



Globe Rocker Display Product Specification

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Product Specification

January 23, 2024

Title: Product Specification	
Project: Globe Rocker Display	Revision: 1.6
Author: Miya Chu	Revision Date: 20240104

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Purpose

This document describes the product specification for [Globe Rocker Display](#). This is based on customers' requirement specification. Foxconn Interconnect Technology LTD also uses this document to develop the system. Base on this specification, the 3rd party team can refer it to understand the detail of this product.

Product Overview

- Major Function

Table 1 Product Specifications


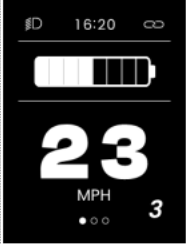
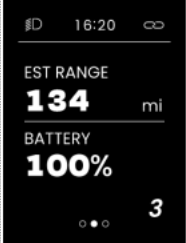
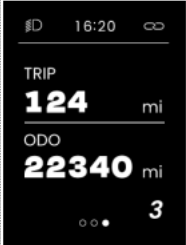
Model Name	Globe Rocker Display
Model No	GLOBE HMI-01
Size	L 50mm x W 60mm x H 58mm
LCM Specification	Color LCD (240 x 320 Pixel)
Material	PC/ABS (35% Recycled Material) 、PC
Screen Type	2" TFT LCD w/LED back-light
Power	Operating Voltage 48Vdc Typical
Current	20Ma
Operation Temperature	-20°C~70°C
Ingress Protection Rating	IPX6
Protocol	CAN 2.0
Physical Button	4(Up/Down/Fun/Power)
Wireless Interface	BLE 5.1
Charging Output	USB Type C : 5V / 1500mA
Functions	PAS level/Speed/ODO/Trip/Walk/Battery Status/Light Status/Error Status/Charging Status
Antenna	ANT162442ST-1000AM1
Data Rate	Bluetooth® 5 – 2 Mbps, 1 Mbps
Antenna Type And Gain.	Chip Antenna And Gain 1.6dBi

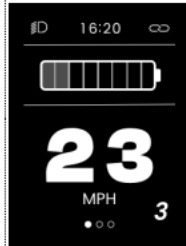
- Outlook Diagram



Figure 1 Outlook Diagram

● Operation Guide

Interface		Function Description
		<p>Opening</p> <p>Long Press 3sec Power button</p> <p>Power On</p> <p>Welcome screen</p>
Interface		<p>Riding Information</p> <ol style="list-style-type: none"> 1. Light (Long Press the 2 sec (+) button to switch light, ON-OFF-ON cycles) 2. Current time 3. Bluetooth connection status 4. Battery level (Total power battery level) 5. Current speed 6. Unit 7. Riding level (Click the (+) / (-) button to increases or decreases the amount of support) 8. Paging icon <p>Click FUN Button</p> <p>Screen scroll : Cycles through the pages GRD HMI preset 0-6 level. Note: G1-G3 (0-1-2-3-4-5) level. G5 (0-1-2-3) level.</p>
		<p>Battery Data</p> <ol style="list-style-type: none"> 1. EST RANGE 2. BATTERY <p>Click FUN Button</p> <p>Screen scroll : Cycles through the pages GRD HMI preset 0-6 level. Note: G1-G3 (0-1-2-3-4-5) level. G5 (0-1-2-3) level.</p>
		<p>Trip Data</p> <ol style="list-style-type: none"> 1. TRIP (Long press 4sec FUN key to clear TRIP) 2. ODO <p>Click FUN Button</p> <p>Screen scroll : Cycles through the pages Note: G1-G3 (0-1-2-3-4-5) level. G5 (0-1-2-3) level.</p>

**Low Battery**

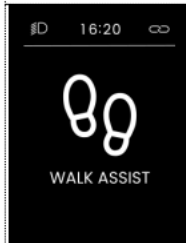
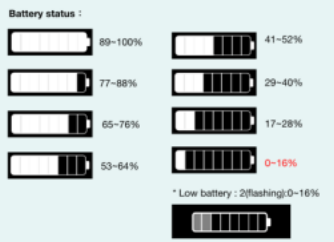
Battery level:

2 grids (solid): 17~28%, 3:29~40%, 4:41~52%, 5:53~64%, 6:65~76%, 7:77~88%, 8:89~100%

2 grids (flashing): 0~16% (Low battery)

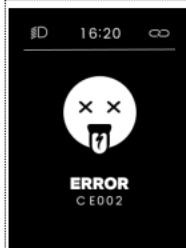
When E-bike is in a low battery state (0~16%), the 2 grid battery icons will flash animations until the battery is exhausted.

