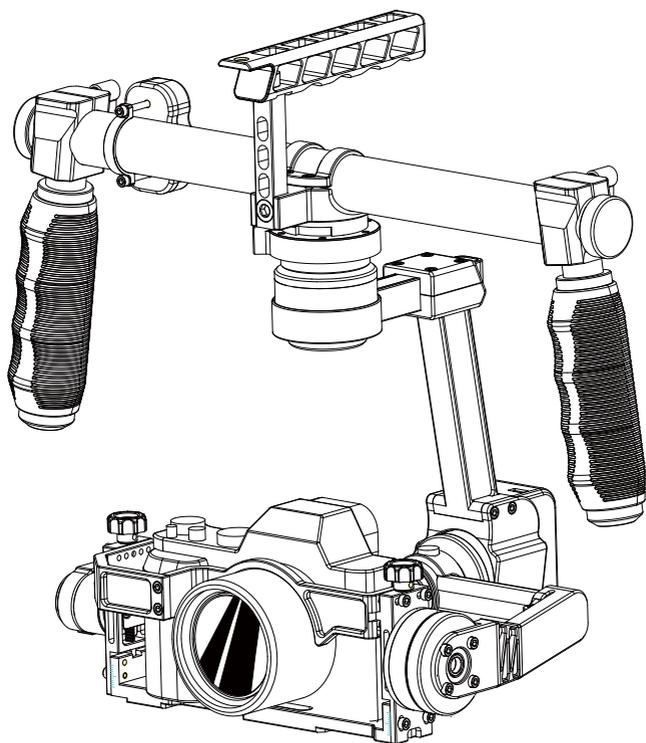


# Summer

## User Manual

(V1.0 2015.02)



# Disclaimers and Warnings

Thank you for purchasing this product. Please read this manual and disclaimer carefully.

Please read this instruction manual carefully before using the product. By using this product, you hereby agree to this disclaimer and signify that you have read it in full.

You agree that you are responsible for your own conduct and any content created while using this product, and for any consequence thereof. You agree to use this product only for purposes that are proper and in accordance with local regulations, terms and any applicable policies and guidelines.

No modification or amending to the Summer is allowed. Please make sure the camera mounted on the gimbal firm enough before installing the battery.

Summer already finished calibration for camera Panasonic GH4, Olympus M.ZUKIKO DIGITAL ED 12-40mm f/2.8 PRO before leave factory.

As Manufactory has no control over use, setup, final assembly, modification or misuse, no liability shall be assumed nor accepted for any resulting damage or injury. By the act of use, setup or assembly, the user accepts all resulting liability. Manufactory assumes no liability for damage(s) or injuries incurred directly or indirectly from the use of this product.

Any parts of this disclaimer is subject to change without prior notice.

Any problems while mounting or using this product, please contact with the authorised agent or the customer service of Manufactory.

## Battery and charge attentions

1. Do not soak battery into water, keep the battery in dry and cool place when unused for a long time.
2. Do not use the battery with disposable battery such as dry cell, or other battery with different capacities, models and varieties.
3. Do not leave or use battery near source of heat, otherwise it may catch fire or auto ignition while overheating.
4. Charge battery with equipped charger. Do not charge when no one is around.
5. Pay attention to discharge voltage, battery will overheat and slowdown in performance, expansion, even fire and explosion.
6. Please pull the plug in time while full charge; Do not overcharging.
7. Please ensure that the battery is installed properly while using.
8. Do not heat or throw the battery into fire.
9. Do not short the battery by wire or any metals.
10. Do not ship or store battery with necklaces, hairpins or other metals.
11. Do not strike or drop battery, avoid battery of hitting with hard objects.
12. Do not impale battery with nails or other sharp objects;
13. Do not hammer or tread the battery.
14. Do not decompose the battery in any way.
15. Do not use the battery if any odor, deformation by heat or abnormal phenomena.
16. Improper use, leakage or overcharging all may result in exploding or fire.
17. Please clean the dirty battery ends with dry cloth. Or it may lead to poor contact, even energy loss or unable to charge.
18. Do not throw the battery casually.
19. Do not use batteries except for 18650 battery.
20. Keep battery out of the reach of children.

