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*Reading software such as Adobe Reader is needed to support the functions above.



SMOOTH - Q4

User Guide

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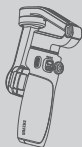
■ Warranty Card

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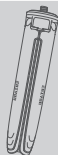
■ Contact Card

Product List

Before using this product, please check carefully that all the following items are included in the product package. In case that any item is found missing, please contact ZHIYUN or your local selling agent.



SMOOTH-Q4 x1



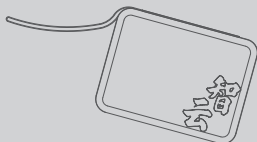
Tripod x1



USB Type – C Cable x1



Quick Start Guide x1



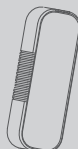
Protective Bag x1*



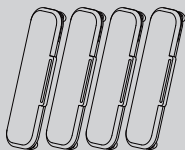
Wrist Strap x1*



VIP Card x1*



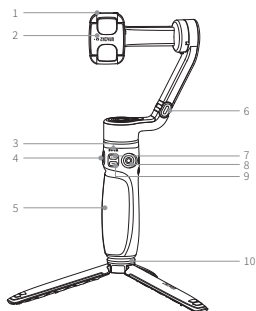
Fill Light x1*



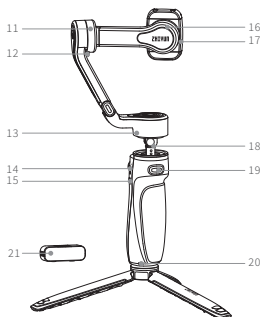
Fill Light Filter x4*

Items marked “*” are only included in the COMBO package. They are not included in the standard package.

Get to Know SMOOTH-Q4



1. Fill Light Magnet
2. Phone Clamp
3. Gimbal Mode/Battery Level Indicator Lights
4. Control Wheel
5. Handle
6. Gimbal Shaft
7. MODE Button
8. Joystick
9. Photo/Video Button
10. Tripod
11. Tilt Axis Motor

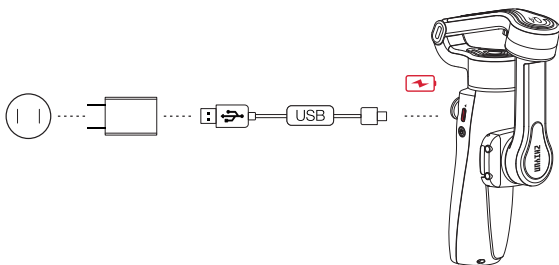


12. Tilt Axis Lock Clip
13. Pan Axis Motor
14. Type-C Charging/Firmware Upgrade Port
15. Power Button
16. Roll Axis Motor
17. Phone Clamp Lock Clip
18. Extension Rod
19. Trigger Button
20. Wrist Strap Hole
21. Magnetic Fill Light (in SMOOTH-Q4 COMBO package)

Battery and Charging

SMOOTH-Q4 adopts built-in battery. When using SMOOTH-Q4 for the first time, please activate the battery by fully charging it to ensure the proper function of the gimbal.

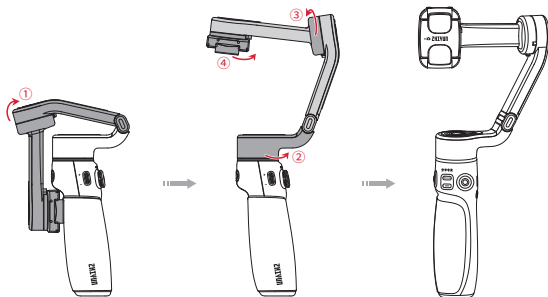
Charging method: Use provided USB Type-C cable to connect the USB charger (not included in the package, 5V2A recommended) to charge SMOOTH-Q4. The four indicator lights on the gimbal stay on in green when charging is complete.



 Please power off the SMOOTH-Q4 to charge.

