

Gladius submersible drone

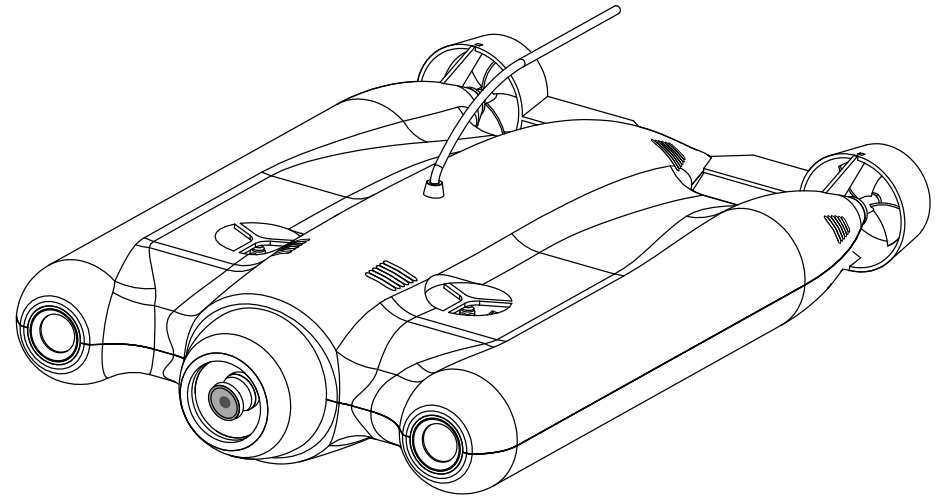
# GLADIUS

## Quick Start Guide

V1.0



Model: GLADIUS ADVANCED



Address: ROOM 506 XITA BUILDING, DIGITAL CULTURE INDUSTRY BASE,  
SHENLAN AVENUE 10128, NANSHAN DISTRICT, Shenzhen, China  
Email: [Service@chasing-innovation.com](mailto:Service@chasing-innovation.com)  
Website: [www.chasing-innovation.com](http://www.chasing-innovation.com)



# ! DISCLAIMER

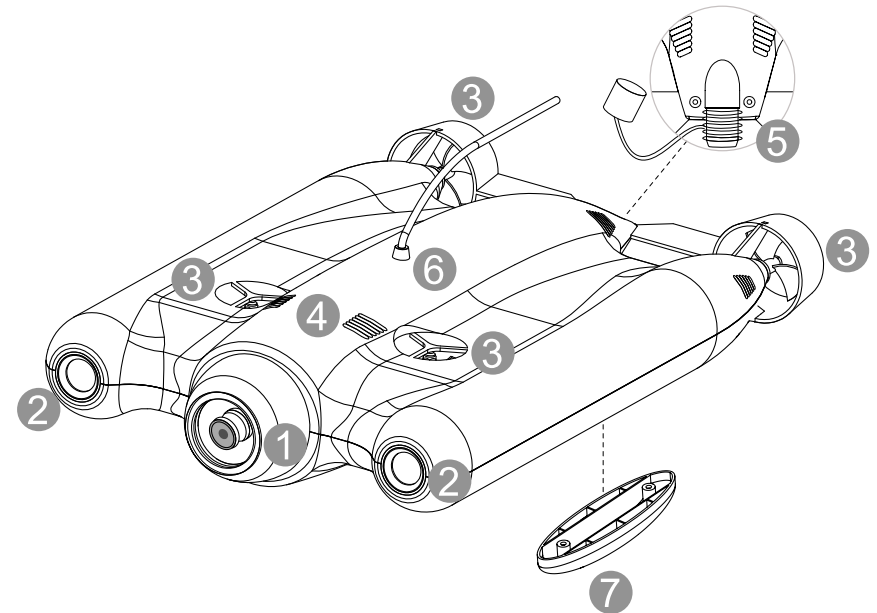
Please read this entire document carefully before using Gladius.  
And by using this product, you hereby signify that you have read  
this disclaimer carefully and that you understand and agree to  
abide by the terms and conditions herein.

GLADIUS is a smart submersible drone built for filming, observing and explore under the deep water.  
Chasing-innovation accepts no liability for damage, injury or any legal responsibility incurred directly  
or indirectly from the use of Gladius in following conditions.

