

# 7 USER MANUAL FOR DP C171.CAN



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# 7.1 IMPORTANT NOTICE

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- If the error information from the display cannot be corrected according to the instructions, please contact your retailer.
- The product is designed to be waterproof. It is highly recommended to avoid submerging the display under water.
- Do not clean the display with a steam jet, high-pressure cleaner or water hose.
- Please use this product with care.
- Do not use thinners or other solvents to clean the display. Such substances can damage the surfaces.
- Warranty is not included due to wear and normal use and aging.

# 7.2 INTRODUCTION OF DISPLAY

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- Model: DP C171.CAN BUS
- The housing material is PC and Acrylic, and the button material is made of silicone.



The label marking is as follows:



**i** **Note:** Please keep the QR code label attached to the display cable. The information from the Label is used for a later possible software update.

# 7.3 PRODUCT DESCRIPTION

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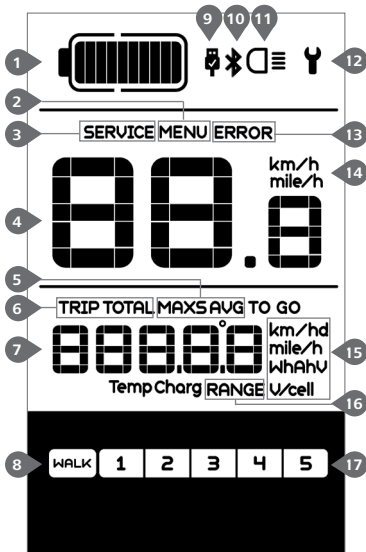
## 7.3.1 Specifications



- Rated voltage: 36V/43V/48V DC
- Operating temperature: -20 °C~45 °C
- Storage temperature: -20 °C~50 °C
- Waterproof: IP65
- Bearing humidity: 30%-70% RH

## 7.3.2 Functional Overview

- Speed display (including speed in real time (SPEED), top speed (MAXS) and average speed (AVG), switching between km and miles)
- Switching between km and miles
- Battery capacity indicator
- Automatic sensors explanation of the lighting system
- Brightness setting for backlight
- Indication of performance support
- Walk assistance
- Kilometer stand (including single-trip distance, total distance)
- Display for the remaining distance.(Depends on your riding style)
- Motor output power indicator
- Energy consumption indicator CALORIES (Note: If the display has this function)
- Error messages view
- Service
- USB charge function
- Bluetooth function (it can be connected to the phone to use the Bafang Go APP).
- The SEGMA heart rate monitor can be connected to display the heart rate in real time.

# 7.4 DISPLAY



- 1 Display of battery capacity in real time.
- 2 Menu.
- 3 Service: please see the service section.
- 4 Digital speed display.
- 5 Speed mode , top speed (MAXS) - Average speed (AVG).
- 6 Kilometer stand, Daily kilometers (TRIP) - Total kilometers (TOTAL).
- 7 Data: Display data, which corresponds to the current mode.
- 8 Walking assistance **WALK** .
- 9 USB charging indicator displays the icon  , if an external USB device is connected to the display.
- 10 Bluetooth indicator.
- 11 The display shows  this symbol, if the light is on.
- 12 Error indicator **Y** .
- 13 Error code indicator.
- 14 Speed unit.
- 15 Unit indicator.
- 16 Remaining distance (RANGE).
- 17 Support level

# 7.5 KEY DEFINITION



# 7.6 NORMAL OPERATION

## 7.6.1 Switching the System ON/OFF

Press and hold (>2S) on the display to turn on the system. Press and hold (>2S) again to turn off the system.


If the "automatic shutdown time" is set to 5 minutes (it can be set with the "Auto Off" function, See "Auto Off"), the display will automatically be turned off within the desired time when it is not in operation.

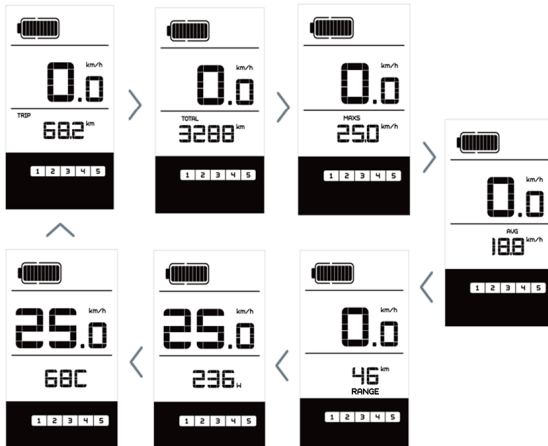
## 7.6.2 Selection of Support Levels

When the display is turned on, press (<0.5S) the or button to switch to the support level, the lowest level is 1, the highest level is 5. When the system is switched on, the support level starts in level 1. There is no support at level null.