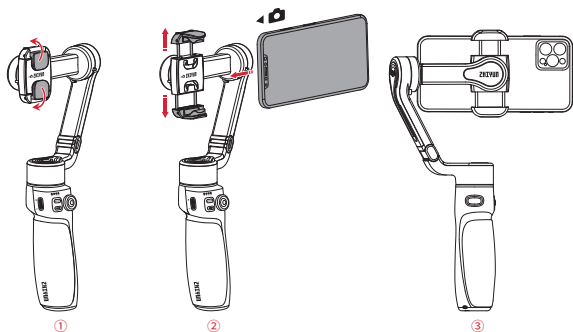
Mounting the Smartphone

1. Expand SMOOTH-Q4. Unlock tilt, pan axis, and the phone clamp.



 Please rotate in the correct direction shown in the image to prevent the lock clip from damaging.

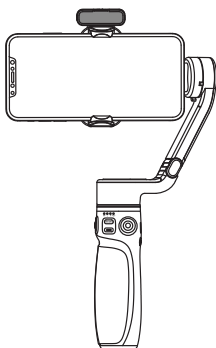
2. Install the smartphone to the phone clamp. Please refer to the images below to avoid blocking the cameras.



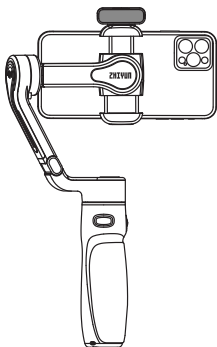
- ① When mounting the smartphone, please make sure that the entire smartphone is fixed in the phone clamp firmly.
- ② SMOOTH-Q4 should have a smartphone mounted on and balanced before powering on. If no smartphones are detected when powering on the gimbal, the motor will make a sound and enter standby mode automatically.

Installing the Fill Light

Magnetic fill light is included in the SMOOTH-Q4 COMBO package. Install the magnetic fill light on the front or rear camera according to the actual filming scenario.

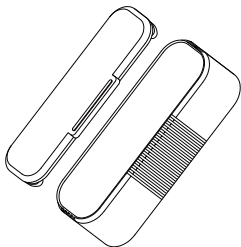


Fill Light on
Front Camera



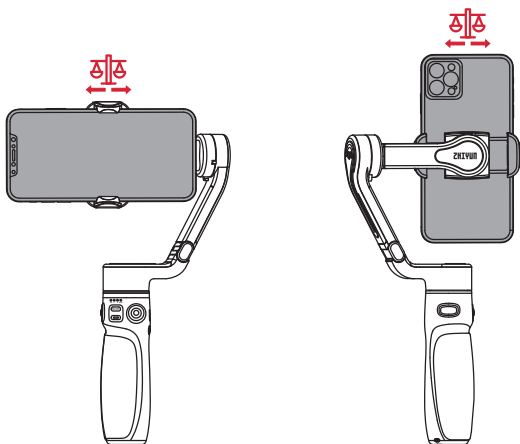
Fill Light on Rear
Camera

The COMBO package also comes with four magnetic fill light filters for SMOOTH-Q4. You can change the fill light filter according to the actual filming scenario.



Balancing

When the phone is in landscape mode, adjust the position of the phone left or right until the phone is steady and is at almost level with the ground. When the phone is in portrait mode, move the phone clamp left or right until the phone is steady and is at almost level with the ground.



- ⚠** The balance state of the smartphone will affect the runtime of SMOOTH-Q4. SMOOTH-Q4 can work normally if unbalanced, but it will consume more battery power and weaken the motor strength.

Button/Light/Port Introduction

1



Power Button

Single press: See gimbal battery level (when the gimbal is on).

Long press: Power on/off.

Press eight times: Reset Bluetooth.

2



Photo/Video Button

Single press:

Take a photo (when in the photo mode of ZY Cami app).

Start/stop shooting a video (when in the video mode of ZY Cami app).

Double press: Switch between photo/video mode in ZY Cami app.

Triple press: Switch between front/rear camera in ZY Cami app.

Long press: Take multiple photos (controls the native phone camera of certain smartphones, the smartphone should support camera control using the volume button).

3



MODE Button

Single press: Switch gimbal mode (PF-L-F-POV-V).

Double press: Return to previous mode.

