GENEINNO

TITAN

The Deepest Diving Underwater Drone
for Everyone

TITAN
DIVE TO AN INCREDIBLE 150M (492 FT) DEEP AT AN UNBEATABLE PRICE!

With Titan, everyone can have fun getting to know the ocean.

Most drones provide a fun way to you capture beautiful outdoor views and while hiking or traveling. But with an underwater drone, anyone can explore the unknown ocean depths! The functionality of a standard, airborne drone expands to meet challenging ocean currents with high performance motion technology.

Titan is the most affordable underwater drone on the market with the highest available water pressure rating, built to go wherever your underwater adventure takes you. With its powerful 4K 30fps camera and streamlined, game-like control system, Titan can be your eyes under the sea. Able to withstand depths up to 150m (492ft), farther than any other drone to date, you can pilot Titan with an easy to use smartphone/tablet app. Capture stunning underwater images and videos, find plentiful locations to fish, or even carry out accurate technical inspections of underwater equipment. The possibilities are endless!

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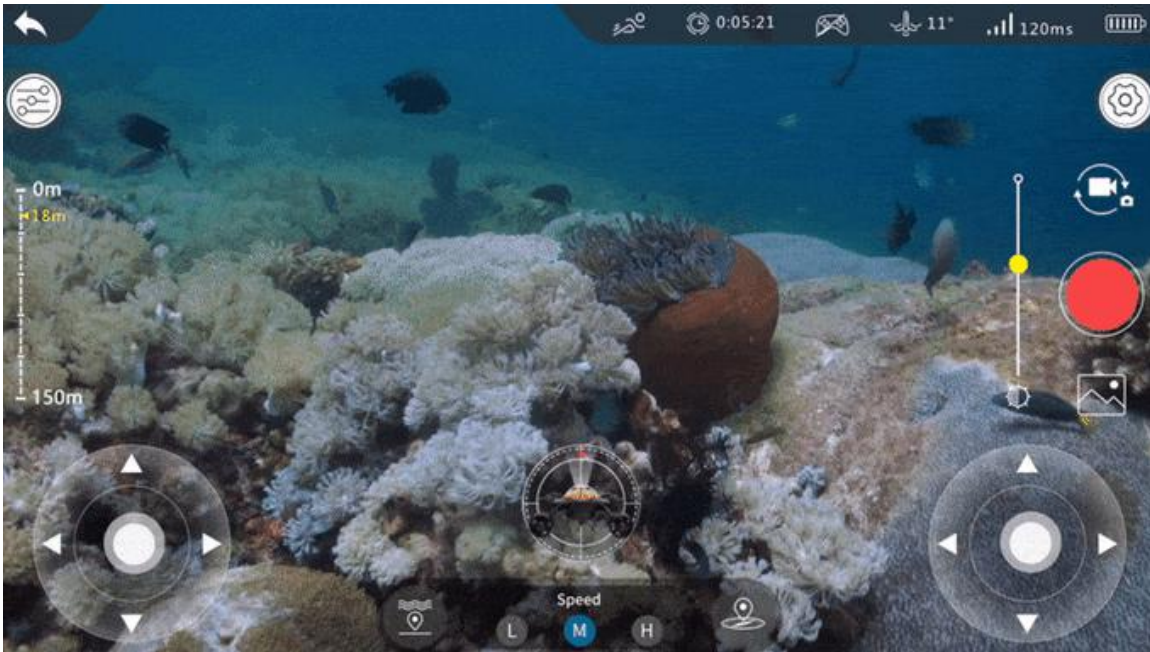# TITAN
underwater drone
4K UHD Camera

4K Camera | 1080p Live Video Feed | Color Correction Dive Filters | 3000LM Lights

4K UHD Footage & 8 Megapixel Photos

Titan's built-in camera features a 160° ultra-wide angle lens, creating cinematic 4K videos and spectacular 8MP photos in rich detail and color.

2.5 F2.5

4K UHD

160° 160° WIDE-ANGLE FOV

1080P Real-time Streaming

Our smartphone app gives you total control while piloting through a live video feed of your underwater drone.

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Dive Filters For Color Correction

Red and purple dive filters provide color correction while capturing footage in water at depths of 5m to 21m (15' to 63'), perfect for fresh or saltwater that appears different color due to algae.

3000LM Lights for Diving in the Dark

Powerful LED lights on each side of the camera illuminate the darkest depths of the ocean.

