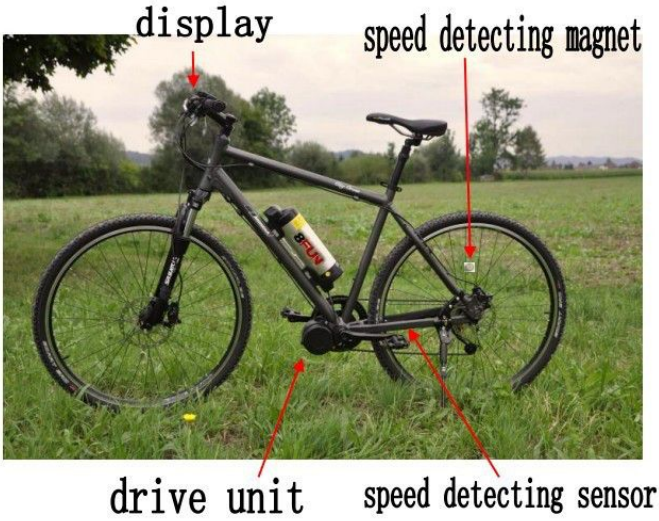
E-BIKE CENTRAL MOTOR DRIVE SYSTEM

USER'S GUIDE



1 Central motor

★ Can be installed on standard bike frame easily.

★ High starting torque, Max torque≥80Nm, good performance on climbing.

★ Double clutch is used on drive unit, more safety.

★ Speed sensor and torque sensor can be applied, controller integrated.

★ High efficiency, low consumption, long travel mileage.

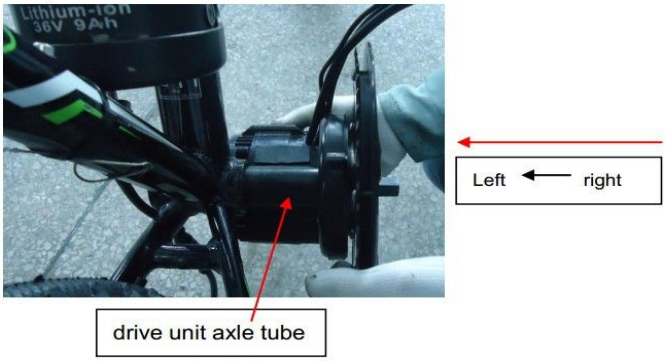
1.5 Installation procedure

1. Open the package and take out the drive unit and accessories; And check the specification whether it is correct.

2. Fix the chain wheel on drive unit with 5pcs screw M5*10, (see picture 1), then fix chain cover on chain wheel with 5pcs screw ST3.9.

Picture1

3. Fix the drive unit axle tube on frame bottom bracket (see picture 2,picture 3)



Picture 2

Picture 3

ensure thread of axle tube extend bottom bracket more than 10mm

4. The surface with teeth of fixing plate towards inside, then fix the plate on drive unit with 2pcs M6*10.(see picture 4,picture 5)

the surface with teeth of fixing plate

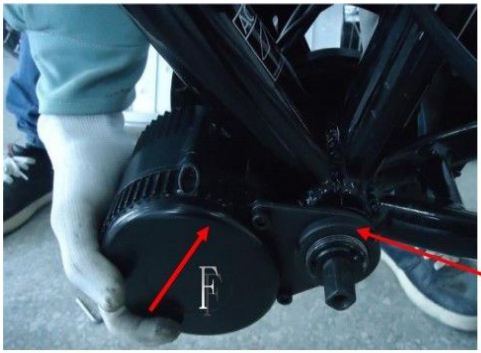
Picture 4

2xM6 nut

Outside surface without teeth

Picture 5

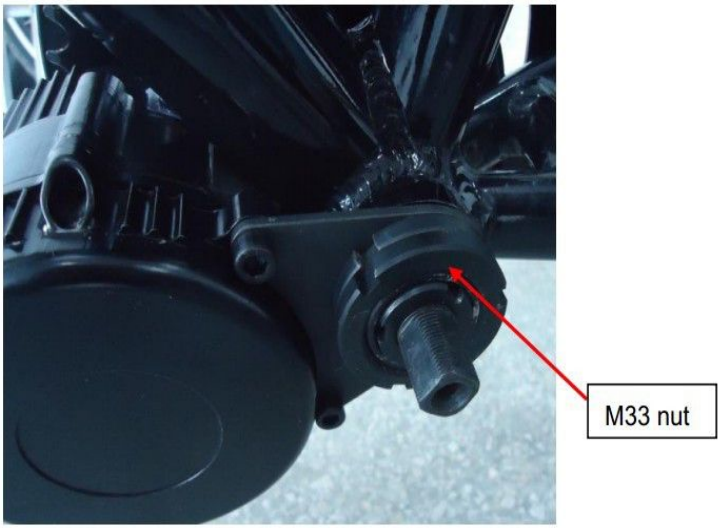
5. Hold the drive unit near to bicycle fork, force less than 5KG, tight 1st nut M33 onto axle tube with force:30-40N.m (see picture 6)



M33 nut

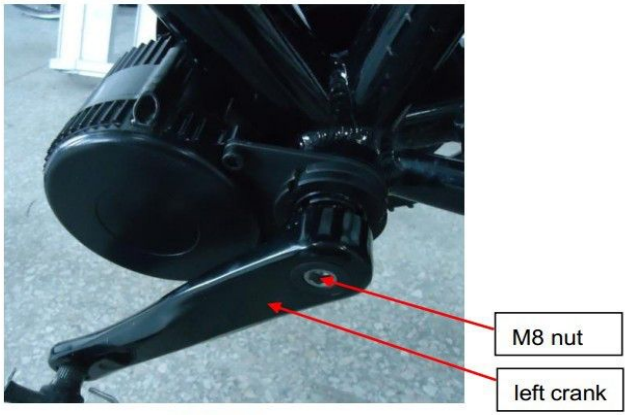
Picture 6

6. Fix 2nd nut M33 onto axle tube, tightening force:30-40N.m(see picture 7)



Picture 7

7.Fix the left crank on the bike with M8 inner hexagon screw. Tightening force:35-40N.m (see picture 8)



Picture 8

8.Fix the right crank on the bike with M8 inner hexagon screw. Tightening force:35-40N.m (see picture 9)

Picture 9

9.Connect all cables for battery, display, speed detecting sensor and so on (see picture 10-12)

C961 DISPLAY INSTALLATIO INSTRUCTION

The C961 display is made of ABS and is designed to perform well under -20° to 60 ° C.

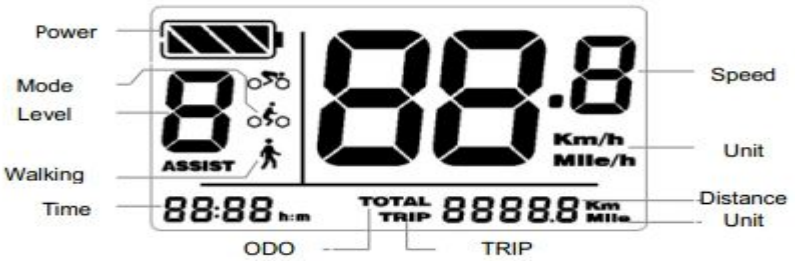
Functions & buttons

Functions

The C961 offers many functions for your riding pleasure.
These Include:
Multiple Power levels settings (Mode)
Remaining Battery Capacity
Speed (Speed/ MAX/AVG)

Distance and Odometer (TRIP/ TOTAL)
Time
Assist walking (slow speed motor assist)
Backlight
Error codes

Interface



Button

C961 includes a three button control electronic switch:

⏻ **Power on/off**

⊞

⊟

Caution: Do not plug in or unplug this display when the power to the unit is on.

Avoid collisions

Protect the display's membrane to provide water resistant performance.

Do not attempt to reset parameters if the display is not working.

Call for service if the C961 display is not working

Installation

Install the display and button control on the handlebar and adjust its location. Plug it into the controller with power off.

ON/OFF

To turn the unit on, press and hold the ⏻ button to start the display. A long press again ⏻ will switch it off.

The display switches off automatically if there is no activity for ten minutes (default).

Walking assist

Press and hold ⊟ to start the walking assist. You will see the walking icon on the display and the motor will move the bicycle or vehicle at 6km/h.

This function is designed for walking alongside only. Please do not use this function when riding.

Backlight

Press and hold ⊞ to turn on the C961's backlight screen. If a front light is configured as well, this will switch it on as well if front light available. Press and hold ⊞ again to switch it off.

Note: The automatic backlight is available only if the controller (or built-in controller) offers this function.

If the controller has a light sensor inside of it, the back light & front light will switch on automatically according to the level of darkness. The automatic function is off when the display is in manual mode.

Power Level

The display is integrated with the controller to provide several levels of power. Press ⊞ or ⊟ to change the levels. The Default range is 0 - 3, where 0 means no output, and 3 means maximum output. The default switch-on is level 1.

Battery Capacity

Four sections highlights when battery is full.

Percentage of capacity for sections:

<20% 20%-40% 40%-60% 60%-80% 80%-100%

The battery icon flashes at 1 Hz when low power.

Distance (trip and odometer)

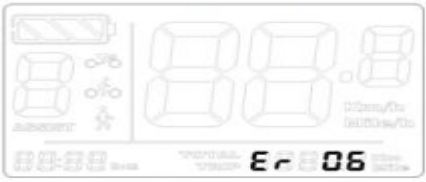
Press ⏻ to shift between TRIP and TOTAL (Odometer).

TRIP Reset

With the power on, Press and hold both ⏻ and ⊟ to clear TRIP distance.

Error codes

When something goes wrong with system, an error code will flash on the display. Check details on attached list.



The motor will stop working in the event of an error.
Only when the error is gone, will the motor work again.

Display Settings

Preparation

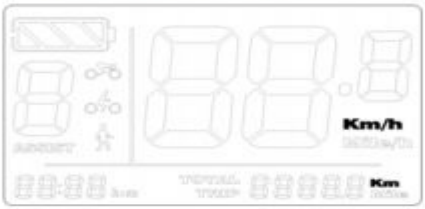
Makes sure the connections are good, then power on.

Setting

Press and hold ⏻ to turn on the display. Press and hold the ⊞ and ⊟ to set the mode.

Unit

Press ⊞ to change unit Km or Mile.



Press ⏻ to save and go to *set speed*.

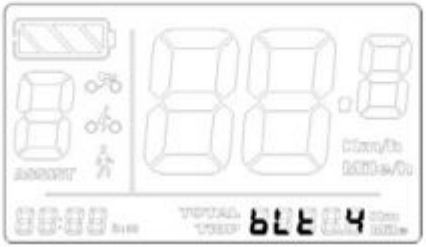
Setting the speed limit

To limit the speed range (from 15Km/h to 40Km/h), press ⊞ or ⊟ to change the limit up or down.

Press ⏻ to save & go to *set backlight*

Backlight

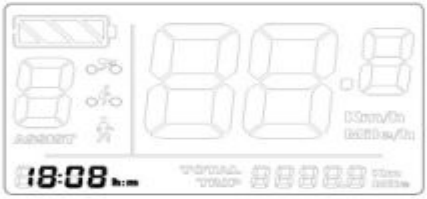
Press ⊞ or ⊟ to change the brightness (range is 1 to 8).



Press ⏻ to save & go to *time setting*.

Time

Press ⊞ or ⊟ to change the hour, then press ⏻ to save & go to the minute setting. Press ⊞ or ⊟ to change the minutes.

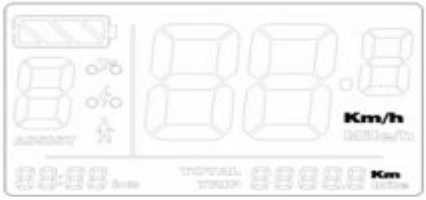


Press ⏻ to save & exit.

The settings go into effect after restart.

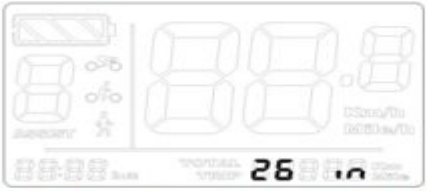
Advanced setting

Press and hold ⏻ to start the display. Press and hold both ⊞ and ⊟ to enter setting mode



Press ⊞ or ⊟ and do not release, meanwhile press ⏻ eight times to go to the advanced setting menu.

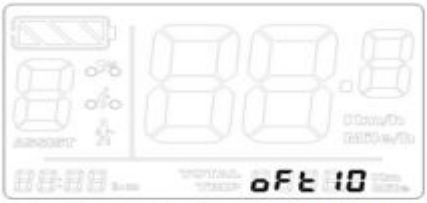
Wheel size setting



Press ⊞ or ⊟ to change the wheel size. Range from 8 to 32 inch. Press ⏻ to save & go to *sleep time interval* setting.

Sleep time interval setting

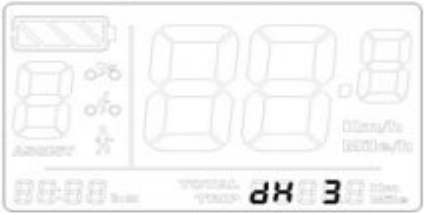
Press ⊞ or ⊟ to change the time, range from 0 to 60 minutes.



Display will sleep and cut off power after no operation on system for the selected time. Press ⏻ to save and skip to *level amount* setting.

Power level amount setting

Press ⊞ or ⊟ to change the amount. The range from 2 to 9 levels (excluding level 0).