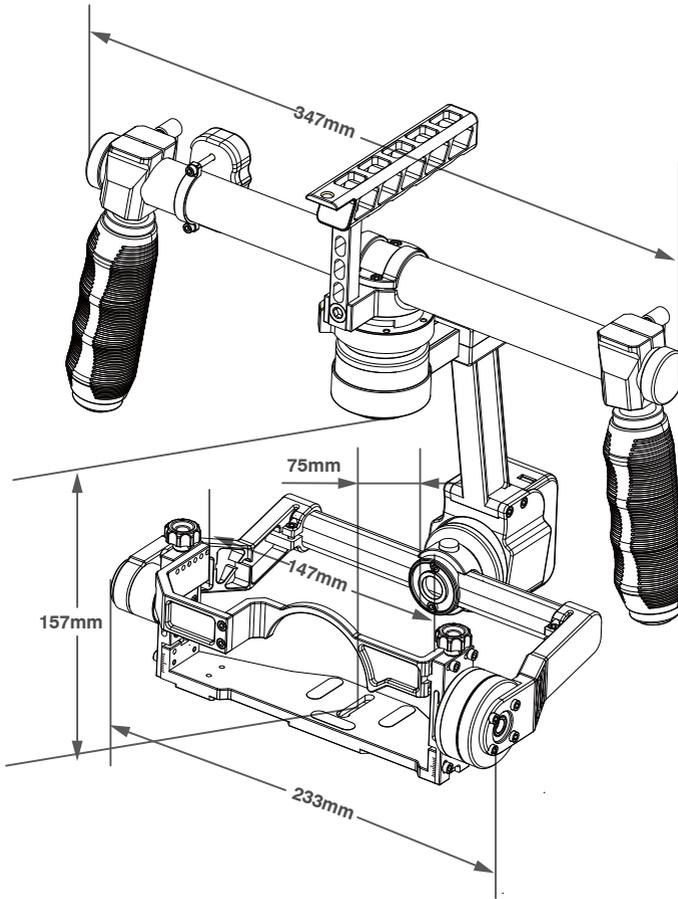
# Contents

Disclaims and warnings	1
Using battery and charging	1
Contents	2
Gimbal Description	3
Box list	4
Assemble stand	5
Install handle with the gimbal	5
Camera mount	6
Battery installation	6
Gimbal balance	
Pitch axis balance	7
Pitch vertical balance	7
Advanced pitch adjustment	7
Roll axis balance	8
Pan axis balance	8
Joystick usage	9
Maintenance	9

# Gimbal description

The Summer comes with dedicated camera fixing board, easy to install and take apart the camera, as well as balance the camera. By testing, the Summer can be used with the following cameras. Any similar in size and weight camera may also work.

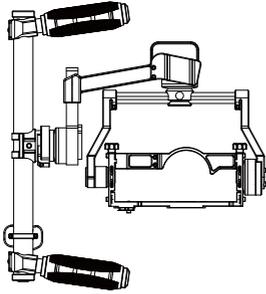
<b>Brand</b>	SONY	Panasonic
	SONY A7S	DMC- GH4
<b>Lens size</b>		
Supported lens	Olyplus & Panasonic ILDC lens	



Camera size requirements: the maximum horizontal length between gravity and Roll axis is 75mm;  
Width of camera is 147mm, height is 157mm as above picture shows.  
While mounting camera, please keep the camera power off.

# Box list

Gimbal x 1set



Fixing stand tube



upper tube x2



Lower tubes x2



Vertical tube x1

Battery 18650x4(exclude)



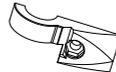
1/4"Camera mount screw x1



Left tube clamp x2



Right tube clamp x2



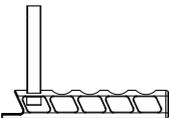
90°tube clamp x2



90°tube clamp parts x2



Gimbal handle



Others

Hexagonal spanner x 1 ( for stand installation)

Battery charger x 1 ( for battery 18650)

Screw M8x20mm (for stand mounting)

