

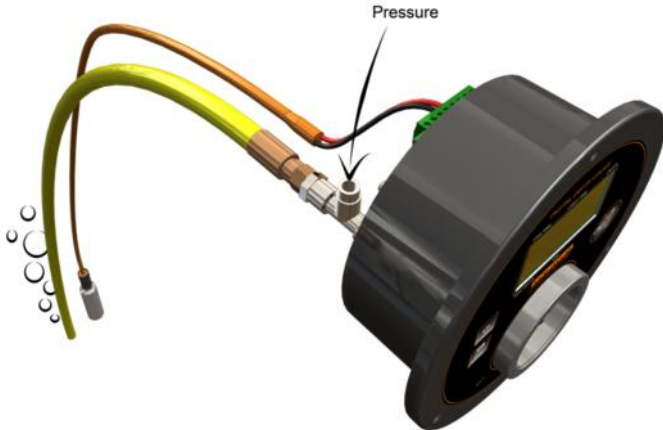


**NSDDG2v1.2, panel mount**

The digital depth diver depth gauge is developed to replace or supplement the current analog pneumo gauges. 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. The DDG is available in two versions, with or without analog depth gauge. The round panel mount 6" DDG1 with analogue gauge and the square DDG2 panel mount box.



**NSDDG1v1.2, panel mount with analog gauge**

## Features

- Dive logging
- USB & Bluetooth sync
- Internal Pneumo sensor
- External depth sensor connection
- Transflective LCD with backlight.

## Applications

- Pneumo Gauge
- Black-Box
- Digital depth Gauge
- Automatic dive logging

**The Digital Depth Gauge is a high end digital pneumo depth gauge.**

The DDG is not only a replacement of your standard pneumo depth gauge but a diver depth tool with multiple extra features making the diver data registration more accurate and safe. The DDG has a standard built in depth sensor with a range of 0- 60 MSW. This sensor connected to the pneumo hose is used to measure the diver depth in the traditional way by pressurizing the pneumo hose until it is complete free of water.

Using the DDG in this way will not add much extra features as the diver depth reading is not constant and dependable on the manual pressurizing of the pneumo hose. For this reason the DDG is fitted with a connection for an external pressure sensor. This sensor is placed at the end of the diver umbilical at the diver end. The external depth sensor signal is transmitted to the surface using 2 wires in the diver umbilical cable.

Novasub has developed the UDS-3, a standard external depth sensor with a range of 0-60 MSW. The sensor signal is a digital signal over a milliamp signal. The external sensor is calibrated and has an accuracy better than 0,25% FS. By calibrating the external sensor, the DDG and the connection to the DDG do not need calibration.

Using the constant depth measurements makes the DDG a complete tool for the 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. The most important information for the Dive supervisor's log. During the dive the display also shows the water temperature of the divers 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, this to keep track of each divers 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.



DDG Visualizer, software for PC, tablet and Smart Phone. The software makes synchronizing the logged dives easy with Bluetooth or wired (RS232/USB) connection.

## Pressure sensors (external):

Connect at the diver end of the umbilical using 2 cores.

- 0.25% (standard UDS-3)
- 0.1%
- 0.05%



UDS-3 External pressure

The DDG meter has great functions such as switching between dive type and water type or changing settings like ppO2, Nitrox value and depth units. There are also a number of alarms which can be set to give a signal to the user when they are exceeded. This makes diving a lot safer and easy to use. The alarms are for example maximum depth, dive time, ascent rate and MOD.



