

ANALOG INSTRUMENT USER MANUAL


WARNINGS

IMPROPER OR UNTRAINED USE OF INNOVASUB ANALOG INSTRUMENTS MAY RESULT IN SERIOUS INJURY OR DEATH. THOROUGHLY READ AND UNDERSTAND THIS USER MANUAL BEFORE SCUBA DIVING.
DO NOT USE ANALOG INSTRUMENTS UNDER LOW VISIBILITY CONDITIONS.
THE PRESSURE GAUGE IS ONLY APPROVED FOR USE WITH COMPRESSED AIR CONFORMING TO EN12021
AND CANNOT BE USED WITH NITROX / O2 MIXTURES EXCEEDING 22% OXYGEN.

SPG WITH HOSE**1. DESCRIPTION**

- Please see Page 2 for applicable models
- Nylon-glass filled housing
- Shatterproof lens
- Shock resistant Bourdon tube design
- 7/16"-20 UNF standard fitting compliant with ISO 263
- 90 cm (36") braided/rubber high pressure hose
- Maximum working pressure: 300 bar
- Operation temperature: -5-45°C (0-100°F)

2. CALIBRATION MEASUREMENTS

at 500 PSI	± 25 PSI	at 50 bar	± 2.5 bar
at 1000 PSI	± 50 PSI	at 100 bar	± 5 bar
at 3000 PSI	± 150 PSI	at 200 bar	± 10 bar
at 4000 PSI	± 200 PSI	at 300 bar	± 15 bar

3. USE

The pressure gauge is a safety device used to monitor residual air pressure in your SCUBA cylinder (tank) for open-circuit SCUBA diving up to a maximum depth of 100m / 328ft. The pressure gauge is intended to prevent a failure in the supply of the breathing gaseous mixture in the scuba cylinder that divers breathe throughout a dive. The pressure range of 50 bar and below is marked in red to alarm divers of an approaching failure in the supply of breathable gaseous mixture. NEVER exceed 100m and check the pressure gauge frequently to ensure there is a sufficient supply of breathing gas in your tank cylinder.

4. ASSEMBLY

Ensure that the pressure gauge is compatible with the maximum working pressure of your 1st stage regulator before assembly. The maximum working pressure for the pressure gauge is 300 bar. Locate the high pressure ports marked 'HP' on the 1st stage regulator (please refer to your regulator user manual) and remove the HP port plug from the port you select. Place a small amount of halocarbon lubricant (Christo-lube MCG 111) on the HP hose end threads and O-ring. Fully screw the hose into the HP port of the 1st stage regulator and carefully torque to 4 to 4.5 Newton meters (35 to 40 inch pounds).

5. ANNUAL INSPECTION

Return the pressure gauge to an authorized InnovaSub technician for annual inspection to ensure safe operation and maintenance. An authorized InnovaSub technician will inspect the pressure gauge, depth gauge, and compass, verify dial accuracies, and replace the pressure gauge swivel (air spool).

6. PRE-DIVE PREPARATION

Test if the instrument is properly connected to the 1st stage regulator by slowly turning the screw knob until the tank is completely open while avoiding to look directly at the instrument dial. After pressurizing the system, listen for any leaking and check the pressure gauge needle to determine if there is a drop in pressure. If so, double check the entire system and avoid diving until the problem is resolved. If the instrument shows visible signs of disrepair like cracking, please immediately return the instrument to an authorized InnovaSub technician to determine whether the assembly can be fixed or requires replacement.

7. POST-DIVE MAINTENANCE

Soak the instrument in fresh, warm water for one hour and flush the instrument boot with running water. Towel dry before storing in a cool, dry place out of direct sunlight. KEEP OUT of extreme heat environments exceeding 45°C (100°F) to avoid harming the instrument. When transporting, please store in a soft padded bag avoiding to knock or bump the instrument.

8. CE CERTIFICATION

The pressure gauge (pressure indicator) is a Category III device as defined under European Regulation 2016/425 and complies with the specifications set out in the harmonized European Standard EN250. The pressure gauge has been tested by Dive Lab Inc. at 1415 Moyland Rd., Panama City Beach, FL 32407, USA to guarantee a minimum level of safety at a maximum depth of 100m in conformity with European Regulation 2016/425. EU type examination was performed by SGS Fimko Oy Notified Body number: 0598 Takomotie 8, FI-00380 Helsinki, Finland. Declarations of conformity may be found at <https://www.innovasub.com/support/>. These certifications are for metric only.

9. MARKINGS

- Reference Marking: CE 0598
- Reference Standard: EN 250
- Full Scale: 400 bar
- Working Pressure Rating: 300 bar
- Date Code: MM/YY
- Manufacturer: INV (InnovaSub)

DEPTH GAUGE**1. DESCRIPTION**

- Nylon-glass filled housing
- Shatterproof lens
- Scales up to 60m
- Max depth gauge

2. ACCURACY MEASUREMENTS

0-30m: ± 0.5m

30-60m: ± 1.75m

3. MAX DEPTH GAUGE

The black needle (with red tip) indicates current depth. As depth increases, it pushes the thinner needle. As depth decreases, the black needle (with red tip) continues to indicate current depth while the thinner needle remains at the maximum depth reading achieved. To reset the max depth needle for a new dive, turn the slotted knob located in the center of the gauge face counter clockwise until it makes contact with the black needle (with red tip).

