ANANDA

USERS GUIDE

AND D10

Model： D10

Version：

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1. Forward

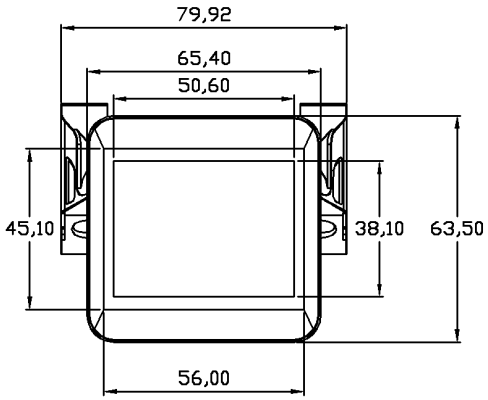
The document contains the product technical specification for the model listed.

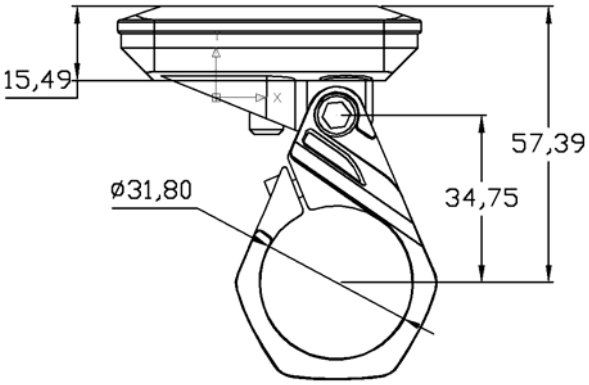
In order to better use your electric bicycle, please read the instructions of the AND D10 instrument carefully before use.

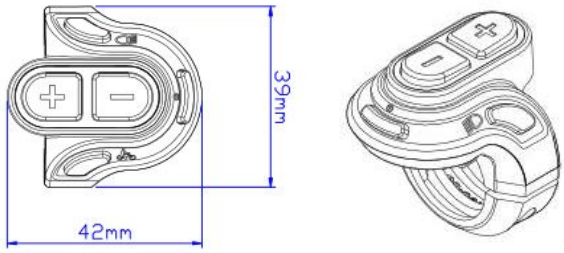
In order to make better use of your e bike, please read the instructions of the AND D10 display carefully before use.

1. Appearance and outline

AND D10 uses a combination of a metal sump and a glass cover. The material of the outer casing allows normal use at temperatures between -20 ° C and 60 ° C and guarantees good mechanical properties.
Dimensional drawing (unit: mm)





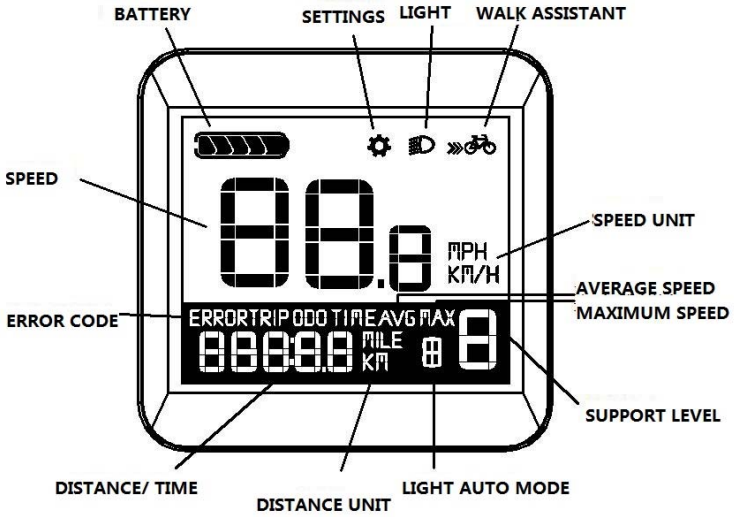


Note: AND D10 has buttons with cable connected at the bottom of the display. Following characters will be used in the instruction for the buttons: “power” for ⏻, “light” for 🔦, “walking” for 🚶.

