



WESTHILL

Electric Bike User Manual

LINK



HAVE A QUESTION? NEED HELP?

Contact us on Facebook for a quick reply.



westhillbikes.com

LINK

WARRANTY

Westhill bikes are covered by a limited 3-year warranty. Aside from general cycle maintenance, any work to the motor should be carried out by a Westhill technician or authorised dealer.

1. Warranty periods

The statutory warranty valid at the time of delivery applies to:

Frame: 3 years

Motor: 2 years

Battery, Charger & Controller: 2 years

2. Warranty conditions

2.1 Requirements

There is a defect in materials or workmanship or an error of information.

The cause of the change in the product is neither natural nor related to its functions, wear and tear or ageing.

The damage was not caused by use of the bike for other than the intended purpose.

2.2 Warranty exclusions

Damage caused by improper use or force majeure.

All parts subject to function-related wear and tear, unless this is the result of a defect in the manufacturing process or material.

Damage which results from improper or insufficient care and repairs, alterations or the replacement of parts by persons other than trained professionals.

Accidental damage or other external effects, provided these are not the result of defective products or information.

Repairs resulting from the use of second-hand parts or damage caused by this use.

Damage resulting from competitive use.

Special fittings, accessories or non-standard components, especially technical modifications.

Observing the required service intervals is also a condition of any warranty claims you may make.

2.3 The following are considered wear parts under the statutory warranty:

Tyres

Rims in combination with rim brakes

Spokes

Brake pads

Chains and toothed belts

Chain wheels, sprockets, bottom brackets and jockey wheels

Sliding bearings

Lamps for lighting system

Handlebar tape/handle grips

Hydraulic oils and lubricants

Gear-shift cables and brake cables

Paint finishes

Batteries (depletion of capacity to 60% is acceptable within first two years)

(1) Definitions

In this warranty the following terms shall have the following meanings: Westhill Bikes shall mean FW3 Ltd; Westhill Product shall mean the FW3 Ltd; Product Warranty Period shall mean a period commencing on the original date of purchase as new

(2) Circumstances outside our control

FW3 Ltd shall not be liable for any failure in service as a result of FW3 Ltd, or FW3 Ltd agents employees or contractors being delayed, prevented or hindered in the performance of its obligations by reason of any circumstances beyond its reasonable control. Such circumstances include, but are not limited to fire, flood, Act of God, and civil disorder.

(3) Disclaimers

FW3 Ltd shall not be liable for any indirect, incidental, special or consequential damages losses or expenses (including without limitation lost profits, loss of use or loss of data, goodwill, reputation or lost business) arising directly or indirectly, from the purchase use or sale of the Product, whether or not FW3 Ltd was advised or aware of the possibility of such damages, losses or expenses. It is the customer's responsibility to make lawful use of the products FW3 Ltd supplies.

TABLE OF CONTENTS

1	BOX CONTENT	3
2	ATTENTION	4
3	CHECK BEFORE USE	4
4	MAINTENANCE	5
5	BIKE DIAGRAM AND PART NAMES	5
6	SPECIFICATIONS	6
7	HOW TO UNFOLD YOUR BIKE	7
8	TURNING ON YOUR BATTERY	7
9	REMOVING OR INSERTING YOUR BATTERY	8
10	CHARGING THE BATTERY	8
11	LIGHTS ON/OFF	8
12	BASIC INFORMATION	9
13	HOW TO USE THE BIKE CONTROLS	10
14	GENERAL INFORMATION	17
15	SAFETY WARNING	18

BOX CONTENT

1 x Westhill Link
1 x Charger
1 x Manual
1 x Tool kit

THIS MANUAL SHOULD BE CONSIDERED A PERMANENT PART OF THE ELECTRIC BICYCLE AND SHOULD REMAIN IF IT IS RESOLD.

ATTENTION

- Do not operate this electric bike without fully reading and understanding its operation and limitations.
- Before riding each time ensure that all parts are in good order. If you have any questions or concerns, please contact us via Facebook chat or by email.
- Ensure you observe traffic rules and regulations when using this electric bike.
- Passengers cannot be carried.
- When riding in rain, snow or slippery conditions reduce your speed and increase the distance between yourself and other vehicles.
- We advise against performing maintenance operations that involve removing parts or components. If this is necessary, please contact us for guidance.
- Do not ride through deep puddles. Water could enter the hub motor, causing short circuits and irreparable damage.
- Do not allow individuals who are unfamiliar with the features and functions of this e-bike to operate it without proper instruction.
- Do not modify the e-bike by yourself.