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TITAN
underwater drone

Ultra Powerful & Stable

Diving Range 150m   6 Thrusters   Adaptable Interface   Portable Hardshell Case

150M Deep-Farther Than Any Other Consumer Underwater Drone Can Reach

We designed Titan with a diving range of up to 150m, so Titan can dive down and unravel the mysteries of the deep blue sea, while you stay high and dry, and enjoy the adventure.
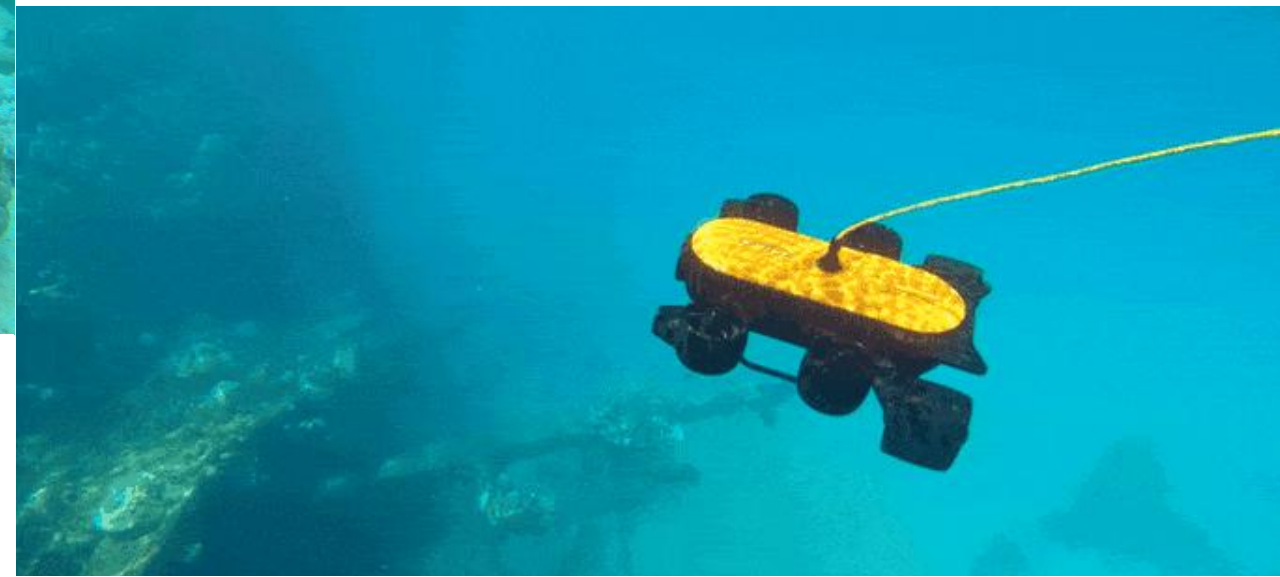
6 Thrusters For Ultra Powerful Motion

Powered by 6 high performance thrusters and guided by a precise steering algorithm, Titan commands the speed, endurance, and agility needed to withstand demanding deep dives and strong currents.

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Adaptable Interface

Rolling Case Design

Titan's underside features an accessory extension port that enables exciting add-ons for different diving purposes.
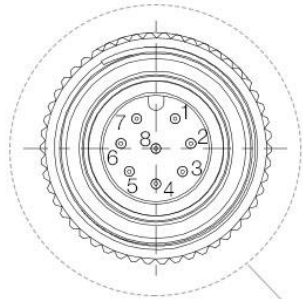
PIN1: 9~12v(wide-range)
PIN2: 5v
PIN3: gnd
PIN4: uart tx
PIN5: uart rx
PIN6: audio+
PIN7: audio-
PIN8: gpio

Accessory Extension Port
extension kit

Sonar ●
Robotic Arm ●
Underwater Microphone ●
Other accessories ●

★ All these extension kits depend on development timeline

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underwater drone

More Fun To Pilot

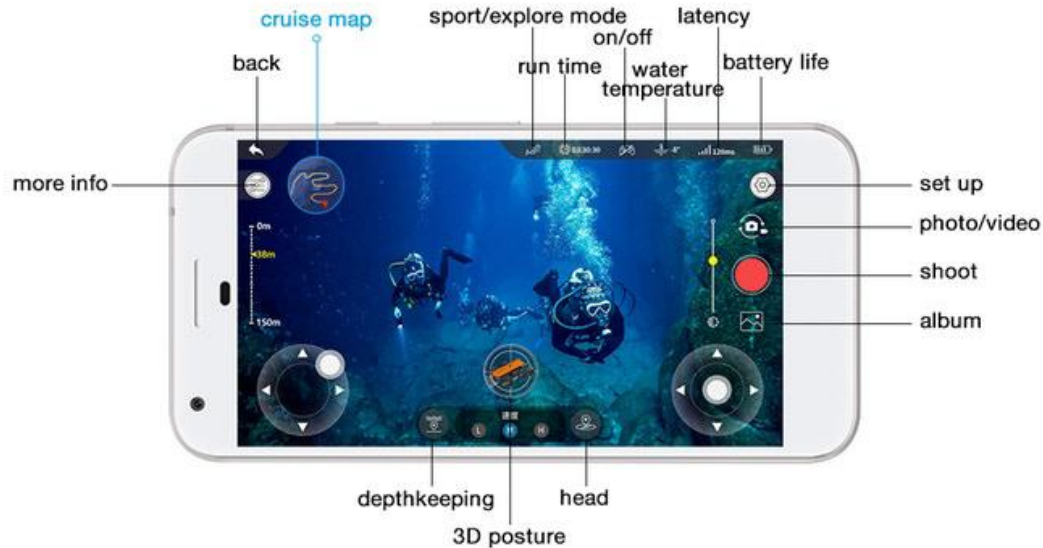 Game-like Controller

 Navigate like a pro

 4 Hour Battery Life

 2018 Red-Dot Award Winning Design

Navigate Like A Pro

The GeneRov app is designed specifically to assist you knowing the drone's precise path at all times.

Fun To Pilot With Easy To Use Controller

Titan's included remote controller uses a 2.4GHz frequency to connect with viewing devices, like your smartphone or tablet. It transmits live footage at 1080p, allowing you to watch epic moments unfold in real-time.