01. Damage(s) or injuries incurred when users are drunk, taking drugs, drug anesthesia, dizziness, fatigue, nausea and any other conditions no matter physically or mentally that could impair your ability.
02. Damage(s) or injuries caused by subjective intentional operations.
03. Any mental damage compensation caused by accident.
04. Failure to follow the guidance of the manual to assemble or operate.
05. Malfunctions caused by refit or replacement with non-Chasing-Innovation accessories and parts, or unauthorized modification, disassembly or shell opening not in accordance with official instructions.
06. Damage(s) or injuries caused by using third party products or fake Chasing-Innovation products.
07. Damage(s) or injuries caused by mis-operation or subjective mis-judgment.
08. Damage(s) or injuries caused by mechanical failures due to erosion, aging.
09. Damage or injury caused by operating the unit with a low battery alert, the drone is out of maximum safe range and depth.
10. Damage(s) or injuries caused by knowingly operating the product in abnormal condition (such as the assembly is not completed, or the main components have obvious faults, obvious defect or missing accessories).
11. Damage or injury caused by operating the drone in the sensitive zone such as the military area or public waters without official permission.
12. Damage or injury caused by using in bad water conditions (such as high winds, or turbid zone).
13. Damage or injury caused by uncontrollable external factors, including severe collision, tidal wave, swallowed by animal.
14. Damage(s) or injuries caused by infringement such as any data, photo or video material recorded by the use of Gladius.
15. Other losses that are not covered by the scope of Chasing-Innovation' s liability.

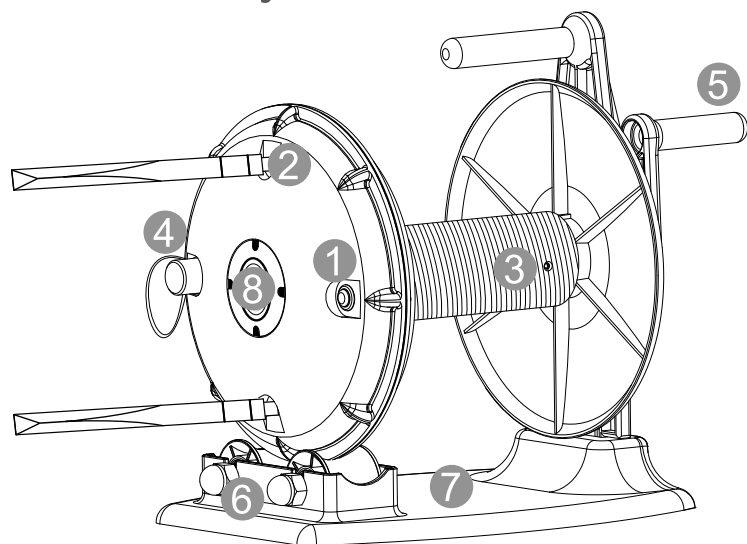
# 📖 GLADIUS INTRODUCTION

## Submersible Drone



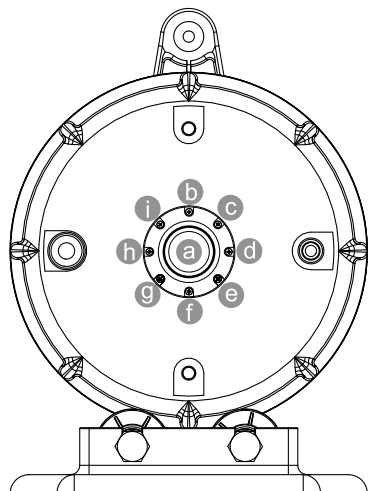
- |               |                                                                          |
|---------------|--------------------------------------------------------------------------|
| 1. Camera     | 5. Charging Port                                                         |
| 2. LED Light  | 6. Cable Connector                                                       |
| 3. Propeller  | 7. Buoyance Modules                                                      |
| 4. Drain Hole | (Default comes with freshwater module, user can replace seawater module) |