Long press: Enter/exit standby mode.

4



Trigger Button

Single press: Enable SmartFollow in ZY Cami app.

Double press: Gimbal reposition.

Triple press: Switch between landscape/portrait mode.

Long press: Enter Go mode.

5



Gimbal Mode Indicator Lights (Flashing F light indicates Go mode, flashing POV light indicates Vortex mode)

- Four slow flashing light indicates standby.
- Four quick flashing light indicates upgrade failure.
- Four lights flashing one by one from left to right indicates that the upgrade is in progress.
- Battery level (Press the power button after powering on the gimbal).

One flashing green indicator light: 0-25% battery level.

Two flashing green indicator lights: 25%-50%

Three flashing green indicator lights: 50%-75%

Four flashing green indicator lights: 75%-100%

6



Joystick

- Push the joystick up/down/left/right to control the gimbal to rotate.

7



Control Wheel

- Single press: Adjust the brightness of the magnetic fill light.
- Long press: Turn on/off the magnetic fill light.
- Scroll up/down: Adjust the focal length in ZY Cami app.

8



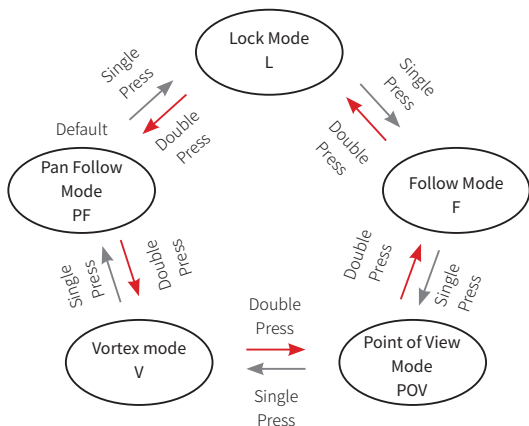
Type-C Charging/Firmware Upgrade Port

- Charge the gimbal/connect to the computer for firmware upgrade via this port.

- 💡 ① Button combo: If the Bluetooth cannot be found or failed to be connected, you can press and hold the trigger button+MODE button+Photo/Video button at the same time for 2 seconds to reset Bluetooth.
- ② When connected via Bluetooth, the SMOOTH-Q4 is able to control the native phone camera without the ZY Cami app. This feature is available in phones which support camera control using the volume button. Bluetooth connection with the SMOOTH-Q4 does not require a password. For the latest information, please visit ZHIYUN's official website www.zhiyun-tech.com to check the SMOOTH-Q4 Smartphone Compatibility List.

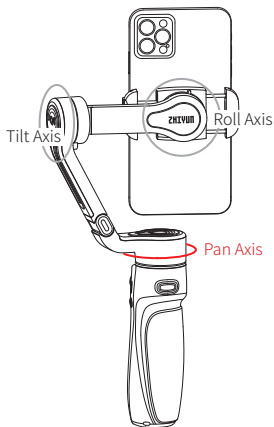
Gimbal Mode Description

Single or double press the MODE button to switch between modes.



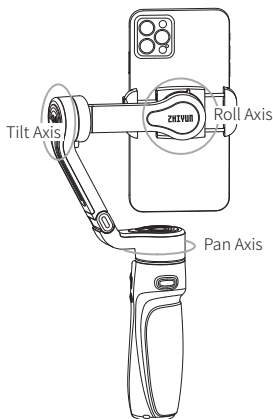
Pan Follow Mode (PF)

The tilt and roll axis motors are locked and the pan axis follows the movement of the gimbal handle. Push the joystick up/down and left/right to control the tilt axis and pan axis.



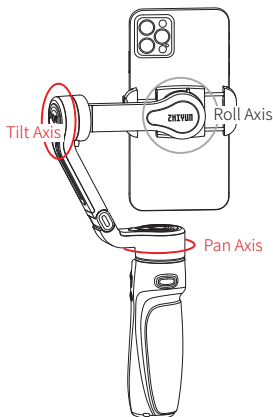
Lock Mode (L)

The three motors are all locked and won't follow the movement of the gimbal handle. Push the joystick up/down and left/right to control the tilt axis and pan axis.