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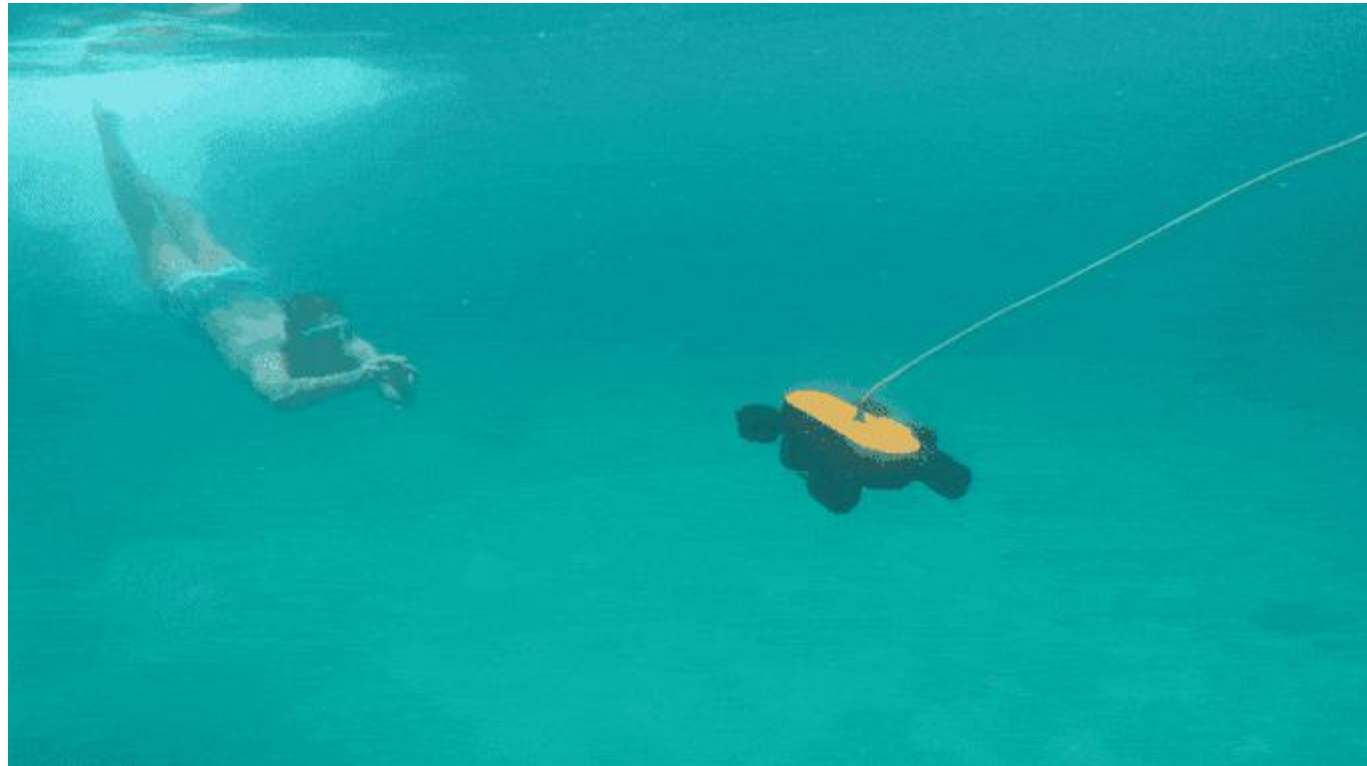
New function - High angel shot and low angel shot both at 60 degree
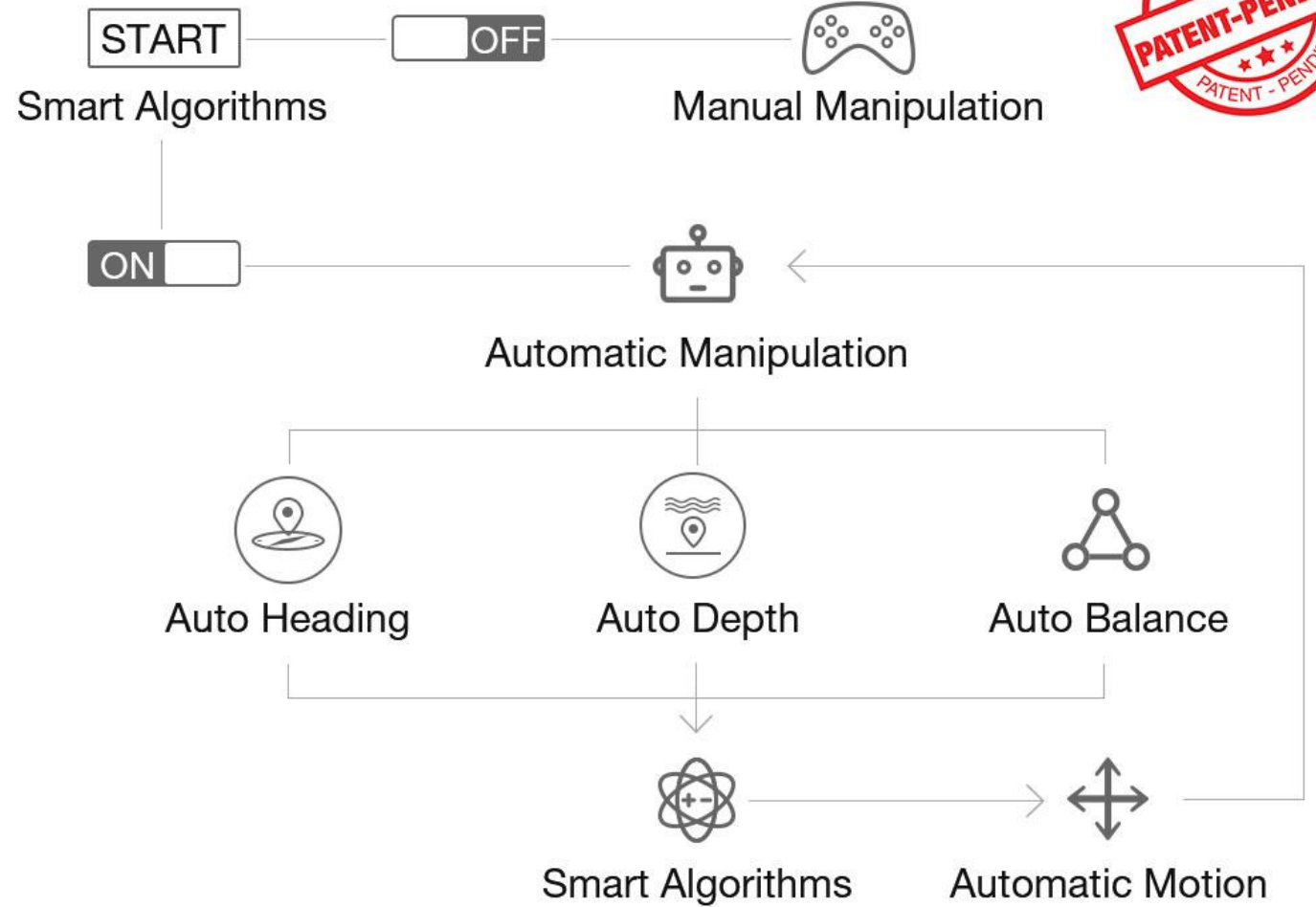

