KT-LED890 Meter Advanced Parameters Setting Instruction Manual   **V2.3**

Settings KT-LED890 meter advanced P parameters, must operate under the guidance of professionals. The users themselves to set and adjust the advanced parameters, can make the electric bicycle motor, controller, meter to achieve the best matching state.

Before P parameter settings and adjustments, need to complete the maximum speed and wheel diameter two conventional project settings.

P Parameter Setting project

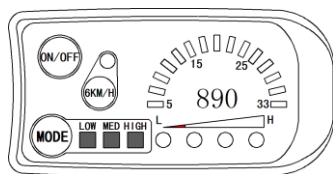P1 Motor Characteristic Parameter Setting Mode

P2 Wheel Speed Pulse Signal Setting Mode

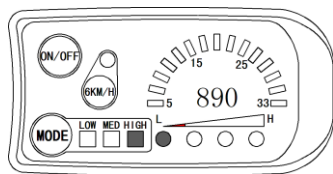P3 Power Assist Control Mode

P4 Handlebar Startup Mode

P5 Power Monitoring Mode

P Parameter Setting Method

After the completion of the wheel diameter setting, short press **6KM /H** button, LOW, MED and HIGH three LED lights are lit, press the **ON / OFF** button and **MODE** button simultaneously for about 2 seconds, enter P parameter setting environment.
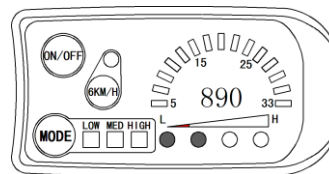
1.   P1 parameter setting

P1 is motor characteristic parameter setting mode. P1 = motor gear reduction ratio× number of rotor magnet pieces, just rounding if there's any decimal.

In the P parameter setting environment, first set the P1 parameters.   From left to right, the first battery indicator (L side) flashes to indicate that parameters is set to P1, two lights flashing as P2, and so on. P1 is set in the range of 1-255. HIGH indicator light flashes,   set the single digits of P1, MED indicator flashes set the tens,   LOW indicator flashes set the nearest hundred, short press **6KM / H** button to Switching P1 single digits, tens and hundred. The setting range of HIGH and MED should be between 0-9, The setting range of LOW should be between 0-2, represented by the number of lights flashing on speed indicator disc, short Press **ON / OFF** button or **MODE** button to select. Number is 0, no indicator shows.P1 parameter setting is completed, Long press 6KM / H button, enter the P2 parameter setting interface.
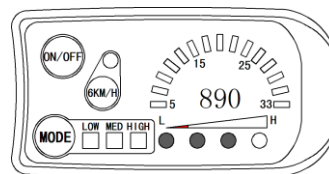
2.   P2 parameter setting

After entering P2 parameter setting interface, two battery indicator light flashes.P2 is wheel speed pulse signal setting mode. If wheel generated 1 pulse signal by a revolution, P2 should be set as1. If wheel generated 6 pulse signals by a revolution, P2 should be set as 6. If users didn't configure the pulse signal system, and then P2 parameter setting can be 0. The setting range of P2 should be between 0-6, represented by the number of lights flashing on speed indicator disc. short Press **ON / OFF** button or **MODE** button to select. When the digital select 0, no indicator lights. P2 parameter setting is completed, short press **6KM / H** button, enter the P3 parameter setting interface.
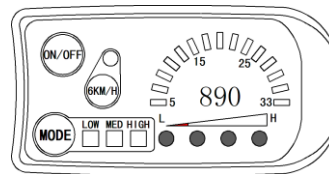
Please Note：when P2 parameter is set to be 0, for the built-in clutch motor, there will be the following defects, when the internal motor rotors stop or the internal rotor speed is lower than the outer rotor speed, then the speed displayed on the meter is inaccurate!
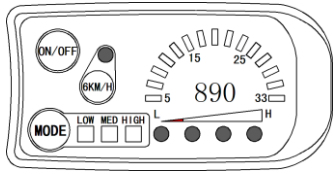
3.   P3 parameter setting

After entering P3 parameter setting interface, three battery indicator light flashes.P3 is for power assist control mode, when P3 parameter setting is1, power assist control mode is gear 3 of "**imitation torque control**" mode, when P3 parameter setting is 0, power assist control mode is gear 3 of "**speed control**" mode. P3 parameter needs to be determined according to the distributed function of the controller, its setting range is 0 or 1, short Press **ON / OFF** button or **MODE** button to select. P3 parameter setting method is the same to that of P2. P3 parameter setting is completed, short press **6KM / H** button, enter the P4 parameter setting interface.