## Winder & Buoy



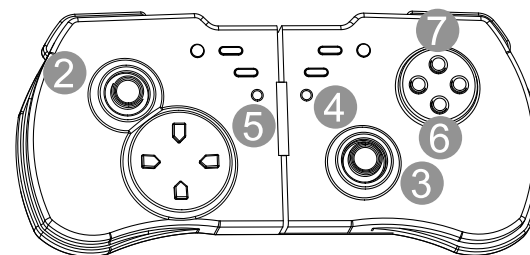
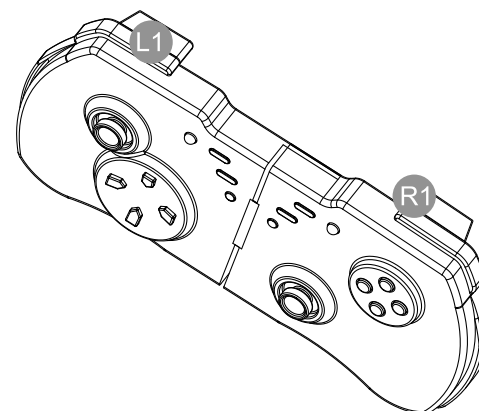
- |                 |                      |
|-----------------|----------------------|
| 1.Power Switch  | 5.Winder Handle      |
| 2.Antenna       | 6.Buoy Bottom Roller |
| 3.Cable         | 7.Winder Seat        |
| 4.Charging Port | 8.Buoy Light Set     |

### Buoy Light Set



- a : Navigation Light ( Colored LED light flicker :  
making it easier to get your buoy's position )
- b : 100% Power Indicator (Green)
- c : Power Indicator (Green)
- d : Power Indicator (Green)
- e : Power Indicator (Green)
- f : Wifi Connection Indicator
- g : Power Line Communication Power Indicator (Green)
- h : Power Line Communication Connection Indicator (Yellow)
- i : Power Line Communication Net Connection Indicator (Green)

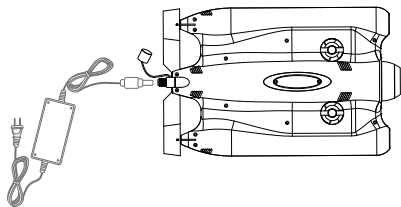
## Remote Controller



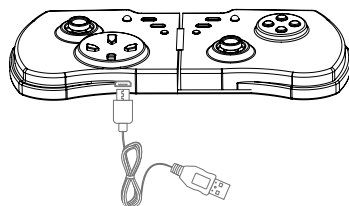
- |                                       |                                  |
|---------------------------------------|----------------------------------|
| 1.Light: L1 reduce light/R1 add light | 5.SELECT: Manual/ Stabilize mode |
| 2.Left Stick: Forward/Back/Left/Right | 6.A: Shutter button              |
| 3.Right Stick: Up/Down/Roll           | 7.Y: Switch Photo/Video mode     |
| 4.START: unlock                       |                                  |



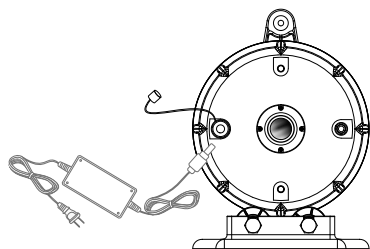
## CHARGING GUIDE



- 1 Charging for Drone**  
Unscrewing the cover Counter clockwise, insert and charging, screwing the cover clockwise.



- 3 Charging for Remote Controller**  
Charging with 5V Input USB port.



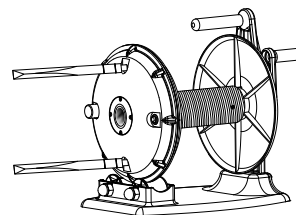
- 2 Charging for Buoy**  
Unscrewing the cover Counter clockwise, insert and charging, screwing the cover clockwise.

**Remark:** red light indicate charging, green light indicate full charge

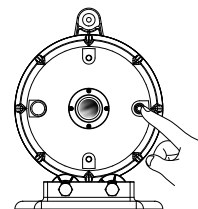


## INSTALL & CONNECTION

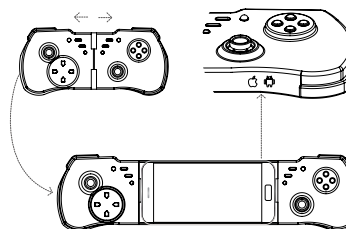
- 1 Download IF.Dive App**  
Android / iOS  
( iOS8 version /Android 4.4 is suitable )  
Scan the QR code to download  
or search on ios store / google play



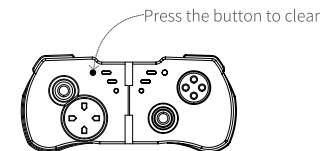
- 2 Install the buoy antenna**  
Turn round and fix the 2 antennas clockwise.



- 3 Start button**  
Press the button with sound and light on



- 4 Extend the controller and put phone inside**  
Slide switch to left for iOS and right for Android



Available devices

HandJoy nPro  
connecting

- 5 Bluetooth connection**  
Clear the record when change the smart phone, turn on the Bluetooth, search "HandJoy nPro" and connect it.  
\*If fails, please clear the Bluetooth HandJOY connection record on smartphone, connect it again.



