RIBBLE

e-BIKE OWNER'S MANUAL

PRE-RIDE **CHECKLIST**

- **A** Please ensure that there is no play in the headset by rocking the bike backwards and forwards while applying the front brake.
- **B** Check the alignment of the hanger that attaches the rear derailleur to the frame. It should be parallel to the floor and not point in towards the wheel.
- **C** Make sure the handlebars and stem are tightened securely.
- **D** Test your tyres to ensure that they are inflated to pressure range indicated on the tyre sidewalls.
- **E** Ensure that the battery is fully charged before commencing your ride.
- **F** Spin the front and rear wheels to check for brake rub. (when the disc rotor contacts the brake pads and produces a metallic sound)
- **G** Check the seat post is clamped up securely.

For your own safety we recommend that you perform these checks before every ride. If you have reason to suspect that your bicycle is not performing correctly, do not ride it.

IWOC ONE
QUICK START USER GUIDE

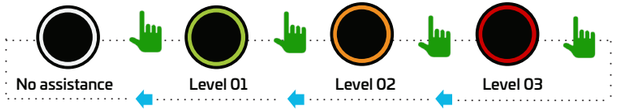
This section refers to Ribble e-bikes equipped with the top-tube mounted iWoc One control button. If your bike is equipped with the handlebar-mounted iWoc Trio button, please skip to that section of the guide.

1. CHANGE THE ASSISTANCE LEVEL

Push the button once and the LED will flash to indicate the current assistance mode.

Press it again **whilst it is flashing** to increase the assistance to the next level.

Repeat as necessary to cycle through to the desired assistance level.



2. TURN THE LIGHTS ON/OFF

(e-bikes with integrated lights only)

Short press the button and while the LED is blinking, hold down the button until it lights up YELLOW.

3. BLUETOOTH AND NOTIFICATIONS

With Bluetooth® activated on your mobile device, turn the bike on and the system will automatically connect to your phone. The LED's will briefly flash BLUE to signal that a connection has been established or a disconnection.

If you receive a notification (call etc) on your phone while connected via Bluetooth®, the LED will briefly flash LIGHT BLUE.

4. SYSTEM ERROR AND SPECIAL MODES

If the LED emits a PINK light, the bike is in SAFE MODE. Contact Ribble for assistance.

The LED may flash PINK to indicate an error. Connect your smartphone to the bike via Bluetooth® to check for an error code. Check the error code section of this guide to find out what the code refers to, and the recommended action to resolve it.

If the LED alternates between a flashing PINK light and a secondary colour, the bike is in DEMO MODE. It can only be ridden for 50km before all assistance will cease. This can only be deactivated by contacting Ribble.

START UP PROCEDURE

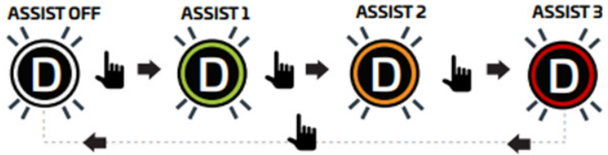
When you first turn the system on, the LED's will cycle through various colours before settling on one solid colour. Here, we explain what is indicated during the start-up process.

1. Press the iWoc One Button to activate the system.

2. The LED's will light up GREEN to indicate that everything is OK.

3. The next flashing light indicates whether an assistance mode is active.

CURRENT ASSIST LEVEL *(While LED is blinking)*



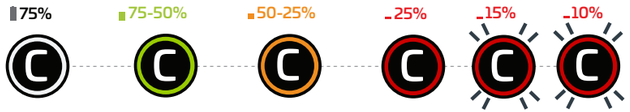
4. Once the start-up procedure is complete, the LED's revert to one solid colour that signifies how much battery is available to you.

BATTERY CHARGING LEVEL

The amount of battery charge available to you is displayed via a simple traffic light system. Whenever you press the iWoc button, the LED will always revert to display a single solid colour. The colours listed below outline what each colour represents.

