

Owner’s Manual
Version 2.0

MUOV Indoor Tilt Bike – Model TB002

Original Instructions

Safety

Read and understand these before using the bike.



Read the instructions before use.



The frame tilts in use. Keep clear of the tilting frame.



Crush hazard. Keep hands away from pivots.



Entanglement hazard. Keep clear of the cranks and drive.



Electrical hazard. Use only the supplied power supply.



Children under 14 may ride only under adult supervision.



Indoor use only. Do not use in wet locations.



Do not open the enclosure. No user-serviceable parts.



Consult a doctor before starting any exercise programme.



Keep at least 0.6 m of free space on all sides.



Maximum user mass 110 kg.



Check that all fixings are tight before each use.

Warning symbols follow ISO 3864-1: a yellow triangle warns, a red circle prohibits, a blue disc instructs.

FOR YOUR SAFETY

- **CAUTION:** Doing too much exercise or doing it in the wrong way can cause serious injury. Always consult a physician before beginning or modifying any exercise program
- It is the owner's responsibility to ensure that all users of the bike are informed of all warnings / precautions
- It is the user's responsibility to ensure that environmental conditions are safe and suitable for riding
- Coming into contact with the moving parts of the bike could result in serious injury
- The frame tilts and steers while you ride. Keep clear of the tilting frame and make sure nobody else can reach it while the bike is in use
- Do not wear loose clothing or shoes with loose laces that may become tangled into the moving parts of the bike
- Children under 14 years old may use the bike only under direct adult supervision. Keep children, animals and objects away from the bike while it is in use
- Do not get hands or any other objects near the moving parts of the bike
- **WARNING:** Your bike weighs 41kg. Be careful when unpacking, lifting and moving it. Make sure you follow all the instructions in this guide carefully
- Max rider weight 110 kg
- **WARNING:** The bike has 4 x protruding legs so could be a trip hazard, take care when walking near it / getting on and off
- Only use the power cables and adapters provided and keep them away from heated surfaces
- Never leave any objects / fabrics on the bike when not in use
- Unplug the bike when not in use or when you are cleaning it
- Do not store outdoors
- Only use the bike on a solid, stable and level surface
- Parts of your bike may get hot when in use, be careful and do not touch these parts
- The bike is designed for indoor cycling only
- Altering or modifying your bike away from the standard factory setup will void your warranty and could result in serious injury. Only use approved parts for adjusting for fit / improvements. Never tamper with the housing
- Improper assembly, use or maintenance will void the warranty and Muov is not liable
- Do not allow your bike to come in contact with water and do not use in a damp environment
- Read all safety and assembly information carefully before building and using your bike
- The basic flat pedals that may come with your bike are not for heavy use / sprinting
- Only use tools provided and follow the instructions carefully when assembling
- If your bike has an RJ45 (Ethernet) port, use only screened Ethernet cables when connecting it
- Warning: don't screw the feet out more than 10mm when adjusting to level the bike on the floor
- Images in this manual may not represent the final product exactly
- This product contains Bluetooth Low Energy and Wi-Fi radio transmitters operating in the 2400-2483.5 MHz (2.4 GHz) band, with a maximum transmitted radio-frequency power of 40 mW (16 dBm) e.i.r.p.
- Don't operate the bike if it is not working properly

Before you ride:

- **Check that the 4 x bolts holding the handlebars in place are tight and cannot rotate**
- **Check that your saddle is properly installed and all bolts are tightened**
- **Check that your seatpost 2 x bolts are fully tightened**
- **Check that your pedals are tightened and installed properly**
- **Refer to this manual for proper torque specs**
- **Check the power brick and cords for any damage before plugging in your bike**
- **Check that there is a minimum of 0.6 m of free space around the bike and that it can achieve the full range of tilt motion**

