

# 7 DEALER MANUAL FOR DP E161.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 E161.CAN BUS
- The housing material is PC+ABS and acrylic, as following:



- The label marking is as follows:



**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

### 7.3.1 Specifications

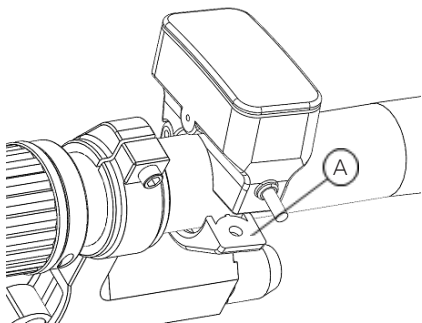
- Operating temperature: -20 °C~45 °C
- Storage temperature: -20 °C~50 °C
- Waterproof: IP65
- Storage room Humidity: 30%-70% RH

### 7.3.2 Functional Overview

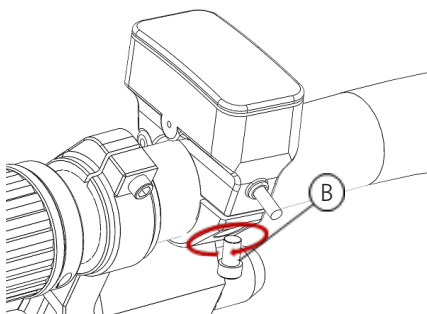
- Battery capacity indicator
- Indication of support level
- Walk assistance
- Automatic sensors explanation of the lighting system
- Indication for error messages
- Control and indication of lighting system
- Bluetooth function

## 7.4 DISPLAY INSTALLATION

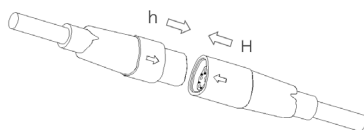
1. Open the clamp A on the display and place the display on to the handlebar in the correct position, where it is suitable for operation (the applicable handlebar are  $\varnothing 22.2\text{mm}$ ).



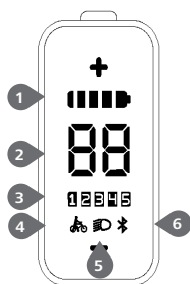
2. With the screw B (M3\*10 hexagon socket screw) tighten the display into position, torque requirement: 1N.m.



3. Please link the display to the EB-BUS cable.  
h: male connector at the display.  
H: female connector at the EB-BUS.



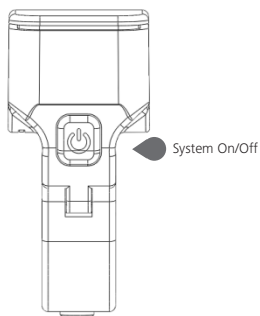
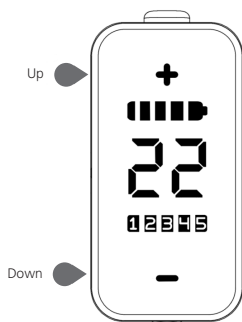
## 7.5 DISPLAY



- 1 Battery capacity indicator
- 2 Speed indicator
- 3 Support level indicator
- 4 Walk assistance
- 5 Indicator for lighting system
- 6 Bluetooth indicator

## 7.6 KEY DEFINITION

E161 Display has three buttons: System On/Off , Up  and Down .

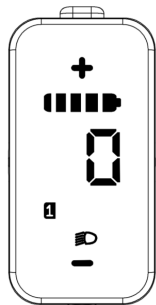


## 7.7 NORMAL OPERATION

### 7.7.1 Switching the System ON/OFF

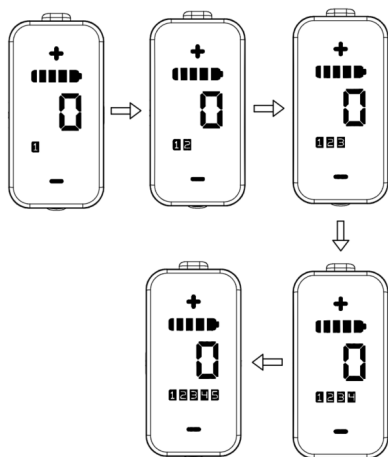
Press and hold  (>2S) on the display to turn on the system.