- White = 75% or more remaining
- Green = 50-75%
- Amber = 25-50%
- Red = Less than 25%
- Slow Red Flash = 10-15%
- Rapid Red Flash = Less than 10%

BATTERY CHARGING LEVEL *(By Default)*



Guide Key;

A System start
B System OK
C Battery charge level
D Assistance level

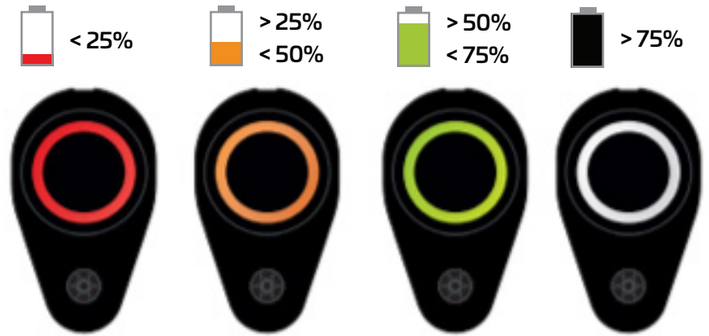
OTHER NOTABLE COLOURS

In addition to those listed above, the LED may also display the following colours.

- **Blue** = Bluetooth connection established
- **Light Blue** = Notification received
- **Slow Flash Pink** = Demo Mode
- **Solid Pink** = Safe Mode (Contact Ribble for assistance)
- **Rapid Pink Flash** = Error (connect bike to app to identify the fault)

CHARGING THE BIKE

Plug the charger into a household power socket and then into the charging port on the bike. The light on the iWoc ONE control button will turn on automatically. While charging, the LED will change colour to reflect what state of charging it has reached.



IWOC TRIO QUICK START USE GUIDE

This section refers to e-bikes equipped with the handlebar mounted iWoc Trio control button only.

1. WALK MODE

Your Ribble e-bike includes a handy walk mode function which provides a little extra assistance should you need to push the bike. To activate this, simply press and hold down Button B until the LED flashes WHITE. The bike will then advance at 5km/h if the button remains depressed.

2. TURN THE BIKE ON/OFF

Press button C (middle button) to turn the bike on. Hold down the same button for a couple of seconds to turn it off again.

3. CHANGING THE ASSISTANCE LEVEL

Push button A (top button), and the LED will flash to indicate the current assistance mode. **Whilst it is flashing**, click the button again to select the next level of assistance. Repeat the process using Button B (bottom button) to decrease the assistance level to the next one down until no assistance is provided.

4. TURN THE LIGHTS ON/

Click Button A, and **whilst it is flashing** hold it down until the LED lights up YELLOW. This confirms that you wish to turn the lights on/off.

5. BLUETOOTH AND NOTIFICATIONS

With Bluetooth® activated on your mobile device, turn the bike on and the system will automatically connect to your phone. The LED's will briefly flash BLUE to confirm a successful connection/disconnection.

If you receive a notification on your phone while connected via Bluetooth®, the LED will briefly illuminate LIGHT BLUE.

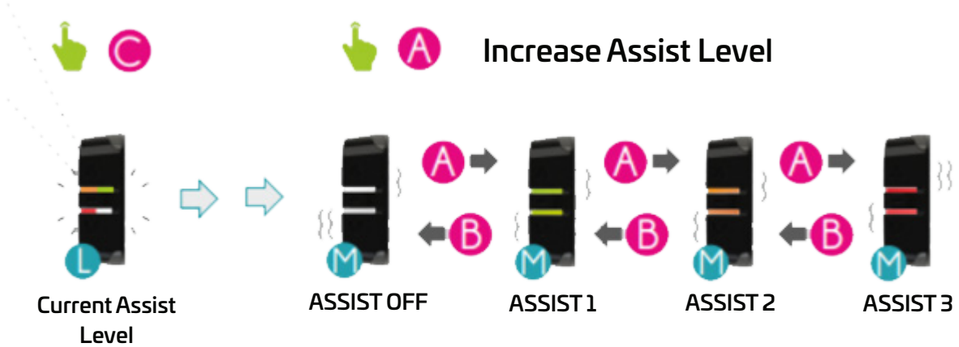
6. SYSTEM ERROR AND SPECIAL MODES

If the LED emits a PINK light, the bike is in SAFE MODE. Contact Ribble for assistance.