CHECK BEFORE USE

- Is the tyre pressure [45-70 PSI] correct?
- Are the brakes working correctly?
- Are the batteries sufficiently charged?
- Is the handlebar attachment and saddle post correctly inserted and tightened?
- Are the wheel hub mounting nuts correctly tightened?
- Is the bell working correctly?
- Is all the wiring correctly connected?

Rated load: 85KG, Max load: 110KG

MAINTENANCE

Charge the battery every 2 months even if the bike hasn't been used for this period.

Keep all working parts lubricated.

Have the bike serviced regularly with a Westhill dealer.

Parts that can be lubricated

Head set
Brake cables
Chain

Parts that should not be lubricated

Rear brake
Front brake
Rims
Tyres

BIKE DIAGRAM AND PART NAMES



SPECIFICATIONS

MODEL	PHANTOM	GHOST 2.0	CLASSIC	LINK
Bike				
Wheel Diameter	27.5"	27.5"	700c	20"
Wheelbase	1156mm	1143mm	1101mm	1040mm
Max Rider Weight	120kg	120kg	120kg	120kg
Max Speed	25km/h 15.5mph	25km/h 15.5mph	25km/h 15.5mph	25km/h 15.5mph
Range Per Charge	20 - 100 miles*	20 - 100 miles*	20 - 100 miles*	15 - 50 miles*
Weight	20kg	20kg	21.8kg	16kg
Tyres	Hutchinson Taipan (54-584) 27.5x2.25	Kenda K1047 (54-584) 27.5X2.1	Kenda K1088 (40-622) 700CX40C	Kenda K1088 (47-406) 20X1.75
Gears	Shimano Deore 30 Speed (3x10)	Shimano Alivio 27 Speed (3x9)	Shimano 7 Speed	Shimano 7 Speed
Brakes	Tektro Hydraulic HD-E500	Tektro MD-M300	Tektro MD-M300	Tektro MD-M300
Display	LCD Display DIGITAL II	LCD Display DIGITAL II	LCD Display DIGITAL II	LCD Display DIGITAL II
Battery				
Capacity	400WH 500WH available	400WH 500WH available	400WH 500WH available	300 WH 400WH available
Type	LG Lithium-ion	LG Lithium-ion	LG Lithium-ion	LG Lithium-ion
Rated Voltage	36V	36V	36V	36V
Motor				
Make	Bafang	Bafang	Bafang	Bafang
Type	Brushless	Brushless	Brushless	Brushless
Rated Power	250W	250W	250W	250W
Rated RPM	205RPM	205RPM	205RPM	275RPM
Rated Voltage	36V	36V	36V	36V
Rated Output Torque	45n.m	45n.m	40n.m	40n.m
Controller				
Controller	Sine Wave	Sine Wave	Sine Wave	Sine Wave
Under Voltage Value	31.5V	31.5V	31.5V	31.5V
Over Current Value	15A	15A	15A	15A
Charger				
Current	2 Amps	2 Amps	2 Amps	2 Amps
Input	41.9V	41.9V	41.9V	41.9V
Type	Smart Charger	Smart Charger	Smart Charger	Smart Charger
Charge Time	4-6h	4-6h	4-6h	4-6h

* The range will be different for every user and max. miles is not what you should expect but is the absolute maximum anyone will achieve in perfect test conditions.

* Factors that effect this: battery size, rider weight, weather conditions, terrain, temperature, gradient, tyre pressure, total load, battery age, battery misuse (please see battery care and maintenance information

6 <https://westhillbikes.com/battery-care-maintenance>)

HOW TO UNFOLD YOUR BIKE



1. When adjusting the seat post and handle bars do not exceed the safety limit.
2. To fold the pedals away, you must push the pedal in before folding up.

TURNING ON YOUR BATTERY

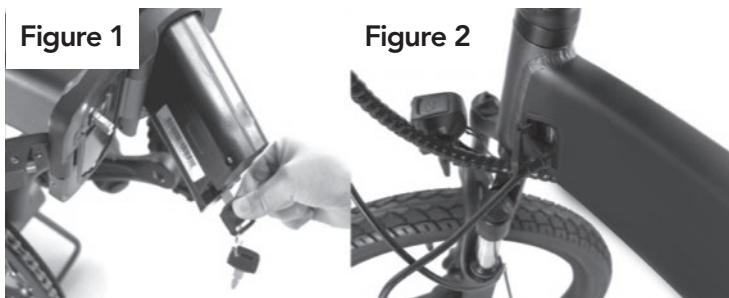
Before turning on the display for your Westhill Link you must turn the battery power on. The switch is located above the charging port on the side of the battery.

