## 7 USER MANUAL FOR DP C263.CAN



## CONTENT

7.1 Important Notice	2
7.2 Introduction of Display	2
7.3 Product Description	3
7.3.1 Specifications	3
7.3.2 Functional Overview	3
7.4 Display Information	.4
7.5 Key Definition	.4
7.6 Normal Operation	,5
7.6.1 Switching the System ON/OFF	.5
7.6.2 Selection of Support Levels.	.5
	.5

7.6.4 Walk Assistance	6
7.6.5 Selection of Mode	6
7.6.6 Service	
7.6.7 Battery Capacity Indication	7
7.6.8 Bluetooth Function	
7.7 Settings	8
7.7.1 "Setting" interface	8
7.7.2 "Information" interface	9
7.8 Error Code Definition	12
7.9 Warn Code Definition	16



# **7.1 IMPORTANT NOTICE**

- 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

- Model: DP C263.CAN BUS
- The housing material is ABS, the cover and window are made from soda-lime glass, the button is TPV material, as following:



• The label marking is as follow:



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

### 7.3.1 Specifications

- Operating temperature: -20  $^\circ\!\mathrm{C}\,{\sim}45\,^\circ\!\mathrm{C}$
- Storage temperature: -20 °C ~60 °C
- Waterproof: IP65
- Bearing humidity: 30%-70% RH

### 7.3.2 Functional Overview

- Speed indication (including the real-time speed, max. speed and average speed)
- Unit switching between km and mile.
- Battery capacity indication
- Control and indication for the headlight
- Indication of support level
- Trip indication (including TRIP, ODO and RANGE)
- Motor power indication (including motor input power, human input power)
- Time indication for single ride
- Walk assistance model
- Indication for error messages
- Indication for consumption of energy CALORIES (NOTE: If the controller has this function)
- Indication for the remaining distance. (NOTE: it needs the controller has this function)

BAFANG

# 7.4 DISPLAY INFORMATION



4 Service indication
5 Speed display in real-time
6 Speed unit indication
7 Mode selection: single-trip distance (TRIP), total distance ODO, maximum speed (MAX), average speed (AVG), remaining distance (RANGE), energy consumption (CALORIES), time (TIME). (Note: same function needs the Controller supports).
8 Support level and walk assistance indication

9 Power indication

Bluetooth indication

- 10 Motor power input indication
- 11 Human power input indication

Headlight indication
 Battery capacity indication

# 7.5 KEY DEFINITION



## 7.6 NORMAL OPERATION

#### 7.6.1 Switching the System ON/OFF

Press and hold (>2S) to power on the display, the HMI begin to show the boot up LOGO. Press and hold (>2S) again can power off the HMI.



#### 7.6.2 Selection of Support Levels

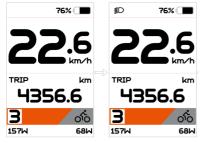
When HMI power on, briefly press  $\blacksquare$  or  $\blacksquare$  (<0.5s) to select the assistance level (the number of assistance level needs to be adapted to controller), The lowest level is Level 0, the highest Level is 5. On the default is Level 1,"0" means no power assistance. The interface is as following:



### 7.6.3 Headlights / backlighting

Press and hold 🕂 (>2S) to turn on the backlight as well as headlight.

Press and hold 👫 (>2S) again to turn off the backlight and the headlight.



#### 7.6.4 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)



#### 7.6.5 Selection of Mode

Briefly press "Mode" button (<0.5s) to view the different mode and information.

1. System with torque sensor, circularly show single trip distance (Trip,km)  $\rightarrow$  total distance (ODO,km)  $\rightarrow$  maximum speed (MAX,km/h)  $\rightarrow$  average speed (AVG,km/h)  $\rightarrow$  remaining distance (RANGE,km)  $\rightarrow$ cadence (CADENCE)  $\rightarrow$  energy consumption (CALORIES/CAL,KCal)  $\rightarrow$  riding time (TIME,min)  $\rightarrow$  cycle.

2. If system with a speed sensor, circularly show single trip distance (Trip,km)  $\rightarrow$  total distance (ODO,km)  $\rightarrow$  maximum speed (MAX,km/h)  $\rightarrow$  average speed (AVG,km/h)  $\rightarrow$  remaining distance (RANGE,km)  $\rightarrow$  riding time (TIME,min)  $\rightarrow$  cycle.



6

#### 7.6.6 Service

HMI will prompt for maintenance according to the mileage. When mileage exceeds 5000km and the "Service" function is enabled, the "Service" indication  $\Upsilon$  will be displayed on the HMI. This function can be set in the interface. For the operation is detailed in the following text.



7.6.7 Battery Capacity Indication

The percentage of current battery capacity is displayed from 100% to 0% according to the actual capacity (as shown in the figure below). When the capacity is less than 5%, the indicator outline will flash at a frequency of 1 HZ.



#### 7.6.8 Bluetooth Function

This display can be connected to the Bafang Go APP through Bluetooth.