Gladius\_apxx

- 6 Wi-Fi connection**  
Open App, click WI-FI icon, search "Gladius\_apxx", Password: 12345678.

- 7 Operation Guide**



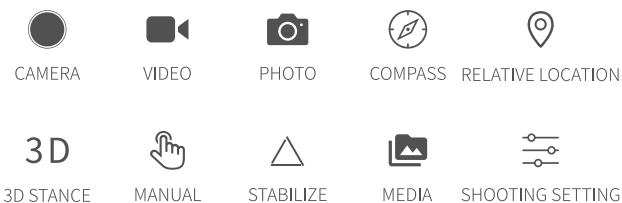
# OPERATION GUIDE



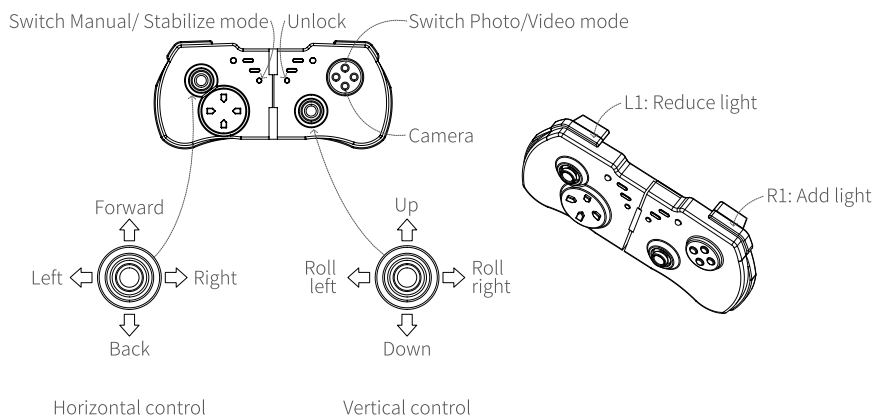
1. To protect the light sets, please DO NOT turn the accent light on unless Gladius has been put in water.
2. For the best experience, please firstly let Gladius dive to 3 meters to exhaust before other operations.
3. The speed can be set on the app from 30% to 100% (the default factory setting is 50%). To prevent collision, please set the speed to 70% or below for new pilot.
4. DO NOT put the buoy far away from you (should be within 100 meters)
5. Please watch video tutorials on the official website([www.chasing-innovation.com](http://www.chasing-innovation.com)) before using your Gladius for the first time.

## 1 App usage

IF.Dive App is dedicated for Gladius.



## 2 Remote controller & Drone



# SPECIFICATIONS

|                                                                                                                                           | Standard            | Advanced            |
|-------------------------------------------------------------------------------------------------------------------------------------------|---------------------|---------------------|
| <b>Drone</b>                                                                                                                              |                     |                     |
| Size                                                                                                                                      | 432*270*114mm       | 432*270*114mm       |
| Weight                                                                                                                                    | 3KG                 | 3KG                 |
| Maximum depth                                                                                                                             | 100m                | 100m                |
| Operating Temperature                                                                                                                     | -10°C~45°C          | -10°C~45°C          |
| Maximum speed                                                                                                                             | 4Kn (2m/s)          | 4Kn (2m/s)          |
| Maximum up/down speed                                                                                                                     | 3Kn(1.5m/s)         | 3Kn(1.5m/s)         |
| Maximum flow resistance                                                                                                                   | 4Kn (2m/s)          | 4Kn (2m/s)          |
| Battery                                                                                                                                   | 67.71Wh (6100mAh)   | 67.71Wh (6100mAh)   |
| Maximum Sailing Time                                                                                                                      | 3.5h                | 3.5h                |
| <b>Buoy&amp;Winder</b>                                                                                                                    |                     |                     |
| Buoy&winder net weight                                                                                                                    | 1.3KG               | 1.3KG               |
| Buoy battery                                                                                                                              | 33.86Wh (3050mAh)   | 33.86Wh (3050mAh)   |
| Maximum battery life                                                                                                                      | 6h                  | 6h                  |
| Buoy&winder size                                                                                                                          | 278H*333L*220W (mm) | 278H*333L*220W (mm) |
| Cable weight                                                                                                                              | 13g/m               | 13g/m               |
| Wifi range                                                                                                                                | 30m                 | <b>300m</b>         |
| <b>Remark</b> : The 300 meters range is measured under ideal testing conditions. But for safe use, do NOT let the buoy out of 100 meters. |                     |                     |
| Cable length                                                                                                                              | 50m                 | <b>100m</b>         |
| Tension resistance                                                                                                                        | 100KG (980N)        | 100KG (980N)        |
| <b>Remote controller</b>                                                                                                                  |                     |                     |
| Working frequency                                                                                                                         | 2.4GHz-2.485GHz     | 2.4GHz-2.485GHz     |
| Temperature                                                                                                                               | -10°C~45°C          | -10°C~45°C          |
| Wifi range(Phone&remote controller)                                                                                                       | <10m                | <10m                |
| <b>Camera</b>                                                                                                                             |                     |                     |
| CMOS                                                                                                                                      | 1 / 2.3inch         | 1 / 2.3inch         |
| Lens                                                                                                                                      | F2.8                | F2.8                |