2. Functionalities overview

◆Battery
◆Speed（current speed, average speed, max. speed）
◆Distance（ODO distance/TRIP distance）
◆Trip time
◆Support levels
◆Light
◆6km/h walk assistant
◆Error code
◆Settings: wheel size, speed limit, backlight, unit, Photosensitive threshold
◆Automatically control backlight brightness (according to ambient light intensity)
◆Battery information and software version
◆Either under riding or parking state, after switching between average/max or trip/time, it will automatically get back to ODO.

3. User's interface



AND D10 UI

4. Functionality

5.1 Switch on/off

Press and hold the Power button for 1 second, the display starts to work and provides the controller working power.

When switch on, press and hold the Power button for 2 seconds to turn off power of the e bike.
When switch off, the display no longer uses the battery's power supply, and the display’s leakage current is less than 1uA.
The system will automatically shut down after 10 minutes without operation.

5.2 Speed/Distance（ODO distance/TRIP distance/Trip time）

At startup the displayed mode is always Current speed and ODO distance. Press Power button shortly to switch between: Current speed and ODO distance-> AVERAGE Speed and TRIP distance-> Maximum speed and TRIP time
In the AVERAGE Speed and TRIP distance mode or Maximum speed and TRIP time mode, pressing and holding the “-” button to reset the AVERAGE Speed, TRIP distance, Maximum speed and TRIP time value to 0.
Reset is invalid in Current speed and ODO distance mode.

Current speed and ODO distance

AVERAGE Speed and TRIP distance

Maximum speed and TRIP time

5.3 Light switch

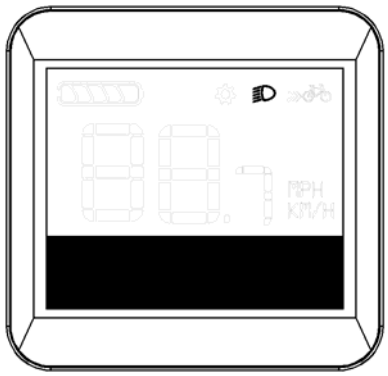
Auto mode: The display automatically controls the light to turn on/off by detecting ambient light. At this time,

pressing “light” button is invalid.

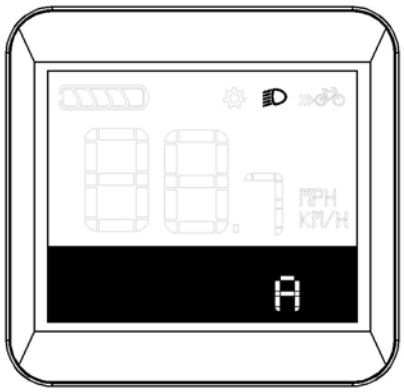
Manual mode: Press “light” button to turn the light on/off in manual mode.

Auto/manual mode switching: Press and hold the "light" button (>2S) to switch between auto mode and manual mode. (Auto mode is on by default when the display is powered on and logo "A" is displayed on the screen).

If in auto mode the light is on and after switching to manual mode, light will be off, and vice versa.



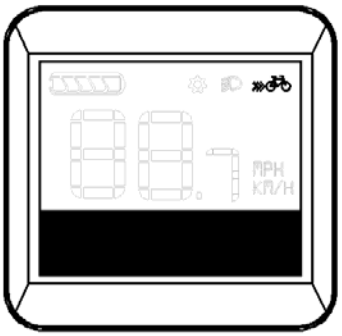
Light indication



Auto mode indication

5.4 6km/h Walk assistant

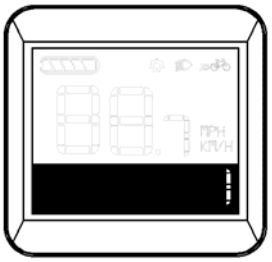
Press and hold the Walk button, e bike will enter the 6km/h walk assistant mode. Release the Walk button to exit the walk assistant mode.



