This is a type of topic you would normally not find on this website but it may be of use to some people doing a search for this type of information.

# **GOTRAX EBE8 E-BIKE REVIEW**

I purchased this e-bike in May of 2022 and wanted to use it for a while before I did a review. I am no ebike expert but thought I would pass along my observations. I used it in the summer of 2022 and put about 2500 km on it mostly on paved paths and roads.



There will be a lot of negative comments below but overall I think this bike is OK. This was an Amazon purchase and basic details about the bike can be found on their website. It was reasonable priced with reference to other e-bikes.

## Unpacking

To start off, very little documentation came with the bike. Unpacking instructions would be useful but if you are careful it can be unpacked an assembled without damage. Don't rush here. Basic tools come with it for assembly and maintenance. I used the better tools I had available for assembly. No maintenance instructions came with the bike.

Assembly instructions did come with the bike. Be prepared to spend several hours unpacking it and putting it together. The battery came discharged and took about 7 hours to fully charge.

## **Operation**

The bike has an LCD display with control buttons but no information was supplied as to how to use them. I e-mailed the manufacturer and received the information below. Overall I found the factory support (China) via e-mail very good.

Key Description.

1. Power off state, long press M to turn on, power on state, long press M to turn off, or stand still for 10 minutes to turn off automatically.

2. Power on state, long press + key to turn on the headlight, long press again to turn off the headlight.

3. Power on state short press + to raise the gear, short press - key to lower the gear (power on default 0 gear, need to raise the gear party has power output)

4. Press and hold the - key to enter the boost mode (5-6KM/H)

5. Press and hold the - key to enter the constant speed range mode (cruising at the current speed)

6. Press and hold the + and - keys (simultaneously) in the power-on state to enter the setting interface, P01 for screen backlight brightness setting,

P02 for KM/MPH display unit switching, short press the + or - key to set, after setting is completed, short press the M key to switch to the next setting.

P16 for ODO range mileage, long press the + key to zero (other parameters are for reference only and cannot be adjusted).

Press and hold the + and - keys (at the same time) to exit the setting interface after the setting is completed, or stand still for 10 seconds to exit automatically.

7. Short press the M key in the power-on state to switch the ODO, TRIP, VOL, CUR, TI parameter display.

8. Accelerator is used to adjust the motor speed, turn it from top to bottom, the motor will accelerate, release the motor to decelerate.

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# **Display Settings on the EBE4**

When powered on hold the up and down arrow together to bring up the settings menu - Once in the menu use the M button to cycle the settings (P01-P16).

Use the up and down arrows to manipulate the setting.

Settings menu will go away automatically after a short time, or can be turned off by holding the up and down arrows.

P01 - Display Brightness. Controls the brightness of your display screen.

P02 – Kph/Mph switch. Change your speedometer to read out in Miles per Hour or Kilometers per Hour.

P03 – Battery indicator voltage setting (correct setting is 36V for EBE1 and EBE2, 48V for EBE4). Shows the correct voltage for your Electric Bike's Battery.

P04 - Sleep time setting. Adjust the time to when you display will automatically shut off.

- P05 Gear setting.
- P06 Wheel diameter setting.
- P07 Speed measuring magnet quantity setting.
- P08 Speed limit setting.
- P09 Zero start/non-zero start setting.
- P10 Electric/assisted/dual mode compatible setting.
- Pll Boost intensity setting.
- P12 Boost sensitivity setting.
- P13 Assist magnet quantity setting.
- P14 Current setting.
- P15 Under voltage setting.

P16 - Endurance total mileage return to zero (long press and build 5 seconds to return to zero) the number at the end of the line is the factory setting.

The above is for the EBE4 model but I assume it's the same as the EBE8 model.

**NOTE:** Some (or a lot) of these programming settings did not work.

#### **General**

The manufacturer doesn't recommend you ride this bike in wet conditions. From the manufacture "The electric bike is not water proof." This could be typical of most e-bikes, I don't know. This could be an issue if you use it to commute. The weather may be fine when you leave but may not be when you return. The same holds true for general riding. It may be fine when you leave but you could get caught in rain. I generally check the weather forecast before I leave.

#### **Assist Setting and Throttle**

This e-bike has 5 assist settings. It has three modes, no assist, assist and peddling and no peddling required. The throttle (accelerator) is more of a switch than a throttle. It has about a 90 degree range and it appears to go from zero to full speed in about 20 degrees of its full travel. This makes it virtually impossible to use this to control the speed of the bike. It's either zero or full speed in each assist range. The assist is hard to define. It seems to be more related to e-bike speed rather than anything else.

#### **Battery Life**

The e-bike came with 720 Watt hour lithium-ion 48 Volt battery. This is the highest rating available for this series of e-bike. I never let the battery run down to low. An average trip was about 20 km and under these conditions I would typically charge it after 2 trips. I do, however, do a lot of peddling and that would extend the battery life. I don't think I have ever seen it discharged more than half way.

The battery voltage appears to be almost proportional to how fast the bike would go in each assist range. As the battery voltage dropped so does the top speed in each range. An exception, to a point, may be the highest assist range which is limited to 32 Kmh. A fully charged battery is close to 54 volts.

#### **Brakes**

The brakes are OK but not great. The only other e-bike I have driven was a MJM E-ST20 and it seemed that the breaking was much better on that bike although it was over 1/3 more expensive. Also, I noticed front fork flexing (twisting) when the brake was applied on the GOTRAX. This didn't seem to create any adverse effects.

#### Gearing

I find the bike gearing to low. This seems odd for a 21 speed bike. The gear ratios are close with little difference between gears. I don't ride this bike fast, typically between 18 to 20 km/h and find I use the top 3 gears the most and peddle faster than I like. This is not a show stopper and may be fine for other riders.

#### Tire Wear

The tire wear of the originally supplied tires seems poor. I had to replace the rear tire after about 1500 km of use. The front tire is still OK. The tires are mountain bike type. I replaced the rear tire from one I bought from Canadian Tire. It was manufactured by Kenda and the wear seems better than the original.

It now has about 1000 km on it and it still looks good. Because of the tire size, 27.5" X 2.1", they appear to be harder to get (less choice) than other bike sizes.

## Front Fender

The bracket holding the front fender failed after about 1000 Km. There is only one support for the fender and there is a lot of movement of it when riding. It is just and L bracket made of light gauge steel. It's pretty much guaranteed to fail because of metal fatigue. The fix was easy as I already had on hand a suitable heavier generic L bracket for replacement. It did require drilling out rivets etc. When you're fails you can always make one.

There is also an L bracket supporting the rear fender but it is heavier gauge steel. Not sure how long it will last.

# Side Stand

The side stand seems a little long for the bike causing the bike to stand almost vertical. I wanted to cut off some from the bottom of the stand but couldn't remove the rubber boot from the end.

## **Accessories**

I added a bike rack and a bell to the bike. Both were bought through Amazon. The bike frame accommodated the required mounting holes for the rack. I ty-rapped the back fender to the rack this was because of the movement of the fender and it would hit the rack while riding the bike. The bike comes with a horn (buzzer) but I did not like the sound of it and I added the bell. There is little spare space to mount anything on the handlebar and even mounting the bell did not allow me to put it where I wanted. Mounting a mirror may be a challenge. There is a taper in the handlebar that doesn't help. Other accessories I added were a bag for the rack, a lock for the bike and a rear reflector (light) mounted on the rack.

## **Conclusion**

Despite the negative comments above, I like the bike. I am sure you can get better bikes but be prepared to pay more, maybe a lot more.

I will probably update the above when I think of more information that I can add.

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