Rider Settings and Adjustment

Pedal Fitting and Crank length

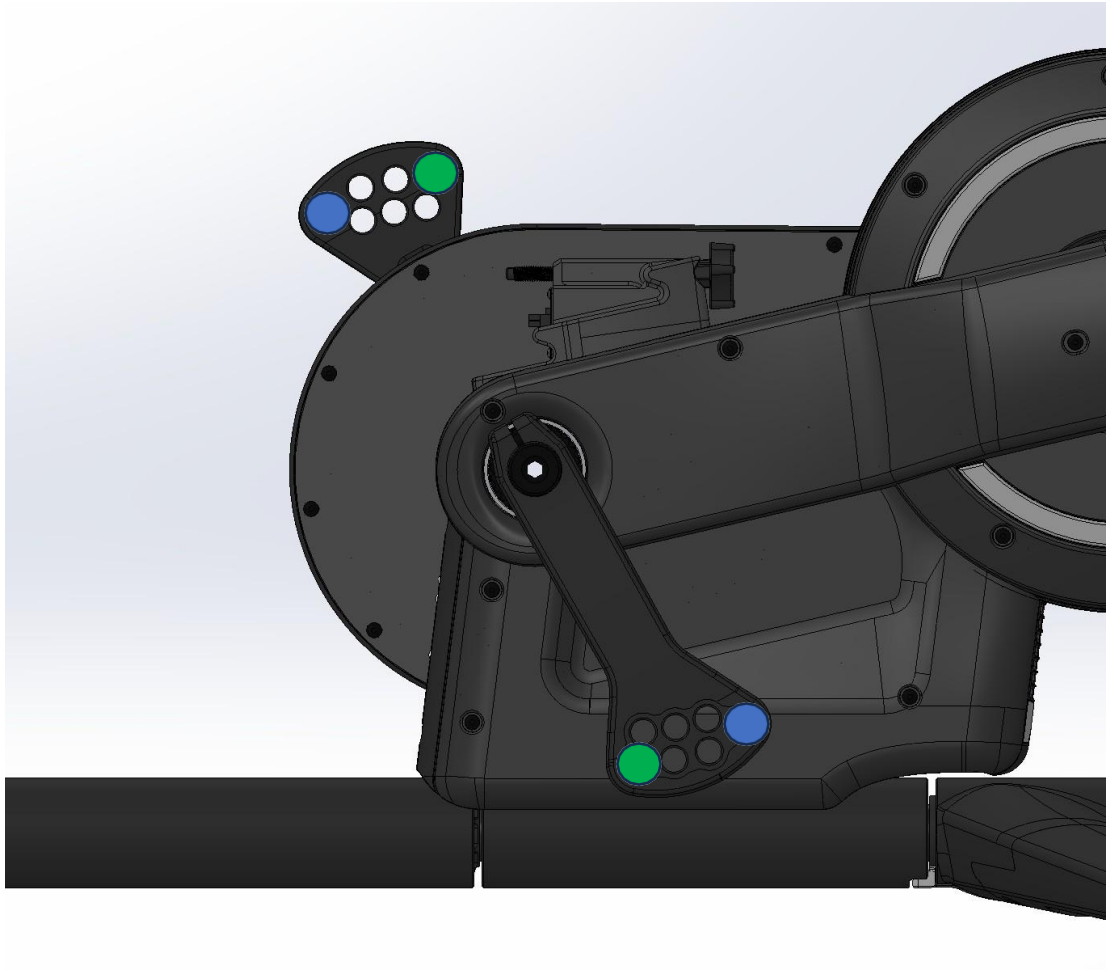
- From 150mm to 175mm
- Most Medium road bikes are 170-172.5mm
- The trend is to use shorter cranks – try it, it's interesting ☺

- When fitting the pedals – PLEASE ENSURE YOU FIT THE CORRECT PEDAL TO THE CORRECT SIDE – Pedals are normally marked