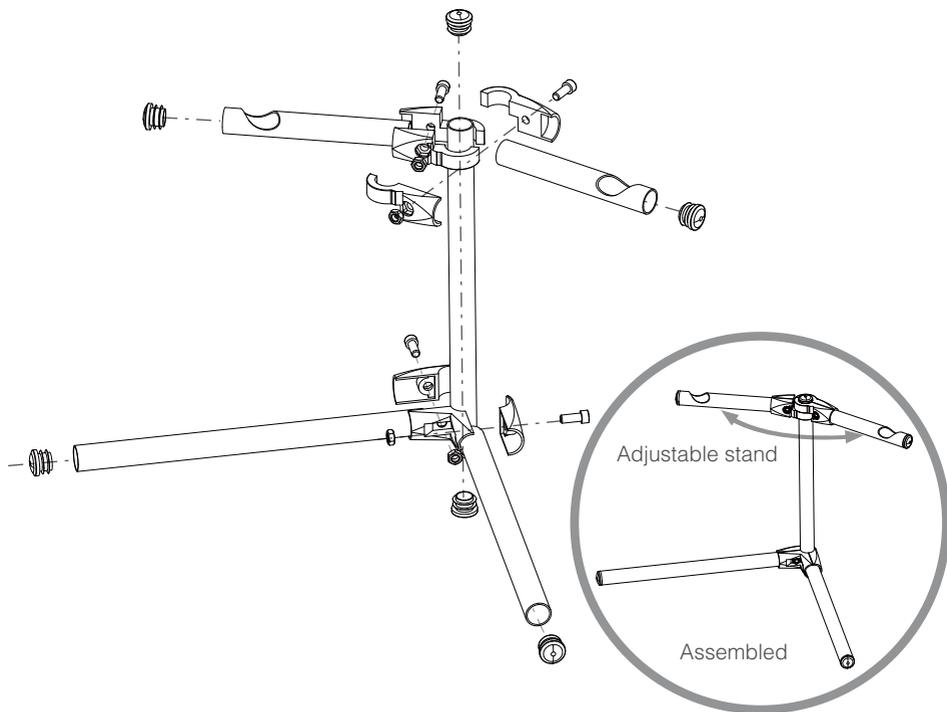
Screw nut M8x20mm ( for stand mounting)



Summer only work with battery 18650 size within 67mm, please pay more attention while purchasing

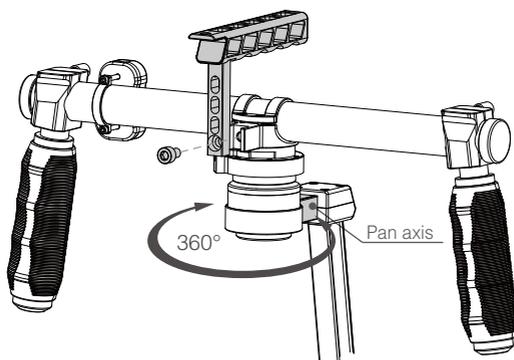
## Assemble stand

Please assemble stand as follows.



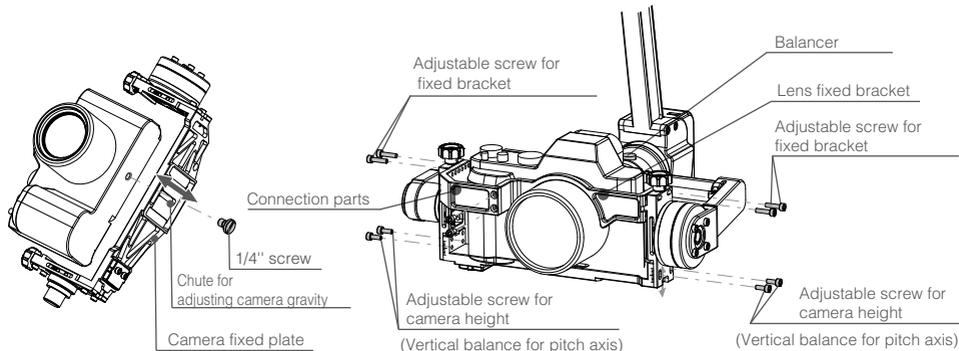
## Install handle with the gimbal

1. Summer handle is placed separately before leaves factory, please install the handle onto the gimbal with screw as shown.
2. Please be sure that the pan axis motor can rotate 360° without obstruction after installation.



## Camera mount

1. Mount the camera on the fixed plate with 1/4" screw, you can adjust the camera according to the camera gravity.
2. Mount the connection part and lens fixed bracket on the camera, the mounting height depends on the camera. Adjust the height with screw in order that the lens can go through the U- shaped ring of the fixed bracket. Make sure the lens fixed bracket and lens is stable.