### 7.6.3 Selection mode

Briefly press (<0.5s) the  button to see the different trip modes. Trip: daily kilometers (TRIP) - total kilometers (TOTAL) - Maximum speed (MAXS) - Average speed (AVG) - Remaining distance (RANGE) - Output power (W) - Energy consumption (C (only with torque sensor fitted)).



### 7.6.4 Headlights / backlighting




Hold (>2S) the  button to activate the headlight and backlight.

Hold (>2S) the  button again to turn off the headlight and backlight. The brightness of the backlight can be set in the display settings "Brightness". (If the display /Pedelec is switched on in a dark environment, the display backlight/headlight will automatically be switched on. If the display backlight/headlight has been manually switched off, the automatic sensor function is deactivated. You can only turn on the light manually after switching on the system again.)



### 7.6.5 Walk Assistance

The Walk assistance can only be activated with a standing pedelec.

Activation: Briefly press (<0.5S) the  button until level null, and then press (<0.5s) the  button, the WALK symbol is displayed. Now hold down the  button and the Walk assistance will activate. The WALK symbol will flashes and the pedelec moves approx. 6 km/h. After releasing the button, the motor stops automatically and switches back to level null (if no any option be activated in 5 second). If no speed signal is detected, it shows 2.5km/h.

### 7.6.6 Battery capacity indication


The battery capacity is showed in ten bars. Each full bar represents a remaining capacity of the battery in a percentage, if the frame of indicator blinks that means to charge. (as shown in the figure below):

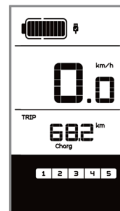


| Bars | Charge in Percentage |
|------|----------------------|
| 10   | ≥90%                 |
| 9    | 80%≤C<90%            |
| 8    | 70%≤C<80%            |
| 7    | 60%≤C<70%            |
| 6    | 50%≤C<60%            |
| 5    | 40%≤C<50%            |
| 4    | 30%≤C<40%            |
| 3    | 20%≤C<30%            |

| Bars     | Charge in Percentage |
|----------|----------------------|
| 2        | 10%≤C<20%            |
| 1        | 5%≤C<10%             |
| Blinking | C<5%                 |


### 7.6.7 USB charge function

If an external USB device is connected to the display, the icon  appears, the device will be charged. The maximum charging voltage is 5V and the maximum charging current is 500mA.



### 7.6.8 Bluetooth function

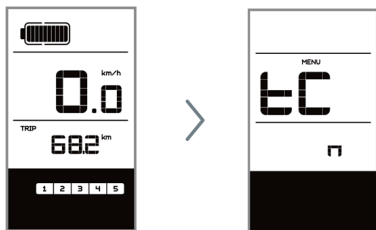
This display can connect via Bluetooth to mobile phone and communicate with Bafang Go APP. The Information of motor, display, battery, sensor and controller information can be displayed on mobile phone, and it can update the firmware of Pedelec by using APP via mobile phone.

If open the APP and connect the display, after connected to the mobile, the Bluetooth  indicator will be lighted as shown below:



# 7.7 SETTINGS

After the display is turned on, quickly press (<0.3S) the **i** button twice to access the "MENU" interface. pressing the **+** or **-** button, you can select and reset the options. Then press (<0.3S) the **i** button twice to confirm your selected option and to return to the main screen. If no button is pressed within 10 seconds in "MENU" interface, the display will automatically return to the main screen and no data will be saved.

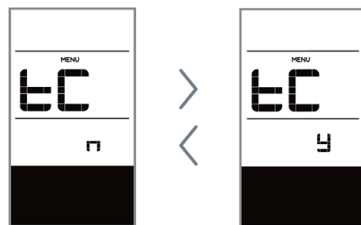


## 7.7.1 Setting

### 7.7.1.1 Reset mileage

When the system is on, quickly press (<0.3S) the **i** button twice to access the "MENU" interface and "tC" appears on the display (as shown below). Now using the **+** or **-** button, choose between "y"(YES) or "n"(NO). If choose "y", the Daily kilometers (TRIP), Maximum speed (MAX) and Average speed (AVG) will be reset.

Once you have chosen your desired selection, press (<0.3S) the **i** button twice to save and return to the main screen, or you can press (<0.3S) the **i** button once to save and enter next item "Selection of unit in km/Miles".



