



汇联时代科技有限公司

Shenzhen JLink Times Technology Co., LTD

YB418 Instruction Manual

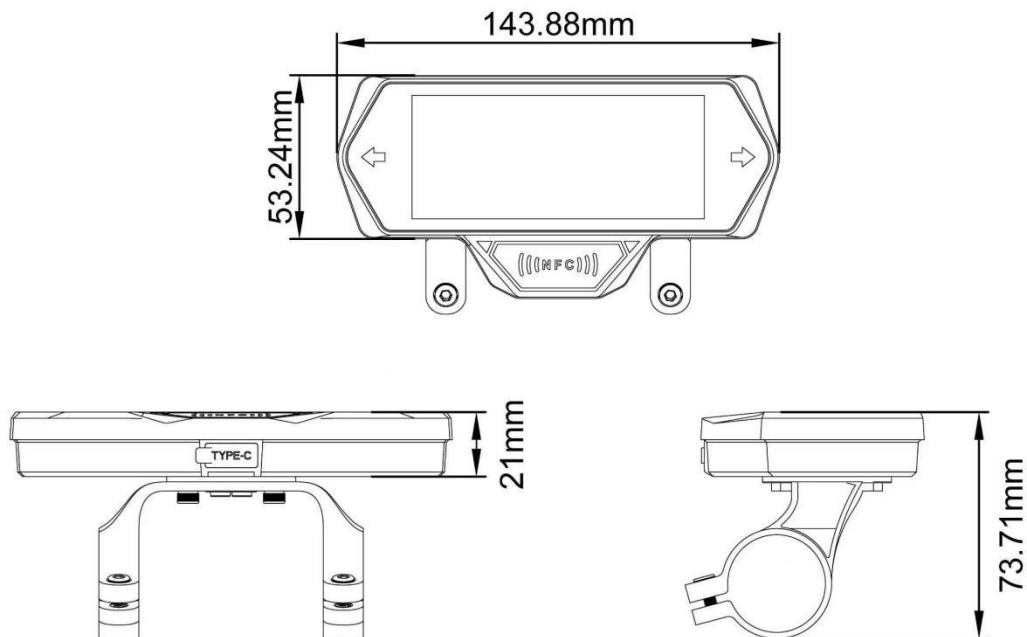
2026-04-27 Protocol 2 / 5S Protocol



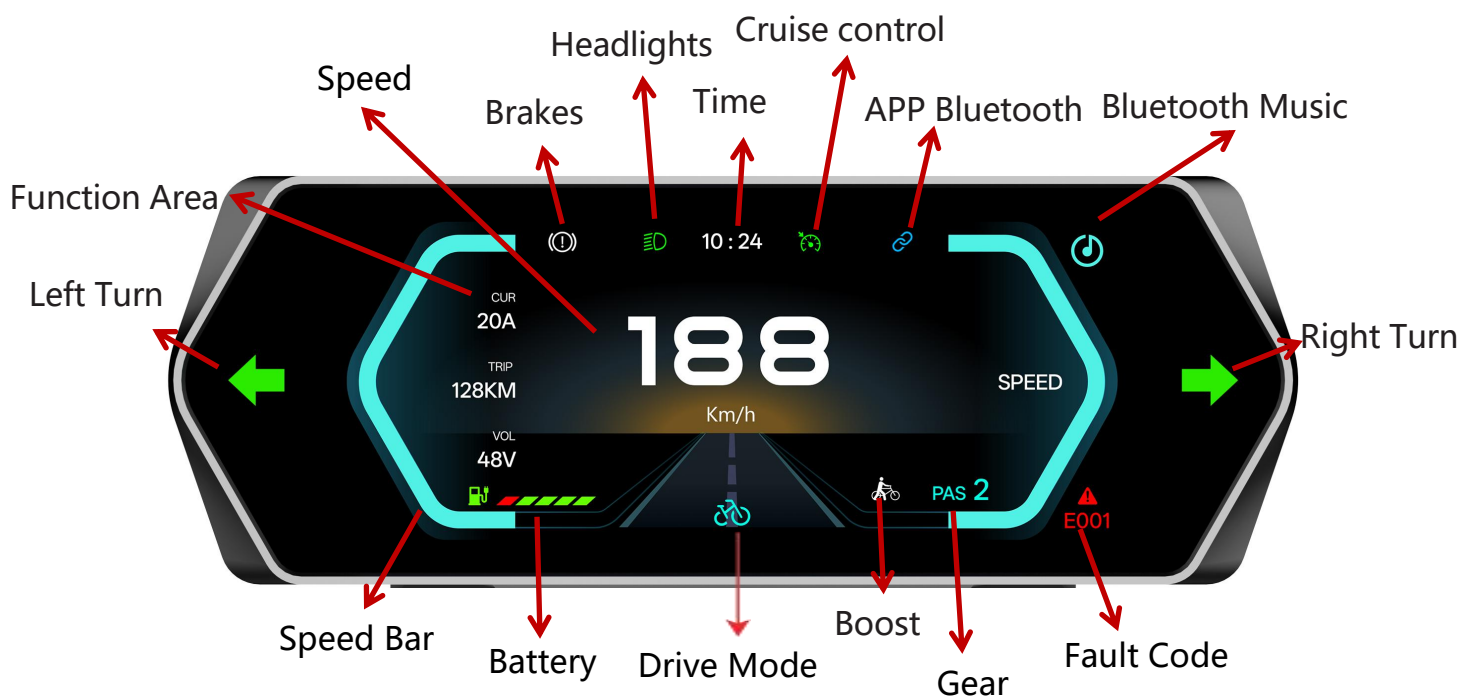
Dear User:

In order for you to use the instrument better, please read the YB418 User Manual carefully.

Outer size:



Description of the display interface:



Operation Instructions for YB418 Instrument

Key Definition :

The instrument's supporting handle has a total of three keys. They are the power-on/mode key (M), the plus key (+), and the minus key (-)



Power on :

Under the electrified state, press and hold the power-on key for 5 seconds to power on.

Power off:

Under the electrified state, press and hold the power-on key for 5 seconds to power off.

Selection of Assist Levels :

Short press the plus (+) key or the minus (-) key to switch the assist level of the electric bike. The power range is from 0 to 5 gears. Gear 1 is the lowest power, and Gear 5 is the highest power. The gear position is determined by the manufacturer for the twist grip/assist gear, and the default is Gear 1.

The total number of gears and the value of each gear can be adjusted in the settings interface. Refer to the settings interface.

Assisted Pushing :

Long press the (-) key for 3 seconds and the electric bike enters the power-assisted pushing state. The electric bike travels at a speed of 6 kilometers per hour. Long press for another 3 seconds or squeeze the brake to immediately stop the power-assisted pushing.



Turn on/off the headlight :

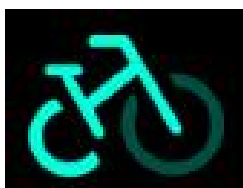
Long press the (+) key for 3 seconds to turn on/off the headlight. (If the light sensor is selected, the headlight will be automatically turned on or off through the light sensor on the front of the instrument.)



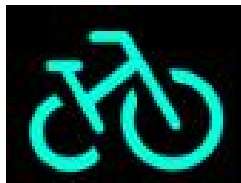
Display Indication of Dual-Drive Mode :

Short press the power button twice to switch the drive mode.

Rear-wheel Drive :

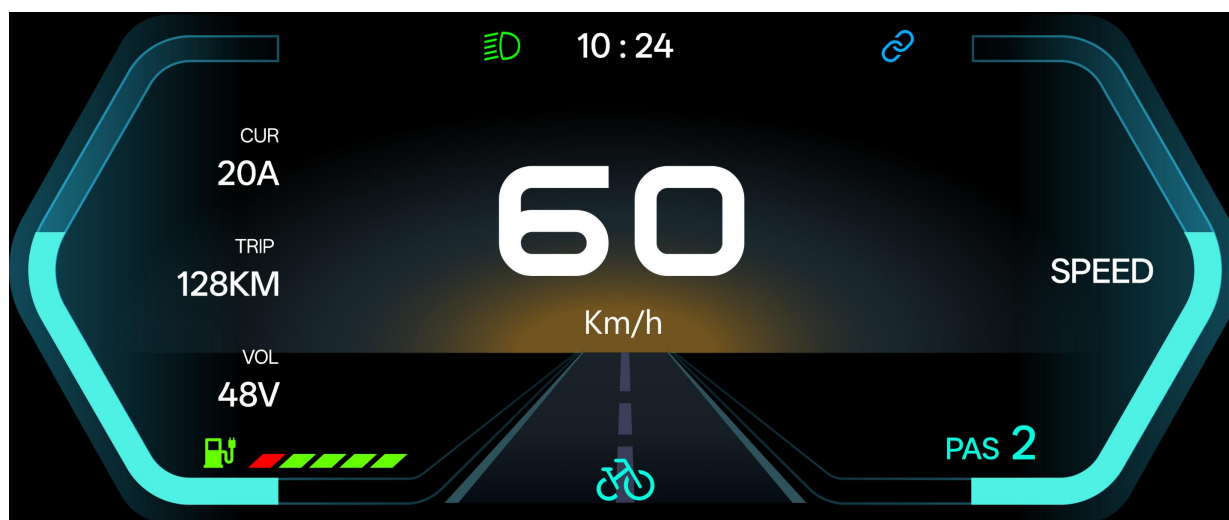


Dual Drive :



