

 **OXYGEN**
S-CROSS



USER MANUAL



Please ensure you read this user manual before using your OXYGEN S-Cross for the first time.

IMPORTANT:

Please register your OXYGEN Bicycle online at www.oxygenbicycles.com to validate the free 2 year warranty within 14 days of purchase.



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Introduction

Dear Customer,

Thank you for choosing an Oxygen Electric Bicycle.

We hope that your new Oxygen Bicycle will bring you a lot of fun and you will be fully satisfied with our product. To ensure that your trips with Oxygen are not only enjoyable but also safe, please do spare a few minutes to read this manual.

Please don't forget that by using an electric bike you are supporting an eco-friendly form of transport and contributing to saving our environment.

At Oxygen, we aim for 100% customer satisfaction and we carefully read all comments and suggestions regarding our products.

If you have any comments, suggestions or require any other information about this product please do not hesitate to contact us.

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Warranty Information

Your OXYGEN S-Cross comes with a statutory 12 months warranty however if registered within 14 days of purchase this warranty is extended to 24 months.

To register your bike please go to:

<http://www.oxygenbicycles.com/support/register-a-bike> or call our office on 01709 886677.

Please retain proof of purchase as this will be required to process any warranty claims.

Once registered your OXYGEN Bicycle is covered by our 24 month warranty against mechanical failure.

The battery on your oxygen bicycle is covered for battery depletion over 20% of the original capacity per year up to 40% over a 24 month period when registered.

Items such as Brake pads, Cables, Tyres and lights are considered as consumable items and will not be replaced under warranty by OXYGEN Bicycles.

OXYGEN Electric bicycles cannot be held responsible for any damage to the bike caused by the bike not being serviced or maintained properly, accidental damage, misuse of the bicycle or general wear and tear.

In the event of a warranty claim the bicycle should be returned to the Authorised OXYGEN stockist the bicycle was purchased from, the defective parts should be returned to OXYGEN Bicycles to be assessed.

Delivery and collection charges are not covered by the warranty, these should be borne by the owner.



About Oxygen S-Cross and its design

The Oxygen S-Cross electric bicycle range has been designed for commuting, long distance cycling, or short trips around the town. The design ensures the S-Cross is suitable for use on public roads as well as off road pathways.

Oxygen's unique frame geometry, SCT (Sport City Touring), combines three riding positions in one frame, allowing the cyclist to choose the most optimal and ergonomic position for their needs, depending on the cyclist's power, performance, size and health condition. This makes the Oxygen S-Cross very comfortable and efficient on long distances.

Please note that the bike is NOT suitable to be used in extreme conditions such as jumping or extreme downhill tracks. The bicycle frame is NOT designed for: Extreme Cross Country XC, Dual DS, 4X Four Cross, Free Ride FR, and Downhill DH.

The maximum allowable payload for the bicycle is:

- 120kg for the cyclist.
- 15kg for the luggage located on the rear rack.



Safety checks and preparing the bicycle before your first ride

Fitting the front wheel

The front wheel requires occasional checks to make sure it is securely and tightly fitted in the forks and is not too loose.

What to check during the front wheel fitment?

The lever should be tightened up properly to the end of its travel. If you feel that the lever is too soft during locking, you need to hold the locking nut on the other end of the axle and turn the lever around to set up as required.

Setting the correct saddle height on your bicycle

It is important that your bike saddle is at the correct height to ensure that your bike ride is comfortable and you don't have to put too much energy into pedalling.

The below guide should be helpful to set the saddle in the correct position and ensure your Oxygen bicycle is comfortable:

When sat on the saddle, hold the brake lever and put the heel of your foot on the pedal when in the bottom position. Your leg should be almost straight with just a slight bend at the knee, when the ball of your foot is moved onto the pedal to the position it would be when pedalling this should increase the bend in your knee slightly and ensure you are able to ride comfortably and get optimum power when pedalling.

Please note that each seat post has a safety marking on the seat pillar – the seat post should never be set above the safety marks on the seat post when adjusting the height of the seat post.



Check the tyre pressures

The recommended tyre pressure for an Oxygen bicycle is between 40psi and 75psi depending on the type of tyre fitted (recommended limits are shown on the tyre). It is recommended the pressure is set near the higher limit as this decreases rolling resistance and helps to reduce the likelihood of getting a puncture. Tyres should not be inflated above the maximum recommended pressure – doing otherwise would affect the comfort of riding and increase the risk of damage to the wheel rim and tyre explosion. Please note that keeping the bike in the bright sun may also increase the pressure in the tyres and therefore it is recommended to keep a pressure at a slightly lower level during hot summer days.