This display is equipped with the OAT function, which can provide firmware update for other parts.



# 7.7 SETTINGS

After the HMI powered on, briefly press "Mode" button two times to enter into the "Setting". Briefly press or (<0.55) to select and then briefly press (<0.55) "Mode" button to confirm and enter into the option.

Note: the speed must be "0" then can enter the setting interface.



Into the Setting function

You can quickly press the "Mode" (<0.5S) button twice at any time, or select "Back" "Exit" to exit back to the main interface.

#### 7.7.1 "Setting" interface

In "Setting" interface, briefly press (<0.55) to select "Setting" and then briefly press (<0.55) "Mode" to confirm and enter into "Setting".

The operations in "Setting" item

#### 7.7.1.1 "Trip Reset"---set reset function for single-trip

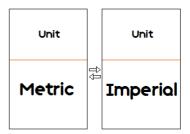
Briefly press or to select "Trip Reset", and then briefly press "Mode" to enter into the item. Select "NO"/"YES" ("YES"to clear, "NO"-no operation), then briefly press "Mode" to save and exit back to the "Setting" interface.

**NOTE:** the cycling time, average speed and maximum speed are reset at the same time.



#### 7.7.1.2 "Unit"--- set unit for km/mile

Briefly press and or to select "Unit", and then briefly press "Mode" to enter into the item. Select "Metric"/ "Imperial", then briefly press "Mode" to save and exit back to the "Setting" interface.



## 7.7.1.3 "Brightness"--- set backlight brightness

Briefly press or to select "Brightness", and then briefly press "Mode" to enter into the item. Select the percentage as "100%"/ "75%"/"50%"/"30%"/"10%", then briefly press "Mode" to save and exit back to the "Setting" interface.

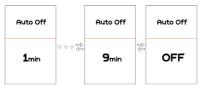
Notice: "10%" is the lowest brightness and 100%" is the highest brightness.



### 7.7.1.4 "Auto Off"--- set automatic Off time

Briefly press or to select "Auto Off", and then briefly press "Mode" to enter into the item. Select the automatic Off time as "OFF"/"9"/"8"/"7"/"6"/"5"/"4"/"3"/"2"/"1", briefly press "Mode" to save the setting and exit back to the "Setting" interface.

Notice: "OFF" means this function is off, the unit is minute.



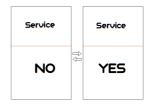
### 7.7.1.5 "Assist Mode"---set assistance level

Briefly press effort or select "Assist Mode", and then briefly press "Mode" to enter into the item. Select the assistance level as "3"/"5"/"9", then briefly press "Mode" to save and exit back to the "Setting" interface.

Assist Mode		Assist Mode		Assist Mode
З	ŶŰ	5	βĄ	9

### 7.7.1.6 "Service"--- turn on/off the Service indication

Briefly press or to select "Service", and then briefly press "Mode" to enter into the item. Select "NO"/"YES" ("YES" means Service indication is on; "NO" means Service indication is off), then briefly press "Mode" to save and exit back to the "Setting" interface.



### 7.7.2 "Information" interface

In Setting interface, briefly press (<0.5S) and then briefly press (<0.5S) "Mode" to confirm and enter into "Information".

-	Wheel Size
-	Speed Limit
-	Battery Info
-	Ctrl Info
-	Display Info
	Torque Info
	Error Code
	Warn Code
-	Back

#### 7.7.2.1 View "Wheel Size"

Briefly press en or to select "Wheel Size", and then briefly press "Mode" to view the wheel size default, then briefly press "Mode" to exit back to the "Information" interface.



#### 7.7.2.2 View "Speed Limit"

Briefly press en or to select "Speed Limit", and then briefly press "Mode" to view the speed limit default, then briefly press "Mode" to exit back to the "Information" interface.



#### 7.7.2.3 View "Battery Info."

Briefly press or to go to "Battery Info.", and then briefly press "Mode" to enter, then briefly press "+" or "-" to view the battery data (b01  $\Rightarrow$  b04  $\Rightarrow$  b06  $\Rightarrow$  b07  $\Rightarrow$ b08  $\Rightarrow$  b09  $\Rightarrow$  b10  $\Rightarrow$  b11  $\Rightarrow$  b12  $\Rightarrow$  b13  $\Rightarrow$  d00  $\Rightarrow$  d01  $\Rightarrow$  d02  $\Rightarrow$  ...  $\Rightarrow$  dn  $\Rightarrow$  Hardware Ver  $\Rightarrow$ Software Ver), then briefly press "Mode" to exit back to the "Information" interface. Notice: If the the battery doesn't have communication function, you won't see any data from battery.



Code	Code Definition	Unit
b01	Current temperature	°C
b04	Total voltage	mV
b06	Average current	mA
b07	Remaining capacity	mAh
b08	Battery capacity of Full charged	mAh
b09	Relative Charge in percentage	%
b10	Absolute Charge in percentage	%
b11	Cycle Times	times
b12	Max Uncharge Time	Hour
b13	Last Uncharge Time	Hour
d00	The number of cell	
d01	Voltage Cell 1	mV
d02	Voltage Cell 2	mV
dn	Voltage Cell n	mV
e01	Hardware Version	
e02	Software Version	

NOTE: If no data is detected, it displays"--".