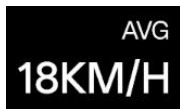
Speed Display :

When working normally and in a no-fault state, the current speed is displayed:



Short press the power key to switch to the flashing of AVG and MAX. Select AVG or MAX through the (+) key and (-) key. Click the power key again or wait for 8 seconds to automatically confirm the speed to be displayed.

AVG : Current Average Riding Speed.



MAX : Current Maximum Riding Speed.



Battery Power Display:

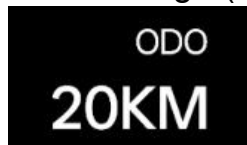
The battery power is displayed based on the set battery voltage (for details, see the settings interface). When the model supports BMS, the battery power is subject to BMS, and the estimated battery power of the instrument becomes invalid.



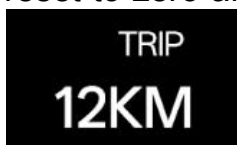
Mileage Display:

The instrument displays the total mileage from the factory and the mileage of a single ride. Short press the power key to switch to the flashing of the mileage unit. Select ODO or TRIP through the (+) key and (-) key. Click the power key again or wait for 8 seconds to automatically confirm the mileage to be displayed.

Total Mileage (ODO): The total mileage from the factory to the present.



Single Mileage (TRIP): The riding mileage after this startup, and it will be automatically reset to zero after



Error Code Display:

When a fault occurs in the electronic control system of the electric vehicle, the fault light comes on and the fault code is displayed at the speed position.

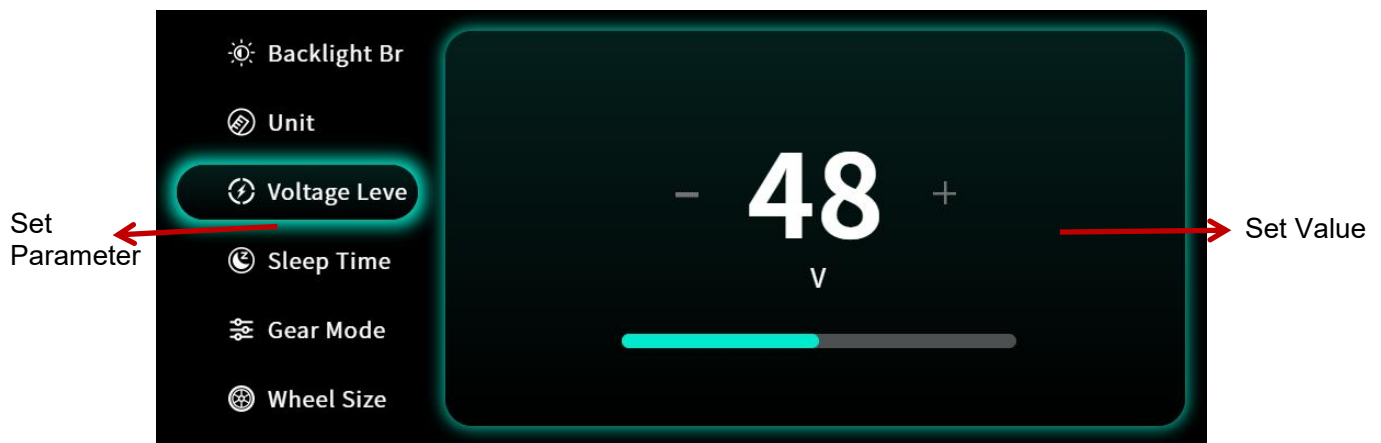


Fault Code for Protocol No. 2	
Fault Code	Fault Name
E06	Under-voltage Fault
E07	Motor Fault
E08	Throttle Fault
E09	Controller Fault
E10	Communication Receiving Fault
E11	Communication Sending Fault
E12	Brake Fault
5S Protocol Fault Code	
Fault Code	Fault Name
E06	Under-voltage Fault
E30	Communication Fault
E33	Current Fault
E34	Throttle Fault
E35	Motor Fault
E36	Motor Hall Fault
E37	Brake Fault

Setting Parameters:

The setting interface may vary depending on the adapted vehicle model and controller, but the specific setting items remain consistent. As some manufacturers customize the accessible settings, the settings listed below may not be available on all meters. Certain setting items may also be removed for safety reasons.

