

Controlling the E-ST-520 Display

A quick start guide for viewing and modifying the display of a
Decathlon Rockrider E-ST-520

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The main display has various items shown.

Top left is the remaining battery charge. Top right is an icon showing that the backlight is on.

In the middle, very large, is the speed (MPH or KPH). This can be changed to show average speed or maximum speed.



Underneath that are a small set of numbers that can be changed to display odometer (total distance the bike has ever travelled), trip meter (how far the bike has travelled since the trip was reset) and remaining mileage from the battery.

At the bottom right is a number indicating what power mode you are in.

There are three buttons, On/Off, Plus and Minus. Here's what they do:

What you press	What happens
On/Off for two seconds	Turns the display on (if off) or off (if on).
On/Off	Toggles the small display between odometer, trip display and estimated battery miles/km remaining.
Plus	Increase the motor effort (goes from 0 to 3)
Minus	Decreases the motor effort (goes from 3 to 0).
On/off and Plus together for 2 seconds	Toggles the main display between current speed, average speed and maximum speed.
Plus key for 2 seconds then continue to hold	Turns on pedestrian mode which operates the motor slowly to assist you when pushing the bike.
Minus key for 2 seconds	Toggles the backlight display on and off.
Minus key for > 10 seconds	Resets what is on display if it is able to be reset. This includes trip display, maximum speed and average speed.
On/Off and Minus together for 2 seconds	A further display of 4 items. They are (as far as I can determine): <ol style="list-style-type: none"> 1. The current voltage of the battery 2. No ide. Seems set at 100 3. The percentage power left in the battery 4. No idea. Seems set at 0.
Plus and Minus key for 8 seconds	Changes the display into settings mode. Once here, there are three options:
Press on/Off while in settings mode	Toggles the display between Display brightness, MPH or KPH and how long before the screen switches off once cycling is finished.
Plus or Minus key while in settings mode.	Changes the value for whatever is on the display
Plus key for 2 seconds while in settings mode.	Sets the value of whatever is selected.
On/Off key for 2 seconds while in settings mode.	Takes the display out of settings mode and switches the display off.

Error Codes

The following error codes have been extracted from the ST-500 manual. I am assuming the ST520 codes are similar.

- ERROR 10/12 = UNDERVOLTAGE Charge the battery.
- ERROR 11 = OVERVOLTAGE Switch off the bike and switch it on again.
- ERROR 20 = CURRENT GAUGE ERROR Switch off the bike and switch it on again.
- ERROR 21/23 = TEMPERATURE SENSOR ERROR Switch off the bike and switch it on again.
- ERROR 24/25 = ABNORMAL CURRENT OR VOLTAGE Switch off the bike and switch it on again.
- ERROR 26 = TEMPERATURE SENSOR ERROR Charge the battery and switch the bike on again.
- ERROR 30 = PEDESTRIAN MODE ERROR Leave the bike for a while, charge the battery and then switch the bike back on.
- ERROR 30 = PEDESTRIAN MODE ERROR Leave the bike for a while, charge the battery and then switch the bike back on.
- ERROR 40/41 = MOTOR OVERVOLTAGE Let the motor cool down by pedalling less hard or switching to a lower boost mode.
- ERROR 42/43 = MOTOR ERROR OR SHORT-CIRCUIT Switch off the bike and switch it on again.
- ERROR 44 = MOTOR OVERHEATING Let the motor cool down by pedalling less hard or switching to a lower boost mode.
- ERROR 45 = ERROR RECTIFIED DURING USE Switch off the bike and switch it on again.
- ERROR 46 = MOTOR NOT WORKING Check that the motor is properly connected and switch the bike back on.
- ERROR 60 = COMMUNICATION CONTROLLER/SCREEN ERROR Check that the screen cables are properly connected. Check that the battery is properly engaged and close enough to the motor unit. ERROR 70/71/72/73 = TORQUE SENSOR ERROR Switch off the bike and switch it on again.
- ERROR 80/82/83/84 = MOTOR PROGRAMME ERROR Switch off the bike and switch it on again.
- ERROR 81 = SPEED INFORMATION NOT RECOGNISED Check that the magnet attached to one of the spokes on the rear wheel is still there and is correctly positioned in relation to the speed sensor.