Pic 1

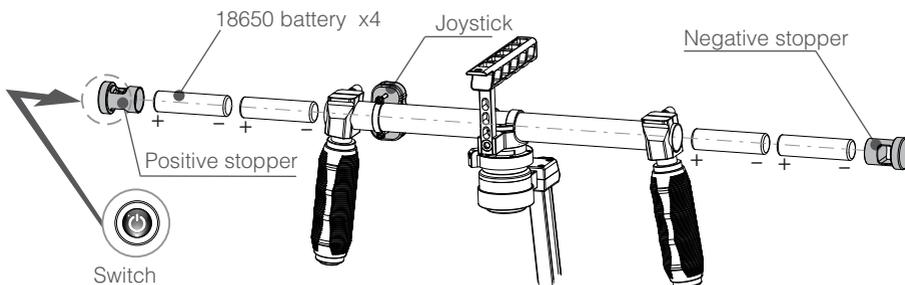
Pic 2



Before assemble the lens to the bracket, please be sure the camera mounted on the fixed plate firmly.

## Battery installation

1. Screw out the stoppers, put 4 pieces 18650 battery as picture shows, and make sure the batteries are connected well.
2. Tighten the stoppers up.



1. Summer just work with 18650 battery.
2. Please charge the battery first before use the gimbal.
3. Please keep the power off while install the battery.
4. If the battery do not install correctly, poor connection or power off may occur.

# Gimbal balance

It is essential to balance the Summer for the best performance. Especially for some extreme sports or accelerations, accurate balance can improve the shoots quality, as well as the battery life. The balancer will help a lot to adjust the pitch, roll, pan axis while power on. Balance finished and without power, all 3 axes almost keep in horizontal level, will not deflect one side seriously.



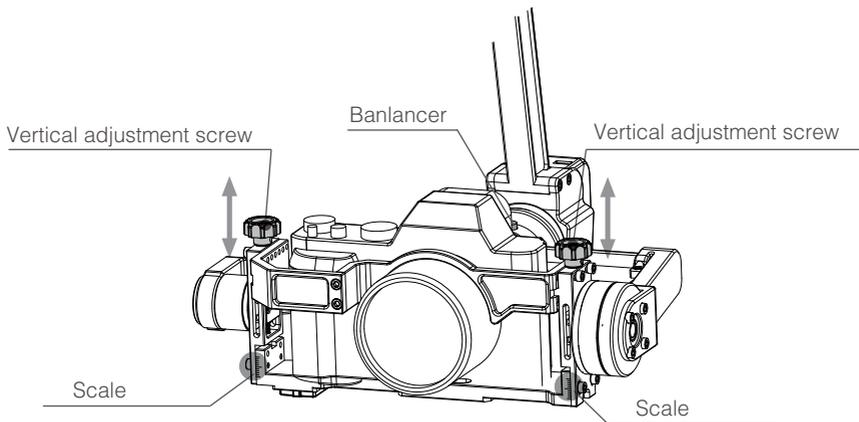
Remove the lens cap and insert memory card after mounting the camera and lens. Make sure the camera is ready to shoot before balancing the gimbal. Please be sure the power is off while balance the gimbal.

## Step 1: Pitch axis balance

- 1) Camera locking screw hole is the chute for adjusting camera gravity (see pic 1 of page 7). Adjust properly (slightly adjust) to keep the camera in horizontal level.
- 2) After balanced, the camera can stay in any tilt angle you rotate.

## Step 2: Vertical balance for pitch axis

- 1) Rotate the camera to one position (note that the lens can reach), remove your hand and adjust the vertical balance screw, slightly adjust and keep scales of both sides are same. Otherwise, the camera will deflect to one side, and the tilt motor cannot rotate. Adjust again in order that the camera lens can stay in the position when remove your hands.
- 2) After adjusted, you should turn the camera by hand to confirm the pitch motor work properly. If vertical balance need to adjust significantly, the pitch axis balance may be adjusted again. After that, the camera will stay in that position no matter where you rotated.

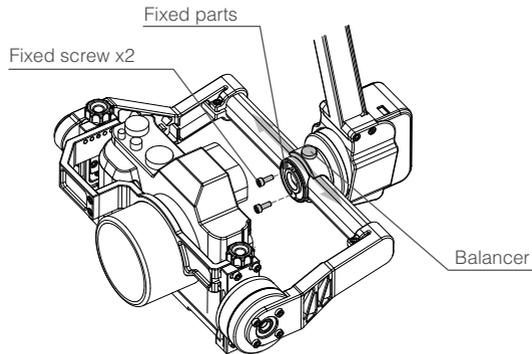


## Advance pitch adjustment:

If it cannot balance well with vertical adjustment screw, please try to adjust the 4 screws of fixed plate to balance it. (see pic 2 of page 7).

