

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# RELATED PRODUCTS

## NOVASUB Available products that can be used in combination with PROTEUS :

**BOREAS**

DIVING AIR
CASES & PANELS

**ARGOS**


CAMERAS

**HELIOS**

LIGHTS

**HERMES**

COMMS

**DUx**

UMBILICALS

**DLRx & CDURx**


CABLES
for video & comms

**UDS**

Depth Sensor