|                                                      |                                                                       |                                                                                                     |
|------------------------------------------------------|-----------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|
| Focus                                                | 70mm~limitless                                                        | 70mm~limitless                                                                                      |
| iOS range                                            | 100-3200                                                              | 100-3200                                                                                            |
| Shutter speed                                        | 1/2s-1/8000s                                                          | 1/2s-1/8000s                                                                                        |
| Maximum resolution rate                              | 800M (3840*2160)                                                      | <b>1200M (4000*3000)</b>                                                                            |
| Photo format                                         | JPEG                                                                  | JPEG                                                                                                |
| Video resolution rate                                | FHD: 1920*1080 30Fps<br>FHD: 1920*1080 60Fps<br>FHD: 1920*1080 120Fps | <b>4K: 3840*2160 30Fps</b><br>FHD: 1920*1080 30Fps<br>FHD: 1920*1080 60Fps<br>FHD: 1920*1080 120Fps |
| Maximum video code flow                              | 30M                                                                   | <b>60M</b>                                                                                          |
| Video format                                         | MP4 (H.264)                                                           | MP4 (H.264)                                                                                         |
| Storage card volume                                  | 16G                                                                   | <b>64G</b>                                                                                          |
| <b>LED Light</b>                                     |                                                                       |                                                                                                     |
| LUMENS                                               | 2X1200                                                                | 2X1200                                                                                              |
| Color temperature                                    | 6200K                                                                 | 6200K                                                                                               |
| Dimming                                              | Manually                                                              | Manually                                                                                            |
| <b>Sensor</b>                                        |                                                                       |                                                                                                     |
| IMU                                                  | Three-axis gyroscope / accelerometer / compass                        | Three-axis gyroscope / accelerometer / compass                                                      |
| Depth sensor                                         | +/- 1m                                                                | +/- 1m                                                                                              |
| Temperature sensor                                   | +/- 2°C                                                               | +/- 2°C                                                                                             |
| <b>Charger</b>                                       |                                                                       |                                                                                                     |
| Drone Charger                                        | 75W/12.6V                                                             | 75W/12.6V                                                                                           |
| Charging time                                        | 1.5h                                                                  | 1.5h                                                                                                |
| Buoy Charger                                         | 38W/12.6V                                                             | 38W/12.6V                                                                                           |
| Charging time                                        | Buoy1.5h                                                              | Buoy1.5h                                                                                            |
| <b>Remark :</b> Please don't mixed use the chargers. |                                                                       |                                                                                                     |
| <b>App</b>                                           |                                                                       |                                                                                                     |
| Name of APP                                          | IF.Dive                                                               | IF.Dive                                                                                             |
| Required operating systems                           | *iOS 8.0 or advanced                                                  | *iOS 8.0 or advanced                                                                                |
|                                                      | *Android 4.4 or advanced                                              | *Android 4.4 or advanced                                                                            |



## PRODUCT CARE

### 1 Battery Storage

Please discharge the battery to 50%-80% when unused. This can greatly extend the battery life.

### 2 Drone Storage

Please store the drone in a cool, dry place away from direct sunlight.

### 3 Cleaning

Please clean the drone with freshwater after work and store it after drying thoroughly.

**For more information, please download the User Manual from our official website:**

[www.chasing-innovation.com](http://www.chasing-innovation.com)

This content is subject to change without prior notice.

©2017 Chasing-Innovation. All rights reserved.

## **FCC Statement**

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.