KHS

E-BIKE

Extended 2.0

Owner's Manual


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BATTERY PACK REMOVAL INSTRUCTIONS



To remove the battery pack, we recommend that you stand on the left side to the frame. (Standing on the left side of the bike gives you more leverage)

Turn the battery key counter-clockwise.

Hold the battery pack with your right hand, and prepare your left hand to catch the battery pack. Push the battery out to the left.

The battery pack is removed.

BATTERY PACK INSTALLATION INSTRUCTIONS

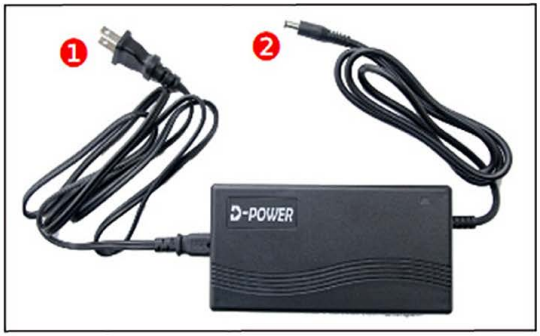


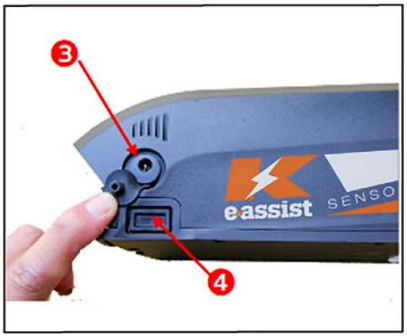

To install the battery pack, we recommend that you should stand on the left side to the bike.

Hold the battery pack with both hands, line up the connector socket on the bottom, and push the battery pack to the right bracket completely.

Turn the battery key clock-wise to lock the battery. Remove the key and store it properly.

CHARGING THE BATTERY & CAPACITY DISPLAY





Charging

Please confirm that the battery and the charger are both rated 48V.

Plug the charge output 2 into the battery charge input 3 .

Charger connect to AC power source. 1 Household 110V ~ 220V socket

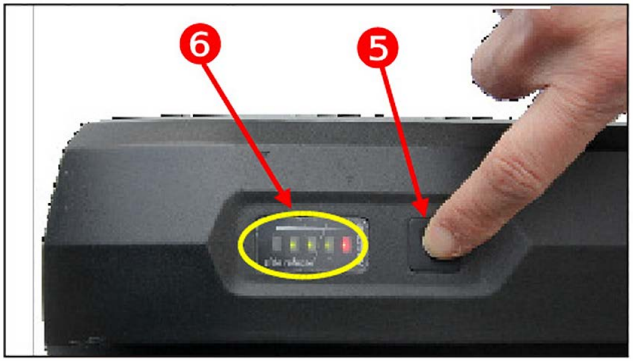
4 is USB port.

CHARGING THE BATTERY & CAPACITY DISPLAY

Charger LED indicator

LED indicator 8 Red light indicates charging.
Green light indicates fully charged.

If after 8 hours of charging and the LED indicator is still Red, the charging seems abnormal.
Please stop the charging and report to supplier for service.



(a) Push the button 5 to activate Capacity Meter

(b) Capacity Meter 6 LED Lamp indicator

4 Green LED represent fully charged

1 Red LED represents charge needed

* We recommend fully charging the battery after every ride.

This battery is equipped with a power button.

Turning the Battery ON

Simply press the power button to turn the battery **ON.**

The battery must be on in order for the bicycle electrical control system (LCD dashboard, page 8) to operate.

Turning the Battery OFF

The battery will automatically shut **OFF** after 60 minutes of being idle. However, to ensure longer battery life, you may turn OFF the battery manually by pressing the power button again.

BATTERY STORAGE

- If the bike is ridden on and/or after a rainy day, remove the battery and wipe it dry.
- When not using the battery for a long period of time or after charge, unplug the battery from the bike.
- Check the battery energy status and charge every three months.

CAUTION when charging:

(a) It is strictly forbidden to charge the battery with an uncertified charger.

(b) Avoid direct sunlight. Charge in dry and weld ventilated environment.

