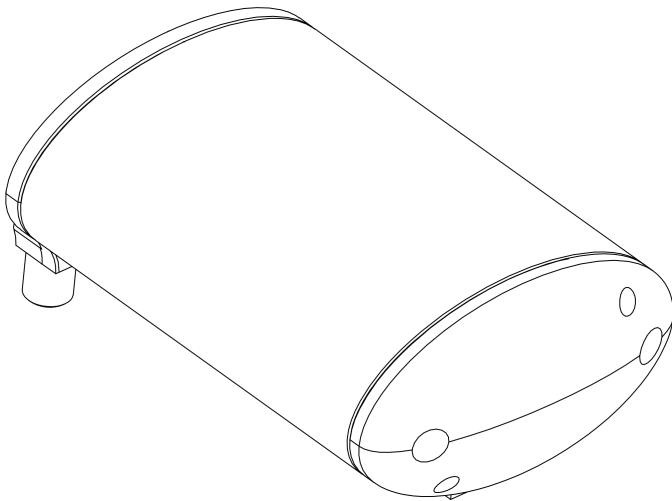




GENEINNO

Laser Scaler User Manual

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1. Introduction

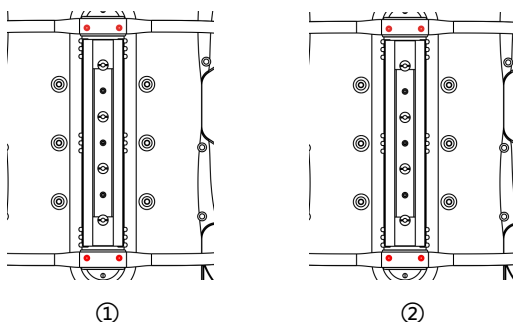
GT_Laser-1 The laser scaler is for measuring the underwater objects dedicated equipped for intelligent underwater robot. Connect with the unique extension port of Geneinno Intelligent Underwater Robot through a customized waterproof connector. Emit two green laser of 510-530nm, the fixed distance between the two spots is 75mm. The laser is high brightness, good monochromaticity, good directivity, and good coherence. The spot size would not exceeds 10mm within a distance of 10 meters.

2. Specification

Dimensions	160mm*105mm*72mm
Weight	720g(air), 200g(water)
Maximum Depth	175m(fresh water)
In-put Voltage	DC 5V
Max Electric Current	0.15A
Laser Wavelength	510-530nm
Laser Colour	Green
Spot Mode	Point no scattering
Light Spot Diameter	Less than 10mm in 10m
Working Temperature	-10°C ~ 50°C
Port Type	Dedicated 8-pin waterproof connector
Product Adaptation	Intelligent underwater robot T1/T1 Pro dedicated

3. Usage Guidelines

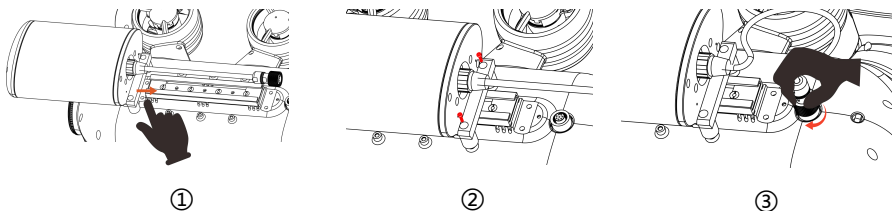
Support bracket installation



- ① Use a cross screwdriver to unscrew the four fixing screws of the bracket and remove the original bracket of the underwater robot.
- ② Replace the original bracket for the support bracket, and install 4 fixing screws with a cross screwdriver.

Note: Need to change to support bracket for accessory application

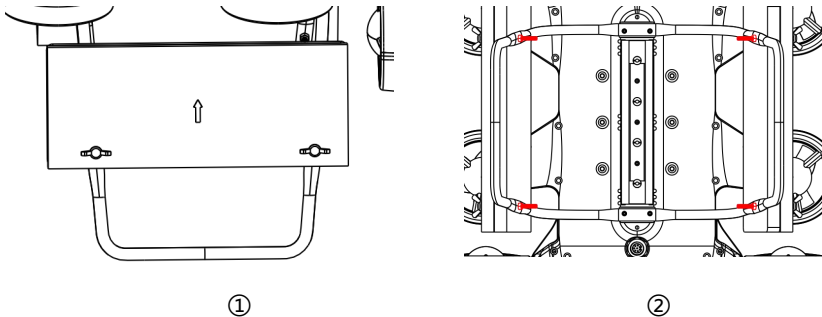
Accessory Installation



- ① Unscrew the sealing metal cover of the 8-pin waterproof connector of the intelligent underwater robot counterclockwise. Match the slot of laser to the slide rail in the bottom of the host, slide the laser according to direction indicated by the arrow and fix by screws when it in right position.
- ② Align the screw with the hole and install the screws.
- ③ Insert the connector of the thruster into the waterproof connector of the extension port. Tighten it clockwise.

Note: The connector has an anti-reversal insertion design, please pay attention when inserting, please do not rotate when inserting, to avoid damage to the pin and its internal structure.

Accessory Buoyancy Block Installation



- ① Align the mounting hole with the hole on bracket, with the arrow of buoyancy block upward.
- ② Install the wing screw through the hole, insert from the outside to the inside, and tighten the nut by hand.

Note: Only two buoyancy blocks needed for the laser scaler. Please install symmetrically. Excessive installation may affect the underwater operation of the underwater robot.

Device start

- First, connect the laser scaler to the underwater robot, and then connect the Wireless Relay connector to the robot.
- After the connection is done, the underwater robot is powered on. Use a tablet or smart phone to connect, and enter the control page in the Geneinno APP, click the icon, to control the device.

Note: Please refer to "Geneinno Underwater Robot T1/T1 Pro User Manual " for APP operation instructions.

4. Maintenance & Precautions

Precautions

- Before starting to use, please check all waterproof connectors for water and other liquid residues, please wipe them clean before connecting.
- It is strictly forbidden to shine the light on others, especially in the eyes
- Please ensure that it is forbidden to look directly at the laser emitting port at any time and under any circumstances.
- It is strictly forbidden to shoot the light onto the transparent glass panel, and prevent the light source from passing through the glass panel to shine on the other side of the glass. Conventional glass has a reflectivity of about 4%, which may also cause the reflected laser light to enter the eyes and cause damage.
- When working with lasers, please take off your watch to prevent the light reflected by the watch from entering your eyes and causing injury
- It is forbidden to place flammable, explosive materials and black paper, cloth, leather and other materials with low ignition point on the laser path.

Maintenance instructions

- After finishing use, please rinse with fresh water and wipe dry in time to reduce seawater corrosion and store in a dry and ventilated place.
- Please use smooth tools such as cotton cloth to clean the surface of this product.

After-sale service

More information please check in Geneinno APP Help selection.

If you need other after sales support or technical issue, please contact

support@geneinno.com or check our website “Service & Support” ,

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

This manual is subject to update without prior notice