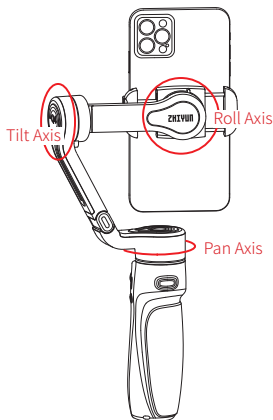
Follow Mode (F)

The roll axis motor is locked. The tilt axis and the pan axis motor follow the movement of the gimbal handle. Push the joystick up/down and left/right to control the tilt axis and pan axis.



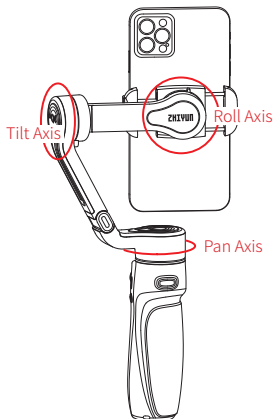
Point of View Mode (POV)

The three motors all follow the movement of the gimbal handle. Push the joystick up/down and left/right to control the tilt axis and pan axis.



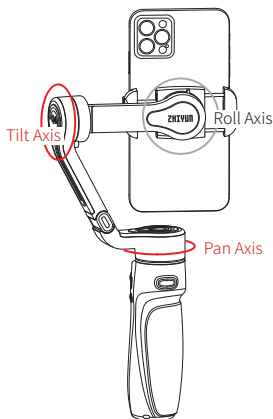
Vortex Mode (V)

The three motors all follow the movement of the gimbal handle. Push the joystick up/down and left/right to control the roll axis and pan axis.



Go Mode (GO)

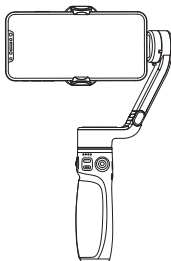
The tilt axis and the pan axis motor follow the movement of the gimbal handle at fast speed while the roll axis is locked. The joystick is disabled.



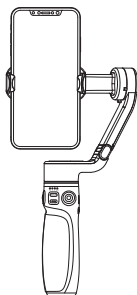
💡 Motors circled in red will follow the movement of the gimbal, while motors circled in grey are locked.

Switching Between Landscape Mode & Portrait Mode

Triple press the trigger button.



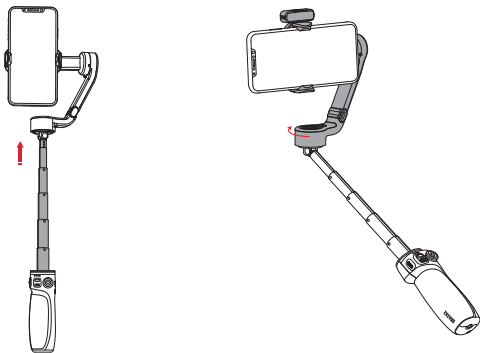
Landscape Mode



Portrait Mode

Extension Mode

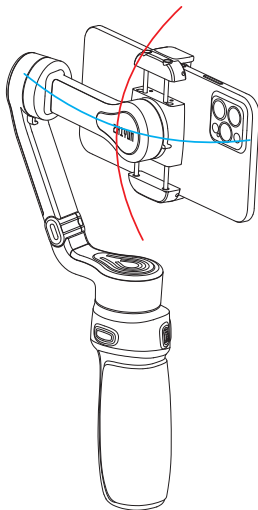
There's a built-in extension rod in SMOOTH-Q4. Pull the extension rod up to enter extension mode. You can adjust the tilt axis angle according to the actual filming scenario.



- 💡 The maximum length for the extension rod is 215mm. The control range of the tilt axis is 90° . Rotation exceeding the angle will cause damage to SMOOTH-Q4.

Manual Reposition

In Pan Follow mode (PF), Lock mode (L) and Follow mode (F), the smartphone can be rotated at a certain angle by hand. Hold it for 2s and the smartphone angle will be fixed at that angle after you release the smartphone.