*Note: GRD HMI had not 1 grid battery status.

**Walk Assist**

Long pressing and holding (-) button to trigger the walk assist.

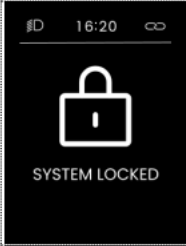
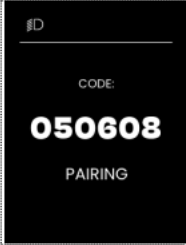

Pressing and holding activates the walk-assist mode, and the display will pop up walk-assist animation.

**Error Code**

Error: (Alert) : If the system detects an error, the display will alert the user with an error code.

Serious Error:

1. When the error occurs show the error code on the screen.
2. If multiple errors occur simultaneously, display the next error code after 3 sec, and repeat in a loop.
3. The device can be power off via the power key or the app.
4. Power on again. The error code will continue to be displayed until the error is resolved.
5. The device can be charged, but the error code will still be displayed on the screen.

		<p>General Error</p> <ol style="list-style-type: none"> 1.The error code will be displayed once and disappear after 5 sec. 2.If multiple errors occur simultaneously, display the next error code after 5 sec. 4.The device can be charged, but the error code will still be displayed on the screen. 5.Return to the main page after troubleshooting. <p>Serious Error & General Error:</p> <ul style="list-style-type: none"> * The error code is recorded in the APP. * The format of error code : C E0XX, B1 E0XX, B2 E0XX.
		<p>System Locked</p> <ol style="list-style-type: none"> 1. The lock mode flow in the mobile phone App and GRD HMI. 2. In Lock mode, all button functions except for the power key are disabled. 3. In Lock mode, the HMI can perform the first Bluetooth connection, and the background can automatically reconnect to Bluetooth in case of disconnection.
		<p>Pairing</p> <ol style="list-style-type: none"> 1. Connection failure/cancel: Back to the previously page with no Bluetooth icon and The RTC displayed. 2. If there is no pairing operation, it will return to the previous page after 6 sec 3. Click any key can back to the operation page. 4. The Bluetooth pairing code is fixed (not random), and the source method is provided by SBC. 5. Pairing code: HMI randomly generates a 6-digit pairing code.
		<p>Power Off</p> <p>Long Press the 4 sec Power Button to trigger power OFF. Shows the GRD HMI Logo screen.</p>

Warning:

15.19

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.

Federal Communications Commission (FCC) Statement

15.105(b)

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 or more 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.

15.21

You are cautioned that changes or modifications not expressly approved by the part responsible for compliance could void the user's authority to operate the equipment.

FCC RF Radiation Exposure Statement:

1. This Transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.
2. This equipment complies with RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated, keeping the radiator at least 20cm or more away from the person's body.

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, and
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, et
2. l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Caution: Exposure to Radio Frequency Radiation

1. To comply with the Canadian RF exposure compliance requirements, this device and its antenna must not be co-located or operating in conjunction with any other antenna or transmitter.

2. To comply with RSS 102 RF exposure compliance requirements, this equipment should be installed and operated, keeping the radiator at least 20cm or more away from the person's body.

1. Pour se conformer aux exigences de conformité RF canadienne l'exposition, cet appareil et son antenne ne doivent pas être co-localisés ou fonctionnant en conjonction avec une autre antenne ou transmetteur.

2. Pour se conformer aux exigences de conformité CNR 102 RF exposition, cet équipement doit être installé et utilisé en maintenant le radiateur à au moins 20cm ou plus du corps de la personne.