A constant RED flash indicates there is an error in the system. Connect your smartphone to the bike to check for an error code. Check the error code section of this guide to find out what the code refers to, and the recommended action to resolve it.

If the LED alternates between a RED flash and a secondary colour, the bike is in DEMO MODE. It can only be ridden for 50km before all assistance will cease. This can only be deactivated by contacting Ribble.

CHOOSING THE ASSISTANCE LEVEL



You have turned the bike on, and the LED now displays a solid colour to indicate the amount of battery available to you. How do you change the assistance level? It really is very simple and will quickly become second nature to you.

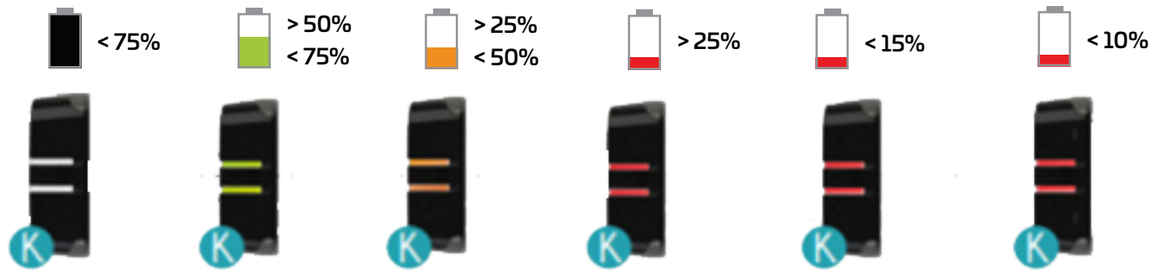
- Press Button C (middle button) to set the LED's to flashing.
- **Whilst flashing**, press Button A (top button) to increase the level of assistance up to Level 3.
- If you press the same button again the unit will vibrate twice to warn you that maximum assistance has already been reached.
- Press Button B (bottom button) to decrease the assistance level to the next level down or until no assistance is being provided.
- If you press the button again the unit will vibrate twice to indicate that no assistance is currently being provided.

BATTERY CHARGE LEVEL

The amount of battery charge available to you is displayed via a simple traffic light system. Whenever you press the iWoc button, the LED will always revert to a single solid colour. The colours listed below outline what each represents.

- **White** = 75% or more remaining
- **Green** = 50-75%
- **Amber** = 25-50%
- **Red** = Less than 25%
- **Slow Red Flash** = 10-15%
- **Rapid Red Flash** = Less than 10%

BATTERY CHARGING LEVEL *(BY DEFAULT)*



DO'S & DON'T'S

Every Ribble e-bike is a built-to-last, but like any high-end item that uses Li-ion batteries it needs a little TLC. Please find below a list of our top tips to keep your bike performing at peak efficiency.

BATTERY CHARGE LEVEL

Do plug the charge into a household power socket and then into the charging port on the bike. The light on the iWoc ONE control button will turn on automatically. While charging, the LED will change colour depending upon what state of charging it has reached.

TEMPERATURE CONTROL

Don't expose the bike to extreme temperatures. It works most efficiently between 10° and 40°. If you stop for any length of time (café stop etc.), try to position the bike so it is out of direct sunlight. Avoid storing the bike in a cold or damp environment.