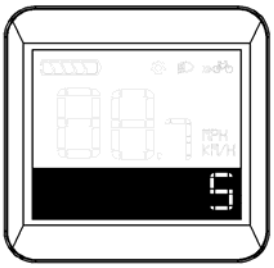
6km/h walk assistant indication

5.5 Support mode

There are 5 support levels and 1 off level, (1 is the lowest support level while 5 is the highest support level).
At startup the support level is always level 1.
Press “+” and “-” button to choose support level between 0-5.



Support level 1



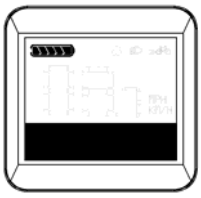
Support level 5

5.6 Battery indication

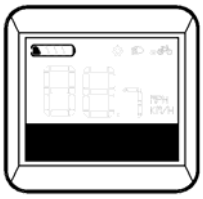
When the battery capacity is full, the five-segment indicator lights up. When the battery capacity is insufficient, it switches from one-segment indicator lighting up and the empty segment flashing, indicating that the battery is under voltage and needs to be charged immediately.

Battery capacity indication:

15%——29%	one-segment
30%——44%	two-segment
45%——59%	three-segment
60%——84%	four-segment
>=85%	five-segment



full battery



low battery

under voltage

5.7 Auto backlight adjustment

The brightness of the backlight will be adjusted automatically according to the intensity of the ambient light.
When it becomes dark, the brightness of the backlight is automatically dimmed while the front light will be automatically turned on. When it becomes bright, the brightness of the backlight will also become brighter while the front light will be automatically turned off to ensure that the rider can read the information easily and accurately.

5.8 Error codes

To show user there is an error, indicate: Error code in the screen.
The error indication can only be exit when the problem is solved. After the error occurs, the e bike will not be able to continue riding.

Error code indication

Error code	Failure	Solution
21	Current failure	Check if the three phases of the motor are short circuit.
23	Motor phase failure	Check if the phase wire is good; Check if the motor phase wire is well connected to the controller.
24	Motor hall failure	Controller with hall: check if the phase wire is good.
30	Communication	Check if the display and the

	failure	controller are well connected.

5. Settings

6.1 Settings Menu

In the main menu and the speed is 0, press “+” and “-” to enter into regular setting menu. Press “+” shortly to switch between Backlight brightness setting - Speed limit setting - Wheel size setting - Unit setting.
In the regular setting menu, press “+” and “-” (>2s) to go into password interface. Enter password (6262 by default) and go into hidden setting 1. Press “+” shortly to switch between Battery information - Software version - Photosensitive threshold setting.
When enter the password, press “+” shortly to change the number, press “-” shortly to change digit, press Power button to confirm the password.

6.2 Backlight brightness setting

In the regular setting menu, press “+” shortly to switch between Backlight brightness setting - Speed limit setting - Wheel size setting - Unit setting.
Press Power button shortly to choose backlight brightness adjustment mode.
There are 3 levels backlight brightness.
At startup the brightness level is always level 1 (the lowest level).

Press “+” or “-” button to choose backlight brightness level between 1-3. Press Power button again to save the change and exit backlight brightness adjustment mode.

Backlight brightness setting

6.3 Speed limit setting

In the regular setting menu, press “+” shortly to switch between Backlight brightness setting - Speed limit setting - Wheel size setting - Unit setting.
Press Power button shortly to choose speed limit adjustment mode.
The speed limit setting sets the maximum riding speed of the e bike. When it exceeds the set value, the controller will cut power supply to the motor to protect the rider's safe driving.
Press Power button to choose speed limit from 12Km/h to 40Km/h. Default speed limit is 25Km/h.
Press Power button again to save the change and exit speed limit setting.