### Step 3: Roll axis balance

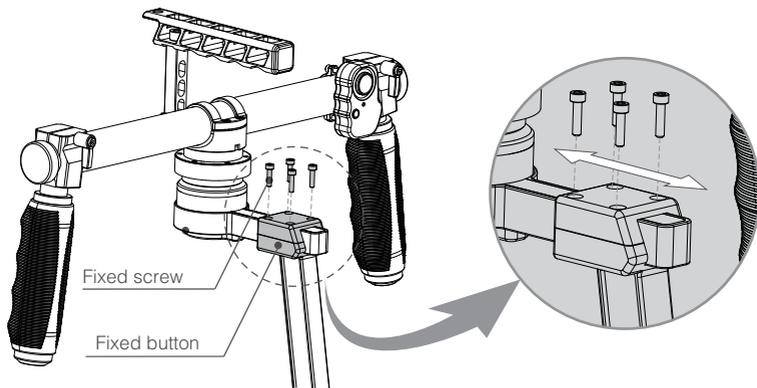
- 1) Loosen the 2 screws as picture shows to allow camera move left and right;
- 2) Adjust properly to make the camera remain level when remove your hands;
- 3) Lock the screw to finish balancing roll axis; After that, the camera will stay in that position while rotating the camera to any roll angles.



### Step 4: Pan axis balance

Last step is to balance the pan axis. Move the fixed button while balancing the axis.

- 1) Loosen the 4 screws of fixed button, lift one handle of both sides, slide the camera forwards or backwards to balance it according to the deflection. **For example:** Lifted left handle, if the pan axis turn to right side(far away from left handle), then move the pan axis to pan motor side( gimbal front side); Lifted left handle, if the pan axis turn to left side( far away from right handle), then move the pan axis away from pan motor side( gimbal back side).
- 2) Lock screws, lift one handle of both sides, the pan axis is balanced well if the camera do not swing.



# Joystick usage

## 1. Direction slide button

It can slide to 4 directions, the movement direction is same as the camera.

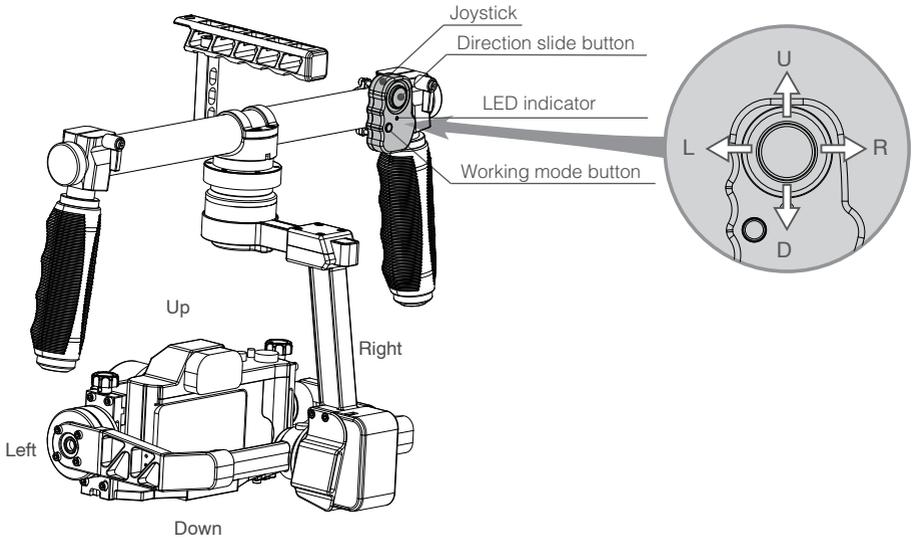
## 2. LED indicator

When the Summer is working, LED indicator is red.

## 3. Working mode button

The Summer comes with following 4 working modes before leaving the factory, mode switch as below steps,

- 1) Press 1 time, yaw follow mode will work, sounds DaDaDi means mode switch successfully;
- 2) Press 2 times, lock mode will work, sounds DaDaDi means mode switch successfully;
- 3) Press 3 times, pitch lock and yaw follow mode, sounds DaDaDi means mode switch successfully;
- 4) Press 4 times, yaw and roll switch mode, sound Di means mode switch successfully.



# Maintenance

While using Summer, please keep it away from sand, dust and water. Please clean Summer with the soft dry cloth after using.