- The direction of tightening is shown on the crank - it's different per side

- Follow the pedal supplier recommended torque - we recommend 20Nm

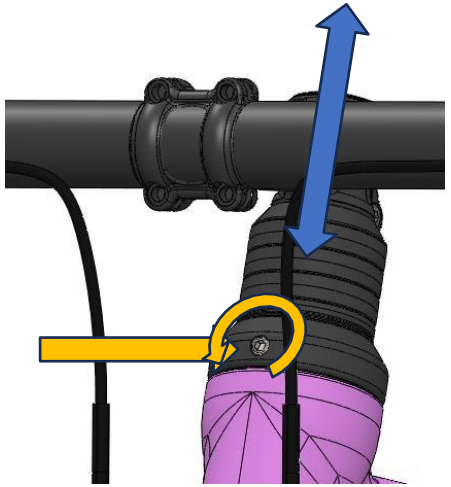
- When fitting pedals please note the numbers on each side
- **THEY ARE NOT IN LINE WITH EACH OTHER**
    - The 2 BLUE dots show the 172.5mm crank positions The 2 GREEN dots show the 165mm crank positions



Rider Settings and Adjustment

Stem Adjustment





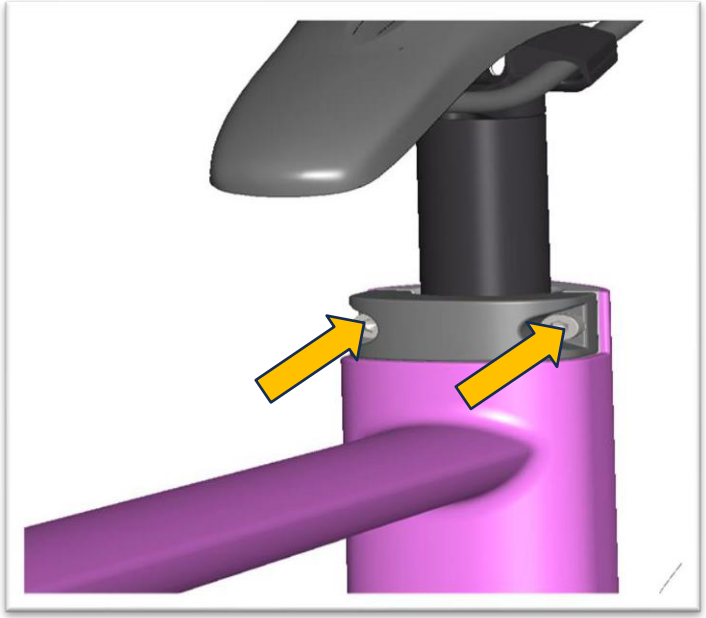
Stem Height Adjustment

1. Loosen the Grub screw with the supplied Yellow Allen Key
2. Disconnect the 2 handlebar connectors (don't worry which one is which)
3. The Height will now slide up and down smoothly
4. To fit and remove the correct amount of spacers – lift the bars out and fit them in any order
5. Tighten the Bolt Allen to 10Nm
6. Reconnect the 2 "smiley" connectors

Note – periodically check if the steerer is tight by retightening the Allen bolt with the 4mm Yellow Allen key
Do not leave a gap without spacers – this risks the stem sliding during riding

Saddle Height

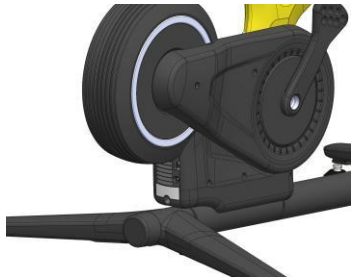
- Loosen Both of the 2 Bolts using the 4mm Yellow Allen key
- Adjust the seat post to the correct height
- Tighten both bolts to 5Nm max.

