

Cloudpower DZ40

Cloudpower DZ40 LCD Display User Manual for Electric Bikes

Model: DZ40

1. INTRODUCTION

Thank you for choosing the Cloudpower DZ40 LCD Display for your electric bike. This intelligent display provides essential information about your bike's performance and settings, enhancing your riding experience. Designed with durability and user-friendliness in mind, the DZ40 features IP65 waterproof capability and is compatible with various electric bike systems.

Please read this manual thoroughly before installation and operation to ensure proper use and longevity of your device.

2. PRODUCT OVERVIEW

The Cloudpower DZ40 LCD Display is a compact and robust unit designed to provide real-time data for your electric bicycle. Its ABS shell ensures durability, and the IP65 waterproof rating protects it from environmental elements.

Key Features:

- **Intelligent Display:** Provides comprehensive information on bike performance and settings.
- **Waterproof and Sturdy:** IP65 rated ABS shell for durability in various weather conditions.
- **Bafang Motor Compatibility:** Specifically designed for Bafang BBS01, BBS02, and HD mid-mounted motors.
- **Versatile Voltage Options:** Compatible with 24V, 36V, and 48V systems.
- **Lightweight and Easy Installation:** Weighs only 44g, designed for straightforward mounting.

Package Contents:

- DZ40 LCD Instrument (1 unit)



Figure 2.1: The Cloudpower DZ40 LCD Display, showing its compact design and integrated handlebar mount.

3. SPECIFICATIONS

Feature	Specification
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Feature	Specification
Model Name	DZ40 LCD Instrument
Item Model Number	F4HXRA7E16KPJROIL49GF7J2G
Rated Current	18mA
Color	Black
Storage Temperature	-30°C to 80°C
Operating Voltage	24V, 36V, 48V (compatible)
Weight	44g (2.01 ounces)
Dimensions	5.51 x 3.94 x 3.94 inches
Waterproof Rating	IP65
Shell Material	ABS
Mounting Type	Stem Mount (Left-mounted switch instrument)
Compatibility	Bafang BBS01, BBS02, BBSHD mid-mounted motors
Handlebar Diameter	Fits Ø22.2mm tube



Figure 3.1: Dimensions of the DZ40 LCD Display, showing a height of 48mm and a handlebar clamp diameter of 22mm.

4. SETUP AND INSTALLATION

The DZ40 LCD Display is designed for easy installation on your electric bike's handlebars. It is a left-mounted switch instrument, suitable for Bafang BBS01, BBS02, and BBSHD mid-mounted motors.

Installation Steps:

1. **Prepare the Handlebar:** Ensure the left side of your handlebar has sufficient space for mounting. The display is designed to fit handlebars with a $\text{Ø}22.2\text{mm}$ diameter.
2. **Mount the Display:** Open the clamp on the back of the DZ40 display. Position the display on the left side of your handlebar and securely close the clamp. Ensure it is firmly attached and does not rotate freely.
3. **Connect the Cable:** Locate the serial communication interface cable extending from the display. Connect this cable to the corresponding port on your Bafang mid-mounted motor system. Ensure the connection is secure and waterproof.
4. **Cable Management:** Route the cable neatly along your bike frame, securing it with cable ties if necessary, to prevent interference with moving parts and protect it from damage.



Figure 4.1: The DZ40 LCD Display showing its integrated cable for connection to the e-bike system.



Figure 4.2: Rear view of the DZ40 display, indicating compatibility with Ø22.2mm tubes and showing a QR code with identifier [23030800170015](#).

5. OPERATING INSTRUCTIONS

The DZ40 LCD Display features a simple two-button interface for easy control and information access.



Designed IP65 waterproof capability, shell material for ABS, serial communication interface

Left switch instrument is suitable for Octagon BBS01, BBS02, BBSHD middle motor

Figure 5.1: Close-up of the DZ40 display buttons, highlighting the 'M' (Mode/Function) key and the 'Open' (Power) key.

Button Functions:

- **Power Button ():**
 - Press and hold to turn the display **ON** or **OFF**.
 - A short press may activate/deactivate the backlight or switch between display modes (if applicable).
- **Mode Button (M):**
 - Short press to cycle through different display parameters (e.g., speed, distance, battery level, assist level).
 - Press and hold to enter settings menu (refer to your e-bike controller manual for specific settings adjustments).

Display Indicators:

The LCD screen provides clear digital readouts and icons for various functions:

- **Speed:** Digital display of current speed.
- **Battery Level:** Bar indicator showing remaining battery charge.
- **Headlight Indicator (☼):** Illuminates when headlights are active.
- **Error/Warning Indicator (▲):** Illuminates to indicate system errors or warnings.
- **Assist Level:** Indication of the current pedal assist level.



Figure 5.2: The DZ40 LCD Display mounted on an electric bike handlebar, showing typical display information during use.

6. MAINTENANCE

To ensure the longevity and optimal performance of your Cloudpower DZ40 LCD Display, follow these maintenance guidelines:

- **Cleaning:** Wipe the display screen and body with a soft, damp cloth. Avoid using abrasive cleaners, solvents, or harsh chemicals, as these can damage the screen or housing.
- **Water Exposure:** While the display is IP65 waterproof, avoid submerging it in water or exposing it to high-pressure water jets. Ensure all cable connections are secure to maintain waterproofing.
- **Temperature:** Store and operate the display within the specified temperature range (-30°C to 80°C). Extreme temperatures can affect performance and lifespan.
- **Cable Inspection:** Periodically check the connection cable for any signs of wear, cuts, or damage. Ensure it is securely plugged into the e-bike system.
- **Physical Damage:** Protect the display from impacts and drops. Although durable, severe physical shock can cause internal damage.

7. TROUBLESHOOTING

If you encounter issues with your DZ40 LCD Display, refer to the following common troubleshooting steps:

- **Display Not Turning On:**

- Check if the e-bike battery is charged and properly connected.
- Ensure the display's power cable is securely connected to the motor controller.
- Press and hold the power button for a few seconds to ensure it's not just a short press.

- **No Data Displayed (e.g., speed, assist level):**

- Verify all connections between the display and the e-bike system are firm.
- Check for any error codes or warning indicators on the display. Refer to your e-bike controller manual for specific error code meanings.
- Ensure the motor is powered on and functioning correctly.

- **Inaccurate Readings:**

- If speed or distance readings are incorrect, check the wheel circumference setting in your e-bike controller (if adjustable via the display or a separate tool).
- Ensure the speed sensor (if external) is clean and properly aligned.

- **Water or Condensation Inside Display:**

- Although IP65 rated, extreme conditions or damage can compromise waterproofing. If condensation appears, turn off the e-bike system and allow the display to dry in a warm, dry place. If the issue persists, contact support.

For persistent issues or problems not covered here, please consult your e-bike manufacturer's manual or contact Cloudpower customer support.

8. WARRANTY AND SUPPORT

Cloudpower products are manufactured to high-quality standards. For specific warranty information regarding your DZ40 LCD Display, please refer to the warranty card included with your purchase or contact your retailer. Typically, warranty covers manufacturing defects under normal use conditions.

For technical support, troubleshooting assistance, or inquiries about replacement parts, please contact Cloudpower customer service through the contact information provided on our official website or through your purchase platform.