Low angel shot

High angle shot

Long-lasting Battery Keeps You Online

Polymer lithium batteries power Titan for up to 4 hours while only requiring 2 hours of charging time, more than enough for a single dive.

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reddot award 2018
winner

START —— OFF —— Manual Manipulation

Smart Algorithms

ON —— Automatic Manipulation

Auto Heading   Auto Depth   Auto Balance

Smart Algorithms   Automatic Motion

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ENDLESS OPPORTUNITIES

PROFESSIONAL INSPECTION

LEISURE AND VACATION

AQUACULTURE

YACHTING

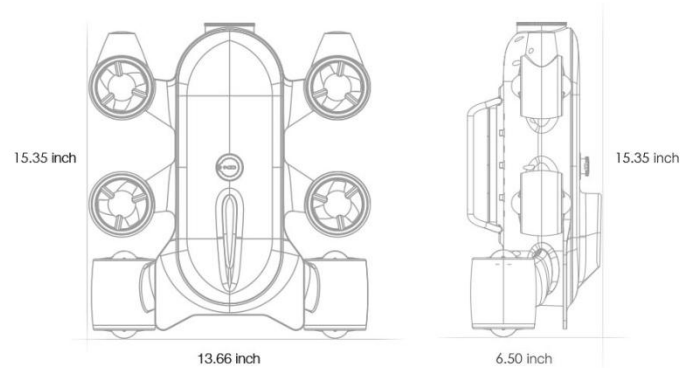RECORD DIVING FOOTAGE

SHIPWRECK EXPLORATION & RESEARCH

FISHING

SALVAGE WORK

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TEC SPECS

Dimension and weight

15.35 inch

13.66 inch

15.35 inch

6.50 inch

Size 15.35*13.66*6.50 inch/390*347*165mm

Weight 9.7 lbs/4.4kg

Performance

Diving Range up to
150m/492ft

Thrusters Configuration
6 thrusters (2 horizontal, 4 vertical)

9 Axis Sensor Accuracy
Roll, Pitch Error <+/-1°; Yaw Error < +/-1.5°

Maximum Forward Speed
2m/s (4 knots, in still water)

Operating Temperature
-10℃~50℃

Field of View
160°

Camera
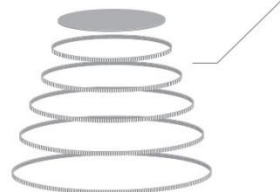
Image Size 8M: 3840X2160 16:9
Video Resolution 4k 3840 X 2160 30fps
ISO Range 445
IRIS F2.5
Shutter Speed 1/30S
Storage 32G
LENs size 1/2.3"
Image sensor 1/2.3" SONY CMOS
Focus 30cm focus, FF
Live Streaming 1080P 30fps/720P 30fps
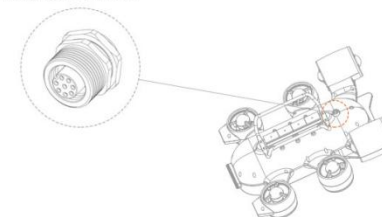
Lights

Light Beam Angle 110°

Color Temperature 7000k

Lumen 1500lm x 2

Battery and Charger

Battery Capacity
97.2Wh /10.8V / 9000mAh

Charging Duration
2 hours

Run Time
4 hours (normal operation)

ROV Charger Input
100~240VAC

ROV Charger Output
12.6VDC

Accessory Extension Port

8 pin 5v/12 DC supply IO port

Wireless Surface Unit

Wireless Range	50m
Cable Diameter	4.2mm
Cable Length	50m/150m
Cable Working Strength	100kgf
Cable Breaking Strength	300kgf
Frequency	2.4GHz