Entering the Setting Menu: When the device is powered on, the vehicle is stationary, and the meter is functioning normally, press and hold both the (+) and (-) keys for 3 seconds to enter the setting interface. The setting code will be displayed in the middle speed area. Short-press the power key to switch between function gear values, use the (+) and (-) keys to adjust the values, then press and hold both (+) and (-) keys for 3 seconds to save manually or wait 8 seconds for automatic saving. All gear and value changes will be shown in the digital display area at the bottom left. In the setting interface, it will automatically exit if there is no operation for 8 seconds.



Parameter Description:

1 : Backlight Brightness: 1 - 4: Manually adjust the backlight brightness from level 1 to level 4.

2 : Mileage Unit 0 : KM ; 1 : MILE ;

3 : Voltage Grade : 24V'36V'48V'60V ;

4 : Sleep Time : 0'No Sleep ;

Other numbers represent the sleep time, ranging from 1 to 60; unit: minutes ;

5 : Power Assist Gear: 0, 3-Gear Mode ;
1, 5-Gear Mode ;

6 : Tire Diameter : unit'inch ;

Value of Tire Diameter : 5.0~50 accuracy : 0.1 inch

This parameter is related to the speed displayed on the instrument and needs to be input correctly ;

7 : Number of Speed Measuring Magnetic Steels : Range : 1-100 ;

This parameter is related to the speed displayed on the instrument and needs to be input correctly.

If it is an ordinary hub motor, directly input the number of magnetic steels.

If it is a high-speed motor, the reduction ratio also needs to be calculated. The input

data = number of magnetic steels × reduction ratio

For example: The number of motor magnetic steels is 20, and the reduction ratio is 4.3: The input

data is: $86 = 20 \times 4.3$.

8 : Speed limit: Protocol No. 2, Range 0 - 100 km/h. 100 indicates no speed limit ;

The input data here represents the maximum operating speed of the vehicle: For example, if 25 is input, it means that the maximum operating speed of the vehicle will not exceed 25

km/h; the

driving speed is maintained at the set value.

Error: ± 0 km/h; (Both power assist and handlebar are subject to speed limit)

Note: The values here are based on kilometers.

9 : : Zero-start and non-zero-start settings , 0 : Zero-start ; 1 : Non-zero-start ;

10 : Drive mode setting. (Only valid for Protocol 2)

0 : Power-assisted drive (The amount of power assistance output is determined by the power assist gear. At this time, the handlebar is invalid).

1 : Electric drive (Driven by the handlebar. At this time, the power assist gear is invalid).

2 : Power-assisted drive and electric drive coexist simultaneously.

11 : Power assist sensitivity setting. (Only valid for Protocol 2) Range: 1 - 24;

12 : Power assist start intensity setting. Range: 1 - 5 ;

13 : Power assist magnetic steel disc type setting. Three types: 5, 8, and 12 magnetic steels.

14 : Controller current limit value setting. Range: 1 - 20A

15 : Controller undervoltage value.

16 : Reset settings: Long-press the + key for 5 seconds to clear the ODO; long-press the - key for 2 seconds to restore the factory settings.

17 : Cruise enable: 0: Cruise not enabled, 1: Cruise enabled; Automatic cruise is optional.

18 : Display speed ratio adjustment range: 50% - 150%.

19 : 0 gear enable bit. 0: There is gear 0. 1: There is no gear 0.

20: (Only valid for 5S protocol) First gear PWM (this value affects speed)

21: (Only valid for 5S protocol) Second gear PWM (this value affects speed)

22: (Only valid for 5S protocol) Third gear PWM (this value affects speed)