#### 7.7.2.4 View "Display Info"

Briefly press or to select "Display Info", and then briefly press "Mode" to view it, briefly press or to view "Hardware Ver" or "Software Ver", then briefly press "Mode" to exit back to the "Information" interface.

Hardware Ver DP C263.C 1.0	
Software Ver	
DPC263CF801 01.0	

#### 7.7.2.5 View "Ctrl Info"

Briefly press and or to select "Ctrl Info", and then briefly press "Mode" to view it, briefly press or to view "Hardware Ver" or "Software Ver", then briefly press "Mode" to exit back to the "Information" interface.



#### 7.7.2.6 View "Torque Info"

Briefly press and then briefly press "Mode" to view it, briefly press or to view "Hardware Ver" or "Software Ver", then briefly press "Mode" to exit back to the "Information" interface.

NOTE: If your Pedelec has no torque sensor, then "Torque Info" can not be displayed.



#### 7.7.2.7 View "Error Code"

Briefly press and then briefly press "Mode" to view it, briefly press and then briefly press "Mode" to view it, briefly press and to view message of error for last ten times by "E-Code0" to "E-Code9", then briefly press "Mode" to exit back to the "Information" interface.

NOTE: 00 means no error exist.

Error Code
E-Code0 <b>30</b>

#### 7.7.2.8 View "Warn Code"

Briefly press or to select "Warn Code", and then briefly press "Mode" to view it, briefly press or to view message of warning for last ten times by "W-Code0" to "W-Code9", then briefly press "Mode" to exit back to the "Information" interface.



# **7.8 ERROR CODE DEFINITION**



The HMI can show the faults of Pedelec. When a fault is detected, one of the following error codes will be indicated on the position of speed display.

**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> <li>Check the connector and cable of the throttle are not damaged and correctly connected.</li> <li>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> <li>Remove and re-insert the battery to see if it resolves the problem.</li> <li>Using the BESST tool update the controller.</li> <li>Change the battery to resolve the problem.</li> </ol>
08	Error with the hall sensor signal inside the motor	<ol> <li>Check all connectors from the motor are correctly connected.</li> <li>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 en- gine has reached its maximum protection value	<ol> <li>Turn off the system and allow the Pedelec to cool down.</li> <li>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> <li>Check all connectors from the battery are correctly connected to the motor.</li> <li>If the problem still occurs, please change the</li> </ol>
	,	Battery.
14	The protection temperature inside the controller has reached	1. Allow the pedelec to cool down and restart the system.
	its maximum protection value	2. If the problem still occurs, please change the controller or contact your supplier.
	Error with the temperature	1. Allow the pedelec to cool down and restart the system.
15	sensor inside the controller	2. If the problem still occurs, Please change the con- troller or contact your supplier.
		1. Restart the system
	Speed sensor Error	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.
		3. Check that the speed sensor connector is connected correctly.
21		4. Connect the pedelec to BESST, to see if there is a signal from the speed sensor.
		5. Using the BESST Tool- update the controller to see if it resolves the problem.
		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.
25	Torque signal Error	1. Check that all connections are connected correctly.
		2. Please connect the pedelec to the BESST system to see if torque can be read by the BESST tool.
		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.

Error	Declaration	Troubleshooting
26	Speed signal of the torque sensor has an error	<ol> <li>Check that all connections are connected correctly.</li> <li>Please connect the pedelec to the BESST system to see if speed signal can be read by the BESST tool.</li> <li>Change the Display to see if the problem is solved.</li> <li>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> <li>Check all connections on the pedelec are correctly connected.</li> <li>Using the BESST Tool run a diagnostics test, to see if it can pinpoint the problem.</li> <li>Change the display to see if the problem is solved.</li> <li>Change the EB-BUS cable to see if it resolves the problem.</li> <li>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 (If brake sensors are fitted)	<ol> <li>Check all connectors are correctly connected on the brakes.</li> <li>Change the brakes to see if the problem is solved.</li> <li>If problem continues Please change the controller or contact your supplier.</li> </ol>
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. 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	<ol> <li>Check the gear shifter is not jammed.</li> <li>Please change the gear shifter.</li> </ol>
62	Electronic derailleur cannot release.	Please change the derailleur.
71	Electronic lock is jammed	<ol> <li>Using the BESST tool update the Display to see if it resolves the problem.</li> <li>Change the display if the problem still occurs, please change the electronic lock.</li> </ol>
81	Bluetooth module has an error	Using the BESST tool, re-update the software onto the display to see if it resolves the problem. If not, Please change the display.



## 7.9 WARN CODE DEFINITION

Warn	Declaration	Troubleshooting
28	Torque sensor's initialization is abnormal.	Restart the system and note not to step on the crank hard when restarting.