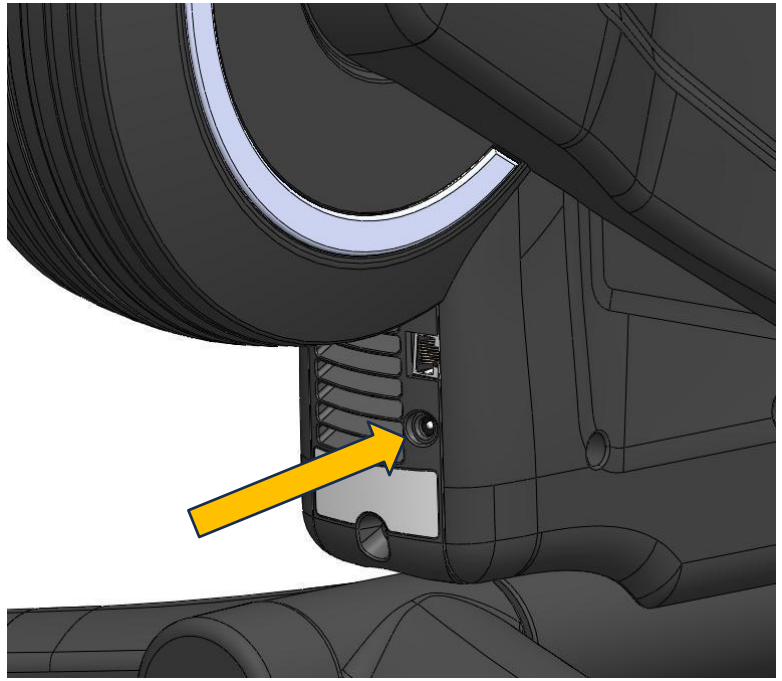


Getting Started

Plugging in the bike

- Only use the supplied 48v Power Block
- Fit the connector into the socket on the right of the vent below the motor
- Ensure the cable is free to move at the rear of the bike – to allow the cable to
  move with the bike in all directions





Connecting the Bike

- The bike connects to most widely used Apps natively using Bluetooth (BLE)
- Open your App of choice (e.g. Zwift) the "MUOV*****" will appear – Select your bike.
- Example



- See the LED status page for more detail
- The bike allows 3 concurrent connections, so you can connect the MUOV app as well as Zwift; connect the main app first
- The bike does not need to be "paired" to a laptop or tablet as a peripheral (like a Bluetooth mouse would)

The Controls

Gear Shifting

- The bike is setup as Shimano Di2 shifting or SRAM shifting (please see App manual for the method to change between types)
- When riding you will feel a clunk on gear change (as per a normal bike)
- Zwift and the MUOV app (and others) show your gear on screen

LH Shifter
Front Chainrings 53 / 36
Front Button (Harder Gear)
Rear Button (Easier Gear)