💡 Can only adjust the tilt axis and the pan axis. Please rotate the device with the proper amount of strength.

Standby Mode

When SMOOTH-Q4 is powered on, rotate the phone clamp or tilt axis manually to the lock clip position, then SMOOTH-Q4 will enter standby mode automatically. Unlock the phone clamp and tilt axis to wake the gimbal up.

Download the App

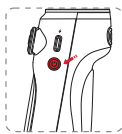


Scan the QR code on the left (Android 7.0 and above, iOS 10.0 and above required) or search "ZY Cami" in App Store or Google Play to download.

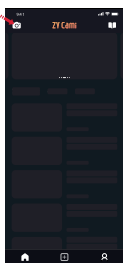
- ① Users can make better use of the various functions of SMOOTH-Q4 with the dedicated app "ZY Cami".
- ② ZY Cami is subject to update. Please always refer to the latest version.

How to Connect

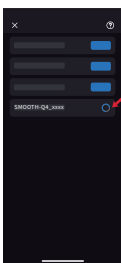
1. Power on SMOOTH-Q4 and turn on Bluetooth on the smartphone.
2. Launch the "ZY Cami" app. Tap the camera icon in the upper left corner in the home screen to open the device list and select the SMOOTH-Q4 device you wish to connect (the SMOOTH-Q4 Bluetooth name can be checked on the axis arm USER ID: XXXX).
3. Activation on the "ZY Cami" app is required if the SMOOTH-Q4 connects the "ZY Cami" app for the first time. Internet connection is required. After the activation succeeds, you can enter the camera interface of ZY Cami App.



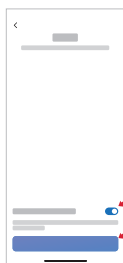
①



②



③



App Features Description



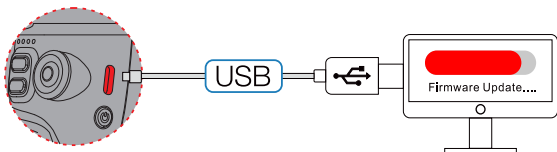
💡 For more details of the “ZY Cami” app features, please visit the official website of ZHIYUN (www.zhiyun-tech.com) and watch SMOOTH-Q4 video tutorials.

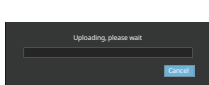
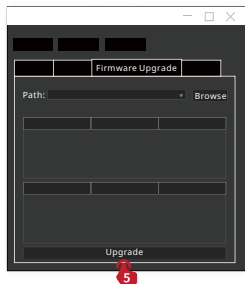
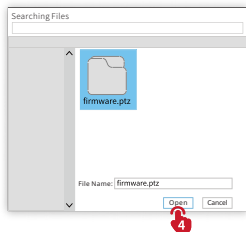
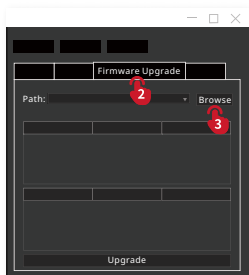
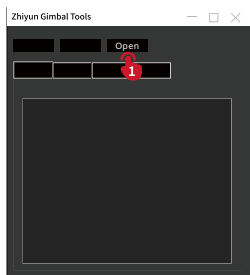
Firmware Upgrade

You can use "Zhiyun Gimbal Tools" or "ZY Cami" App to upgrade the firmware of SMOOTH-Q4.

Method 1:

1. Connect the Type-C charging/firmware upgrade port of SMOOTH-Q4 to the computer with the USB Type-C USB cable, power on SMOOTH-Q4, and enter standby mode.
2. Visit the official website of ZHIYUN (www.zhiyun-tech.com), go to the SMOOTH-Q4 product page, click "Download", find the USB driver, the ZHIYUN calibration upgrade tool, and the firmware and download. (USB drivers are not required for Mac OS systems).
3. Install the driver and the software, unzip the firmware for the documents with the ".ptz" file extension.
4. Open "Zhiyun Gimbal Tools", select the corresponding port, click "Open", click "Firmware Upgrade". Click "Browse" under "Path" to select the latest firmware downloaded (with the ".ptz" file extension), and click "Upgrade" at the bottom to upgrade firmware. When the firmware upgrade finishes, SMOOTH-Q4 will be automatically turned off.