KEEP OUT OF DIRECT SUNLIGHT

DO NOT EXPOSE THE EBIKE TO EXTREME TEMPERATURES

WATER IMMERSION

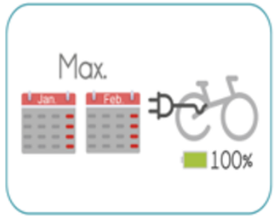
Don't ride your bike on heavily flooded roads or attempt to ford streams. The electrical components of the X35 system are IP54 rated. This means that they are protected against water spray from any direction. However, this does not include full immersion, or when subjected to pressurised water such as that from a hosepipe or power washer. When transporting the bike on the outside of a vehicle, a waterproof cover should be used to protect the electrical components from water damage that can occur during such transportation.

CHARGING CAPACITY

Don't leave it charging for more than 5 hours.
Don't leave your bike in storage for a prolonged period without charging it. Keep it topped up to approximately 40-70%. Set up a reminder to give it a booster charge monthly.

Do charge your battery to maximum capacity if you have a big ride planned. However, try and leave this as close to the ride as possible. Ideally you want to charge it to approximately 70-80% capacity and then top it up shortly before setting off.

Don't charge the bike when it's too hot or cold. If you have just finished a ride, leave it to cool down for half an hour or so. This gives the battery cells ample time to cool down. Similarly, if the bike has been in a garage or shed, try, and bring it up to room temperature before plugging it in.



IF YOUR BIKE IS IN STORAGE FOR A PERIOD OF 3 MONTHS OR MORE PLEASE GO THROUGH THE CHARGING CYCLE AGAIN
DO NOT LEAVE LONGER THAN 3 MONTHS WITHOUT CHARGING YOUR EBIKE

MAXIMUM CHARGE IS 5HRS

DO'S & DON'T'S CHARGING PORT

Do not insert any metal objects into the charging port and ensure that the charger is always inserted correctly.

DO NOT INSERT ANY METAL OBJECTS

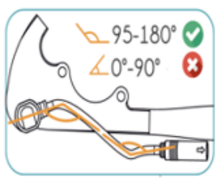
ALWAYS INSERT THE CHARGER WIRE IN THE CORRECT

DO'S & DON'T MOTOR CABLE

Always connect the cable with the arrows aligned (fig 3).

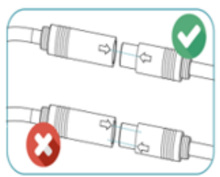
Ensure that the cable clip is positioned correctly (fig 2).

Always makes sure that the cable is at the correct angle (fig 1).



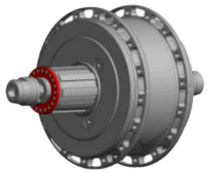
ALWAYS MAKE SURE THE CABLE IS AT THE CORRECT ANGLE

CORRECT POSTION OF CABLE CLIP



ALWAYS CONNECT THE CABLE AS SHOWN IN PICTURE

DO'S & DON'T'S MAGNETIC LOCKRING



The magnetic lockring replaces the standard cassette lockring that locks the cassette onto the rear hub. It is essential in ensuring that the motor system works correctly and should be kept free of dirt and grime.

IMPORTANT
DO NOT DISCARD THE MAGNECTIC LOCKING RING. ENSURE THE LOCKING RING IS RETAINED OR REPLACED

MAINTENANCE

1. Always clean the bike regularly, especially after wet rides. Avoid using pressure washers or hosepipes.
2. Check the magnetic lockring is clean and in place.
3. Great care should be taken to avoid contaminating the brake pads and disc rotors when cleaning or lubricating the bike.
4. Regularly check the bearings for play or roughness.
5. Lubricate the chain often and wipe off any excess.
6. Gear cables will stretch over time, adjust cable tension to correct this.
7. Always ensure the battery has sufficient charge before commencing your ride.
8. Check that you have the most up to date version of the companion app and that you are fully registered.
9. Make sure your e-bike is stored correctly.
10. In the event of you removing the rear wheel, make sure that the motor cable is disconnected and reconnected correctly.