When charging the battery please make sure the switch is turned OFF.



REMOVING OR INSERTING THE BATTERY

To remove the battery you must fold the bike in half as shown in Figure 1. Please unlock the battery with the keys provided and simply slide the battery out of the frame. To insert the battery please reverse this process.



CHARGING THE BATTERY

- Plug the charger into the wall outlet. The LED on the battery charger will illuminate RED when charging. The LED will change to GREEN when the battery is fully charged.
- When the battery is fully charged, disconnect the charger from the wall outlet before disconnecting the charger from the bike.
- Ensure that the cover over the charging port on the bike is closed and sealed.
- Be sure to use the charger supplied together with the bike, use of other chargers will invalidate the warranty.

LIGHTS ON/OFF

Hold the UP button for 2s to turn on the headlight, repeat this process to turn the headlight off.

Press the button on the rear light to turn on the rear light separately, double press to change to a flashing light. Pressing the button a third time will turn off the rear light.



BASIC INFORMATION

FRAME MATERIAL	Aluminum, Al6061
FRONT FORK SIZE	20"
BATTERY	7.8Ah (10Ah upgrade)
MOTOR	36V 250W
CONTROLLER	36V 250W
DISPLAY	LCD Display DIGITAL II
LIGHT	6V/LED
BRAKES	TEKTRO Disc Brakes
DERAILLEUR	Rear 7 Speeds

HOW TO USE THE BIKE CONTROLS

Digital II



STANDARD OPERATION

ON/OFF

Starting your Westhill bike. Hold MODE button to start display and supply power to the controller. Your e-bike will then start to work.

To switch off press and hold the MODE button; the display will then switch off. If your e-bike is stationary (not used) for more than 10 minutes the controller will automatically power off.

CHANGING DISPLAY SPEED INFORMATION

On completion of your journey you will be able to view your average speed and your maximum speed achieved. Helping you maintain and log your riding goals. When you are stationary press MODE to view your stats. You can switch display information by simply pressing MODE to flip from display to display. You will be also be able to view trip distance and cumulative total mileage.

The display starts in REAL TIME SPEED → AVERAGE RIDING SPEED → MAX. SPEED → TRIP** → ODO → RIDE TIME

** To reset the 'TRIP' feature back to 0 press and hold the MODE and UP button together for 3 seconds.



Real Time Speed



Average Speed



Max Speed



Trip



ODO



Time

PAS LEVEL OR PEDAL ASSIST LEVEL

The bike will start in 'PAS' (Pedal Assist) level 1. Press UP or DOWN to change the output power of motor. Power range is 1 to 9. 1 is the lowest power – 9 is the highest. You will also have the option to turn the power off by setting the level to 0.



WALK ASSIST

Press and hold DOWN button to start walk assist mode. The bike will keep at an even speed of 4 mph or 6km/h. Release the button to stop walk assist mode.



Walk assist should only be empowered when you are walking the bike. This mode is NOT for riding.

TURNING ON AND OFF BACKLIGHT



Press and hold the UP button for 2 seconds to turn on the backlight.
Press and hold the UP button again for 2 seconds to turn the backlight off.

BATTERY INDICATOR

The battery icon will show the level of charge currently held by the battery. There are five segments which will decrease as charge is used. If the battery level falls below the advised minimum, the battery icon will flash on and off and you should recharge as quickly as possible.



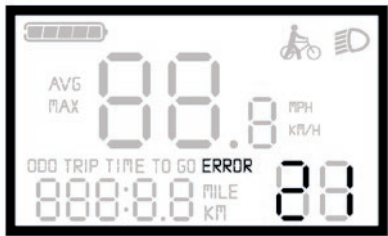
Battery levels



Flashing to indicate low charge

ERROR CODE

If your Westhill bike computer develops a fault, the 'ERROR' code will be highlighted on the display. Contact your nearest Westhill service centre or your retailer as soon as possible.