**NOTE:** If the daily kilometers accumulate 99999km, the daily kilometers will be reset automatically.

### 7.7.1.2 Selection of unit in km/Miles

When the system is on, quickly press (<0.3S) the **i** button twice to access the "MENU" interface, repetitively press the **i** button until the "S7" appears on the display (as shown below). Now using the **+** or **-** button, choose between "km/h" or "mile/h".

Once you have chosen your desired selection, press (<0.3S) the **i** button twice to save and return to the main screen, or you can press (<0.3S) the **i** button once to save and enter next item "Set light sensitivity".



### 7.7.1.3 Set light sensitivity

When the system is on, quickly press (<0.3S) the **i** button twice to access the "MENU" interface, repetitively press the **i** button until the "bLO" appears on the display (as shown below). And then press **+** to increase or **-** to reduce (light



sensitivity for 0-5). Chose 0 means turn off the light sensitivity.

Once you have chosen your desired selection, press (<0.3S) the **i** button twice to save and return to the main screen, or you can press (<0.3S) the **i** button once to save and enter next item "Set display brightness".



#### 7.7.1.4 Set display brightness

When the system is on, quickly press (<0.3S) the **i** button twice to access the "MENU" interface, repetitively press the **i** button until the "bL1" appears on the display (as shown below). And then press **+** to increase or **-** to reduce (brightness for 1-5).

Once you have chosen your desired selection, press (<0.3S) the **i** button twice to save and return to the main screen, or you can press (<0.3S) the **i** button once to save and enter next item "Set Auto Off".



#### 7.7.1.5 Set Auto Off

When the system is on, quickly press (<0.3S) the **i** button twice to access the "MENU" interface, repetitively press the

**i** button until the "OFF" appears on the display (as shown below). And then press **+** to increase or **-** to reduce (brightness for 1-9minute).

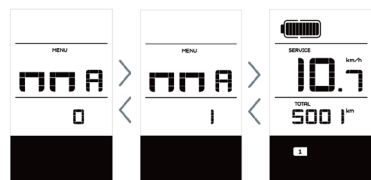
Once you have chosen your desired selection, press (<0.3S) the **i** button twice to save and return to the main screen, or you can press (<0.3S) the **i** button once to save and enter next item "Service Tip".



#### 7.7.1.6 Service Tip

When the system is on, quickly press (<0.3S) the **i** button twice to access the "MENU" interface, repetitively press the **i** button until the "nnA" appears on the display (as shown below). And then press **+** or **-** to choose between "0" or "1". Chose 0 means turn off the notification.

Once you have chosen your desired selection, press (<0.3S) the **i** button twice to save and return to the main screen.







**NOTE:** If the "Service" function switch on, every 5000 km (the mileage of more than 5000 km) the indicator "**SERVICE**" is displayed every time at switch on.

## 7.7.2 View Information

All data in this item cannot be changed, only to be viewed.



### 7.7.2.1 Wheel Size



When the system is on, quickly press (<0.3S) the  button twice to access the "MENU" interface, repetitively press the  button until the "LUd" appears on the display (as shown below).

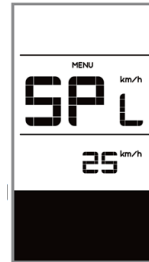
Once you have viewed your desired information, press (<0.3S) the  button twice to save and return to the main screen, or you can press (<0.3S) the  button once to enter next item "Speed Limit".





### 7.7.2.2 Speed Limit



When the system is on, quickly press (<0.3S) the  button twice to access the "MENU" interface, repetitively press the  button until the "SPL" appears on the display (as shown below).

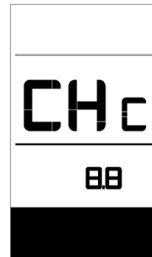
Once you have viewed your desired information, press (<0.3S) the  button twice to save and return to the main screen, or you can press (<0.3S) the  button once to enter next item "Controller hardware info".





### 7.7.2.3 Controller hardware info



When the system is on, quickly press (<0.3S) the  button twice to access the "MENU" interface, repetitively press the  button until the "CHc (Controller Hardware check)" appears on the display (as shown below).

Once you have viewed your desired information, press (<0.3S) the  button twice to save and return to the main screen, or you can press (<0.3S) the  button once to enter next item "Controller software info".





### 7.7.2.4 Controller software info



When the system is on, quickly press (<0.3S) the  button twice to access the "MENU" interface, repetitively press the  button until the "CSc (Controller Software check)" appears on the display (as shown below).

Once you have viewed your desired information, press (<0.3S) the  button twice to save and return to the main screen, or you can press (<0.3S) the  button once to enter next item "Display hardware info".