Method 2:

Connect SMOOTH-Q4 to the “ZY Cami” app. If “ZY Cami” app prompts to upgrade the firmware, follow the instructions to upgrade. Internet connection is required.

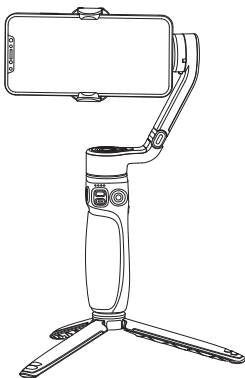
- ⚠ Before upgrading the firmware, please ensure that the SMOOTH-Q4 has more than 50% power remaining. Do not exit the app interface or access in the background during the upgrading process. Pay attention to the prompts on the app.

Calibration

Calibration Reason	How to calibrate
1. A slight deviation is found in the tilt angle of the smartphone in level position after power-on. 2. A slight deviation is found in the roll angle of the smartphone in level position after power-on. 3. Frequent small angle correction is found when the smartphone is in a level position when the gimbal stays still.	Gimbal auto-calibration
1. A slight deviation is found in the level position after the auto-calibration of the gimbal. 2. The gimbal has not been used for a long time. 3. The gimbal has undergone a significant temperature difference.	Six-side calibration

Auto-Calibration

1. Install SMOOTH-Q4 onto the tripod and connect to the ZY Cami App.
2. Go to the settings of the app and select "auto-calibration". The SMOOTH-Q4 will enter the calibration automatically. You can check the progress at the prompt of the app.

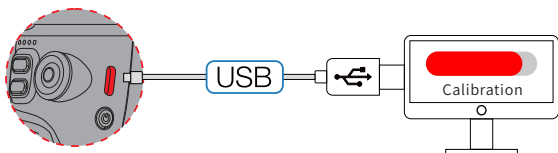


 Before the calibration, please make sure the gimbal is straightly put on a flat surface. Please don't touch the gimbal when in calibration.

Six-side Calibration

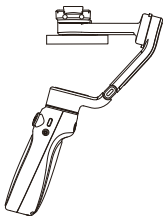
You can use “Zhiyun Gimbal Tools” to perform six-side calibration for SMOOTH-Q4.

1. Connect the charging/firmware upgrade port of the gimbal to the computer with the Type-C USB cable. Power on the gimbal and enter standby mode.
2. Open "Zhiyun Gimbal Tools", click "open" on the top, and click "calibration" on the bottom. Please conduct the process according to the following steps. A "√" mark will appear after the calibration is complete.

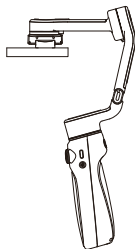


- 💡 ① Please refer to the six-side calibration steps below. When the calibration is complete, please restart the gimbal.
- ② In simple terms, six-side calibration is to place all six sides of the phone clamp vertically to a level surface respectively.