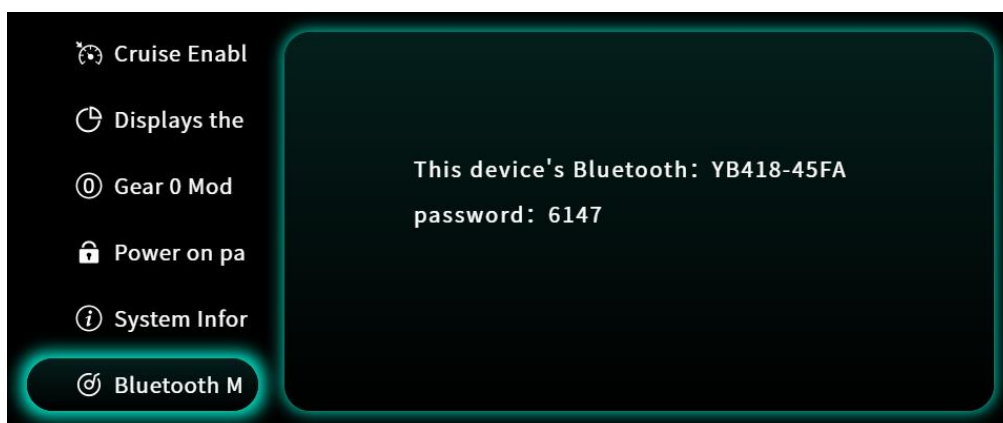
23: (Only valid for 5S protocol) Fourth gear PWM (this value affects speed)

24: (Only valid for 5S protocol) Fifth gear PWM (this value affects speed)

25: (Only valid for 5S protocol) 6KM boost PWM (this value affects speed)

26: Power-on password setting: 0: Off, 1: On;

27. Music Playback: Turn on your phone's Bluetooth, find the device Bluetooth shown in the picture, enter the password displayed in the image, and you can connect to Bluetooth Music.



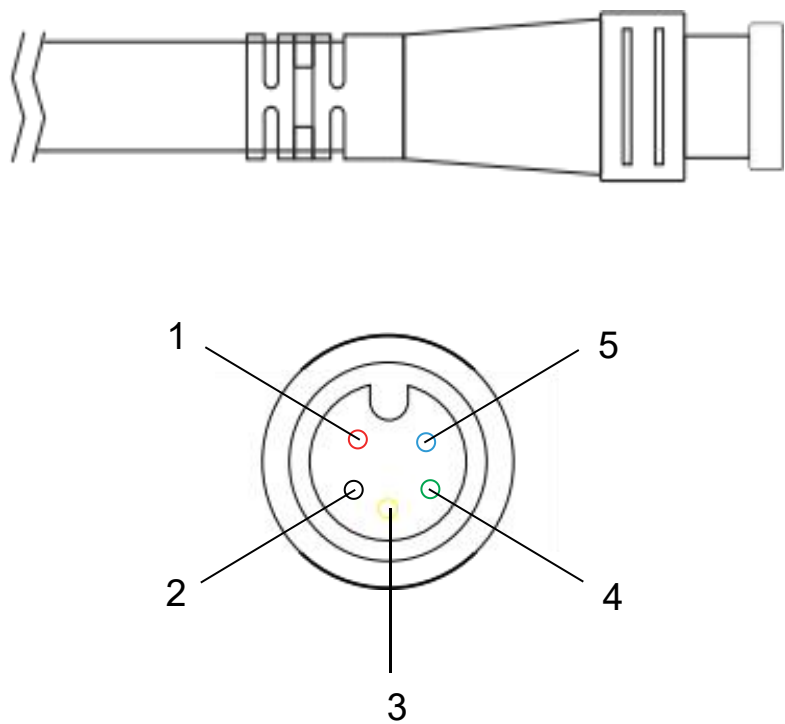
28. Connect APP.

29. System Language: Chinese, English.

30. NFC Binding.

31. Time Display.

Connection line description :



Lead wire number	Color	Function description
1	Red (VCC)	Connect to the positive electrode of the battery B+
2	Black (GND)	Connect to the negative electrode of the battery B-
3	Yellow (TX)	Data transmission
4	Green (RX)	Data reception
5	Blue (K)	Electric door lock

Note: The product connection line adopts a waterproof plug, and users cannot see the color of the lead wire inside the line

Remarks & Instructions:

The content of this instrument manual is compiled based on the current product version, aiming to guide users in understanding the instrument's basic functions, operation methods, and interface display logic.

As the product will undergo continuous iteration and optimization, the instrument's interface layout, function details, etc., may be adjusted with version updates, but this will not affect your normal use. Meanwhile, in response to the customized needs of different customers, there may also be differences in the instrument's setting item parameters and ranges (such as speed, battery level, mileage, etc.).

In actual use, please refer to the physical status, latest display interface, and customized parameters of the instrument you purchased. This manual is for reference only and does not constitute a final functional commitment.

FCC Warning:

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.

Caution: Any changes or modifications to this device not explicitly approved by manufacturer could void your authority to operate this equipment.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator and your body.