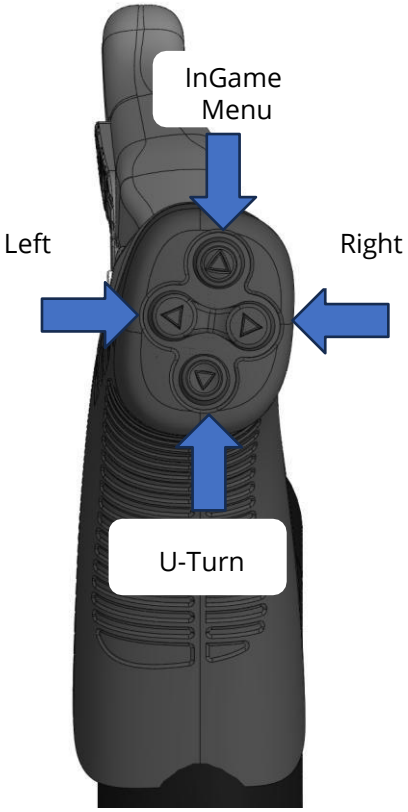


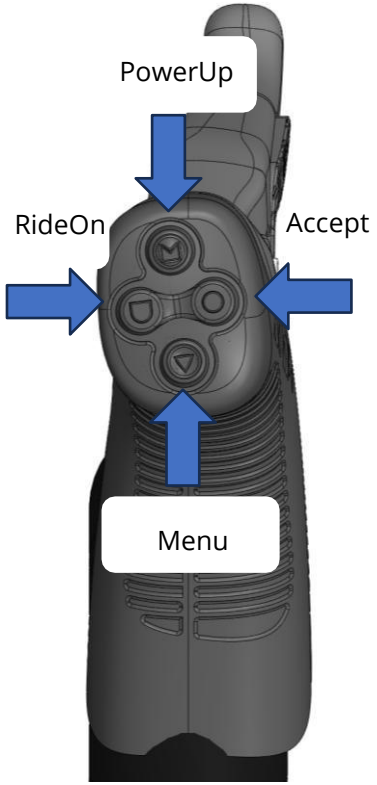
RH Shifter
Cassette 11-34 (12-speed)
Front Button (Easier Gear)
Rear Button (Harder Gear)



Menu and controls

- Fully functional in Zwift (can be found in Zwift Menu)





Workout Intensity

- Used in ERG Mode to adjust intensity



Frame Fitting and Swapping

It is possible to frame swap on the MUOV bike

Frame removal

1. Loosen the frame bolt

- Use the supplied Red Allen key to start the process) (A
- Unscrew the bolt until it is completely free (using the knob)

2. Disconnecting the frame

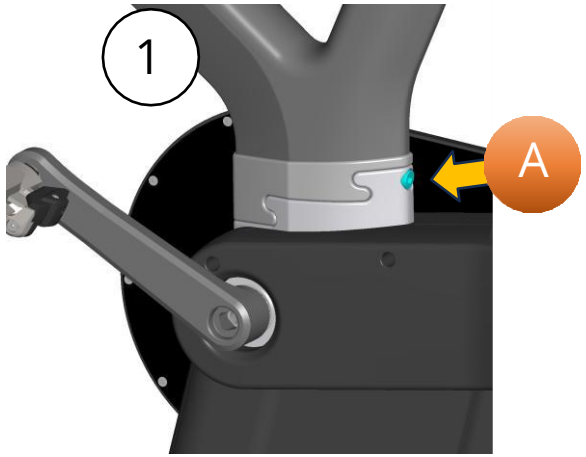
- Place your hand at point (B) – push towards the back of the bike
- Using the palm of you hand "hit" the frame forwards at point (C)
- (Repeat until the frame pops loose)

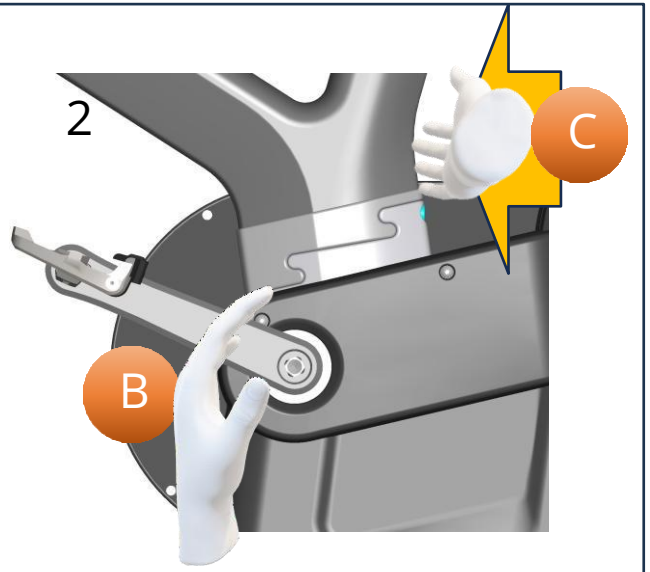
3. Clear the frame

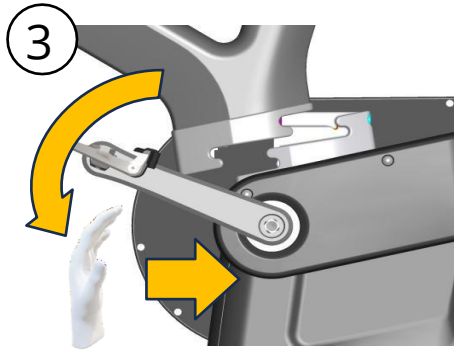
- Slide the mechanism fully rearwards
- Lower the non drive side crank to the bottom of stroke