GeneROV App and Controller

Drone Controller

BLE4.0

GeneROV app for smartphone/tablet

Download on the App Store

GET IT ON Google Play

*Available on

Compatibility

Android 5.0 or later

IOS 10.0 or later

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TITAN

USER MANUAL

V1.0.0
2018.08

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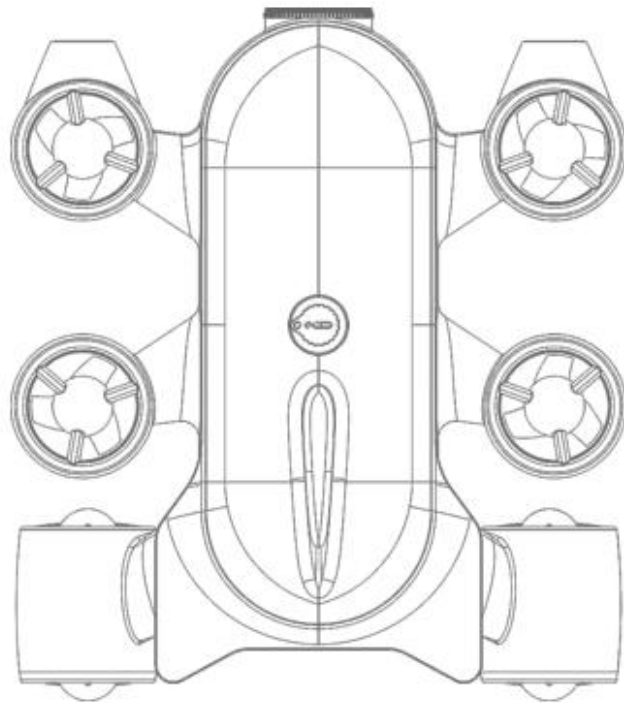
一、User tips

packing list :

1.Titan, wireless relay, cable
2.Charger
3.Balancing weight
4.The bluetooth handle
5.Filter (users'choice)
6.User's Manual

Attention :

1.It is recommended that the weight Balancing block should not be installed in fresh water, and the weight Balancing block should be installed in seawater. The installation position should be adjusted according to the actual balance state of the host machine, whichever is the best balance that the host machine can achieve.

2.Wireless relay design for low grade waterproofing standards, do not use directly in water.

3.At the beginning of use, it is recommended that the cable be connected to the wireless relay first, and then to the host machine. The system will be powered on.

4.Please control the speed of movement during use to avoid scratches or equipment damage caused by collision.

5.After the end of use, please rinse with fresh water and dry , especially keep the insertion dry.Reduce corrosion of sea water and store in dry ventilation

6.Titan is designed for positive buoyancy. It is recommended to be used in clean water so as not to stick sediment to affect buoyancy balance.

7.Please connect the Titan to wireless relay before putting it in the water, set the fresh/salt water according to using environment

Manual :

The contents and pictures of this manual are subject to the actual version and the latest version. The content is subject to change without prior notice. Please visit the official website "Download" page for the latest version.

APP:

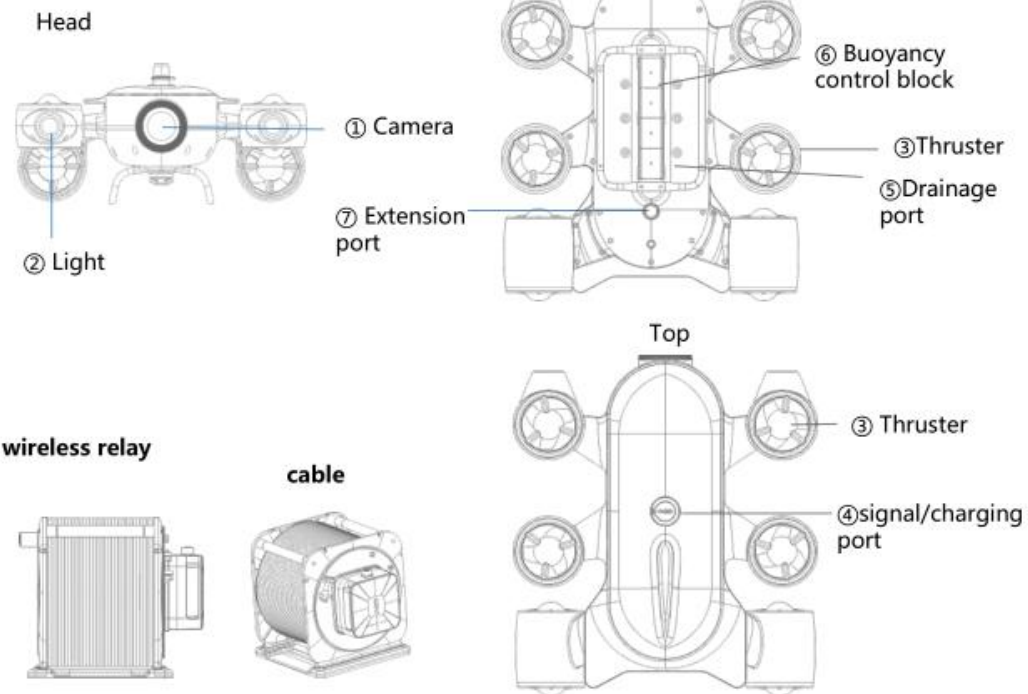Android   IOS

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二、 Product

Overview :