WARRANTY

Product warranty terms and conditions are included in the warranty certificate located in the product packaging.

Please note the warranty does not cover annual inspection costs.

This user manual does not include any language that could imply liability or direct coverage for limited product liability.

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**ANALOG INSTRUMENT USER MANUAL
AND
BOOT INSTALLATION/REMOVAL INSTRUCTIONS
for
PRESSURE GAUGE, DEPTH GAUGE, AND COMPASS**

[Innovasub.com](https://www.innovasub.com)

BOOT INSTALLATION/REMOVAL INSTRUCTIONS

WARNINGS

CONSULT AN AUTHORIZED INNOVASUB TECHNICIAN FOR INSTALLATION OR REMOVAL OF MODULES.
IF AN AUTHORIZED INNOVASUB TECHNICIAN IS UNAVAILABLE, PLEASE USE CAUTION WHEN INSTALLING OR REMOVING MODULES FROM THE BOOT.
THE WARRANTY DOES NOT COVER DAMAGE CAUSED FROM IMPROPER INSTALLATION OR REMOVAL OF MODULES.
DO NOT USE AEROSOL SPRAY ON THE BOOT TO AVOID DEGRADATION OF THE BOOT MATERIAL.
DO NOT POKe HOLES THROUGH SLOTS IN THE BACK OF THE INSTRUMENT TO AVOID DAMAGING COMPONENTS.

BOOT INSTALLATION INSTRUCTIONS

INSTALLING INSTRUMENTS IN CONSOLE BOOTS

To install the pressure gauge:

- Insert the regulator end of the hose down through the pressure gauge cavity of the boot and out through the handle opening. If the pressure gauge is fitted with a quick disconnect, connect it after it is through the handle.
 - Pull the hose through the handle of the boot until the pressure gauge module is above the opening of the pressure gauge cavity.
 - Grab the top section of the boot with one hand and push the pressure gauge module down into place.
- After the pressure gauge module is in the console, squeezing the edges of the cavity open until the lip covers the outside diameter of the pressure gauge lens may be necessary to ensure proper installation.

To install the depth gauge :

- Place the console with the module cavity facing up. Position the depth gauge over the upper cavity in the boot and dip the bottom edge into the cavity.
- Correct the alignment of the depth gauge as needed to ensure straightness.
- Press the top edge of the depth gauge module with the palm of your hand.
- Press the depth gauge module while watching the alignment until it is fully engaged inside the console.

To install the compass:

- Place the console with the compass facing up. Position the compass module directly on the compass cavity of the boot aligned with the side viewing window over the viewing notch of the console's compass cavity.
- Using the palm of your hand, press directly down on the top of the compass module until it slides into place. Turn the compass bezel to ensure it rotates properly in both directions.

INSTALLING INSTRUMENTS IN WRIST BOOTS:

- Place the module over the cavity in the boot and dip the bottom edge into the cavity.
- Correct the alignment of the module as needed to ensure straightness.
- Press the module into place while ensuring correct alignment.

BOOT REMOVAL INSTRUCTIONS

REMOVING INSTRUMENTS FROM CONSOLE BOOTS

To remove the pressure gauge:

- Grab the hose protector firmly and slide it down the hose away from the console boot.
- Place the console with the pressure gauge facing up and grab the top depth gauge section of the boot with one hand and hose end of the boot with the other. Carefully bend both ends downward while applying firm upward pressure at the middle section of the boot with one or both thumbs.
- The pressure gauge will be forced upward past the lip of the boot. Reposition the hand at the hose end of the boot so that you can push the hose into the boot and the pressure gauge out of its cavity while continuing to bend the boot.
- If necessary, pull the hose through the pressure gauge cavity to remove.

To remove the depth gauge:

- Press the depth gauge module out by applying pressure on the back of the console.
- Please DO NOT pry the depth gauge from the boot. Slowly increase pressure from behind the depth gauge to cause it to slide out of the boot.

To remove the compass:

- Place your thumb under the bezel at the side view window and lift slowly upward. The compass module will pivot up and out of the boot.

REMOVING INSTRUMENTS FROM WRIST BOOTS:

- Peel the lips of the boot downward off the module while applying pressure from underneath to work the module out slowly. ONLY IF NECESSARY, USE EXTREME CARE:
- Insert a flathead screwdriver down between the boot and module until the tip rests just underneath the module.
- Please DO NOT pry the module from the boot. Increase pressure under the module until it slides up the screwdriver and out of the boot.

PN	Model Description
DPX-101	PG module
DPX-101bx	SPG w/No Boot Braided Hose
DPX-101rx	SPG w/No Boot Rubber Hose
DPX-101b	SPG w/Braided Hose
DPX-101r	SPG w/Rubber Hose
DPX-201b	2-Gauge w/Braided Hose
DPX-201r	2-Gauge w/Rubber Hose

EU Declaration of Conformity URL

<https://www.innovasub.com/support/>

Authorized EU Representative:

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