Speed limit setting

6.4 Wheel size setting

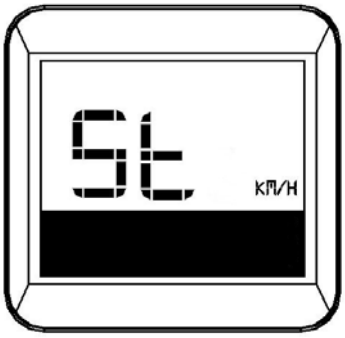
In the regular setting menu, press “+” shortly to switch between Backlight brightness setting - Speed limit setting - Wheel size setting - Unit setting.
Press Power button shortly to choose wheel size adjustment mode.
Following wheel sizes are available: 16inch, 18 inch, 20inch, 22inch, 24inch, 26inch, 700C, 28inch, 29inch.
Default wheel size is 26 inch.
Press “+” or “-” button to choose wheel size between 16inch, 18 inch, 20inch, 22inch, 24inch, 26inch, 700C, 28inch and 29inch.
Press Power button again to save the change and exit wheel size adjustment mode.

Wheel size setting

6.5 Unit setting

In the regular setting menu, press “+” shortly to switch between Backlight brightness setting - Speed limit setting - Wheel size setting - Unit setting.

Press Power button to choose unit adjustment mode for speed and trip. Press “+” or “-” button shortly to switch between the metric unit (Km/h) and the imperial unit (MPH). Press Power button again to save the change and exit unit adjustment mode.



Unit setting

6.6 Battery information

After entering the hidden setting, short press "+" button to switch between Battery information - Software version - Photosensitive threshold setting.
Press Power button shortly to choose battery information mode.
Press “+” or “-” shortly to switch between the different battery conditions.
Press Power button again to exit battery information mode.

Battery information code table

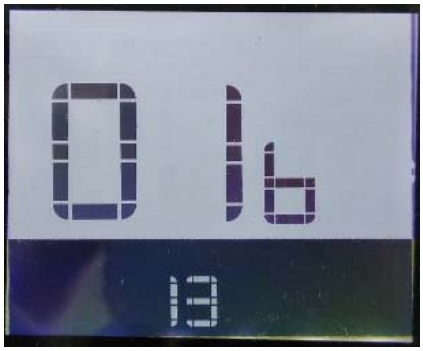
Code	Battery
1b	“Cycles”
2b	“Full charge ——Cap”
3b	“Remaining ——Cap”
4b	“Battery Voltage”
5b	“Cell01 Voltage”
6b	“Cell02 Voltage”
7b	“Cell03 Voltage”
8b	“Cell04 Voltage”
9b	“Cell05 Voltage”
10b	“Cell06 Voltage”
11b	“Cell07 Voltage”

12b	“Cell08 Voltage”
13b	“Cell09 Voltage”
14b	“Cell10 Voltage”

6.7 Software version

After entering the hidden setting, short press "+" button to switch between Battery information - Software version - Photosensitive threshold setting.
Press Power button shortly to choose software version.
Software version information can only be read.

Software version



Battery information

6.8 Photosensitive threshold setting

After entering the hidden setting, short press "+" button to switch between Battery information - Software version - Photosensitive threshold setting.
Press Power button shortly to enter Photosensitive threshold setting mode.
Press “+” or “-” shortly to change the levels.
P stands for the photosensitive threshold. Adjust this parameter to adjust the sensitivity of the automatic headlight function to ambient light. The higher the value is, the lower the sensitivity is. The ambient light required to automatically turn on the headlights needs to be weaker.
Press Power button again to save the change and exit

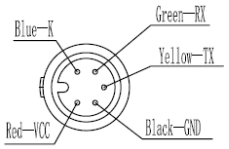
photosensitive threshold adjustment mode.

photosensitive threshold setting

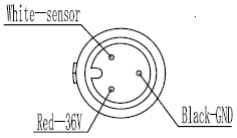
6.9 Save/ Exit settings

1. After finishing the settings in both regular settings menu and hidden settings menu, press and hold Power button (>2s) to save the setting and back to the main menu.
2. 10 seconds without operation in both regular settings menu and hidden settings menu to save the latest setting and go back to the main menu.

6. Connection terminal and pins definition



Connection to control



Connection to buttons

Pin definition

Sequence	Color	Definition
1	red	VCC
2	blue	KEY
3	black	GND
4	green	RX
5	yellow	TX

- End of file -