Titan is a consumer level underwater intelligent robot, equipped with A17/A7 dual-core CPU, supporting H265, 4K video encoding and decoding.
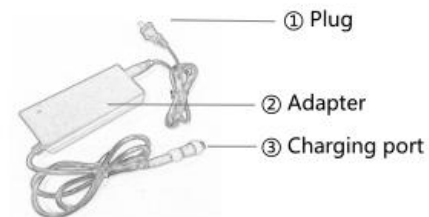
Equipped with professional deep-sea starlight level 4k camera, front 3000lm led light, and built-in special image processing DSP,

At the same time, the whole machine adopts industrial-grade waterproof scheme, with a maximum diving depth of 150m.The maximum speed is 2m/s, 2 high-power horizontal thrusters and 4 low-power vertical thrusters. The closed-loop control algorithm can effectively realize 360 degree full-attitude control, underwater hovering and self-balance.
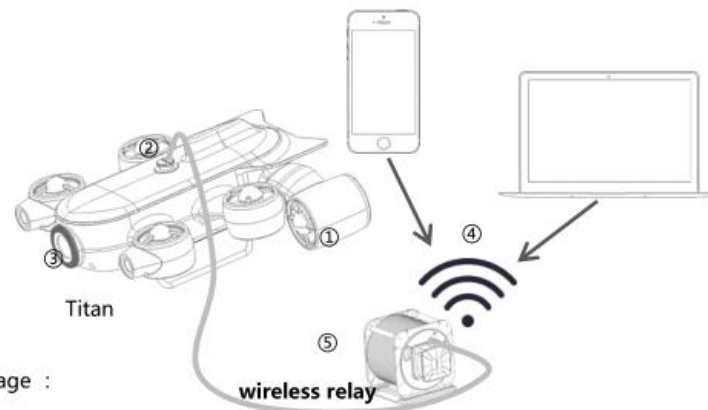
Titan graphic :

Head

① Camera

② Light

wireless relay

cable

Bottom

⑥ Buoyancy control block

③Thruster

⑤Drainage port

⑦ Extension port

Top

③ Thruster

④signal/charging port

Charger

① Plug

② Adapter

③ Charging port

Connect Titan

Android and IOS

②

③

①

④

Titan

⑤

wireless relay

Usage :

1.Connect device: Insert one end of the wireless relay cable into the socket of the wireless relay and tighten it with force. Insert the other end into the socket of the host machine and tighten it with equal force, then complete Titan connection and power on.

2.App connect: when Titan gets to work(about 1 minute after connection), the LED light on ,Titan will flash twice every several seconds, it means the Titan is ready to connect to your phone, pad and PC devices, search the Wi-Fi hotspot named GENEINNO_XXXX, connect your device to it, the default passwords is 88886666, then get to the app control interface.

3.Operation: Put Titan into the water, you can freely control Titan to rise and dive.Wireless relay has low grade waterproofing standard. It is recommended to be placed on shore or on board and fixed to avoid the difficulty of recovery after being dragged into the water by Titan.

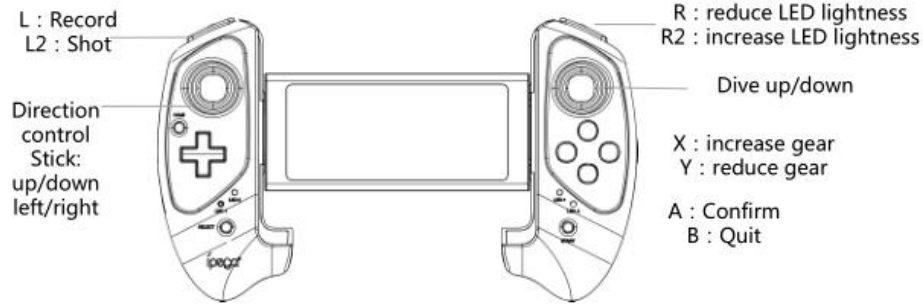GENEINNO

Bluetooth controller

1. Connecting :

A: Start up: push the left switch to on, press the Home button (about 2 seconds) to LED1 and LED2 to blink, and start the handle.

B: Handle connection: after starting up, the working lamp flashes and the handle enters the connection mode. Open the right menu of APP homepage - bluetooth handle,
Click to search the bluetooth handle, and you will find the handle address and name (geneinno-xxxx). Click to connect. Led1/2 handle will always be on after successful connection.

C. Power off: push the left switch to off and turn off the handle. 3 minutes after starting up, the bluetooth device is not connected, and the handle is off automatically. There is no operation for 5 minutes after the bluetooth connection of the handle, and the handle is off automatically

D. Bluetooth handle connection status confirmation:
After successful connection of bluetooth handle, open GeneROV APP and enter the full-screen control interface of APP. The handle icon will appear in the status bar at the top of APP

L : Record
L2 : Shot

Direction control Stick:
up/down
left/right

R : reduce LED lightness
R2 : increase LED lightness

Dive up/down

X : increase gear
Y : reduce gear

A : Confirm
B : Quit

Charge

1. Titan battery info will be seen at APP operation interface, battery signal light info will be seen at wireless relay; Please charge Titan when battery is low using standard charger and plug; charge Titan for 3 hours, wireless relay for 2 hours; signal lights on charger is red when it's charging, turn into green when fully charged.
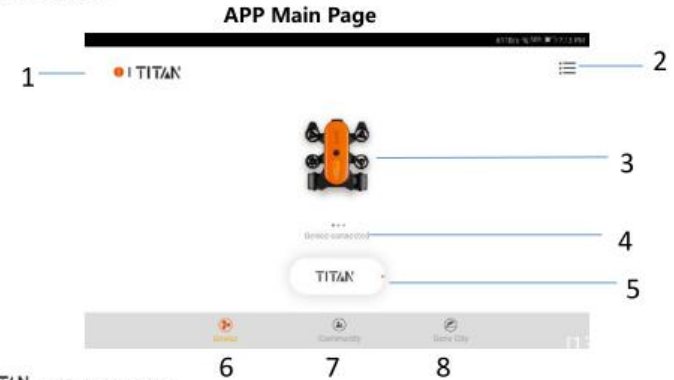
2. Be sure, that there are no water in the plugs,before you start charging.