Charging the battery for the first time

Before using your Oxygen bicycle for the first time you should ensure that the battery is fully charged.

When the charger is plugged in and showing a red light, this indicates charging is in progress, when the charge cycle is complete a green light on the charger comes on – please do not disconnect the battery or switch off the power before the charge cycle is complete.

Check the handle bar and stem assembly.

Before your first ride, please make sure that the stem and handle bar assembly bolts have been securely tightened and there is no play in the stem or headset.

Check your brakes

Before your first ride it is crucial to familiarise yourself with the braking system and make sure that both brakes are in good working order.

Please remember that the RIGHT HAND LEVER operates the front brake and the LEFT HAND LEVER operates the rear brake. It is always best to use both brakes at the same time.



When cycling in wet conditions, please remember that the braking performance may be affected and brakes may not be as effective as they are when cycling in dry conditions. Always allow extra distance for braking when cycling in wet conditions. Both brakes must be in fully working order at all times, you should never ride your bicycle if there is a problem with the brakes however small the problem may be.

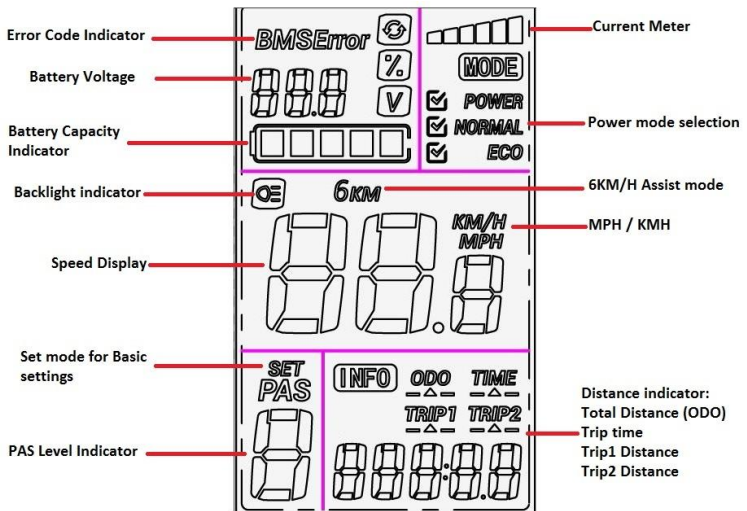
For your own safety we recommend that you always wear a helmet when cycling, regardless of the time or distance of your ride. Please never cycle under the influence of alcohol or drugs, as this significantly increases a risk of an accident, serious injury or even death.

All Oxygen bicycles sold by authorised dealers should be checked and tested before being delivered to an individual customer. However, Oxygen Bicycles cannot always guarantee that these procedures have been completed, particularly in the case of online sales. It is therefore crucial to check all the components yourself before the first ride.



Display Function Summary

1. ON/OFF
2. Current meter
3. Power mode selection
4. Speed display
5. KM/H or MPH
6. Backlight indicator
7. 6KM/H assist
8. PAS level selection
9. Error code indicator
10. SET operation
11. Distance indicator
12. Battery indicator
 - 12.1 Battery residual capacity indicator
 - 12.2 Battery voltage





1. ON/OFF

Press and hold **“ON/OFF”** button to switch on the display, the display will power up and provide power to the 5v USB socket on the handlebar.

To switch power off to the display press and hold the **“ON/OFF”** button for 3 seconds.

The display panel will go into sleep mode when the speed is 0 km/h for 5 minutes.

2. Current Meter

This shows the amount current being drawn through the controller to power the motor indicating how much power the motor is currently using.

3. Power Mode selection

There are three power modes that can be selected using the basic settings menu, these are, POWER, NORMAL and ECO. These modes are in addition to the 6 PAS levels.

4. Speed Display

This shows the speed of the bike and can be switched between MPH and KM/h, the mileage will be displayed in the same unit as the speed.

5. MPH / KMH

This indicates the unit that the speed and distance are displayed in, this can be changed in the basic settings menu (as explained in **Basic settings adjustment**).

6. Backlight Indicator

With the power on, click the **“ON/OFF”** button to switch on/off the backlight on the display.



7. 6KM/H assist mode

Hold the “-“button for 2 seconds to engage the 6KM/H assist mode. When the “-“button is released power to the motor will stop.

8. PAS Level Selection

The PAS Levels on the S-Cross range from **0** to **6**, this varies the amount of torque the motor gives you when pedalling **0** providing no assist and **6** providing maximum assist. Click the “+” or “-“button to change the PAS level.

