# USER MANUAL FOR DISPLAY

## 7 USER MANUAL FOR DP C18.CAN



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# 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 C18.CAN BUS
- The housing material is PC; the Display Glass is made of high-currentem material:



· 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

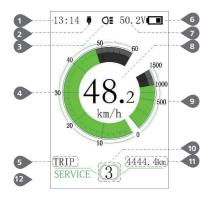
- Operating temperature: -20 °C ~45 °C
- Storage temperature: -20°C~50°C
- Waterproof: IP65
- Bearing humidity: 30%-70% RH

#### 7.3.2 Functional Overview

- Speed display (including top speed and average speed, switching between km and miles).
- Battery capacity indicator.
- Automatic sensors explanation of the lighting system.
- Brightness setting for backlight.
- Indication of performance support.
- Motor output power and output current indicator.
- Kilometer stand (including single-trip distance, total distance and remaining distance).
- Walk assistance.
- Setting the support levels.
- Energy consumption indicator CALORIES (Note: If the display has this function).
- Display for the remaining distance. (Depends on your riding style)
- Setting password.

BAFANG

## 7.4 DISPLAY



#### 1 Time

USB charging indicator displays the icon \$, if an external USB device is connected to the display.

- 3 The display shows **OI** this symbol, if the light is on.
- 4 Speed Graphics

Trip: Daily kilometers (TRIP) - Total kilometers (ODO) - Top speed (MAX) - Average speed (AVG) - Range (RANGE) - Energy Consumption (CALORIES(only with torque sensor fitted)) - Travel time (TIME).

- 6 Display of battery capacity in real time.
- **7** Voltage indicator in voltage or in percent.
- 8 Digital speed display.
- 9 Power indicator in watts / amperes.
- 🔟 Support level/ Walking assistance 🛵
- Data: Display data, which corresponds to the current mode.
- 12 Service: Please see the service section

# 7.5 KEY DEFINITION



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## 7.6 NORMAL OPERATION

#### 7.6.1 Switching the System ON/OFF

Press and hold 0 (>2S) on the display to turn on the system. Press and hold 0 (>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. If the password function is enabled, you must enter the correct password to use the system.

#### 7.6.2 Selection of Support Levels

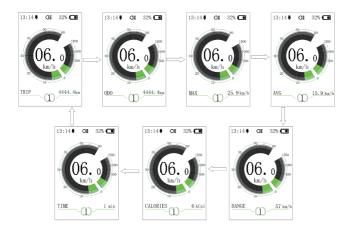
When the display is turned on, press the  $\blacksquare$  or  $\blacksquare$  (<0.5S) button to switch to the support level, the lowest level is 0, the highest level is 5. When the system is switched on, the support level starts in level 1. There is no support at level 0.



#### 7.6.3 Selection Mode

Briefly press the 👔 (0.5s) button to see the different trip modes.

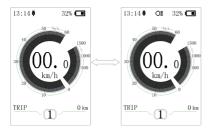
Trip: daily kilometers (TRIP) - total kilometers (ODO) - Maximum speed (MAX) - Average speed (AVG) - Range (RANGE) - Energy consumption (CALORIES(only with torque sensor fitted)) - Travel time (TIME).



#### 7.6.4 Headlights / backlighting

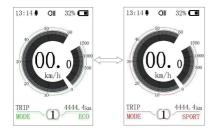
Hold the 🔳 (>2S) button to activate the headlight and taillights.

Hold the **(**)(>2S) button again to turn off the headlight. 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 ECO/SPORT Modus

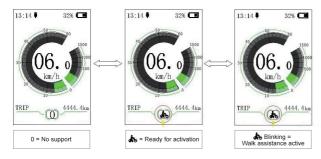
Press and hold the 📑 (<2S) Button, to change from ECO mode to Sport mode. (Depending on the version of the pedelec manufacturer)



#### 7.6.6 Walk Assistance

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

Activation: Press the subtrom until this symbol is appears. Next hold down the buttom whilst the symbol is displayed. Now the Walk assistance will activate. The symbol is will flashes and the pedelec moves approx. 6 km/h. After releasing the buttom, the motor stops automatically and switches back to level 0.



#### 7.6.7 SERVICE

The display shows "Service" as soon as a certain number of kilometers or battery charges has been reached. With a mileage of more than 5000 km (or 100 charge cycles), the "Service" function is displayed on the display. Every 5000 km the display "SERVICE" is displayed every time. This function can be set in the display settings.