4. Lift the Frame clockwise over the frame holder block
(don't worry the base flexes to allow this to happen)

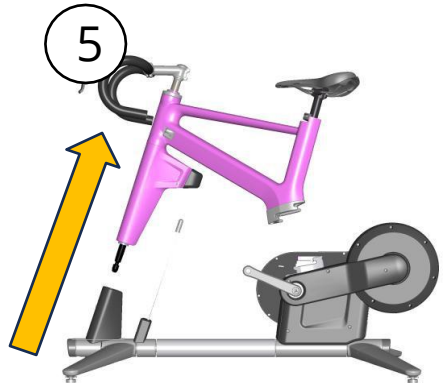
5. Pull the frame upwards on an axis parallel to the fork











Frame Fitting and Swapping

Frame Refitting – The reverse of removal

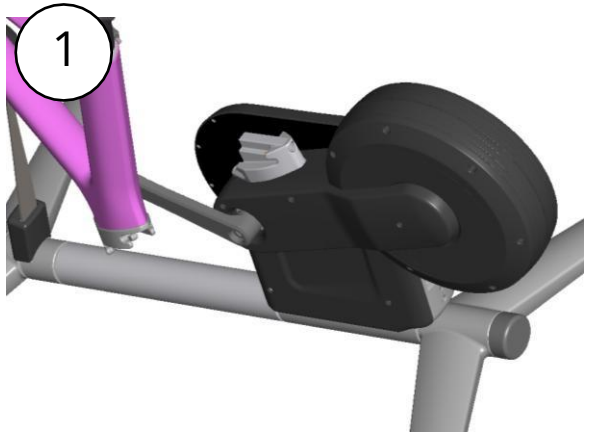
1. Set the rear of the frame to the LHS of the bike
2. Slide the frame down partially into the fork aperture
3. Align the Steer spring to the steer spigot

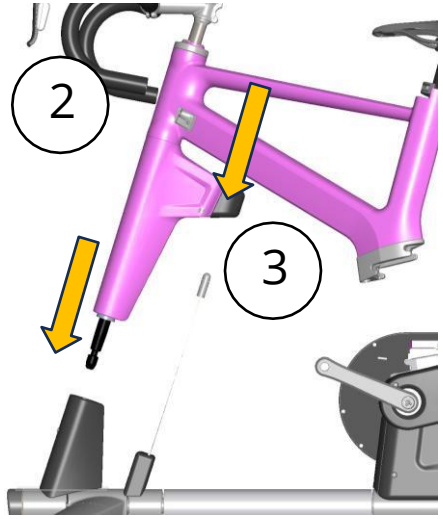
• Allow the frame to drop on to the spring (and fully into the fork aperture)

4. Rotate and lift the rear of the frame onto the frame holder block
5. Slide the Motor assembly forwards (the frame should almost be fully located)
6. Tighten the bolt using your fingers on the knob

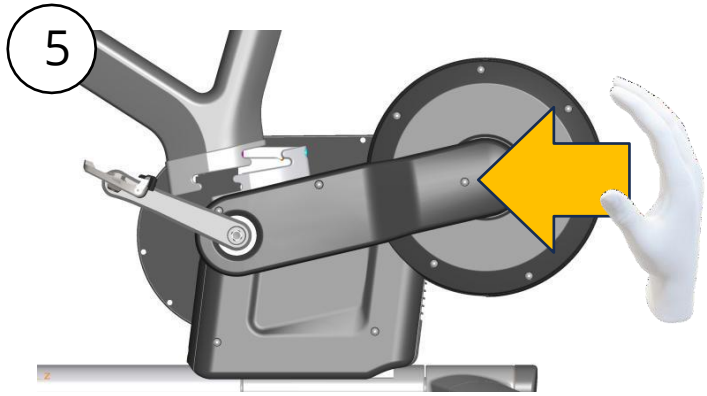
• Then Tighten using the Red Allen Key to the max torque of 20Nm