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



### 7.7.2 Selection of Support Levels

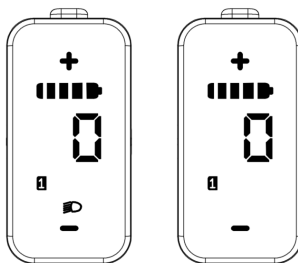
When the display is turned on, press the  or  (<0.5S) button to switch to the support level, the lowest level is 1, the highest level is 5. When the system is switched on, the support level starts in level 1. There is no support at level 0.



### 7.7.3 Headlights / backlighting

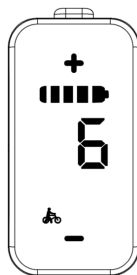
Hold the  (>2S) button to activate the headlight and taillights.

Hold the  (>2S) button again to turn off the headlight and taillight. (If the display is turned on in a dark environment, the display backlight/headlight will be turned on automatically. If the display backlight/headlight are turned off manually, they also need to be turned on manually afterwards)



### 7.7.4 Walk Assistance

When your Pedelec is motionless, briefly press  button until the Walk assistance indicator  is displayed. At this point, long press  button, the Pedelec enters the walk assistance mode, the indicator will flash. If release the button will stop this, if no any operations within 5s will automatically return to 0 level. That is stopped from the Walk assistance mode.(as following)



7.7.5 Battery Capacity Indication

The battery capacity is indicated with 5 levels. When the lowest level indicator flashes that means battery needs to charge. The battery capacity is shown as follows:

| Indication definition | SOC      | Example |
|-----------------------|----------|---------|
| 5 bars                | 80%-100% | ■■■■■   |
| 4 bars                | 60%-80%  | ■■■■▢   |
| 3 bars                | 40%-60%  | ■■■▢▢   |
| 2 bars                | 20%-40%  | ■■▢▢▢   |
| 1 bar                 | 5%-20%   | ■▢▢▢▢   |
| 1 flashing            | <5%      | ■▢▢▢▢   |

7.7.6 Bluetooth Function

When the mobile phone is connected to the display by Bluetooth, the Bluetooth symbol will be displayed, and the disconnected symbol will disappear automatically.

This display can be connected to the Bafang Go APP through Bluetooth. More information can be viewed on the APP, such as the information of battery, remaining capacity, single-trip distance.



## 7.8 ERROR CODE DEFINITION



DP E161.CAN display can provide warning for failures. The error code flickers when an error is detected.

**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 and cable of the throttle are not damaged and correctly connected.</li> <li>2. Disconnect and reconnect the throttle, if still no function please change the throttle.</li> </ol> |
| 05    | The throttle is not back in its correct position.                          | Check the connector from the throttle is correctly connected. If this does not solve the problem, please change the throttle.                                                                                                                   |
| 07    | Overvoltage protection                                                     | <ol style="list-style-type: none"> <li>1. Remove and re-Insert the battery to see if it resolves the problem.</li> <li>2. Using the BESST tool update the controller.</li> <li>3. Change the battery to resolve the problem.</li> </ol>         |
| 08    | Error with the hall sensor signal inside the motor                         | <ol style="list-style-type: none"> <li>1. Check all connectors from the motor are correctly connected.</li> <li>2. If the problem still occurs, please change the motor.</li> </ol>                                                             |
| 09    | Error with the Engine phase's                                              | Please change the motor.                                                                                                                                                                                                                        |
| 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 still occurs, please change the motor.</li> </ol>                                                                  |
| 11    | The temperature sensor inside the motor has an error                       | Please change the motor.                                                                                                                                                                                                                        |
| 12    | Error with the current sensor in the controller                            | Please change the controller or contact your supplier.                                                                                                                                                                                          |

| Error | Declaration                                                                               | Troubleshooting                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|-------|-------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 13    | Error with the temperature sensor inside of the battery                                   | <ol style="list-style-type: none"> <li>1. Check all connectors from the battery are correctly connected to the motor.</li> <li>2. If the problem still occurs, please change the Battery.</li> </ol>                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 14    | The protection temperature inside the controller has reached its maximum protection value | <ol style="list-style-type: none"> <li>1. Allow the pedelec to cool down and restart the system.</li> <li>2. If the problem still occurs, please change the controller or contact your supplier.</li> </ol>                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| 15    | Error with the temperature sensor inside the controller                                   | <ol style="list-style-type: none"> <li>1. Allow the pedelec to cool down and restart the system.</li> <li>2. If the problem still occurs, Please change the controller or contact your supplier.</li> </ol>                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| 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. Connect the pedelec to BESST, to see if there is a signal from the speed sensor.</li> <li>5. Using the BESST Tool- update the controller to see if it resolves the problem.</li> <li>6. Change the speed sensor to see if this eliminates the problem. If the problem still occurs, please change the controller or contact your supplier.</li> </ol> |
| 25    | Torque signal Error                                                                       | <ol style="list-style-type: none"> <li>1. Check that all connections are connected correctly.</li> <li>2. Please connect the pedelec to the BESST system to see if torque can be read by the BESST tool.</li> <li>3. Using the BESST Tool update the controller to see if it resolves the problem, if not please change the torque sensor or contact your supplier.</li> </ol>                                                                                                                                                                                                                                                                      |