Charger

Charge

Titan

Buoy
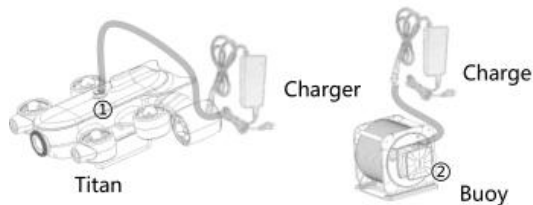
① How to charge Titan: tighten the plug between charger and Titan

②How to charge wireless relay: tighten the plug between charger and wireless relay

APP interface

APP Main Page

1
2
3
4
5
6   7   8

[1] ● I TITAN : Product type
[2] ≡ : Menu (APP update, hardware update, Bluetooth controller, about and help options)
[3] 🐛 : Titan picture
[4] 设备已连接 : Current status
[5] TITAN : Current equipment name and entrance
[6] : Device
[7] : Forum
[8] : Underwater City

APP info

The information consists of memory information, battery information, motor speed value and version information. As shown in figure:

SD card storage   Battery   Motor speed   Version info
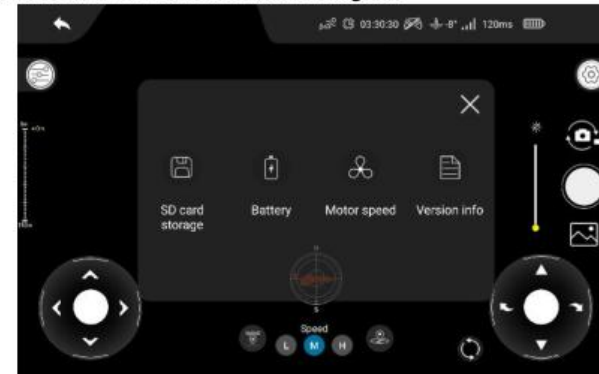
1. Memory information: memory information displays the current memory capacity of the fuselage
2. Battery information consists of current, voltage, electric quantity, water pressure, internal humidity and internal temperature data
3. The motor speed information can display the current motor speed in real time.
4. Version information displays the current device firmware version information.

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APP interface

APP Operation Interface
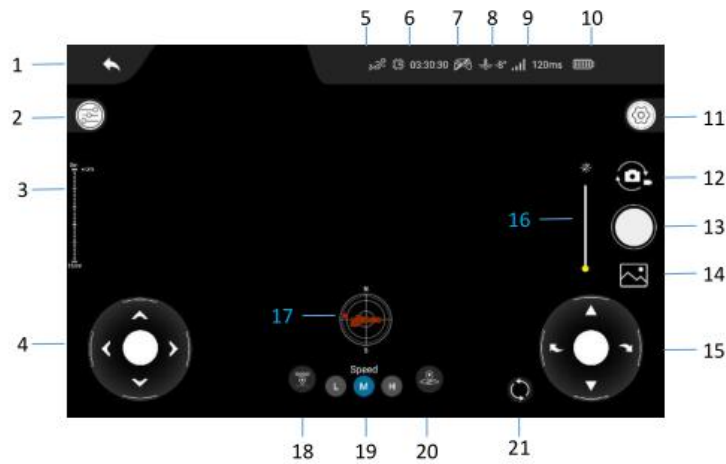
|		
[1]	↰	: Return
[2]	🕸	: Menu
[3]	▬	: Depth
[4]	✛	: Up/Down/Left/Right
[5]	🚗	: Motion mode
[6]	03:30:30	: Running Time
[7]	🎮	: Bluetooth controller
[8]	-8°	: Temperature
[9]	120ms	: Delay
[10]	🔋	: Battery
[11]	⚙	: Settings
[12]	📷	: Shot/Film mode
[13]	⚪	: Shot/Film
[14]	🖼	: photos/Videos
[15]	✛	: Attitude control
[16]	▬▬	: LED
[17]	🎯	: 3D real-time attitude
[18]	🔒	: Lock Down Depth
[19]	🔘	: Motion Switch
[20]	🧭	: Lock Down Direction
[21]	↻	: Restore 0 pitch angle

APP System Settings

The setting of App system consists of camera setting, recording setting, environment setting, sensor setting, mode setting and recovery factory setting.

