Manual guide for smart bicycle stem

Omni

Host lighting :
1. When host blue light on, means host is connected with mobile.
2. When host blue light flashing, means host disconnected with mobile.
3. When host red light on, means host battery is under charging.
4. When host red light flashing, means host start anti-theft status.
Warning: Once start anti-theft status, red light flashes for 15 seconds and then off.

Power bank lighting:
1. When power bank is under charging,4 indicating lights all light up, and then shows current power capacity and charging status.
2. When fully charged, 4 indicating lights all on.
3. When power bank is charging for host or mobile, indicating light shows current power capacity.

Button:(left side of power bank)
1. when power bank not yet finish power, short press button can display the current power capacity.
2. Long press button for 2 seconds, on the light; short press button, switch to full bright and semi-bright; when light on, long press 2 seconds to off light.

V. App installation and functions
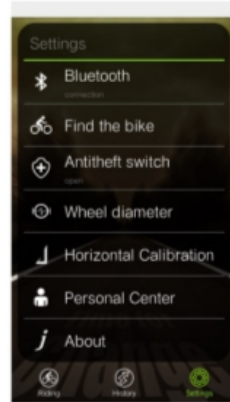
• App installation

Before using App, please make sure the host and power bank is installed well, and blue indicating light is flashing.
1. Please find the corresponding operating system for your mobile, and then scan the QR code, download the application App then install.

IOS   Android

2. User account register and log in. For this step make sure networking. And user account is the right email address which you can get the mail. Please keep in mind the account number and password.
Go to setting page, click the "Bluetooth" button, then click "Scan". Choose the device scanned to pair with your mobile. And then click " find the bike ", there will be sound, along with flashing light.

3. For getting the accurate data, after finishing pairing need to set the wheel diameter and horizontal calibration. On level ground, hold the bicycle well, handlebar towards front, and wheel vertical to the ground, click "calibration", then finish calibration.

4. During transportation, security check or some special occasions need to turn off the radio frequency signals, off the device functions. If need to on it. Then remove the power bank again to plug in.(interval of 1 minute or more after unplug.) or charging the host via USB interface, will back to work.

5. For different mobile to use account and password logging, please ensuring networking, and then control the bicycle.
After finishing pairing, register again and pairing.

6. Smart bicycle stem should work with smart phone, for the requirement of mobile as following:
Above Android 4.3, hardware support bluetooth 4.0-BLE, best screen resolution 1280X720,IOS above 7.1, Iphone 4S above.

• App functions introduction

Basic settings

Real time riding data display , Speed, slope, altitude, temperature, calories consumption.

Anti-theft alarming setting, lighting(full bright, semi bright, SOS) lighting angle can be adjusted.

Local music play

Map navigation, route planning.

Riding track and all riding data record.

(There will be little adjustment when App update, the actual page to prevail)

VI. Notification

1. Please make sure the distance between the bicycle speed sensor and inductive head shouldn't be more than 3mm.
2. For the power bank and host to connect, make sure they are fully connected, in case power bank drop during riding.
3. This product is waterproof, used in the rain is ok. But shouldn't soaking in the water. Please clear water after rain.
4. During different setting of the mobile, and affect of other applications, App processing may exit when running because of mobile memory shortage, bluetooth disconnect and affect the alarming reset. Then should clear the mobile applications and open the app to connecting the device.
5. Due to different application performance of the mobile bluetooth, if bluetooth connect to other application often or mobile connect to other bluetooth device frequently, when using this App may couldn't search out the device or not stable, then try to restart the bluetooth or mobile.

VII. FCC Warning Statement

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. 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.
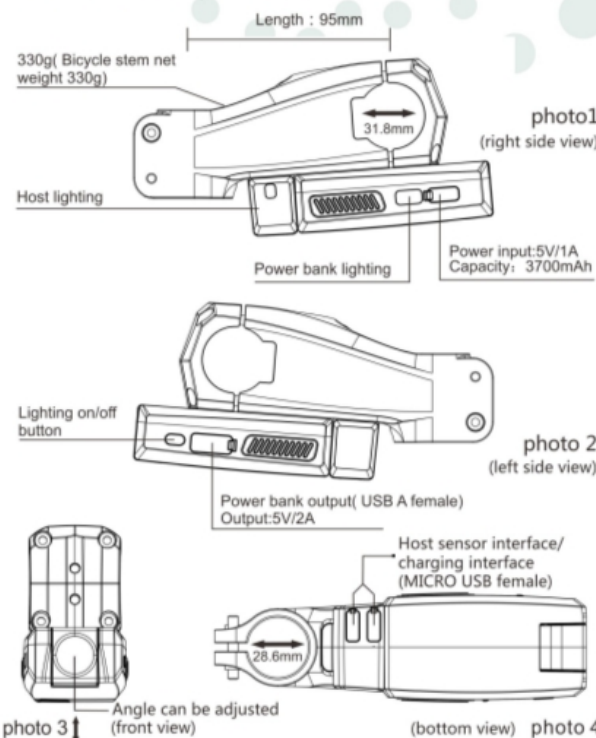-- Consult the dealer or an experienced radio/TV technician for help.

I. Product Introduction.

OC2 smart bicycle stem designed by Omni, can be used for mountain bicycle and road bicycle, replaced the previous bicycle stem, is a smart device which connect with mobile app by wireless to offer you function of lighting, anti-theft, speedometer, etc.

