

MOTINOVA

**CYCLE COMPUTER
CS520 SERIES
OPERATION INSTRUCTION**

Please read this instruction thoroughly before
using the product and keep it well.

(English)

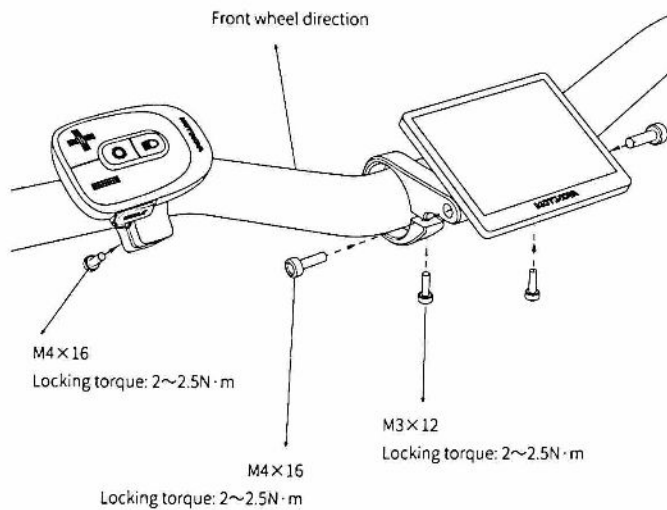
INSTALLATION INSTRUCTION

Step 1:

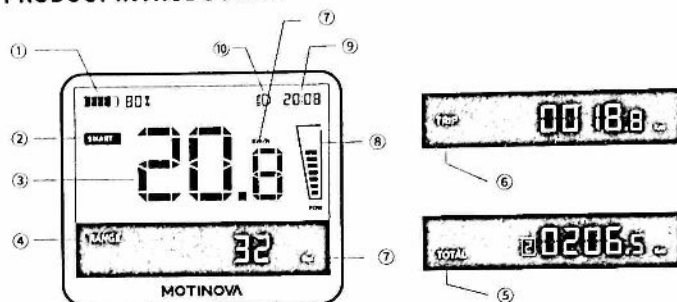
Fixing cycle computer controller to the left handle bar and display to the middle of handle bar, and adjusting them to the proper position and viewing angle.

Step 2:

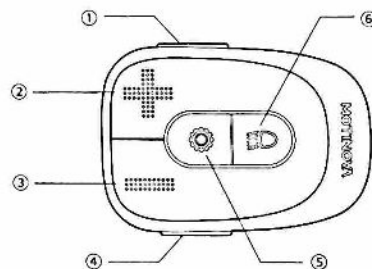
Following the below picture to install the screw, and suggesting to use 2N.m - 2.5N.m torque to tighten. (Instrument damaged by over-locking is not promised to get warranty service.)



PRODUCT INTRODUCTION



- ① Battery capacity ② Power mode ③ Speed ④ Endurance mileage
- ⑤ Total mileage ⑥ Current mileage ⑦ Unit ⑧ Power level
- ⑨ Time ⑩ Bicycle light indication



- ① Power button ② "+" button ③ "-" button ④ Walk assist button
- ⑤ Setting button ⑥ Bicycle light button

OPERATION

Shift Up the Gear Level

Short pressing the "+" button.

Shift Down the Gear Level

Short pressing the "-" button.

Settings

Long pressing (more than 1.5s) the "Setting" button to enter.

Light On/Off

Short pressing the "Light" button.

Power On

Pressing "Power" button for 1s.

Power Off

Short pressing the "Power" button.

Walk Mode

Under Walk mode, the Walk mode icon displays on the right corner. The system will provide within the power 6 km/h.

1. Click WALK button to enter Walk mode enquiry, the Walk mode icon displays and the "+" sign on the icon flashes.
2. Long pressing "+" button, the "+" icon on the display stop flashing and the system outputs power; when loosing "+" button, the system stops providing power and the "+" icon on the display flashes again.
3. Under Walk mode, if you do not press "+" button at 3s, the motor will exit the Walk mode automatically, and the interface will be restored to the previous Power mode. You can also click any button (excluding "+" button) to exit the Walk mode automatically, and the interface will be restored to the previous Power mode. Under Walk mode, the Power mode will not be displayed.

Shift to show continuable / Current / Total trip

Short pressing the "Setting" key.

ASSIST LEVEL

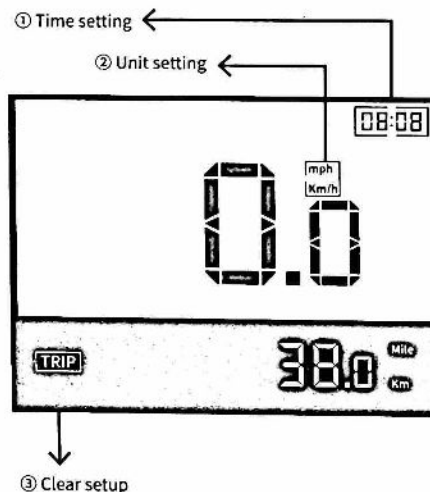
6 Levels

OFF, ECO, NORM, SPORT, TURBO, SMART.

Default Level

Level OFF, without power output.

CYCLE COMPUTER SETTING INSTRUCTION



① Time Setting:

System time can be adjusted. Operations as below:

1. When speed is 0, long pressing "Setting" button for over 1.5s to enter setting interface.
2. After entering setting interface, click "+" button or "-" button to select "hour" or "minute", then pressing "Setting" button to confirm, the value of "hour" or "minute" flashes.
3. Pressing "+" or "-" button to adjust the value, click "Setting" button to save. After the adjustment is completed, short pressing the "Setting" button to save, or long pressing the "Setting" button for over 1.5s to save and exit the settings interface.