9. Error Code Indicator

If there is a problem with the electronic control system, the display will flash and show an error code number automatically.

See the **Error code table** in this manual for details.

10. Basic settings adjustment

Press and hold the “**SET**” button for 2 seconds to enter the basic settings interface, press the “**SET**” button to cycle between the parameters.

There are 4 parameters that can be changed on this display, these correspond to the numbers shown on the display as below.

1: Reset trip 1

Press the “-“button until trip1 resets to **0** to reset the trip1 meter.

2: Power mode selection

There are three power modes that can be selected, these are in addition to the PAS levels: POWER, NORMAL and ECO.

Press the “+” or “-“button to change between these.



3: Wheel diameter setting

Press “+” or “-“button to select the accurate wheel diameter value to ensure the accuracy of the speed and mileage shown on the display,

4: KM/H & MPH

Press the “+” or “-“button to change between KM/H and MPH, the odometer and trip values will also be shown in the unit selected.

To save the changes made and exit press and hold the “SET” button for 1 second. The display will automatically exit the settings mode if there is no operation for 20 seconds.

11. Distance Indicator

When the display is on, press “SET” to switch the display information. In turn shows: ODO, trip 1 and trip 2.

ODO

The ODO records the total mileage the bicycle has travelled, this value cannot be cleared.

Trip 1

Trip1 records the distance ridden and can be reset manually in the basic settings interface. (when the mileage reaches 500km, this will be reset automatically)

Trip 2

Trip2 displays the last distance ridden for 30 seconds after turning the display on, this is then automatically reset and starts to record the current distance.

Time

This shows the time spent riding, this is automatically reset after shut down.



12. Battery Indicator

Battery residual capacity indicator

This indicates the charge level of the battery. When the battery is severely low the meter will flash, this indicates the battery needs to be recharged as soon as possible.

Battery voltage

This displays the current voltage of the battery.



Battery care and charging

Battery charging

To ensure optimum performance of the battery fitted to your Oxygen bicycle it is important to follow these steps.

The battery must be fully charged before the first use. In order to charge the battery, you will first need to plug the charger into the socket on the battery then switch on the power to the charger. It is important that this is done in this specific order as connecting the charger to the battery when live may cause a short circuit, if this occurs the battery will not take a charge and the green light will show on the charger.

When the battery is taking a charge a red light should show on the charger unit, the charger should not be disconnected while the red light is showing. When the charging cycle is complete a green light appears on the charger, this indicates the battery is fully charged and ready for use, power should be switched off, the charger can then be removed from the battery.

Battery care and maintenance

If the battery is fully discharged it should be re-charged the same day, but not earlier than approx 10-20 minutes after your bike ride as the battery cells need some time to cool off.

If you are planning not to use your bike for a long period of time, it is very important that you charge the battery before storage.

Batteries stored for long periods of time should be fully charged before storage and then charged for approx 2 hours every 2 months failure to do this will result in the battery losing voltage and irreparable damage to the battery occurring.

Please note, damage to, or failure of batteries caused by neglect or misuse will not be repaired or replaced under warranty.



How to achieve the maximum battery performance and range

The range and performance of your battery depends on a number of different factors, such as:

- A. Tyres pressure – it is best to keep the tyres pressure in the region of 55-60 PSI. If the pressure is low this will result in a higher rolling resistance; a higher pressure (within the recommended limit) will result in less rolling resistance and the bike will be easier to ride.
- B. Weight of the rider and luggage – the less weight the bicycle is carrying the better the range and performance will be.
- C. Pedal assist – the lower the level of pedal assist more effort you put into pedalling, the longer distance you can cycle with the electric assist on.

There are also other factors, independent of how the bike is being used. The range quoted in the technical specification is based on the assumption that the cyclist's weight is no more than 80kg, and cycles in a relatively flat area. The range may be lower for cyclists of over 80kgs or when cycling in hilly areas. Temperature is another factor that can influence the range, with the best performance achieved in temperatures between 15 and 25C.

IMPORTANT: Never open the battery case - the battery case should only be open by an authorised engineer at a service centre appointed by Oxygen Bicycles. Unlawful breach of this rule will automatically invalidate the battery warranty.

Opening of the battery case or tampering with the batteries by unauthorised individuals may cause serious injury or even death. Oxygen Bicycles cannot be held responsible for any accidents or damages caused by unlawful battery maintenance.



Carrying luggage on your bike

It is important to ensure that any luggage being carried on the rear carrier is attached securely and doesn't exceed the maximum recommended limit. Please make sure you only use appropriate pannier sets for your luggage needs. Any panniers should be attached securely to the carrier.