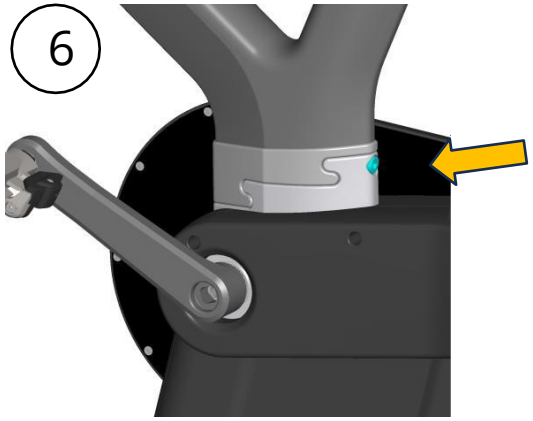
7. Confirm the frame electrical connection by pedalling the bike



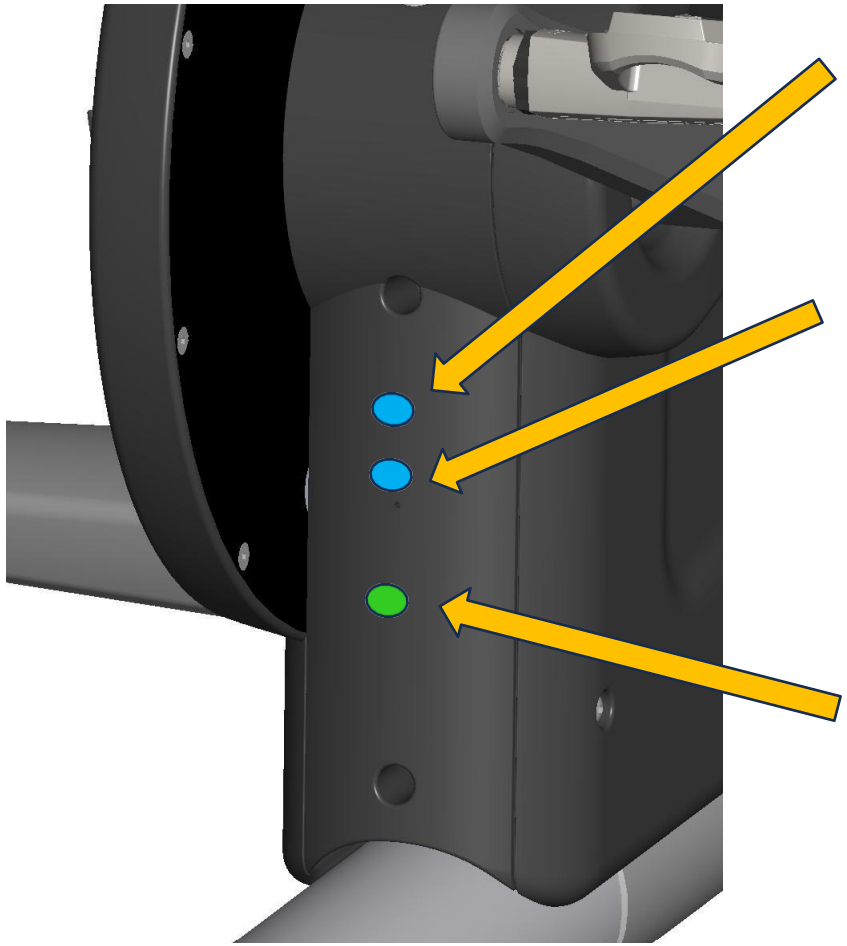








LED indicator meaning and error codes



BLE LED

Colours & State	Indication	Info
Off	Not connected	BLE not connected
Blue	Connected	BLE connected

Internet LED (WiFi)

Colours & State	Indication	Info
Orange	Not connected	Internet not connected
Green	Connected	Internet connected