② Unit Setting:

Speed and mileage unit can be adjusted. You can choose km or mile in setting. When the speed unit changes, the mileage unit changes accordingly. Operations as below:

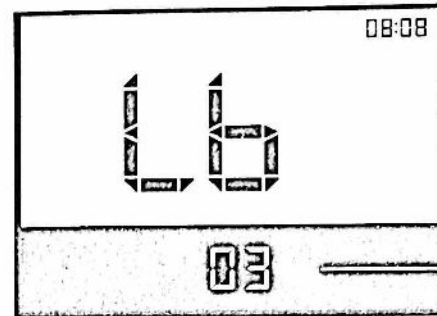
1. When the speed is 0, pressing the "Setting" button for over 1.5s to enter the setting interface.
2. After entering the setting interface, pressing the "+" button or "-" button box to select the "unit", and then click the "Setting" button to confirm, the selected unit flashes.
3. Then pressing the "+" button or "-" button to adjust the unit. After the adjustment is completed, short pressing the "Setting" button to save, or long pressing the "Setting" button for over 1.5s to save and exit the settings interface.

③ Clear Setup:

The subtotal mileage can be cleared, while total mileage cannot be cleared.

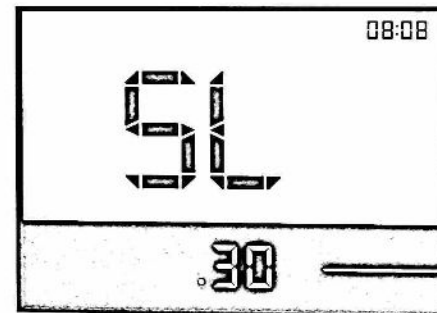
Operations as below:

1. When the speed is 0, long pressing "Setting" button for over 1.5s to enter the setting interface.
2. After entering the setting interface, click the "+" button or "-" button to select the subtotal mileage, and then click the "Setting" button to confirm, the subtotal mileage value flashes.
3. Then long pressing "-" button for over 1.5s to clear the value (this operation is irrevocable). After the adjustment is completed, short pressing the "Setting" button to save, or long pressing the "Setting" button for over 1.5s to save and exit the setting interface.



④ Backlight brightness setting:

After entering the backlight setting interface, click "Setting" button to enter the setting state (at this time, the value will flash continuously), click "+" or "-" button to select the brightness from Level 1 to Level 5, and then click "Setting" button to confirm the setting.



⑤ Automatic power-off time setting:

After entering the setting interface of automatic power-off time, click "Settings" button to enter the setting state (at this time, the value will flash continuously), click "+" or "-" button to select from 5min to 30min in a cycle (each 5 minutes is a level), and then click "Settings" to confirm the setting.

ERROR CODE LIST

Code	Source	Fault description	Solution
10	MC	Over Current Protect	Automatic recovery after 5S
11	MC	Under Voltage Protect	Charging for battery
12	MC	Over Voltage Protect	Change the proper battery
13	MC	Rotor Locked	Power off and restart
14	MC	Over Heat Protect	Power off and restart after 30min
15	MC	NTC Fault	Depot repair
16	MC	Speed Sensor Fault	Check or change speed sensor
17	MC	Torque Sensor Fault	Depot repair
18	MC	Motor Fault	Depot repair
19	MC	BMS Check Fault	Change new battery
20	MC	PBU Check Fault	Change the cycle computer button
21	MC	HMI Check Fault	Change the cycle computer
22	MC	PhaseLine Fault	Depot repair
23	MC	Cadence Sensor Fault	Depot repair

24	MC	Gas Sensor Fault	Change throttle
25	MC	MOS Short Circuit	Depot repair
26	MC	Abnormal Voltage Fluctuation	Change the battery
27	MC	Motor Controller Fault	Depot repair
28	MC	Circuit Fault	Depot repair
29	MC	TE MCU Fault	Depot repair
30	MC	TE Circuit Fault	Depot repair
40	BMS	Over Current Alarm (After the failure disappears, HMI delay display 3s)	Stop riding
41	BMS	Charge Over Voltage Alarm	Stop charging or change the charger
42	BMS	Discharge Under Voltage Alarm	Charging in time
43	BMS	Charge Over Current Alarm	Change the charger
44	BMS	Discharge Over Current Alarm	Automatic recovery after 5S
45	BMS	Charge Over Heat Alarm	Stop charging
46	BMS	Charge Low Temperature Alarm	Stop charging
47	BMS	Discharge Over Heat Alarm	Use after shutdown and standing for 30min

48	BMS	Discharge Low Temperature Alarm	Recommend stop using
49	BMS	MOS Over Heat Alarm	Automatic recovery after 5S
60	PBU	"+" Button Fault	Check or change the button
61	PBU	"-" Button Fault	Check or change the button
62	PBU	"Setting" Button Fault	Check or change the button
63	PBU	"Light" Button Fault	Check or change the button
64	PBU	"Walk" Button Fault	Check or change the button
65	PBU	"Power" Button Fault	Check or change the button
66	PBU	MCU Fault	Depot repair
67	PBU	MOS Short Circuit	Depot repair
68	PBU	Voltage Test Fault	Depot repair
69	PBU	HMI Communication Fault	Depot repair
70	PBU	MC Communication Fault	Depot repair
80	HMI	MC Communication Fault	Check circuit or change parts
81	HMI	PBU Communication Fault	Check circuit or change parts

PARAMETER

Material	plastic
Work temperature	-10°C ~ +50°C
Voltage	24 v / 36 v / 48 v
Size	controller:59 x 49 x 44 mm display:82.5 x 21 x 70mm
Adapted handle bar's diameter	controller:φ22.2mm display:φ22.2mm / φ25.4mm / φ31.8mm
IP grade	IP55

MOTINOVA