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The Unofficial Luna X-1 Enduro Display Manual

An unofficial manual for Luna Cycle's awesome X-1 Enduro e-bike.

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The X-1 comes equipped with Bafang's M600 drive system. This includes the G521 motor and DP C240 display & controller.

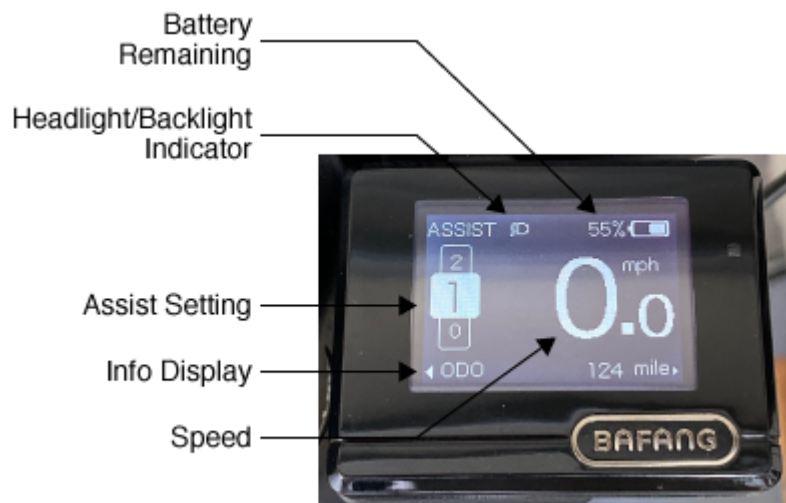
The Controller

You'll use the buttons on the controller to navigate the display, change settings, and adjust the configuration.



Display Basics

The display shows information about your e-bike's settings and riding statistics.



Battery Remaining

Displays the remaining capacity of the battery as a percentage value.

Headlight/Backlight Indicator

Press and hold the **Up** button to toggle the display backlight. The display also features a light sensor that will automatically trigger the display backlight and headlight (if equipped) when in a dark environment. The headlight icon will appear when the headlight/backlight is active.

Assist Setting

Press **Up** to increase the assist level and **Down** to decrease. Assist levels start at 0 (no assistance) and scale up to 5 (maximum assistance). Note that the Assist Setting affects the maximum power available at 100% throttle. For maximum power at 100% throttle, select PAS 5.

- Boost Mode
- 5 (maximum assistance)
- 4
- 3
- 2
- 1 (minimum assistance)
- 0 (no assistance)
- Walking Mode

Boost Mode

Note: Since all versions of the X-1 are equipped with a throttle, this feature is made moot by the ability to simply press the throttle lever.

Boost mode allows you to exceed the drive's 25 MPH (40 km/h) PAS limiter. This feature allows the rider to use full motor power temporarily, bypassing the limit. To initiate boost mode, start by pedaling to 25 MPH. Press **Up** repeatedly until the Boost Mode Icon (pictured below) appears. Press and hold the **Boost / ON-OFF** button. You should feel the motor assist you beyond 25 MPH. To terminate boost mode, release the **Boost / ON-OFF** button.



Walking Mode

Repeatedly press **Down** until the walking mode icon is displayed. Then press and hold **Down** for 2 seconds and the motor will move the bike along at a walking pace. To stop, release the **Down** button.

*Note: You **do not** need to use the throttle while using Walking Mode. Doing so may cause the bike to leap out of your grip.*



Info Display

Cycle the info line by briefly pressing the **Boost / ON-OFF** button. Available information includes:

- **TRIP** (km,mi) - trip distance traveled (can be reset in settings)
- **ODO** (km,mi) - total distance traveled
- **MAX** (km/h,mph) - maximum speed (reset by trip reset)
- **AVG** (km/h,mph) - average speed (reset by trip reset)
- **RANGE** (km,mi) - estimated range remaining
- **CAL** (Kcal) - the rider's energy consumption (reset when the bike is turned off)
- **POWER** (W,A) - real-time power output
- **TIME** (minutes) - riding time (reset by trip reset)

Adjusting Settings

To enter the settings menu, press and hold the **Up** and **Down** buttons at the same time for 3 seconds. The display will show the main settings menu. Use the **Up** and **Down** buttons to select an item, and press the **Boost / ON-OFF** button to activate an item.

The menu is arranged in a two-tier heirarchy, with the following items:

- Setting
 - Unit
 - Auto Off
 - Brightness
 - Power View
 - AI Sensitivity
 - Trip Reset
 - Vibration
 - Service
 - Assist Mode
 - Back
- Information
 - Wheel Size
 - Speed Limit
 - Display Info
 - Controller Info
 - Torque Info
 - Error Code
 - Back
- Exit

Details for each menu item follow:

Setting

These settings can be configured to adjust the operation of your bike.

Unit

Configures the linear unit of measure used for speed, trip, odometer, etc.

- Imperial: miles
- Metric: kilometers

Auto Off

Configures the time (in minutes) before the system automatically turns off. Can be disabled by selecting **OFF** from the menu. Note that the system draws a small amount of power, even when the bike is not moving. It will slowly deplete your battery if auto off is disabled and the bike is left on.

- OFF, 0–9

Brightness

The brightness of the display as a percentage of maximum intensity.

- 10%, 30%, 50%, 75%, 100%

Power View

Configures the unit used to display the real time power output.

- Current: amps
- Power: watts

AI Sensitivity

Configures the sensitivity of the light sensor for the backlight / headlight. Note that this is a capital “a” followed by a lower case “l”, which stands for **Auto-Light**. The font makes it easily confused with **Artificial Intelligence**. Other display firmware versions use all-caps “AL”.

- 0–5
- 0 disables the auto-light
- 1 is the lowest sensitivity
- 5 is the highest sensitivity

Trip Reset

Resets the trip values. See *Info Display* section for a list of values reset by this function.

- YES, NO

Vibration

Enables a vibration with each press of a controller button.

- YES, NO

Service

Enables service mode.

- YES, NO

Assist Mode

Configures the available number of assistance levels. Note that changing this does not change the amount of total assistance available. It is best to think of them as divisions of a whole. E.g. 1/3, 2/3, 3/3 for 3 levels of assist and 1/5, 2/5, 3/5, 4/5, 5/5 for 5 levels of assist.

- 3, 5, 9

Back

Navigates back to the main menu.

Information

These settings are for information only. They are loaded with the firmware and cannot be changed.

Wheel Size

28 Inch, the size of the wheel used for computing speed.

Speed Limit

90 km/h / 56 MPH, limits the top speed of the bike.

Display Info

Displays the hardware and software version of the display.

Controller Info

Displays the hardware and software version of the controller.

Torque Info

Displays the hardware and software version of the torque sensing unit.

Error Code

Displays a list of the 10 most recent error codes.

Back

Navigates back to the main menu.

Exit

Exits the menu system.

The Unofficial Luna X-1 Enduro Display Manual maintained by [bradland](#)

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