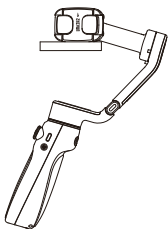
STEP 1



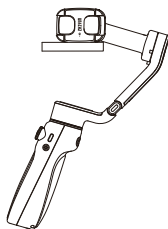
STEP 2



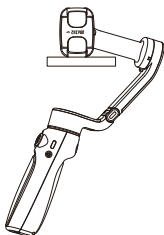
STEP 3



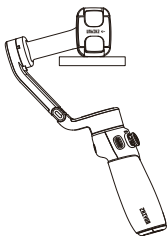
STEP 4



STEP 5



STEP 6



Product Model: SM117

	Min.	Standard	Max.	Remark
Operation Voltage	6.5V	7.7V	8.8V	
Operation Current	100mA		3300mA	
Charging Voltage	4.5V	5V	5.5V	
Charging Current			1200mA	
Following Deviation in Static State	$\pm 0.01^{\circ}$	-	$\pm 0.04^{\circ}$	
Following Deviation in Motion State	$\pm 0.05^{\circ}$	$\pm 0.1^{\circ}$	$\pm 0.3^{\circ}$	
Tilt Mechanical Range	-84	338°	254	
Roll Mechanical Range	-175	338°	163	
Pan Mechanical Range	-96	331°	235	
Operation Temperature	-10°C	25°C	45°C	
Charging Ambient Temperature	0°C	25°C	40°C	
Battery Capacity	-	1200mAh	-	
Runtime	-	10h	15h	Lab Data 1
Charging Time	-	2.5h	-	Lab Data 2
Compatible Smartphone Weight	150g	226g	280g	
Mounting Clamp Supporting Range	55mm	-	90mm	
Smartphone Thickness			7mm~10mm	
Extension Rod	0	-	215mm	
Fill Light Power	-	2w	-	

	Min.	Standard	Max.	Remark
Fill Light Illuminance	48 lx	-	520lx	
Bluetooth			Bluetooth 4.2	
EIRP			<3dBm	
Operation Frequency			2.402GHz~2.480GHz	
Compatible Model	Smartphones that their width is within the holder's capable width.			

"Lab Data 1": The data is collected under the below conditions: a specified temperature of 25°C ; the gimbal has been balanced and mounted with an iPhone XR (220g). When the gimbal is in operation, the runtime is 10h. When the gimbal is in the standby state, the runtime is 15h.

"Lab Data 2": The data is collected when charging with a 5V/2A rated power adapter at a specified temperature of 25°C . The actual charging time varies with environmental factors. In addition, the lower the temperature, the longer the charging time.

All the data in this guide is collected from internal experiments of ZHIYUN laboratories. Under different scenarios, the above data is subject to a margin of error. Please refer to the actual use of this product.

Thank you for purchasing SMOOTH-Q4. The information contains herein affects your safety, legitimate rights and obligation. Please read this instruction carefully to ensure proper configuration before use. Failure to read and follow this instruction and warnings herein may result in serious injury to you or bystanders, or damage to your device or property. Guilin Zhishen Information Technology Co., Ltd (hereinafter referred to as "ZHIYUN") reserves all rights for final explanation on this instruction and other documents related to SMOOTH-Q4. The information is subject to update without notice. Please visit www.zhiyun-tech.com to obtain the latest product information.

By using this product, you hereby signify that you have read this document carefully and that you understand and agree to abide by the terms and conditions herein. You agree that you are solely responsible for your own conduct while using this product, and for any consequences thereof. You agree to use this product only for purposes that are proper and in accordance with all terms, precautions, practices, policies and guidelines ZHIYUN has made and may make available.

ZHIYUN accepts no liability for damage, injury or any legal responsibility incurred directly or indirectly from the use of this product. Users shall observe safe and lawful practices including, but not limited to, those set forth herein.

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Reading Tips

Legends:  Hints and Tips  Important

Warnings

Read the ENTIRE User Guide to become familiar with the features of this product before operating. Failure to operate the product correctly can result in damage to the product or personal property and cause serious injury. This is a sophisticated product. It must be operated with caution and common sense and requires some basic mechanical ability. Failure to operate this product in a safe and responsible manner could result in injury or damage to the product or other property. This product is not intended for use by children without direct adult supervision. DO NOT use with incompatible components or in any way otherwise as mentioned or instructed in the product documents provided by ZHIYUN. The safety guidelines herein contain instructions for safety, operation and maintenance. It is essential to read and follow all of the instructions and warnings in the User Guide, prior to assembly, setup or use, in order to operate the product correctly and avoid damage or serious injury.