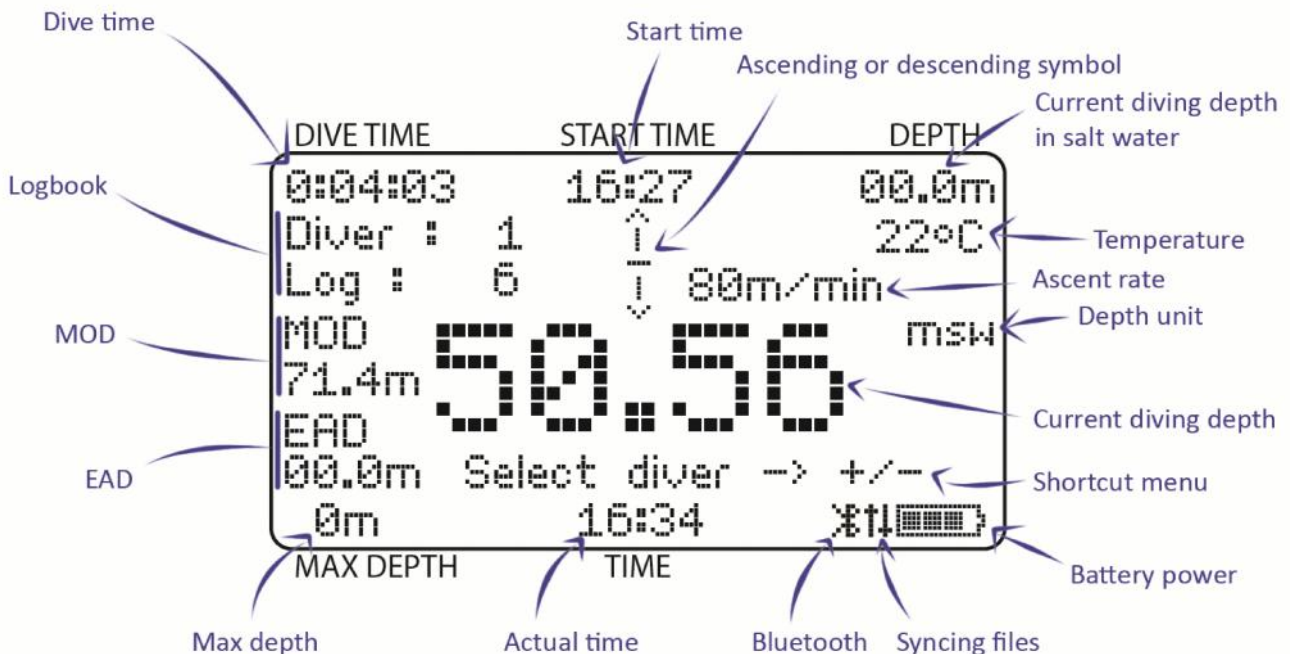
## Technical Specifications

- NSDDG1 outside diameter:  $\varnothing$ 195 mm (6 in) x 95 mm
- NSDDG2 outside dimension: 144x72x100 mm
- Transflective LCD 128x64 dots with backlight
- LCD size visible area: 33x66 mm
- Temperature operating range: -10 ~ 60 °C (14 ~ 150 °F)
- Counting starts and stops automatically at 1 m (3 ft.) depth
- Dive counter: 20 divers, 255 logs (per diver)
- Ascent rate: 0 ~ 20 m/min (0 ~ 65 ft./min)
- ppO<sub>2</sub> value range: 1,4 ~ 1,6 bar
- Nitrox value range: 21 ~ 60 %
- Logging interval: 2 sec. range: 1 ~ 60 sec.
- Manometer: 60 MSW (EN 837.1; scale accuracy: Cl. 1,6)
- Internal Depth sensor: 0 to 60 MSW; accuracy:  $\pm$  0.25%
- Pneumo connector: Male 1/4" BSP
- External diver sensor (UDS-3): 4 ~ 20mADC 2-wire current output HART protocol accuracy:  $\pm$  0.25%
- External power supply: 12-32 vDC
- Internal Power: NiMH battery pack, 6v-2200 mAh
- Battery operating time: 10-24 hrs
- Log and data transfer to PC (USB/Bluetooth or USB/RS232 and rs485 (NovaNet)
- 1x serial data outputs 1x rs232

## 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 Salt water
- Selectable internal or external pressure sensor use
- Configurable for other depth sensor ranges
- Alarms: Diver depth, Time, Ascent rate, Maximum 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 other device

**Main window indicating most of the functions. All dive data is directly visible.**



### Related Products:

- SCC-2DRVL-DVR
- SCC-PCDVR-04
- UDS-3

### Future add-ons:

- Decompression tables
- Decompression logging

### Distributed by: