YG90 product manuals



Preface

Dear friends, thank you for choosing randride, we wholeheartedly provide you with quality products and services. We uphold the principle of customer satisfaction first to provide you with high-quality design, technology and products. We are committed to do a good job in each product, if you have any questions about the product, please feel free to contact our customer service team.



YG90

445mm 1-Seat tube 2-Reach 420mm 3-Head tube 150mm 4-Chain stay 480mm 5-Bracket height 315mm 1120mm 6-Wheelbase 7-Standover 770mm 8-Top tube 520mm 9-Stack 430mm 10-Weight 27 kg





Ebike Size

The seat cushion can adapt to height adjustment







Installation Steps







Move in the right direction





Screw on and tighten

Install the pedals



Looking for "R" mark



Installed on the chainwheel side crank



Rotate clockwise to tighten



Looking for "L" mark



Rotate counterclockwise



Tighten

Seat installation







Adjust the height and lock

Front wheel installation



Install the front wheel into the fork



Release the rod

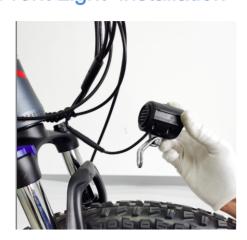






Both sides must be tightened

Front Light installation





Remove Battery

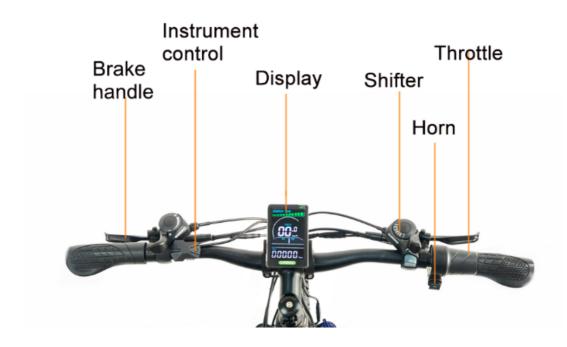




Power open









Usage Guidance



Power switch on/off

The power button locates on the button pad on the left handlebar. Pressing and holding the button to switch on/off.



Power assist level setting

Setting a power assist level 1,2,3, or 4,5 by pressing up or down button.



Throttle

The throttle locates on the button pad on the right handlebar. The throttle is valid in 1,2, 3, 4 or 5. You can set power assist level 0 to turn off the throttle.



Head light switch on/off

Press the+button for 3 seconds to turn the lights on or off.



Multi-function button

Press the+- keys simultaneously to enter the function mode settings



The shifter

Push the lever to let gear up. Press the button to let gear down. (Notice: please shift the gear when the rear wheel is rotating. Gear shifting when the rear wheel stops may damage the components.)



Cruise control system and walk-power assist

Turn throttle hold, Holding down - button for 8-15 seconds, cruise control system will start.

Holding down - button ,walk-power assist

1. Display function

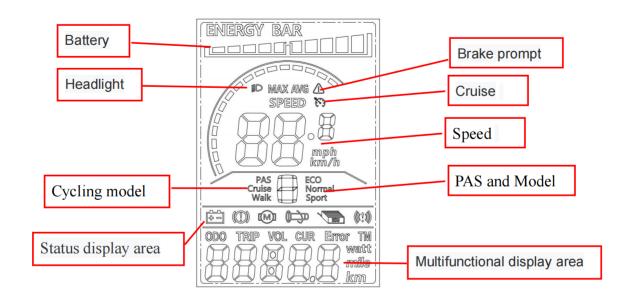
Speed display, power level display, power indicator, failure warning, total mileage, single mileage, headlight display, single driving time display

2. Control, setting up functions

Power switch control, headlight switch control, 6Km/h point control, wheel diameter setting, maximum speed setting, idle automatic hibernation time setting, backlight brightness setting, voltage level setting

3. Communication protocol: UART

All the contents of the display screen(full display in boot 1S)



Show content introduction

3.1 Headlight The instrument can be manually turned on and the brightness

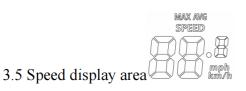
of the sensing environment is automatically turned on(light sensitivity support is required).

- 3.2 Battery power display BATTERY ENERGY BAR
- 3.3 Multifunctional display area ODO TRIP VOL CUR Error TM

Total mileage ODO, single mileage TRIP A, single mileage TRIP B, battery current voltage VOL, current operating current CUR, remaining mileage RM; Instrument boot time TM



Walk boost mode; Cruise: constant speed cruise mode; PAS: Power file position: $0 \sim 9$ adjustable;

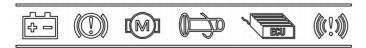


Maximum speed MAX, average speed AVG

Unit MPH, KM/H

The meter will calculate the true speed based on the wheel diameter and signal data

3. 6Vehicle Status Display Area



Meaning of fault icon:









Status prompt icon:



Vehicle Status Code Meaning:

Status	State Meaning	Remarks
Code(Decimal)		
E00	Normal	
E02	Brakes	
E06	Battery undervoltage	
E07	Motor failure	
E08	Turn malfunctioning	
E09	Controller failure	
E10	Communication reception failure	
E11	Communication dispatch failure	

3. 7. **install**

P01: Backlight brightness: the darkest level 1, the brightest level 3;

P02: mileage unit: 0: KM; 1: MILE;

P03: Voltage level: 24V, 36V, 48V, 60V;

P04: Dormancy time: 0, not dormancy; Other numbers are dormancy times, range:

1-60; Unit minutes;

P05: PAS number selection: 0, 3 file mode:

1,5 gear mode:

P06: Wheel setting: unit, inch;

wheel diameter value: 5.0 ~ 50 Precision: 0.1 inch

This parameter is related to the meter display speed and needs to be entered correctly;

P07: Speed gauge magnetic steel number: range: 1-100;

This parameter is related to the meter display speed and needs to be entered correctly; If it is an ordinary hub motor, the number of magnetic steel is input directly;

If it is a high-speed motor, it is also necessary to calculate the deceleration ratio, and the input data = the number of magnetic steel × deceleration ratio;

For example: number of motor magnets 20, deceleration ratio 4.3: input data is: $86 = 20 \times 4.3$

P08: Speed limit setting: Agreement No. 2 range 0-100km / H, 100 means no speed limit;

The input data here represents the maximum operating speed of the vehicle: for example, input 25, indicating that the maximum operating speed of the vehicle will not exceed 25km/h; The drive speed is maintained at the set value,

Error: ± 1km/h; (The speed limit for power and turning is equal)

Note: The value here is based on kilometers. When the unit setting is converted from kilometers to miles, the speed value of the display interface automatically converts to the correct mile value, but the speed limit value data set at this menu under the mile interface is not converted. Is inconsistent with the actual speed limit of the mile speed;

P09: zero start, non-zero start setting: 0: zero start; 1: Non-zero start; (valid for protocol 2 only)

P10: The drive mode is setting: 0: Power Drive(how much power is output is determined by the power file bit, and the switch is invalid at this time).(valid for protocol 2 only)

1: Electric drive(by turning the handle drive, the power file bit is invalid at this time).

2: Power Driven and Electric Driven Coexistence

P11: Help sensitivity setting: range: 1-24;(valid for protocol 2 only)

P12: Help start intensity setting: range: 1-5;(valid for protocol 2 only)

P13: Power Magnetic Steel Disk Type Setting: 5, 8, 12 Magnetic Steel Types

P14: Controller limit value setting: range: 1-20A

P15: Controller undervoltage

P16: ODO zero setting: length press key 5 seconds ODO zero

P17: Automatic cruise optional: 0: No enabling cruising, 1: enabling cruising; (valid for protocol 2 only); (valid for protocol 2 only)

P18: Display speed ratio adjustment: range: 50 % ~ 150 %,

P19:Zero PAS selection: 0: 0 file, 1: does not include 0 file

P20:0:2 Protocol 1:5 S Protocol 2: Standby 3: Standby



Battery Charging and Maintenance

Two keys are provided to lock or unlock the battery.

The battery can be charged in the compartment or taking off.

- •Please do not use any other chargers. Select a suitable charger based on applicable voltage.
- •The charging environment should be cool, dry and non-conductive.
- *Unplugging the socket immediately as soon as the battery gets charged fully (Green light on).
- Do not store the battery at the temperature above 60°C or below -20°C.
- In winter, the effective power of the battery can decrease by 1/3 when working in 0°C.
- The power volume will return to normal after the environment temperature raise to 20°C or higher.
- In summer, heat dissipation is important to keep the battery healthy. The battery should not be
- charged immediately after exposure to the strong sunshine.

Charging battery immediately after cycling or power consumption can to a large extent avoid the loss of battery capacity and lifetime.





The battery contactor cannot touch metals. Many cases shows the battery can be burned out if the customers use metals to touch the battery contactor.



Troubleshooting

Disc brake system fault Brake level

The display shows error code, which illustrates the failure to stop the bike by brake lever. This means the wires are not connected well or the brake lever is damaged. We suggest the customer can check whether any screw is loose and the lever can be returned to the position after grabbing. Ruling out the reasons above, the customer should replace the brake lever.

Disc brake

After bike assembly, the rubbing noise from disc brake can be heard when riding, which means the disc brake needs adjustments. Notice: The abnormal condition of disc brake usually results from the crush of shipment. This is a universal situation in our industry. The customer should do adjustment after assembly. The customer can search "bike disc brake adjustment" on Google or contact us to get a video link. The customers can turn to local bike shop's staff for help if they fail to do adjustment. Please do not grip the brake lever before assembling the brake disc, otherwise the oil will leak.

Shifter system fault

The failure to change the speed by shifter with the noise or chain beating illustrates the adjustment is not complete. The customer needs to adjust the shifter lever and rear shifter. (Please contact us to get a video link)

Notice: The abnormal condition of shifter usually results from the crush of shipment. The customershould do adjustment after assembly. This is a universal situation in our industry. The customer can search "bike shifter adjustment" on Google or contact us to get a video link. The customers can turn to local bike shop's staff for help if they fail to do adjustment.

Driver system fault

Error code

Error code on display and no response from throttle could be caused from controller wires damage, throttle extension wire damage or the loose of wires connections. Ruling out the reasons above, the customer should replace the throttle and extension wires.

The sensor issue

No power assist in power assist riding mode. The customer should check whether the wires damage or loose connection between the sensor and controller. Ruling out the reasons above, the customer should replace the sensor.



Battery fault

Battery voltage loss

Even if the customers had not ridden the bike for a long time, the battery should be charged one time in sixty days to avoid the battery voltage loss. The original charger cannot be used to charge the battery when the battery voltage is lower than the charger voltage.

The battery cannot get charged (The charger green light on)

The battery voltage loss can lead to the failure to charge the battery through the original charger. The customer needs to look for a lower voltage charger to charge the battery. For instance, the customer can try to charge 48V battery deeply one time by 36V charger till the red light turn to green light, then continuing to charge by original 48V charger to see whether red light of the charger is on. The issue will be solved after the light turns green. If the issue cannot be solved, the customer should replace a battery.

Endurance mileage decrease

The battery gets charged fully in a few minutes, but running out shortly. The endurance mileage is much less than described, which can be caused by the protective board or electric core fault. The customer should replace the battery to local bike shops staff for help if they fail to do adjustment.

The battery stops working when the bike climbing

The battery always stops working when the bike goes up the hill, but works normally on flat roads. This can be caused by the protective board or electric core fault. The customer should replace the battery.

Motor fault

The display shows error code, which means the motor stops working because the Hall sensor got burned, or motor overload got burned, or motor gear got damaged with noise. The customer should replace the motor.

Notice: The customer should check whether the wires loose, the function buttons are in the normal place.

The customer should rule out the problem caused by controller and display before checking the motor

Charger fault

The red light of charger will be on when charging, while the green light will be on when it stops charging. The normal charging time is 4 to 6 hours.



Warning

- (1) You are required to wear a helmet to protect yourself during cycling.
- (2) You have to learn and obey the local law for cycling.
- (3) You have to check the bike carefully before riding.
- (4) You should charge and store the battery according to our guidance.