FREQUENTLY ASKED QUESTIONS

What sort of range can I expect from the bike?
Available range is dependant upon several factors including rider weight, route profile, rider fitness, weather conditions etc. A rider of 90kg can expect an average distance of approximately 60km over variable terrain. An optional range extender is available which effectively increases the total battery capacity by a further 70%.

Do I need to pedal to ride this bike?
As required by law, all Ribble e-bikes are always pedal-assisted and require rider input.

Can I ride faster than 15mph?
Yes, though the motor will only aid you up to 15mph. At which point, (by law, and as with all e-bikes in the UK) the assistance will cut out. If you drop below 15mph, the motor will automatically re-engage but above 15mph it's all you.

Do I need tax, insurance, or a licence to ride an e-bike?
No, pedal-assisted e-bikes are classed as ordinary bicycles and do not require you to hold a valid driver's licence, pay tax or take out insurance.

How do I charge the battery?
Simply plug the bike into any household power socket using the supplied charger and cable. An optional range extender is also available which can be charged away from the bike. When connected to the bike it will charge the main battery when stationary or supplements it, with the first of the charge being supplied by the extender and the rest from the main battery.

What type of battery is it?
The X35 system is equipped with a Panasonic i250 36V/250Wh 18650GA-10S/2P Li-ion battery.

How long does it take to charge the battery?
From fully depleted, the battery takes 3.5 hours to reach full capacity.

What would the average range achieved for each assistance level?
Ribble e-bike users can expect approximately 50-60miles from a full charge with moderate motor usage. This can be extended by a further 70% with the optional range extender.

Do e-bikes need servicing?
The components of the e-bike system do not require any specific servicing. However, the bike should be serviced regularly, as per a conventional non-assisted bike.

EBIKEMOTION ERROR CODES & FIXES

Very rarely the motor system may encounter an issue. Bikes equipped with the iWoc ONE top tube control button will flash PINK to indicate a fault exists. Models equipped with the iWoc Trio handlebar button will flash RED. Connect the bike via Bluetooth to the MAHLE SmartBike Systems companion app and check for the error code. Below is a summary of the error codes and the recommended steps to resolve them.

4. Voltage too low
The battery pack voltage is too low.
Please connect the charger.

5. Voltage too high
Connect to the dealer app and check that the voltage is within range. If it isn't, discharge the battery by 5% while checking that the battery voltage drops below 42V.
Restart the system and see if the problem disappears. If it persists, contact Ribble.

6. Motor sensor signal error
Check the motor cable for signs of damage and ensure that the connector pins are not damaged or misaligned.
If the error persists, contact Ribble

7. Excessive Temperature (+80°C – 100°C)
The bike is outside the permissible temperature range.
Switch the bike off and allow the drive system to cool down to the correct range. Restart the system.
If the problem persists, contact Ribble.

8. Temperature Sensor Fault
The temperature sensor may be damaged. Contact Ribble for assistance.

10. BMS Communication Fault
There's a communication error with the battery pack. Please check the battery pack connector. If the problem persists, contact Ribble for assistance.

11. Communication Fault
There's a communication error with the remote control. Please check the connector. If the problem persists, contact Ribble for assistance.

12. Driver Error Undervoltage
Battery pack voltage is too low. Connect the charger.

13. Driver Error/Overtemperature (80°C – 100°C)
The bike is outside the permissible temperature range. Switch the bike off and allow the drive system to cool down to the correct range.

Restart the system. If the problem persists, contact Ribble.

14. Driver Error Overcurrent
The current being supplied by the battery pack is too high. Temporarily reduce the amount of assistance being provided. If the system locks, perform a full restart. If the problem persists, contact Ribble for assistance.

