

## Hybrid E Bike - Owner's Manual

## C 24 Commuter



Proudly designed in New Zealand

## Welcome to the Hybrid E Bike Community

Thank you very much for purchasing one of our Hybrid E Bikes. We hope you enjoy riding it as much as we do.

Hybrid Bikes is a New Zealand owned company which specialises in the manufacture of carbon fibre E bikes, offering outstanding strength and performance to all our customers.

Our Hybrid Bikes dealership network is designed to look after you in the best possible way, so you can be fully satisfied with your purchase.

If you ever feel you are not being looked after, please let me know.

Kind regards

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## Contents

Packaging	3
Hybrid E Bike Model	4
Maintenance Tips	7
Specifications	8
Controller Display and Control	9
Battery Instructions	14
Warranty	15
Service Record:	18
Registration Form:	19

## Packaging



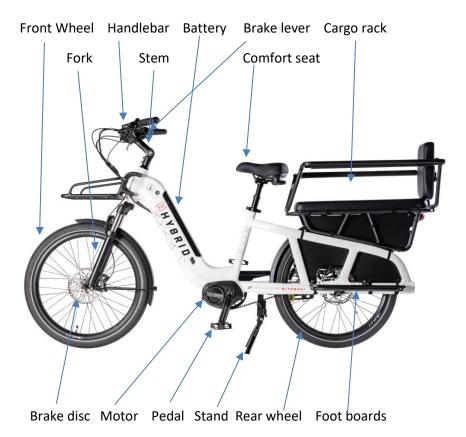
NOTE: Your Hybrid E Bike will come fully assembled when you purchase it directly from us or from one of our Hybrid E Bike dealerships.

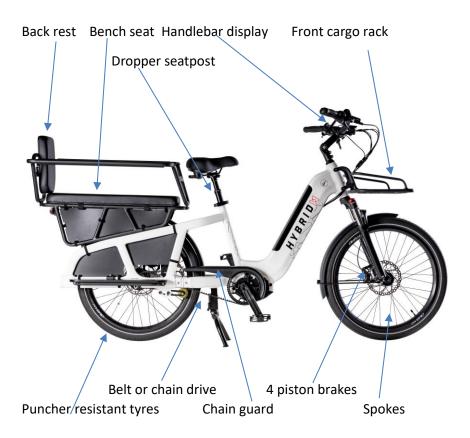
Contents of box:

- E Bike
- Battery
- Battery Charger
- Display Controller

## Hybrid E Bike Model

#### C 24 Commuter





#### The family Hybrid C24 Commuter



## **Maintenance Tips**

The maintenance schedule is based on the average E Bike usage. Your Hybrid E Bike should have its first service after 250km to ensure you are riding safely and efficiently.

Further inspections should then be carried out every 6-8 months or around every 1,000km. If these services are missed it may void the warranty of your Hybrid E Bike.

#### Lubrication:

We recommend lubrication of your derailleur pivot points and derailleur pulleys every 6 weeks, using the correct oil recommended by your Hybrid E Bike dealer.

We recommend you should lubricate the chain, gears and brake lever pivots every 12 weeks using the correct oil recommended by your Hybrid E Bike dealer.

#### Cleaning of your Hybrid E Bike:

It is recommended you use soapy water to clean your Hybrid E Bike using a cloth. It is NOT recommended to use the garden hose and point it straight onto the battery or any other electrical components. Hybrid E Bikes are designed to be used in the rain but the battery or any other electrical components should not be immersed in water. The battery should only be cleaned with a damp cloth and dried afterwards to avoid the risk of getting water into the connecting points.

*Note*: If the Hybrid E Bike is exposed to salty conditions it will need to be serviced and maintained more regularly.

### **Specifications**

Specifications	Parameters
Model	Hybrid C24
Frame	Carbon Fibre
Packaging Box Size	1550 * 860 * 300mm
Speed Support	40km/h (adjustable)
Max. Load	180 Kg
Voltage	AC 100 - 240V
Charging Time	4.5 - 5 Hours
Power	250 Watt
Max. Km	100 Km*
Battery	36 Volt / 20Ah / 720Wh
Recommended Tyre Pressure	30 - 40 PSI

\*The maximum range depends on a variety of factors including hills, terrain, statue of rider, selection of motor assist levels, headwind and N m selection of the motor.

## **Controller Display and Control**

#### 1.1 Specifications and Parameters of the Display

- 36V / 48V Power Supply
- Rated Current: 10 mA
- Maximum Operating Current: 30 mA
- Power-off Leakage Current: <1uA
- Operating Current Supplied to the Controller: 50 mA
- Operation Temperature: -18 60%
- Storage Temperature: -30 70%
- Waterproof Grade: IP65
- Storage Humidity: 30% 70%

## **1.2** Appearance and Dimensions **1.2.1** Materials and Dimensions

The shell is made of PC. The liquid crystal display is made of hardened PMMA.