Flicker for 5s

# 7.7 SETTINGS

After the display is turned on, quickly press the display is turned on, quickly press the settings" menu. By pressing the display or (<0.55) button, you can select: Display Settings, Information or EXIT. Then press the (<0.55) button to confirm your selected option.

Or select "EXIT" and press the 1 (<0.55) button to return to the main menu, or select "BACK" and press the 1 (<0.55) button to return to the Settings interface.

If no button is pressed within 20 seconds, the display will automatically return to the main screen and no data will be saved.

SETTING	
Information	
EXIT	

You can quickly press the **1** (<0.55) button twice at any time, to return to the main screen.

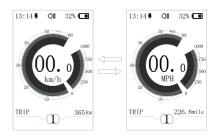
#### 7.7.1 "Display setting"

Press the effect of and then briefly press the following settings, and then briefly press the (<0.5S) button to access the following selections.

	Metric
Service Tip	OFF
Brightness	100%
Auto Off	5Min
MAX PAS	5
Power View	Power
SOC View	Percent
TRIP Reset	NO
AL Sensitivity	3
Password	>
Set Clock	>

#### 7.7.1.1 "Unit" Selections in km/Miles

Press the end or end (<0.55) button to highlight "Unit" in the Display settings menu, and then press the end (<0.55) button to select. Then with the end or end button choose between "Metric" (kilometer) or "Imperial" (Miles). Once you have chosen your desired selection, press the end (<0.55) button to save and exit to the "Display setting" interface.



## 7.7.1.2 "Service Tip" Switching the notification on and off

Press the end or end (<0.55) button to highlight "Service tip" in the Display settings menu, and then press (<0.55) to select. Then with the end or button choose between "ON" or "OFF". Once you have chosen your desired selection, press the (<0.55) button to save and exit to the "Display setting" interface.

#### 7.7.1.3 "Brightness" Display brightness

Press the  $\blacksquare$  or  $\blacksquare$  (<0.55) button to highlight "Brightness" in the Display settings menu. Then press  $\blacksquare$  (<0.55) to select. Then with the  $\blacksquare$  or  $\blacksquare$  button choose between "100%" / "75%" / "50%" /" 30%"/"10%" . Once you have chosen your desired selection, press the  $\blacksquare$  (<0.55) button to save and exit to the "Display setting" interface.

## 7.7.1.4 "Auto Off" Set Automatic system switch off time

Press the end or end (<0.55) button to highlight "Auto Off" in the Display settings menu, and then press i (<0.55) to select. Then with the end or button choose between "OFF", "9"/"8"/"7"/"6"/"5"/"4"/"3" /"2"/"1", (The numbers are measured in minutes). Once you have chosen your desired selection, press the i (<0.55) button to save and exit to the "Display setting" interface.

#### 7.7.1.5 "MAX PAS" Support level

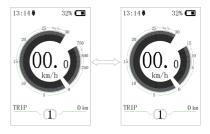
(Function not available with ECO/SPORT display) Press the 🕂 or 📑 (<0.5S) button to highlight "Max Pass" in the Display settings menu, and then press  $1 \leq (<0.5S)$  to select. Then with the  $1 \leq or = button choose$ between "3/5/9" (the amount of support levels). Once you have chosen your desired selection, press the  $1 \leq (<0.5S)$  button to save and exit to the "Display setting"

#### 7.7.1.6 "Default Mode" Set for ECO/Sport mode

Press the solution of (<0.55) button to highlight "Default Mode" in the Display settings menu. Then press (<0.55) to select. Then with the of the button choose between "ECO" or "Sport". Once you have chosen your desired selection, press the (<0.55) button to save and exit to the "Display setting" interface.

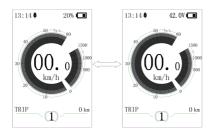
## 7.7.1.7 "Power View" Setting the power indicator

Press the eff or eff (<0.55) button to highlight "Power View" in the Display settings menu, and then press i (<0.55) to select. Then with the eff or eff button choose between "Power" or "Current". Once you have chosen your desired selection, press the i (<0.55) button to save and exit to the "Display setting" interface.