15. Driver Error VDD Undervoltage
Battery pack voltage is too low. Charge the battery pack.

16-24. Power malfunction
Check the condition of the motor connector and ensure that it is connected correctly, and the arrows are aligned. Power up the bike and check to see if the LED has stopped flashing PINK.

If the error persists, contact Ribble for assistance.

25. Component Malfunction
A new component has been detected that is not configured for this e-bike system.

Contact Ribble to activate it.

27. NVMI Error Saved/Errors Lost
Error in the error database. Restart the bike.

If the problem persists, contact Ribble for assistance.

28. EMN Error/ Impossible Save Errors
Error database is full. Restart the bike.
If the problem persists, contact Ribble for assistance.

29. Battery Voltage Sensor
Battery pack sensor may be damaged. Restart the system.

If the problem persists, contact Ribble for assistance.

30. Over Current Protection
Current supplied by the battery pack is too high. Reduce the assistance level. If the system locks restart the bike.

If the problem persists, contact Ribble for assistance.

31. Peak Over Current Protection
Current supplied by the battery pack is too high. Reduce the assistance level. If the system locks restart the bike.

If the problem persists, contact Ribble for assistance.

34. ACC Voltage Error
Power supply problem in the HMI Bus.

Restart the system. If the problem persists, contact Ribble for assistance.

35. Sensors 4V3 Error
Power supply problem in the sensors. Check the pedalling (PAS) and Motor Sensor.

Restart the system. If the problem persists, contact Ribble for assistance.

36. Lights V Error
Power output failure in the lights cable.
Restart the system. If the problem persists, contact Ribble for assistance.

129 Demo Mode
Contact Ribble for this to be deactivated remotely.

193. Cell Over Voltage
Fully discharge the battery and then recharge it. Leave the battery connected to the charger for two hours after it reaches maximum charge to balance the cells.

194. Cell Under Voltage
Fully discharge the battery and then recharge it. Leave the battery connected to the charger for two hours after it reaches maximum charge to balance the cells.

195. Excessive voltage in the battery pack
Fully discharge the battery and then recharge it. Leave the battery connected to the charger for two hours after it reaches maximum charge to balance the cells.

196. Pack Under Voltage
Connect the bike to the dealer app and check the battery voltage. If the voltage does not increase, check the connection and try another charger. Contact for Ribble for assistance.

197. Charge Over Current
Check the charger is in good working order. Let the battery rest for 2 hours and try a new charger.

199. Short Circuit
Short circuit at the power output. Check the port is in good condition. If it is, contact Ribble for the part to be replaced.

201. Imbalance
Charge the system for 3 hours until the error disappears. If the error persists, contact Ribble for assistance.

202. Battery blocked by a short circuit
Check the cables and connect the charger. Contact Ribble for assistance.

203. Reverse Connection
Inverted polarity at the charger. Check the charger and charging port for damage.

204. Charge Over Temperature
Excessive temperature when charging. Stop charging and allow the system to rest for 30 minutes with the bike switched off. Continue charging as normal.

205. Charge Under Temperature
Temperature too low during charging. Stop charging and protect the bike form thew wet and cold until the temperature of the cells increase. Continue charging.

206. Discharge Over Temperature
Excessive temperature during use. Reduce the discharge rate or stop altogether for a few minutes. The bike needs to be connected to the dealer app to check the temperature.