App system settings interface
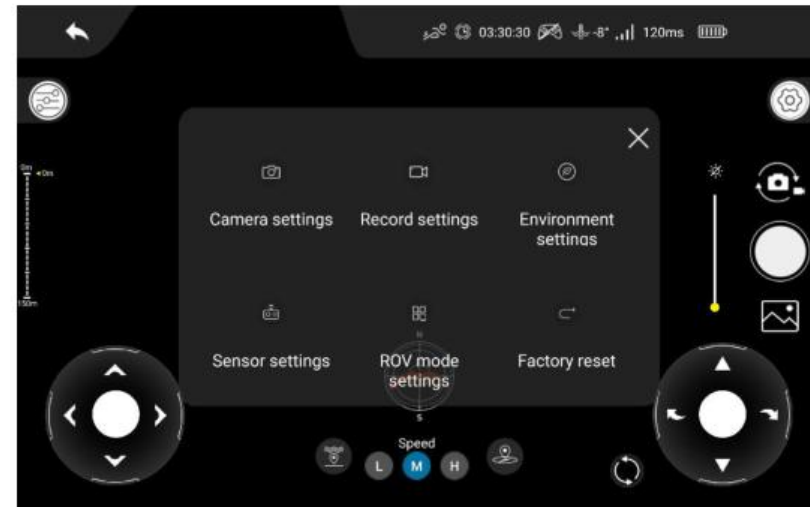
1. Camera Settings are composed of three parts: camera Settings, live stream quality and anti-shake switch.
   Photo setting can set single/continuous shot, The number of continuous shots/time interval can be set to 1-99
   The quality of the live stream can be selected as 1080P/720P/480P
   The anti-shake switch can be turned on or off to improve the quality of the picture taken and recorded during the movement.
2. Recording settings consist of resolution, format, file time length, watermark switchers
   Resolution: 3840*2140/1920*1080.
   Format: H265/H264, H264/H265 will be saved as MP4.
   File time length: range from 0-30, unsegmented division when time length is 0.
   Watermark switchers: add depth, temperature, time and other info on photo/video.
3. Environment settings has the option for fresh/salt water, select salt water or fresh water, salt water or fresh water has effect on depth accuracy only.
4. Inside the sensor setting is the compass correction, the user can correct the compass here.
5. The attitude balance switch is set in mode
   The device enters the self-stabilizing mode after turn on, greatly optimizing the operation experience of the motion
   The equipment will not automatically adjust its attitude after turn off.
6. Restore to factory setting.

App photo:

App photos: divide into remote ROV directory and local directory, save, delete and select all the selected photos by long press

Export photos and videos to the computer

1. PC

Windows:

First, use a laptop to connect to the device WIFI, and then enter \\192.168.8.8 in the start-run to open the device file system, Photos is the photo storage folder, Videos is the video storage folder, and when opened, you can copy, cut, delete or copy files from the computer.

Mac:

The Mac connects to Titan WIFI, and then opens the Finder application on the Mac. After opening the application, press the command+K key on the keyboard and enter SMB :// 192.168.8.8 in the server address.

2. Android

First, use the tablet or mobile phone to connect the device. After successful connection, enter the photo video page, select the remote ROV directory, open and select the photo or video you want to open for download.

Troubleshooting

1. Cannot search for GENEINNO WIFI hotspot after cable connection:

Check if the cable is connection is tight.

Check the buoy battery indicator, if the buoy battery is low.

2. Connected to the GENEINNO WIFI hotspot, but can't see the real-time picture, can't control:

Check if Titan LED flashes, such as flashing 3, 4 or 5 times, the internal fault of the host, please contact after-sales customer service.

When LED light does not flash, please confirm whether the battery is low, try to use it again after charging; still can not be used after charging, please contact after-sales customer service.

3. Motor obstruction

Please power off first, manually remove the obstacles, and then turn on the power again. For more information, please open the APP for help information.

5. Appendix

Product parameter list

Drone	
Weight	9.7Ibs (4.4kg)
Dimension	15.35×13.66×6.5 inch
	390×347×165 mm
Depth	492.15ft (150m)
Speed	6.6ft/s (2m/s)
Degrees of Freedom	Forward/back, rise/fall, turn left/right
Thruster	6
Camera	
Image Sensor	1/2.5 inches SONY CMOS
Video Resolution	4K
Video Format	MP4(H264/H265)
Photo Fomat	JPEG
FOV	160°
Lumen	1500lm×2
Micro SD	32G
Tether	
Strength	500N(50KG)
Length	164ft/328.08ft/492ft (50m/100m/150m)
Diameter	4.5mm/0.18 inch
Sensors	
IMU	6 axis gyro & accelerometer+3 axis Compass
Depth Sensor	+/- 0.2m
Temp. Sensor	+/-0.5℃
Battery	
Chemical	Lithium
Capacity	9000mAh(Titan)/6000mAh(wireless relay)
Run time	4 hours(Titan)/6 hours(wireless relay)
Charge time	3 hours(Titan)/2 hours(wireless relay)
App	
Platform	IOS 9.0 and Android 5.0

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5. Appendix

Product warranty

1. If the product fails during operation, please contact and consult with our service team as soon as possible to avoid delay in your use and maintenance period.
2. This product is subject to the whole machine tracking service from the date of purchase by the customer. The warranty is one year. During the warranty period, the company is responsible for free repair due to the failure caused by the equipment itself. If the equipment is scratched or impacted, resulting in damage, which is caused by the user, or self-disassemble and etc., will not enjoy free maintenance by the company.
3. If the warranty period is exceeded, the maintenance fee will be charged for the repair to the customer. (repair cost + component fee)
4. After-sales service, please log in to the company website for online message:
 Website: www.geneinno.com

You are most welcome to give us valuable advice on our product quality and after-sales service through our website online messages.

TITAN USER MANUAL

Facebook

YouTube

wechat

weibo

深圳市吉影科技有限公司
www.geneinno.com

GENEINNO

Design Packaging

Contact Information

Gianluca Salone

Drone Solution Services Pte Ltd

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www.dronesolutionservices.com