Press ⏻ to save and exit.

The settings go into effect after restart.

FAQ

Q: Why does the display not power on?
A: Please check that the battery is connected and has power. Then check all the wires and connections. Then press the ⏻ button again. If this fails, please see your service technician.

Q: What should I do when an error code is displayed?
A: Please check the error code list. Sometimes powering down the unit (press ⏻), then unplugging the display, leave it unplugged for two minutes and then plugging it back in and turning it on will reset and correct the error. Please call your service technician if the user cannot remove the error.

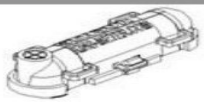
Error Codes:

Error code	*Definition*
04	Throttle not returning to zero state
05	Throttle abnormality
06	Low voltage protection
07	Over voltage protection
08	Hall sensor abnormality
09	Phase line abnormality
10	Controller overheat
11	Temperature sensor in controller abnormality
12	Current sensor abnormality
21	Speed sensor abnormality
22	Communication abnormality in BMS

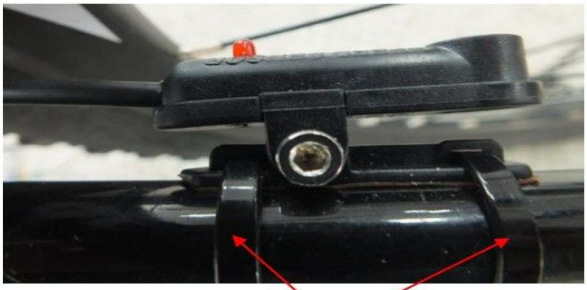
3 Speed detecting sensor

By measuring the wheel RPM, the signal is transferred to the controller, the speed and mileage will be showed on the display.

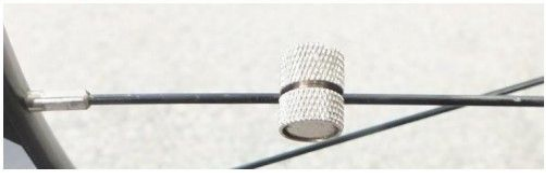
3.1 Dimension



2. Fix the speed sensor on appropriate position (bottom fork is suggested) of frame by ribbon.

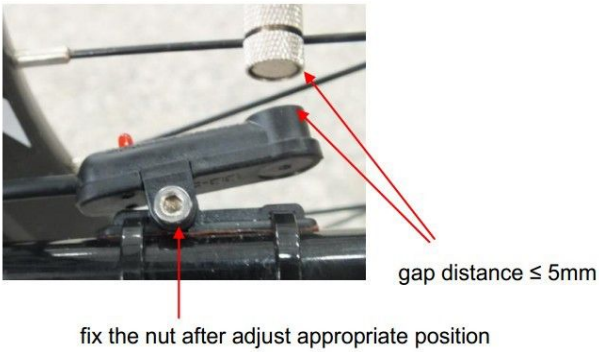


3. Fix the magnet on spoke of rear wheel

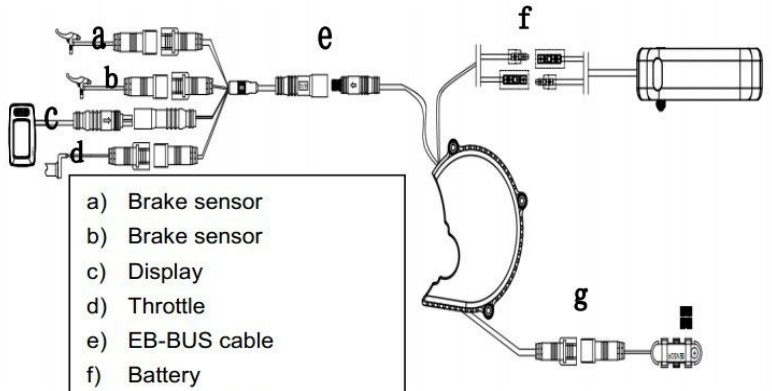


Note: magnet's surface must be parallelized with sensor's surface

4. Adjust the distance between speed sensor and magnet within 5mm



4 Connection diagram



a) Brake sensor
b) Brake sensor
c) Display
d) Throttle
e) EB-BUS cable
f) Battery
g) Speed detecting sensor

5 Notes

1.Should be stocked in a dry ventilated warehouse, do not be stocked in a humid, acidic and alkaline area, not coexist with magnetic object

2.Each connector inserted according to arrow to arrow

3.Avoid sharp objects impact on display

4.Avoid overload for long time when using

5.Avoid wading and soaking

Enjoy your ride life !

CNEBIKES CO.,LTD