# 1.3 Function Overview and Key Definitions1.3.1 Function Overview

- Use of a two-way serial communication protocol, simple operation of the display via the external 5-key keypad
- Speed display: Displaying the real-time speed as SPEED, the maximum speed as MAXS and the average speed as AVG
- Km or mile: The user can choose between km and mile
- Intelligent battery level indication: With an optimised algorithm, a stable display of the battery level is ensured, and the problem of fluctuant battery level indication common with other displays is avoided
- Automatic light-sensitive lights: The headlight, taillight and display light will be automatically turned on depending on lighting conditions
- 5-Level-Support: Setting power levels from 1 to 5
- Trip distance indication: The maximum distance displayed is 99,999. Single-trip distances TRIP or the total distance TOTAL can be displayed
- Display of error messages
- Walk assist

#### 1.3.2 Information on the Display



 Battery capacity indication
Warn code indication
Speed in real-time
Speed bar
Power-assisted mode indication (4 Modes/ 6 Modes)
Unit switching of speed (km/h, mph)
Multifunction indication (Clock. TRIP, ODO, MAX, AVG, Range, CAL, Cadence, Time)
Symbol indication (Headlight, USB, Service, Bluetooth)

- 1: Battery capacity indication
- 2: Warn code indication
- 3: Speed in real-time
- 4: Speed bar
- 5: Power -assist mode indication
- 6: Km/h speed reading

7: Multi-function display (Clock, Trip, ODO, Max, Avg, Range, Cal, Cadence, Time)

8: Symbol indication (Headlight, USB, Service, Bluetooth)



#### 1.4 Power Assisted Mode Selections



(4 Modes)



(6 Modes)

#### 12 | Page

#### 1.4.1 Display Options



1.4.2 Display Settings



#### 1.4.3 Program Options



#### **13 |** Page

## **Battery Instructions**



Charge point on frame Charger Charge point on battery

The Hybrid E Bike battery can be charged on or off the bike. The charger light when in use indicates:

- 1) Red light: Battery is still on charge
- 2) Green light: Battery is fully charged and can be disconnected

By using the keys supplied you can remove the battery from the frame.

All Hybrid E Bikes use Samsung SDI batteries being high quality Lithium batteries. These batteries are highly efficient and will be an excellent

power pack for many years to come. An average battery life depends on its use and its care. Conservatively, a Li-Ion battery will last around 500 cycles.

A lithium-ion battery left with low charge will deteriorate much faster than a fully charged battery. Lithium-ion batteries are best stored at a 40–60% charge level. During long term storage, recharge your battery to 40–60% every 90 days. You should also fully charge your battery before each ride but please **do not leave the battery on charge for extended periods of time once fully charged. It is not recommended to charge the battery overnight without having a timer fitted to cut the power after 5 hours.** 

## Warranty

#### What the Warranty covers:

The "Hybrid Bikes Ltd" limited warranty covers defects in materials and workmanship on the frame, forks, motor, brakes, battery and on parts which are fitted onto the Hybrid branded E Bikes by Hybrid Bikes Ltd or any authorised Hybrid E Bikes dealer and sold directly to the customer.

The "Hybrid Bikes Ltd" limited warranty covers a lifetime warranty on the frame; two years or 5,000km (whichever comes first) warranty on

the motor; two-year warranty on forks, brakes and battery; one year for all other parts from the date of purchase.

Note: The warranty will be dependent on compliance with the service maintenance schedule. All maintenance should be carried out by an authorised "Hybrid Bikes" E Bike dealer, or any other qualified E Bike mechanic and the service document should be filed in and provided with any claim of fault or damage. Should the annual maintenance service be missed the warranty will be invalid. Costs for maintenance and service will need to be borne by the owner of the product.

The "Hybrid Bikes Ltd" limited warranty is valid from the date of purchase of the product and is limited to the first purchaser of this product. All warranties are not transferable.

The "Hybrid Bikes Ltd" limited warranty covers all parts which fall under the warranty but excludes the labour to fit them.

#### What the Warranty does not cover:

The "Hybrid Bikes Ltd" limited warranty does not cover any defect caused by "wear and tear", accident, neglect, improper handling, colour fade due to exposure to sunlight, abuse, misuse, an act of god or improper assembly if done by the buyer.

The "Hybrid Bikes Ltd" limited warranty does **not cover** the Lithium battery if it has been uncharged for an extended length of time or

sustained water damage which can lead to problems in the electrical circuit.

The "Hybrid Bikes Ltd" limited warranty does not cover the E Bike and any of the original parts if they have been modified or changed in any way without approval from "Hybrid Bikes Ltd".

The "Hybrid Bikes Ltd" limited warranty does not cover labour time.

#### To Claim under the Warranty:

You must claim the limited warranty from the authorised "Hybrid Bikes" dealer from whom the E Bike was purchased or from "Hybrid Bike Ltd" direct if purchased online within the warranty period. You must return the "Hybrid" E Bike part or the "Hybrid" E Bike in a timely manner at your own expense. Note: you will also need to provide your proof of purchase for investigation.

In case of replacement or refund, the returned products become the property of "Hybrid Bikes Ltd".

### Service Record:

#### **Recommended Service Schedule:**

- 1. First service after 250km or 3 months (whichever comes first)
- 2. Every 1,000km or every 6-8 months (whichever comes first)

NOTE: Please keep all receipts with your service history.

Service History:

## **Registration Form (for your records):**

Note: The Serial Number can be found on the underside of the bike frame or on your invoice (e.g., HYC24000001)

Hybrid E Bike Serial Number:\_\_\_\_\_ \_\_\_\_\_

Model: \_\_\_\_\_

Date of Purchase: \_\_\_\_\_

Dealer's Name/Location:

NOTE: Please register your Hybrid E Bike with the authorised dealer you made your purchase from or online <u>here</u>. You must register your Hybrid E Bike within 30 days of purchase for the warranty to remain valid.