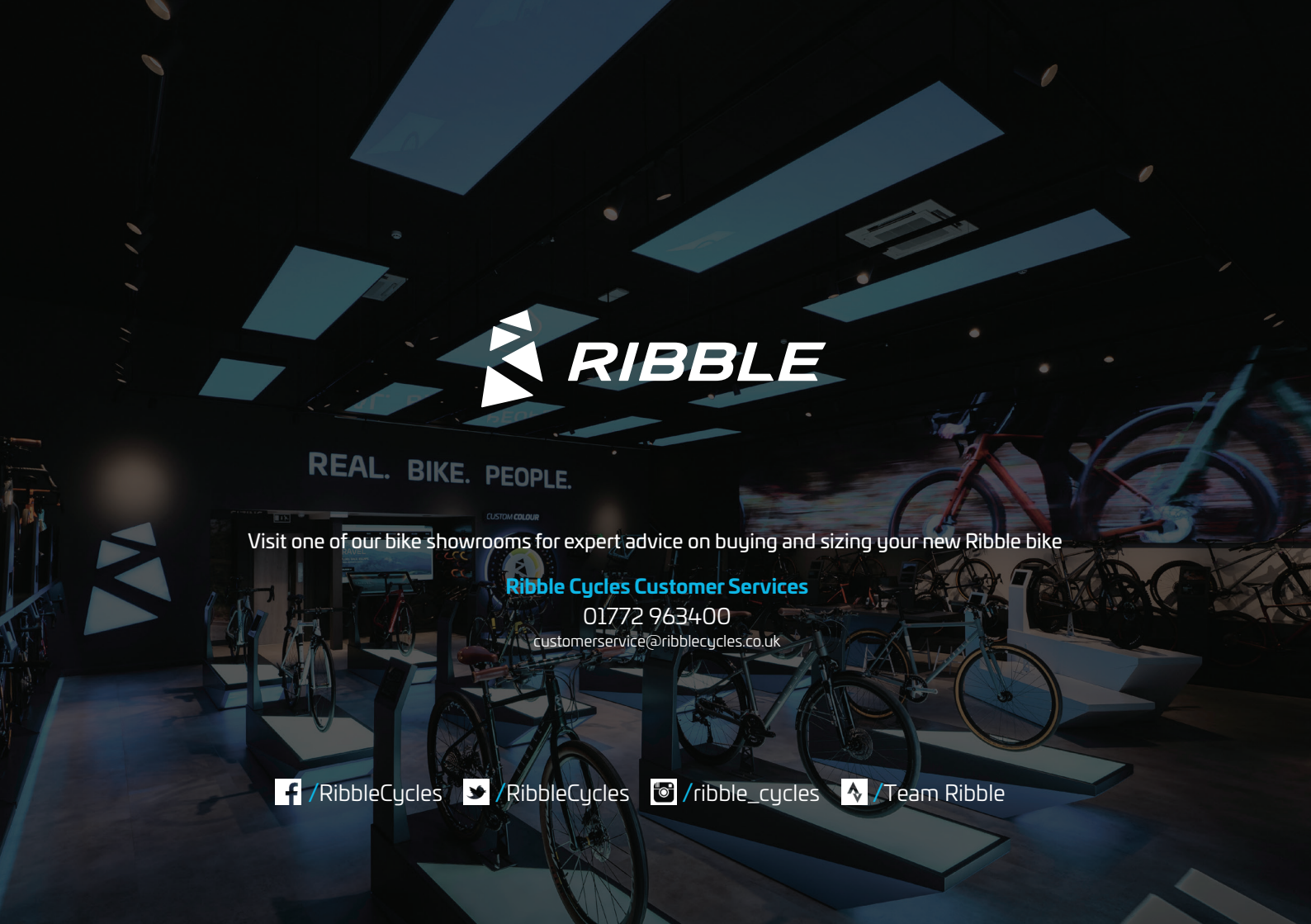
207. Discharge Under Temperature
Temperature too low during use. Avoid large power demands while this error is active and try not to use the system outside of the recommended temperature range of 10°C and 40°C.

Charge the battery within these recommended temperature ranges.

If the error persists, contact Ribble for battery replacement.

208. Fet Over Temperature
Excessive switch temperature. Avoid large power demands while this error is active and try not to use the system outside of the recommended temperature range of 10°C and 40°C. Charge the battery within these recommended temperature ranges.

If the error persists, contact Ribble for battery replacement.



RIBBLE

Visit one of our bike showrooms for expert advice on buying and sizing your new Ribble bike

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