Safe Operation Guidelines

WARNING:

1. Never allow the product to come into contact with any liquid. Never immerse the product in water or make it get wet. Never use the product in the rain or a humid environment. Corrosion reaction may occur when the interior of the product is exposed to water, which may cause the battery to ignite spontaneously and may even cause an explosion.
2. If the product catches fire, please use water or water mist, sand, fire blanket, dry powder, carbon dioxide fire extinguisher immediately to put out the fire. Please choose the method according to the actual situation.
3. Please use the product in an environment with a temperature between -10° C and 45° C.
4. It is forbidden to disassemble the product in any way. If the battery is pierced during disassembly, it will cause the electrolyte inside the battery to leak or even cause fire or explosion.
5. Mechanical impact, rolling, or throwing of the product is prohibited. Do not place heavy objects on the product.
6. Do not heat the product. Do not place the product in a microwave oven or pressure cooker.
7. It is forbidden to place the product near a heat source (stove or heater, etc.) or inside the car in hot weather. Do not store the product in an environment above 60° C. The ideal temperature of storage is 22°C to 28° C.
8. Do not store the battery for a long time after it is completely discharged to avoid the battery entering the over-discharged state and causing damage to the battery cell, and it will not be able to resume use.

BE CAREFUL:

1. SMOOTH-Q4 is a high-precision control device. Damage may be caused to SMOOTH-Q4 if dropped or subject to external force, and this may result in malfunction.
2. Make sure the rotation of the gimbal axes is not blocked by external force when SMOOTH-Q4 is turned on.
3. SMOOTH-Q4 is not waterproof. Prevent contacts of any kind of liquid or cleaner with the SMOOTH-Q4. It is recommended to use dry cloth for cleaning.
4. Protect SMOOTH-Q4 from dust and sand during use.

CAUTION:

1. After the charging is complete, disconnect the product from the charger.
2. If you do not use the product for more than 10 days, please charge/discharge the battery to 40%-65% and store it to extend the battery life.
3. Recharge and discharge every 3 months to keep the battery active.
4. Keep the handle stable when powering on the SMOOTH-Q4. Shakiness during power-on may fail to start.

Warranty Period

1. Customers are entitled to replacement or free repair service in case of quality deficits found in the product within 15 days upon receipt of the product.
2. Customers are entitled to free repair service from ZHIYUN for any product proven defective in material or workmanship that results in product failure during normal consumer usage and conditions within the valid warranty period, which is 12 months counting from the date of selling. However, warranty period varies by product component and country of purchase. Please contact our after-sales service team on ZHIYUN official website or your place of purchase for detailed warranty information.

Warranty Exclusions

1. Products subjected to unauthorized repair, misuse, collision, neglect, mishandling, soaking, accident, and unauthorized alteration.
2. Products subjected to improper use or whose labels or security tags have been torn off or altered.
3. Products whose warranty has expired.
4. Products damaged due to force majeure, such as fire, flood, lightning, etc.

Warranty Claim Procedure

1. If failure or any problem occurs to your product after purchase, please contact a local agent for assistance, or you can always contact ZHIYUN's customer service through email at info@zhiyun-tech.com or website at www.zhiyun-tech.com.
2. Your local agent or ZHIYUN's customer service will guide you through the whole service procedure regarding any product issue or problem you have encountered. ZHIYUN reserves the right to reexamine damaged or returned products.

Customer Information

Customer Name:

Phone Number:

Address:

Sales Information

Sales date:

Product Serial Number:

Distributor Name:

Distributor's Contact Number:

First Maintenance Record

Service Date:

Repairman Signature:

Cause of Problem:

Service Result:

☐ Solved

☐ Unsolved

☐ Refunded/Replaced



Website



Weibo



Vimeo



Google+



Facebook
(Zhiyun Support)



Facebook
(Zhiyun Tech)



Youku



Youtube



Wechat



Instagram

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Europe Hotline: +49 (0) 61018132180, 10:00-17:00 GMT+1, Mon-Fri

Web: www.zhiyun-tech.com

E-mail: info@zhiyun-tech.com

Address: 09 Huangtong Road, Tieshan Industrial Zone, Qixing District, Guilin, 541004, Guangxi, China

Certificate of Quality

This product is confirmed to meet quality standards and permitted for sale after strict inspection.

QC Inspector: _____



For full product information, please visit ZHIYUN's official website: Content on www.zhiyun-tech.com is subject to update without notice.

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