#### 7.7.2.5 Display hardware info


When the system is on, quickly press (<0.3S) the  button twice to access the "MENU" interface, repetitively press the  button until the "dHc (Display Hardware check)" appears on the display (as shown below).



Once you have viewed your desired information, press (<0.3S) the  button twice to save and return to the main screen, or you can press (<0.3S) the  button once to enter next item "Display software info".



#### 7.7.2.6 Display software info



When the system is on, quickly press (<0.3S) the  button twice to access



the "MENU" interface, repetitively press the  button until the "dSc (Display Software check)" appears on the display (as shown below).

Once you have viewed your desired information, press (<0.3S) the  button twice to save and return to the main screen, or you can press (<0.3S) the  button once to enter next item "BMS hardware info".



#### 7.7.2.7 BMS hardware info

When the system is on, quickly press (<0.3S) the  button twice to access the "MENU" interface, repetitively press the  button until the "bHc (BMS Hardware check)" appears on the display (as shown below).

Once you have viewed your desired information, press (<0.3S) the  button twice to save and return to the main screen, or you can press (<0.3S) the  button once to enter next item "BMS software info".



### 7.7.2.8 BMS software info

When the system is on, quickly press (<0.3S) the **i** button twice to access the "MENU" interface, repetitively press the **i** button until the "dSc (Display Software check)" appears on the display (as shown below).

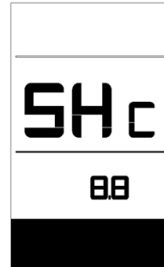
Once you have viewed your desired information, press (<0.3S) the **i** button twice to save and return to the main screen, or you can press (<0.3S) the **i** button once to enter next item "Sensor hardware info".



### 7.7.2.9 Sensor hardware info

When the system is on, quickly press (<0.3S) the **i** button twice to access the "MENU" interface, repetitively press the **i** button until the "SHc (Sensor Hardware check)" appears on the display (as shown below).

Once you have viewed your desired information, press (<0.3S) the **i** button twice to save and return to the main screen, or you can press (<0.3S) the **i** button once to enter next item "Sensor software info".



**NOTE:** This information is not displayed, if there are no torque sensor in the drive system.

### 7.7.2.10 Sensor software info




When the system is on, quickly press (<0.3S) the **i** button twice to access the "MENU" interface, repetitively press the **i** button until the "SSc (Sensor Software check)" appears on the display (as shown below).



Once you have viewed your desired information, press (<0.3S) the **i** button twice to save and return to the main screen, or you can press (<0.3S) the **i** button once to enter next item "Battery info".



**NOTE:** This information is not displayed, if there are no torque sensor in the drive system.

### 7.7.2.11 Battery Information

When the system is on, quickly press (<0.3S) the  button twice to access the "MENU" interface, repetitively press the  button until the "b01" appears on the display (as shown below). You can briefly press  (0.3s) to view all information of the battery.

Once you have viewed your desired information, press (<0.3S) the  button twice to save and return to the main screen, or you can press (<0.3S) the  button once to enter next item "Message of Error Code".







| Content | Explanation              |
|---------|--------------------------|
| b01     | Current temperature (°C) |
| b04     | Voltage (V)              |
| b06     | Discharge (A)            |
| b07     | Remaining Capacity (A/h) |
| b08     | Total Capacity (A/h)     |
| b09     | Relative SOC (%)         |
| b10     | Absolute SOC (%)         |

| Content | Explanation                     |
|---------|---------------------------------|
| b11     | Charging cycles (number)        |
| b12     | Maximum not charging time (Hr)  |
| b13     | Recently not charging time (Hr) |
| d00     | Number of battery cell          |
| d01     | Voltage of cell 1 (mV)          |
| d02     | Voltage of cell 2 (mV)          |
| dn      | Voltage of cell n (mV)          |

**NOTE:** If no data is detected, "--" is displayed.



### 7.7.2.12 Message of Error Code

When the system is on, quickly press (<0.3S) the  button twice to access the "MENU" interface, repetitively press the  button until the "E00" appears on the display (as shown below). You can briefly press  (0.3s) to view last ten Error Code "E00" to "E09". Error code "00" means that there is no error.

Once you have viewed your desired information, press (<0.3S) the  button twice to save and return to the main screen.



# 7.8 ERROR CODE DEFINITION

 The display can show the errors of a pedelec. If an error is detected, the wrench icon  appears on the display and one of the following error codes will be displayed.