| Error | Declaration                                                | Troubleshooting                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|-------|------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 26    | Speed signal of the torque sensor has an error             | <ol style="list-style-type: none"> <li>1. Check that all connections are connected correctly.</li> <li>2. Please connect the pedelec to the BESST system to see if speed signal can be read by the BESST tool.</li> <li>3. Change the Display to see if the problem is solved.</li> <li>4. Using the BESST Tool update the controller to see if it resolves the problem, if not please change the torque sensor or contact your supplier.</li> </ol>                                                              |
| 27    | Overcurrent from controller                                | Using the BESST tool update the controller. If the problem still occurs, please change the controller or contact your supplier.                                                                                                                                                                                                                                                                                                                                                                                   |
| 30    | Communication problem                                      | <ol style="list-style-type: none"> <li>1. Check all connections on the pedelec are correctly connected.</li> <li>2. Using the BESST Tool run a diagnostics test, to see if it can pinpoint the problem.</li> <li>3. Change the display to see if the problem is solved.</li> <li>4. Change the EB-BUS cable to see if it resolves the problem.</li> <li>5. Using the BESST tool, re-update the controller software. If the problem still occurs please change the controller or contact your supplier.</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 are correctly connected on the brakes.</li> <li>2. Change the brakes to see if the problem is solved.</li> </ol> <p>If problem continues Please change the controller or contact your supplier.</p>                                                                                                                                                                                                                                                |
| 35    | Detection circuit for 15V has an error                     | Using the BESST tool update the controller to see if this resolves the problem. If not, please change the controller or contact your supplier.                                                                                                                                                                                                                                                                                                                                                                    |
| 36    | Detection circuit on the keypad has an error               | Using the BESST tool update the controller to see if this resolves the problem. If not, please change the controller or contact your supplier.                                                                                                                                                                                                                                                                                                                                                                    |

| Error | Declaration                                    | Troubleshooting                                                                                                                                                        |
|-------|------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 37    | WDT circuit is faulty                          | Using the BESST tool update the controller to see if this resolves the problem. If not, please change the controller or contact your supplier.                         |
| 41    | Total voltage from the battery is too high     | Please change the battery.                                                                                                                                             |
| 42    | Total voltage from the battery is too low      | Please Charge the battery. If the problem still occurs, please change the battery.                                                                                     |
| 43    | Total power from the battery cells is too high | Please change the battery.                                                                                                                                             |
| 44    | Voltage of the single cell is too high         | Please change the battery.                                                                                                                                             |
| 45    | Temperature from the battery is too high       | Please let the pedelec cool down.<br>If problem still occurs, please change the battery.                                                                               |
| 46    | The temperature of the battery is too low      | Please bring the battery to room temperature. If the problem still occurs, please change the battery.                                                                  |
| 47    | SOC of the battery is too high                 | Please change the battery.                                                                                                                                             |
| 48    | SOC of the battery is too low                  | Please change the battery.                                                                                                                                             |
| 61    | Switching detection defect                     | 1. Check the gear shifter is not jammed.<br>2. Please change the gear shifter.                                                                                         |
| 62    | Electronic derailleur cannot release.          | Please change the derailleur.                                                                                                                                          |
| 71    | Electronic lock is jammed                      | 1. Using the BESST tool update the Display to see if it resolves the problem.<br>2. Change the display if the problem still occurs, please change the electronic lock. |
| 81    | Bluetooth module has an error                  | Using the BESST tool, re-update the software onto the display to see if it resolves the problem.<br>If not, Please change the display.                                 |

## 7.9 CERTIFICATION

Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the 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 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 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.

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

1. This device may not cause interference.
2. This device must accept any interference, including interference that may cause undesired operation of the device.

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

1. L'appareil ne doit pas produire de brouillage;
2. L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

CAN ICES-3 (B)/NMB-3(B)