4.   P4 parameter setting

After entering P4 parameter setting interface, four battery indicator light flashes. P4 is handlebar startup mode. When P4 setting is 1, indicating the handlebar is under "**non-zero startup**" mode, namely, the handlebar can be effective only after startup the foot power assist. When P4 setting is 0, indicating the handlebar is under "**zero startup**" mode, the motor can be startup by the handlebar directly. P4 setting range is 0 or 1, short Press **ON / OFF** button or **MODE** button to select. P4 parameter setting method is the same to that of P2. P4 parameter setting is completed, short press **6KM / H** button, enter the P5 parameter setting interface.

5. P5 parameter setting

After entering P5 parameter setting interface, four battery indicator and 6KM / H function indicator will flash simultaneously. P5 is power monitoring mode, when P5 setting is 0, the power monitoring is the "**real-time voltage**" mode. Namely, it is the method to determine the battery capacity based on real-time battery voltage. When P5 equals to a specified parameter, the power monitoring is the "**smart power**" mode (this parameter is determined by the battery characteristics, ordinary 24V lithium is generally is 4-11, 36V lithium is between 5_15). P5 setting ranges from 0-15, short Press **ON / OFF** button or **MODE** button to select. P5 parameter setting method is the same to that of P2.

6. Exit P Parameter Setting

Among the five P parameter settings, when each parameter setting is completed, if Long press **6KM / H** button, all can exit the setting environment, meanwhile, the current set parameters would be saved.

Under each parameter setting interface, if there's no button operation on the meter for more than 1 minute, and then the meter will automatically exit the setting environment, and the original set parameters will be saved.
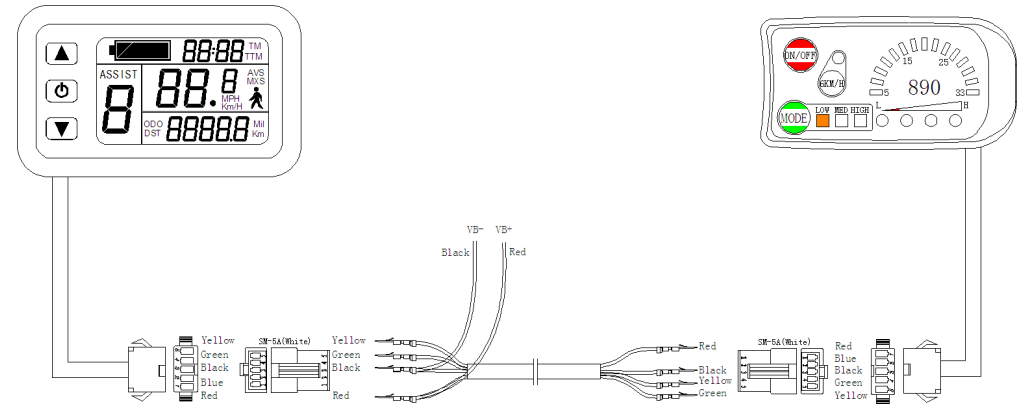
User Setting Note

After entering the user setting environment, if there's no button operation on the data for more than 1 minute, the meter will automatically exit the setting environment, and the original set parameters will be saved.
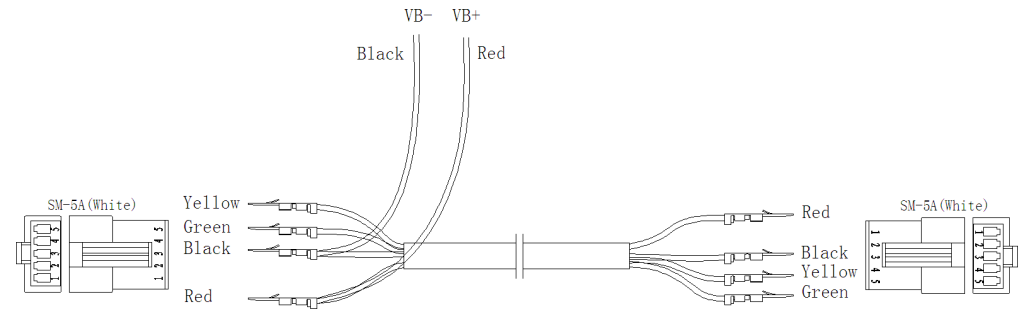
The factory parameter set value and the default value of the meter can be set according to user requirements.

Parameter Copy

Set parameters (include general project parameter and P parameter) of all KT-LCD meter or KT-LED890 meter produced by our company according to requirements, use special wiring cables to properly wire to 890 meter needs to be copied according to the diagram.

Meter parameter copy wiring diagram

Special wiring cable

Turn on meter power supply of setting parameters. Power supply of 48V or 36V or 24V is available (VB + positive power supply). After wiring the meter needs to be copied, long Press **ON / OFF** button till meter is startup. Within 5 seconds after startup, press the **ON / OFF** button and **MODE** button simultaneously for about 2 seconds, enter the parameter copying interface. This moment, LOW, MED and HIGH three indicator light lit alternately. If the copy operation is correct, after 3 seconds, MED indicator lights up and exit copy environment. If a connection error, then stay in the advanced parameters manually setting environment.