II. Product each part name and functions.

• Part name and specifications

Length : 95mm
330g(Bicycle stem net weight 330g)
31.8mm
Host lighting
photo1 (right side view)
Power bank lighting
Power input:5V/1A Capacity: 3700mAh

Lighting on/off button
photo 2 (left side view)
Power bank output(USB A female) Output:5V/2A
Host sensor interface/ charging interface (MICRO USB female)
28.6mm
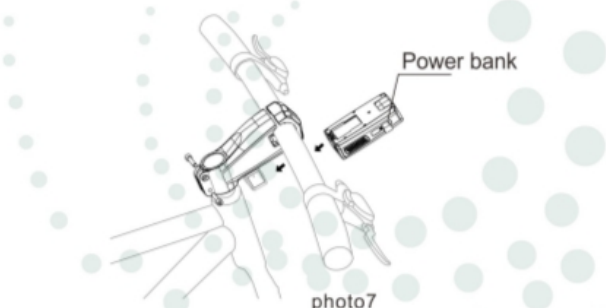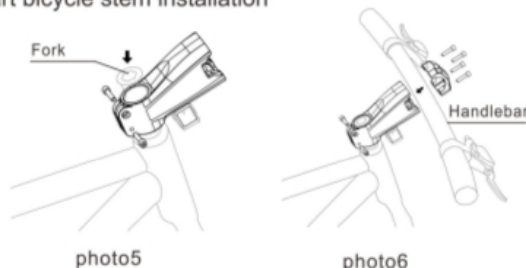Angle can be adjusted (front view)
photo 3
(bottom view) photo 4

• Main function introduction

1. Smart speedometer: big mobile screen, wireless connect to the bicycle stem, real time display all riding data, seamless handover navigation, lighting control, music play,etc.

2. Smart bicycle stem:
(1)External speed sensor.
(2)Built in barometric altimeter sensor chip.
(3)Real time collecting all riding data, riding speed, distance, time, slope, altitude,etc.

3. Smart anti-theft: Owners away, automatic alert, return automatic released.
(1)Under the alarming status, any movement, will start high-decibel speaker alarming on site, stop and threaten the thief.
(2)Owner identification smart recognize, no need extra operation.

4. Power bank:
(1)Riding lighting.
(2)Work as backup power for stem(no need to bring bicycle home to charge, and also avoid the inconvenient of normal power bank during riding).
(3)Charge for mobile.

5. Smart lighting:
(1)Riding lighting, away from bank lighting.
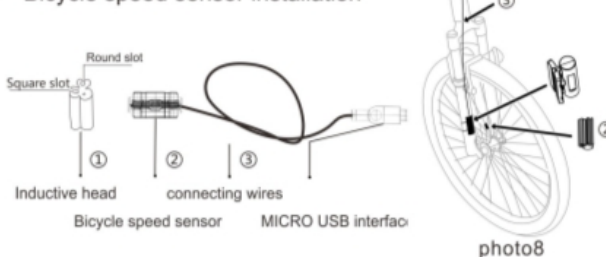(2)3 modes lighting: semi-bright, full bright, SOS blistering.

III. Installation

• Smart bicycle stem installation

Fork
Handlebar

photo5   photo6

Please remove the previous bicycle stem before installation and follow the rest step:
1. Please install the smart bicycle stem on the fork ---(photo 5)
2. Please fix the handlebar on the bicycle stem----(photo 6)
3. Fasten all the screws---(photo5, photo6)
4. Fix power bank on the smart bicycle stem----(photo 7)

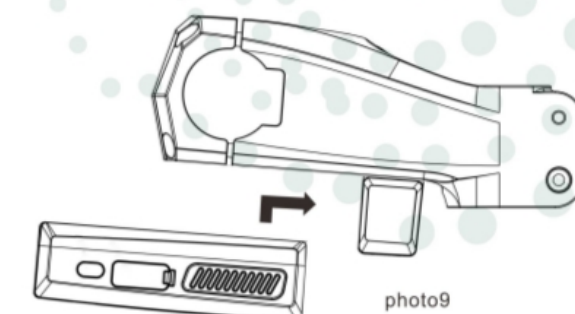### • Bicycle speed sensor installation

Round slot
Square slot
① Inductive head
② connecting wires
③ MICRO USB interface
Bicycle speed sensor
photo8

1. Install the bicycle speed sensor inside of fork, fix it with the cable clamp.
2. Choose the suitable slot according to spoke shape, and install inductive head on the spoke.
3. Adjust the position of bicycle speed sensor and inductive head, for the distance shouldn't be more than 3mm.
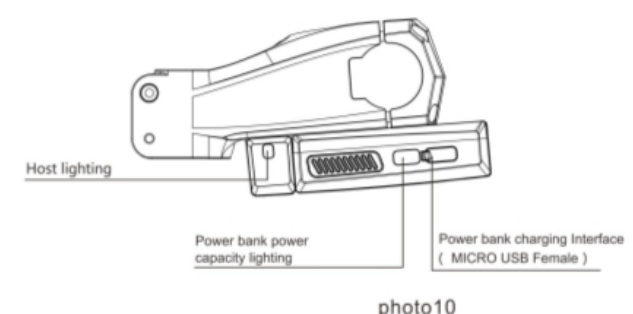4. Install the bicycle speed sensor connecting wire MICRO USB plug to the host sensor interface.

Power bank
photo7

5. Open App, connect the smart bicycle stem, go to the page of testing speed. Little bit adjust the distance between speed sensor and magnetic head,turn the wheel to see if there is speed display on the app page.
6. Take cable clamp to fixing the bicycle speed sensor and wire tightly.

• The connection and separation of the power bank and host

photo9

1. When connection, hold the power bank, alignment to the slot, then push back, little bit push then connect.
2. When disassemble, hold the power bank, little bit pull forward, then separate power bank and host.

IV. Smart bicycle stem status instruction

Host lighting
Power bank power capacity lighting
Power bank charging Interface (MICRO USB Female)
photo10

Omni
Smart hardware , Smart your life!