**Note:** Please read carefully the description of the error code. When the error code appears, please first restart the system. If the problem is not eliminated, please contact your dealer or technical personnel.



| Error | Declaration  | Troubleshooting  |
|-------|--|--|
| 04    | The throttle has fault.  | <ol style="list-style-type: none"> <li>1. Check the connector of throttle whether they are correctly connected.</li> <li>2. Disconnect the throttle, If the problem still occurs, please contact your retailer.<br/>(only with this function)</li> </ol> |
| 05    | The throttle is not back in its correct position.                          | Check the throttle can adjust back into its correct position, if the situation does not improve, please change to a new throttle.(only with this function)   |
| 07    | Overvoltage protection   | <ol style="list-style-type: none"> <li>1. Remove the battery.</li> <li>2. Re-Insert the battery.</li> <li>3. If the problem persists, please contact your retailer.</li> </ol>   |
| 08    | Error with the hall sensor signal inside the motor                         | Please contact your retailer.  |
| 09    | Error with the Engine phase's  | Please contact your retailer.  |
| 10    | The temperature inside the engine has reached its maximum protection value | <ol style="list-style-type: none"> <li>1. Turn off the system and allow the Pedelec to cool down.</li> <li>2. If the problem persists, please contact your retailer.</li> </ol>  |
| 11    | The temperature sensor inside the motor has an error                       | Please contact your retailer.  |
| 12    | Error with the current sensor in the controller                            | Please contact your retailer.  |
| 13    | Error with the temperature sensor inside of the battery                    | Please contact your retailer.  |

| Error | Declaration   | Troubleshooting   |
|-------|---|---|
| 14    | The protection temperature inside the controller has reached its maximum protection value | <ol style="list-style-type: none"> <li>1. Turn off the system and let the pedelec cool down.</li> <li>2. If the problem persists, please contact your retailer.</li> </ol>  |
| 15    | Error with the temperature sensor inside the controller                                   | Please contact your retailer.   |
| 21    | Speed sensor Error  | <ol style="list-style-type: none"> <li>1. Restart the system</li> <li>2. Check that the magnet attached to the spoke is aligned with the speed sensor and that the distance is between 10 mm and 20 mm.</li> <li>3. Check that the speed sensor connector is connected correctly.</li> <li>4. If the error persists, please contact your retailer.</li> </ol> |
| 25    | Torque signal Error   | <ol style="list-style-type: none"> <li>1. Check that all connections are connected correctly.</li> <li>2. If the error persists, please contact your retailer.</li> </ol>   |
| 26    | Speed signal of the torque sensor has an error  | <ol style="list-style-type: none"> <li>1. Check the connector from the speed sensor to make sure it is connected correctly.</li> <li>2. Check the speed sensor for signs of damage.</li> <li>3. If the problem persists, please contact your retailer.</li> </ol>   |
| 27    | Overcurrent from controller   | Please contact your retailer.   |
| 30    | Communication problem   | <ol style="list-style-type: none"> <li>1. Check all connections are correctly connected.</li> <li>2. If the error persists, please contact your retailer.</li> </ol>  |
| 33    | Brake signal has an error<br>(If brake sensors are fitted)                                | <ol style="list-style-type: none"> <li>1. Check all connectors.</li> <li>2. If the error continues to occur, please contact your retailer.</li> </ol>   |

| Error | Declaration                                    | Troubleshooting   |
|-------|--|---|
| 35    | Detection circuit for 15V has an error         | Please contact your retailer.                           |
| 36    | Detection circuit on the keypad has an error   | Please contact your retailer.                           |
| 37    | WDT circuit is faulty                          | Please contact your retailer.                           |
| 41    | Total voltage from the battery is too high     | Please contact your retailer.                           |
| 42    | Total voltage from the battery is too low      | Please contact your retailer.                           |
| 43    | Total power from the battery cells is too high | Please contact your retailer.                           |
| 44    | Voltage of the single cell is too high         | Please contact your retailer.                           |
| 45    | Temperature from the battery is too high       | Please contact your retailer.                           |
| 46    | The temperature of the battery is too low      | Please contact your retailer.                           |
| 47    | SOC of the battery is too high                 | Please contact your retailer.                           |
| 48    | SOC of the battery is too low                  | Please contact your retailer.                           |
| 61    | Switching detection defect                     | Please contact your retailer. (only with this function) |
| 62    | Electronic derailleur cannot release.          | Please contact your retailer. (only with this function) |
| 71    | Electronic lock is jammed                      | Please contact your retailer. (only with this function) |
| 81    | Bluetooth module has an error                  | Please contact your retailer. (only with this function) |