Error code interface

Error Code	Definition
21	Current Abnormality
22	Throttle Abnormality
23	Motor Abnormality
24	Motor Hall Abnormality
25	Brake Abnormality
30	Communication Abnormality

The fault display interface can only be exited when the fault has been addressed. Your e-Bike computer will not function if the error code activated.

WARNING: Your warranty may be invalidated should you continue to use your e-bike after the 'ERROR' code has been displayed. Please see error code chart above for codes and meanings.

USERS MENUS AND SETTINGS

Turn on the display screen, then hold the UP and MODE buttons simultaneously for two seconds to enter the user settings menu. There are 8 user settings menus. The main display will tell you which user menu you are on.

SETTINGS MENU INDEX

P = Set Password

St.1 = Wheel Diameter Menu

St.2 = Limit Speed Setting **

St.3 = Display Brightness

St.4 = Unit Display KM/H Or MPH

10 = Switch ON/OFF Time

POS = PAS Levels

cu.r = Limit Current Setting

SP.S = Speed Magnet Sensor Setting **

SC.A = Magnet Assistance Setting **

SS.P = Slow Start Setting

Voltage 1-5 = Voltage Setting **

** Changing these setting can damage your bike and will invalidate your warranty.

Use the UP or DOWN buttons to scroll through the menu options.
Short press MODE to select the required menu.

SET PASSWORD

Selecting the 'PASSWORD' menu lets you personalise your password.

You can personalise your power-on password by pressing the UP/DOWN buttons to select the required digits. Press MODE to confirm your selection. Then short press MODE again to confirm the password.



WHEEL DIAMETER MENU

If you need to change the wheel diameter, press MODE to select the wheel diameter menu.

The set values are 16inch/18 inch/20 inch/22 inch/24 inch/26inch/27.5 inch/700C/28 inch.

Adjusting the wheel diameter setting will ensure the accuracy of displayed speed and mileage is correct for your wheel diameter.

Short press the MODE button to confirm the desired wheel diameter.

Factory default wheel diameter on the digital II-LCD display is preset accordingly. Always check this is correct to your wheel size.



LIMIT SPEED MENU

The maximum speed your e-bike motor is legally allowed to assist you in the UK is 15.5mph or 25km/h. If you increase the default setting (15.5mph / 25km/h) you will not be covered under warranty and will be breaking the law.

The optional range for motor assistances is 7mph (12km/h) – 15mph (25km/h). Press the UP or DOWN button to limit or increase your maximum speed attainable. Short press the MODE to confirm.



DISPLAY BACKLIGHT BRIGHTNESS

To adjust the brightness of your display backlight press the UP and DOWN button to select the correct menu short press the MODE and then select the brightness setting from 1 – 3. Short press the MODE button to confirm and switch to display unit setting. The default value of Digital II-LCD is 1.



DISPLAY UNIT SETTING (METRIC AND BRITISH UNIT)

Short press UP/DOWN Buttons to switch display unit to the unit menu. You can select km/h or mph to display your speed and your trip statistics. This will change automatically once you change the display unit setting.



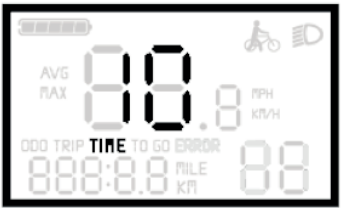
Miles per hour (MPH)



Metric unit

SWITCH OFF TIME SETTING

Select the 'TIME' menu and short press the MODE button to select. Use the UP/DOWN buttons to adjust the time settings.



PAS LEVEL SELECTION

You can adjust your 'PAS' assistance speed by using the UP/DOWN buttons as you ride.



Level Range



PAS Level Ratio

CURRENT SETTING

Press UP and DOWN to set limited current value.



SPEED MAGNET NUMBERS SETTING

These settings are for use by Westhill technicians ONLY and should not be adjusted by end users.

WARNING: The speed magnet settings have already been set at the optimum levels for your Westhill bike and adjusting these levels can invalidate your warranty.



MAGNET ASSISTANCE SETTING

These settings are for use by Westhill technicians ONLY and should not be adjusted by end users.

WARNING: The magnet assistance settings have already been set at the optimum levels for your Westhill bike and adjusting these levels can invalidate your warranty.



SLOW START SETTING

Press UP and DOWN to set slow start.



BATTERY VOLTAGE

These settings are for use by Westhill technicians ONLY and should not be adjusted by end users. **WARNING:** The 'VOLTAGE' settings have already been set at the optimum levels for your Westhill bike/battery and adjusting these levels can invalidate your warranty.