#### 7.7.1.8 "SOC View" Battery view in volt percent

Press the end or end (<0.55) button to highlight "SOC View" in the Display settings menu, and then press end (<0.55) to select. Then with the end or end button choose between "percent" or "voltage ". Once you have chosen your desired selection, press the end (<0.55) button to save and exit to the "Display setting"



#### 7.7.1.9 "TRIP Reset" Reset mileage

Press the end or end (<0.55) button to highlight "TRIP Reset" in the Display settings menu, and then press i (<0.55) to select. Then with the end or end button choose between "YES" or "NO". Once you have chosen your desired selection, press the (<0.55) button to save and exit to the "Display setting"

#### 7.7.1.10"AL Sensitivity" Automatic headlight sensitivity

Press the  $\blacksquare$  or  $\blacksquare$  (<0.55) button to highlight "AL-Sensetivity" in the Display settings menu, and then press  $\blacksquare$  (<0.55) to select. Then with the  $\blacksquare$  or  $\blacksquare$  button choose between "0" / " 1" / " 2"/ "3" / "4"/ "5"/ "OFF". Once you have chosen your desired selection , press the  $\blacksquare$  (<0.55) button to save and exit to the "Display setting"

#### 7.7.1.11"Password"

Press the solution of (<0.55) button to choose Password in the menu. Then by briefly pressing (<0.55) to enter the password selection. Now again with the or (<0.55) buttons highlight "Start Password" and press the (<0.55) button to confirm. Now again using the or (<0.55) Button choose between "ON" or "OFF" and press the (<0.55) button to confirm.

Now you can input your 4-digit pin code. By using the  $\blacksquare$  or  $\blacksquare$  (<0.55) button choose numbers between "0-9". By briefly pressing the  $\blacksquare$  (<0.55) button you can move on to the next number.

After entering your desired 4-digit code, you must re-enter the 4-digits you chose, to ensure the code is correct.

After selecting a password, the next time you turn on the system it will ask you to input your password. Press the error or error (<0.5S) button to select the numbers, Then press briefly error (<0.5S) to confirm.

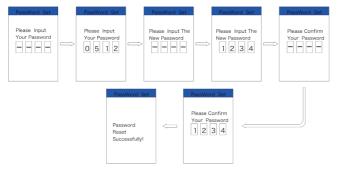
After entering the wrong number three times, the system switches off. If you have forgotten the password, please contact your retailer.



#### Changing the password:

Press the  $\blacksquare$  or  $\blacksquare$  (<0.55) button to choose Password in the menu. Then by briefly pressing  $\blacksquare$  (<0.55) to enter the password section. Now again with the  $\blacksquare$  or  $\blacksquare$  (<0.55) button highlight "Password set" and press the  $\blacksquare$  (<0.55) button to confirm. Now with the  $\blacksquare$  or  $\blacksquare$  (<0.55) buttons and highlight "Reset Password" and with the  $\blacksquare$  (<0.55) button to confirm.

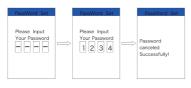
By entering your old password once, followed by inputting the new password twice, then your password will be changed.



#### Deactivating the password:

To deactivate the password, use the  $\blacksquare$  or  $\blacksquare$  buttons to get to the menu point "Password" and press the  $\boxed{1}$  (<0.5S) button to highlight your selection. Press the  $\blacksquare$  or  $\blacksquare$  (<0.5S) button until is shows "OFF". Then press briefly  $\boxed{1}$  (<0.5S) to select.

Now enter your password, to deactivate it.



#### 7.7.1.12"Set Clock"

Press the  $\blacksquare$  or  $\blacksquare$  (<0.55) Button to access the "Set Clock" menu. Then briefly press the  $\blacksquare$  (<0.55) button to confirm selection. Now press the  $\blacksquare$  or  $\blacksquare$  (<0.55) button and input the correct number (time) and press the  $\blacksquare$ (<0.55) button to move to the next number. After entering the correct time, press the  $\blacksquare$ (<0.55) button to confirm and save.

#### 7.7.2 "Information"

Once the system is turned on, quickly Press the (<0.55) button twice to access the "SET-TINGS" menu. Press or (<0.55) button to select "Information", and then press the (<0.55) button to confirm your selection.

Or select the point "EXIT" by confirming with the  $1 \leq (-0.5S)$  button to return to the main menu.