Rider LED

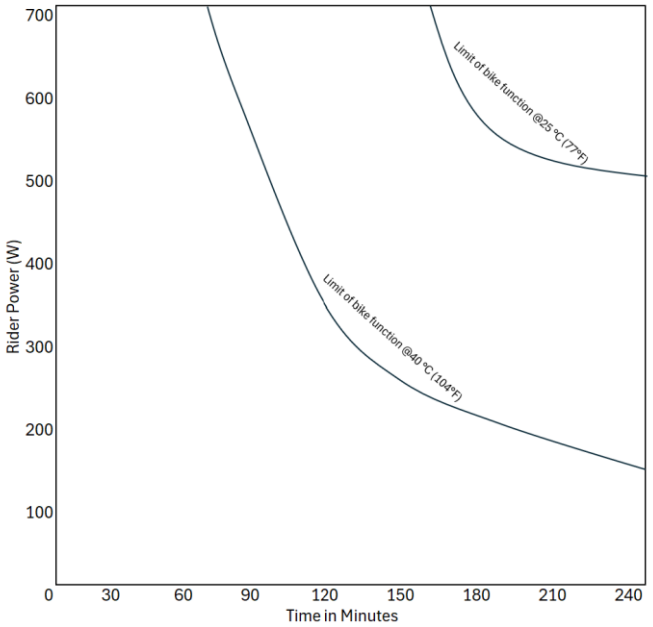
Colours & State	Indication	Info	
White pulsating	Sleep mode	Board is in sleep mode	
White	Motor active, colour indicated power level	< 60% Recovery	The percentages are based on a 200W FTP reference
Blue		60-75% Endurance	
Green		76-89% Tempo	
Yellow		90-104% Threshold	
Orange		105-118% VO2 Max	
Red		> 118% Anaerobic	

Error Codes

Colours & State	Indication	Info
All LEDs pulsating red	Error	Error is active, causing the motor to be disabled
All LEDs pulsating pink	No communication with mainboard	The mainboard is not sending data; it may have had a fatal crash

Additional information

- **Product tech spec:**
  - Connection methods: Bluetooth (BLE) and Wi-Fi
  - Temperature range: -10 to +40 degrees c (14 to 104 degrees f)
  - Maximum simulated grade: 25%
  - Maximum power output 2500w
- **Looking after your Muov bike:**
  - Allow to cool down
  - Clean your bike by wiping it down with a damp cloth only, do not use any detergents
  - Regularly check for signs of corrosion or excessive wear
  - Inspect all bolts and parts for corrosion
- **Warranty Information**
  - For more information about our warranty policy visit: https://www.muov.bike/
- **Operational Limit conditions**
  - Operating the bike for over 3 hours at ambient temperatures above 36ºC may lead to the bike overheating
  - The MUOV Bike is suitable for heat training up to 40ºC, up to a maximum of the following parameters



- **Disposal Information (WEEE)**
  - This symbol means that according to local laws and regulations your product need to be disposed of separately from household waste.
    Once this product has reached the end of its life, take it to the correct recycling facility



Product identification and conformity

MANUFACTURER

Muoverti Limited
364 Stockley Close, West Drayton UB7 9BL, United Kingdom
support@muov.bike

Registered office: 3 The Mount, Trumpsgreen Road,
Virginia Water GU25 4EJ, United Kingdom

EU AUTHORISED REPRESENTATIVE

24hour Solutions B.V.
Van Nelleweg 1
3044 BC Rotterdam
The Netherlands

Model / type

TB002

Serial number and year of manufacture

See the rating label on the frame

Scan for the signed declarations, the PSTI statement, and other language versions

DECLARATIONS AND CONFORMITY

The signed EU and UK Declarations of Conformity and the UK PSTI statement of compliance for this product are available at the address below.

www.muov.bike/pages/regulatory-notices

European Union
Muoverti Limited declares that the radio equipment type TB002 is in compliance with Directive 2014/53/EU.

United Kingdom
Muoverti Limited declares that the radio equipment type TB002 is in compliance with the Radio Equipment Regulations 2017.