(c) For best charging efficiency, charge in temperature range of 32ºF to 104ºF (0ºC to 40ºC).

(d) Battery performance deteriorates over time whether the battery is used or not. This is known as "calendar fade". Performance also deteriorates with usage and this is known as "cycle fade". Follow these instructions to help extend the battery life and performance.

Model / Battery / Charger Chart

Model	*Battery*	*Charger*
Easy 24	36V	36(42)V
Envoy 200	48V	48(54)V
Extended 2.0	48V	48(54)V

LCD OPERATION:

On & Off

On [M] Push for 1 second

Off [M] Push for 2 seconds

LCD dashboard content description

Power output and battery level indicators section

(1) POWER output indicator:

Each cell means 2A (current) of output

(2) BATTERY level indicator:

100~90% 90~80% 80~60% 60~40% 40~20% 20~10% 10% Flashing

When the battery is empty, all six cells are blank and red light will flash. Motor will stop and show ERROR code (1). *Please charge, or install a charged battery, ASAP

Power Assistance Level Indicator Section

Push (+) to increase power assistance level (0.1.2.3.4.5)

Push (−) to decrease power assistance level (5.4.3.2.1.0)

Speed Indicator Selection : MPH vs. KM/H

Push (M) and (+) simultaneously for 2 seconds to change the speed unit between Miles Per Hour (MPH) and Kilometers Per Hour (KM/H).

Additional Information Section

Push (M) button briefly each time will cycle through the following functions : 

- Screen cycles through the information modes automatically Σ → ⏲ → KM → MAX
- Odometer recorded by the system since the manual reset
- Time since the system was turned on
- Distance traveled since system was turned on
- Max Speed since system was turned on

* NOTE 1: Distance and speed units will depend on the selected MPH or KM/H unit in the Speed Indicator section.

* NOTE 2: To clear all info except for odometer, push (M) and (−) together for 2 seconds.

* NOTE 3: To clear all info including odometer, push (M) and (−) together for 10 seconds.

Throttle

Push the throttle lever. The bike can start without pedaling.

Walking Mode 3.8MPH (6Km/H)

Press  on control panel button for 2 seconds to start the walking mode.

Button must be held to continue walking mode. Releasing the button will immediately stop the walking mode.

Walking mode will allow the motor to run up to 3.8MPH (6KM/H)

It is designed to assist when pushing the bike uphill or need to go slowly.

When engaged, the power assistance indicator will show AUTO 6.

LCD Backlight and Front & Rear Lights

On: Press and hold  on control panel for 1.5 seconds to turn on.

Off: Press and hold  on control panel for 1.5 seconds to turn off.

NOTE: Bicycle battery must be "ON" for the bicycle lights to work.

If shows up, there is an error. The indicated numeric codes are defined as follows:

Error code	*Definition*	*Solution(s)*
1	Voltage too low 48V is under 42V // 36V is under 32V	Charge battery, or replace.
2	Brake is stuck or shorted	1. Check the brake to make sure it's not stuck. 2. Unplug the brake wire to see if message goes away. If it does, the wire maybe shorted.
4	Crank sensor: no signal or no phase	At power on with power assistance level (0), error code (4) may appear. The code should disappear automatically after 30 seconds, or when you start pedaling. If you start pedaling, but the code stays on within the first 30 seconds, it indicates there is no flash signal from the crank sensor. *Sensor needs to be replaced.
5	Motor overload, reduce motor output	1. Shutdown and restart the system. 2. Put on max assistance level. 3. Motor requires repair.

LCD OPERATION

6	Controller temperature exceeds 158ºF (70ºC)	Power off and wait until the temperature decrease back to normal about 10 minutes.
8	Motor Hall is abnormal	1. Is the connection between motor and controller loose or broken? 2. Motor requires repair.
9	Motor overcurrent	1. Shutdown and restart the system. 2. Motor requires repair.
14	Wheel diameter Sensor abnormal	Check wheel sensor or wheel magnet
15	Voltage too high 48V system: battery is above 60V 36V system: battery is above 44V	Replace the battery.
17	Lost or abnormal communication between LCD and controller.	1. Shutdown and restart the system. 2. Is the wire between the LCD and controller loose or broken? 3. Controller or LCD may require repair.

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