Voltage Class 1



Voltage Class 2



Voltage Class 3



Voltage Class 4



Voltage Class 5

GENERAL INFORMATION

BATTERY RANGE

The range of the battery is up to 50 miles per charge. However, a lot of factors affect how far you can go per charge:

- Driving surface: A smooth, flat surface will increase driving distance.
- Weight: More weight means less distance.
- Maintenance: Regular battery charging and maintenance will prolong the life of your battery.
- Speed and riding style: Maintaining a moderate speed will increase distance. Frequent starting and stopping, acceleration and deceleration will reduce it.
- Battery size, tyre pressure, temperature, battery age and weather conditions.

SPEED LIMIT

The top speed of the bike is set to 25km/h (15.5mph) (obey local laws).

WEIGHT LIMIT

The maximum load is 110kg (17.3 stone). Going above the maximum weight limit can cause injury or damage the bicycle and will void your warranty.

CLEANING THE BIKE

To clean the bike carefully wipe with a damp cloth, then dry with a dry cloth. Do not use excessive water to clean the bike as this could damage the components, resulting in personal injury or malfunction of the bicycle. Lubricate the chain after every wash if you can to keep it smooth and rust free. Suitable products are available via **westhillbikes.com**.

BATTERY

- Keep the bike away from fire and excessive heat.
 - To avoid damage to the battery, never subject the bike to intense physical shock, severe vibration or impact.
 - Protect the battery from water or moisture.
 - You can remove the battery but never disassemble it.
 - If there are any issues with the battery, please contact Customer Support on +44 (0)1823 672 970.
-

STORAGE

- If you plan on storing the bike for a substantial period of time, please make sure you fully charge the battery before storing. The battery should be fully charged once a month after this.
 - To protect against dust, cover the bike.
 - Store the bike indoors, in a dry place and at a suitable temperature.
 - You should bring the bike into a warm environment for charging.
 - Do not leave the bike plugged into the charger for long periods of time.
-

TYRE PRESSURE

The recommended tyre pressure is written on the tyres (45-70 PSI).

SAFETY WARNINGS

Here are some useful tips to make sure you always have a safe ride:

- Children, the elderly and pregnant women should not use the bike.
- Do not ride after drinking alcohol.
- Consult your doctor if taking prescription medication.
- Do not carry items when riding.
- Prior to each ride, inspect each part of the bike to ensure it has been maintained correctly and is functioning properly.
- Always give way to pedestrians.
- Be aware of your surroundings.

- Always comply with local traffic laws and regulations. Remember, this bike is a motor vehicle, and is treated as such by local law enforcement. You can and will be arrested for drink driving. Many cities have restrictions on where you can drive motor vehicles, as well as additional restrictions on driving non-automobiles on streets and highways.
 - Make sure your feet are always placed securely on the pedals.
 - The bike cannot be ridden by two or more people. Only one person can ride at a time.
 - When you ride the bike along with other cyclists, always keep a safe bike distance to avoid a collision.
 - When turning, be sure to maintain your balance.
 - Do not allow distractions when riding, such as answering the phone or engaging in any other activities.
 - Applying brakes too hard or too suddenly can lock up a wheel, which could cause you to lose control and fall. Sudden or excessive application of the front brake may pitch the rider over the handlebars, which may result in injury or death.
-

MODIFICATIONS

Do not attempt to disassemble, modify, repair or replace any electrical parts without contacting the Customer Service (+44 (0)1823 672 970). This will void any warranty and can lead to malfunctions which may cause injury.

ADDITIONAL OPERATION CAUTIONS

Do not lift the bike off the ground while it is in operation and the wheels are in motion. This can result in freely spinning wheels, which may cause injury to yourself or others nearby. Do not jump on or off the bike.

Westhill Bikes Warranty

Register Now Through Our Website

Simply visit **westhillbikes.com/warranty-registration** and fill in your information.

Register Now Through Facebook



The other way to register your new bike is through Facebook. Simply visit our page **www.fb.com/westhillbikes** or scan the QR code below with your mobile phone and message us with this information:

Your name:

Your email address:

Your postal address:

Bike model & colour:

Purchase date:

Where you purchased from:



Be sure to register right away so your bike is covered!

Don't have Facebook? Email the above details to enquiries@westhillbikes.com to activate your warranty.

WESTHILL

westhillbikes.com