Information		
Wheel Size	27"	
Speed Limit	25km/h	
Battery Info	>	
Ctrl Info	>	
Display Info	>	
Torque Info	>	
Back		

#### 7.7.2.1 Wheel Size and Speed Limit

The "Wheel Size" and "Speed Limit" cannot be changed, this information is here to be viewed only.

#### 7.7.2.2 Battery Information

Press the 1 or 1 (<0.5S) button to access the Battery Info menu, and then press the 1 (<0.5S) button to select confirm. Now press the 1 or 1 (<0.5S) button and select "Back" or "Next Page". Then press the 1(<0.5S) button to confirm, now you can read the battery information.

Content	Explanation
TEMP	Current temperature in degrees (°C)
TotalVolt	Voltage (V)
Current	Discharge (A)
Res Cap	Remaining Capacity (A/h)
Full Cap	Total Capacity (A/h)
RelChargeState	Default Loader Status (%)
AbsChargeState	Instant charge (%)
Cycle Times	Charging cycles (number)
Max Uncharge Time	Maximum time in which no charge was made (Hr)
Last Uncharge Time	
Total Cell	Number (individual)
Cell Voltage 1	Cell Voltage 1 (m/V)
Cell Voltage 2	Cell Voltage 2 (m/V)
Cell Voltage n	Cell Voltage n (m/V)
HW	Hardware Version
SW	Software Version

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

#### 7.7.2.3 Controller Information

Press the **H** or **H** (<0.55) button and select "CTRL Info", and then press the **H** (<0.55) button to confirm. Now you can read the controller information. To Exit press the **H** (<0.55) button, once "EXIT" is highlighted to return to the information settings.

H₩	*******
SW	******
Back	

#### 7.7.2.4 Display Information

Press the  $\blacksquare$  or  $\blacksquare$  (<0.55) button and select Display Info, then press the  $\boxed{1}$  (<0.55) button to read the software and hardware data in the display. To Exit press the  $\boxed{1}$  (<0.55) button, once "EXIT" is highlighted to return to the information settings.

HW	*******
SW	******
Back	

#### 7.7.2.5 Torque Information

Press the  $rac{1}{2}$  or  $rac{1}{2}$  (<0.55) button and select "Torque info", then press the (<0.55)  $rac{1}{2}$  button to read the software and hardware data in the display. To Exit press the  $rac{1}{2}$  (<0.55) button, once "EXIT" is highlighted to return to the information settings.

HW	*****
SW	*****
Back	

#### 7.7.2.6 Error Code

Press the effect or and (<0.55) button and select "Error Code", and then press the i (<0.55) button to confirm. It shows error information for the last ten errors of the pedelec. Error code "00"means that there is no error. To return to the menu press the i (<0.55) button, once "BACK" is highlighted to return to the information settings.

# **7.8 ERROR CODE DEFINITION**



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

Note: Please read the description of the error code carefully. If you see the error code, restart the system first. If the problem is not resolved, please contact your dealer.

Error	Declaration	Troubleshooting
04	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)
05	The throttle has fault.	<ol> <li>Check the connector of throttle whether they are correctly connected.</li> <li>Disconnect the throttle, If the problem still occurs, please contact your retailer.</li> <li>(only with this function)</li> </ol>
07	Overvoltage protection	<ol> <li>Remove the battery.</li> <li>Re-Insert the battery.</li> <li>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> <li>Turn off the system and allow the Pedelec to cool down.</li> <li>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 maxi- mum protection value	<ol> <li>Turn off the system and let the pedelec cool down.</li> <li>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> <li>Restart the system</li> <li>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>Check that the speed sensor connector is connected correctly.</li> <li>If the error persists, please contact your retailer.</li> </ol>
25	Torque signal Error	<ol> <li>Check that all connections are connected correctly.</li> <li>If the error persists, please contact your retailer.</li> </ol>
26	Speed signal of the torque sensor has an error	<ol> <li>Check the connector from the speed sensor to make sure it is connected correctly.</li> <li>Check the speed sensor for signs of damage.</li> <li>If the problem persists, please contact your retailer.</li> </ol>
27	Overcurrent from controller	Please contact your retailer.
30	Communication problem	<ol> <li>Check all connections are correctly connected.</li> <li>If the error persists, please contact your retailer.</li> </ol>
33	Brake signal has an error (If brake sensors are fitted)	<ol> <li>Check all connectors.</li> <li>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)