Maximum allowable luggage

Total luggage weight should not exceed 15kgs, including any pannier sets. The weight of the luggage should be distributed evenly, with a maximum of 7.5kgs on each side of the carrier.

Warnings regarding carrying luggage

Please do not overload the rear carrier with more than the maximum allowable weight.

Please do not attach a child seat to the standard rear rack supplied – you should use a carrier designed specifically for this purpose.

Fasteners on the rear carrier should be properly fitted and regularly checked. The carrier bolts should be tightened with 2.5nm torque. Carrying the maximum luggage allowed may have an effect on the bike's handling and braking performance.

Please make sure there are no loose items or straps coming from the panniers or rack, this could damage spokes in the wheel.

Please ensure that luggage fitted on the carrier does not obstruct the visibility of any lights fitted to the carrier or bicycle.



Regular use and bike maintenance

All bicycles require regular routine maintenance. To ensure the maximum safety on your bike, we strongly recommend carrying out checks and routine maintenance before each ride.

Additionally, the following checks should be carried out by a competent person approximately once per month:

Spokes – Spokes should be checked before the first ride and after the first 300 miles (approx 500km) of buying your bike, and then at least every 500 miles (800km) to ensure that the spokes are not loose and the wheel is still running true. Any damage caused by spokes working loose or breaking will not be covered under warranty.

Brake pads – The condition of brake pads should be checked on regular basis. The position of pads may also need adjusting as wear occurs.

The life span of brake pads may vary significantly and last as long as 5000 miles or as little as 250 miles depending on the conditions the bike is being used in. Generally, if used a lot in rain and muddy conditions, the pads will last less than if used mainly in dry conditions. Wear will also be much quicker if used in hilly areas, compared to flat areas, where less braking is applied.

Running gears – Running gears should be checked and adjusted on a regular basis, if not adjusted this can cause wear to the chain and gearing.

Tyre condition – You should never ride the bike with worn tyres, this can affect the handling and safety of the bicycle and increase the risk of punctures and could put you at much greater risk of having an accident.



Chain – The chain should be cleaned and lubricated on a regular basis to increase performance and lifespan. Please ensure that only lubricants sold by professional bike shops are used. Never use motor oil or grease to lubricate your chain.

Condition of rims – If using V-brake type brakes, it is important to check the condition of the rims occasionally. With regular usage, rims wear out over time and their wall thickness is reduced – a very worn or damaged rim may collapse and cause an accident, serious injury or even death. It is always best to ask a professional bike shop to check the condition of rims for you – many independent bike shops offer such advice for free.



Torque recommendations –

Rear axle nuts 33N.m

Seat pillar clamp nut/bolt 5-8N.m

Brake cable anchor bolt 5N.m

Brake centre bolt M6: 11N.m

Gear shifter nuts 4N.m

V brake calliper nuts 10N.m

Rear carrier nuts 8N.m

Mudguard bracket nuts 8N.m.

Other torques depend on the size of the nut/bolt as follows:

M4 2.5-4N.m

M5 4-6N.m

M6 6-7.5N.m

Warning: All mechanical components on the bike will wear over time, depending on the type of the component and the material used. Any cracks, scratches or colour changes may indicate that the component has worn and should be replaced.

You should not try and fix any electrical components by yourself; any electrical problems should be investigated by an Authorised Oxygen Bicycles Technician.



Lubrication of the bike components

The table below shows how often, on average, you should lubricate the bike's components.

If you are not experienced in bike maintenance, you should always use a professional bike mechanic for any maintenance.

Component Lubricant Frequency

Frequency	Component	Lubricant	How to Lubricate
Weekly	Chain Derailleur wheels Derailleur Brake levers	Chain Lube or light oil Chain Lube or light oil Oil Oil	Brush on or squirt Brush on or squirt 2 drops from oil can 2 drops from oil can
Monthly	Brake callipers	Oil	2 drops from oil can
Every six months	Freewheel Brake cables Shift levers	Oil Lithium grease Lithium grease	2 squirts from oil can Disassemble Disassemble
Annually	Pedals Derailleur cables Wheel bearings Headset	Lithium grease Lithium grease Lithium grease Lithium grease Lithium grease	Disassemble Disassemble Disassemble Disassemble



Error Code Table	
21	Current error
22	Throttle error
23	Motor stalling
24	Hall sensor error
25	Brake sensor error
9	Display Communication error



If this manual hasn't answered all your questions regarding Oxygen electric bikes, please do not hesitate to contact us directly either through our website www.oxygenbicycles.com or by emailing us at sales@oxygenbicycles.com



www.oxygenbicycles.com

