

# TOPSECRET

## The Hubless E-Bike





# Table of Contents

About TOPSECRET	04
Powerful Electric Drivetrain	05
Safety Features	07
Dimensions	09
Color Options	10
TOPSECRET Specification	11
Optional Accessories	12





# Introduction

Top Secret, a Hubless E-Bikes are built with a futuristic, sophisticated design, high quality materials, and stability. You can change the paradigm of your life style by drawing the world's attention to the hubless style.



## Urban Style

In particular, it is an urban E-Bike designed and manufactured with a high-strength, ultra-light aircraft aluminum frame and titanium material components, including innovative and stable parts with a spoke-less structure inside the E-bike wheel.

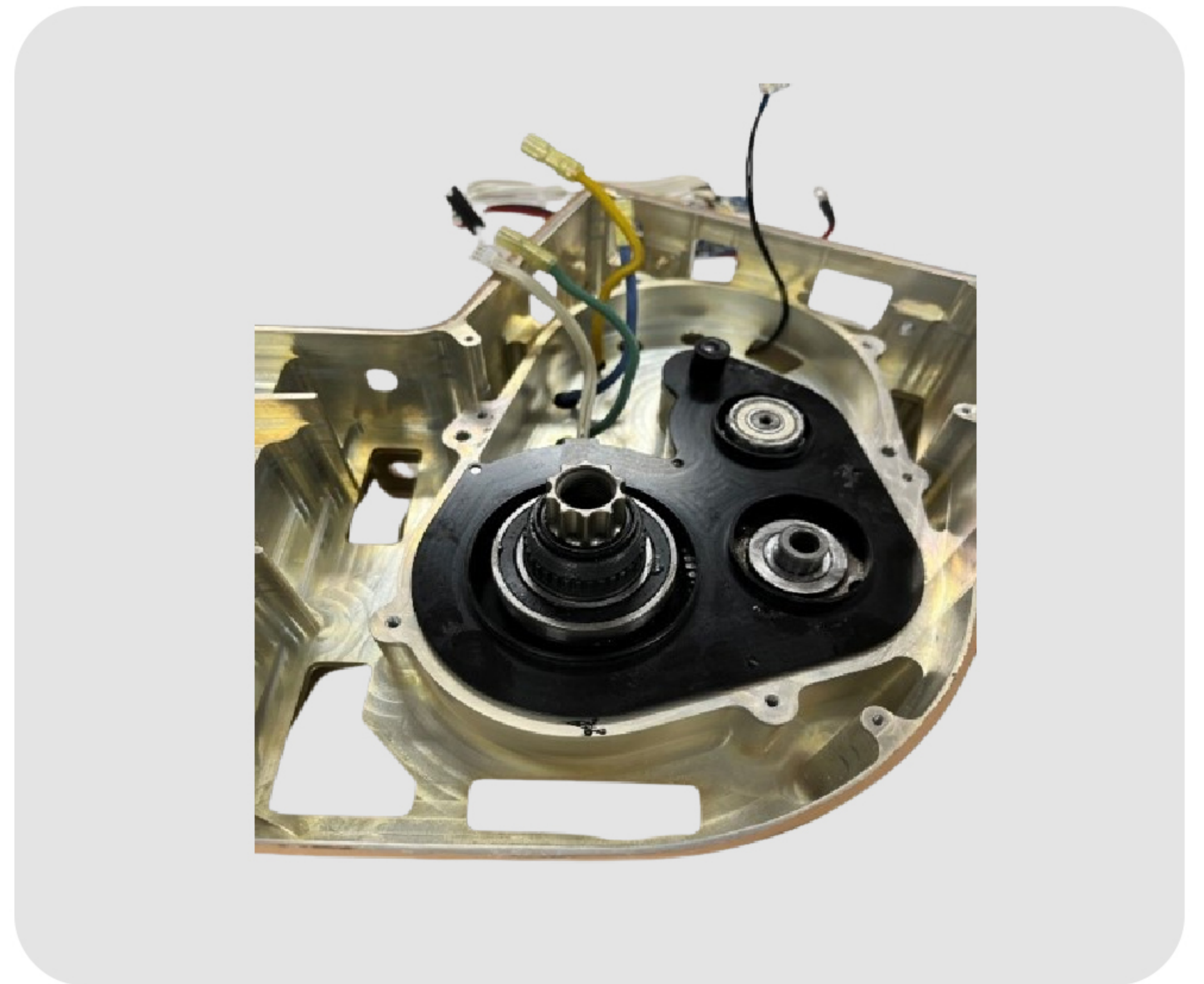
Based on the design philosophy, the main tube was designed with a large curved shape to easily withstand force during driving, and the hubless wheel retains only its circular shape, intuitively demonstrating its function as a wheel.





# Powerful Electric Drivetrain

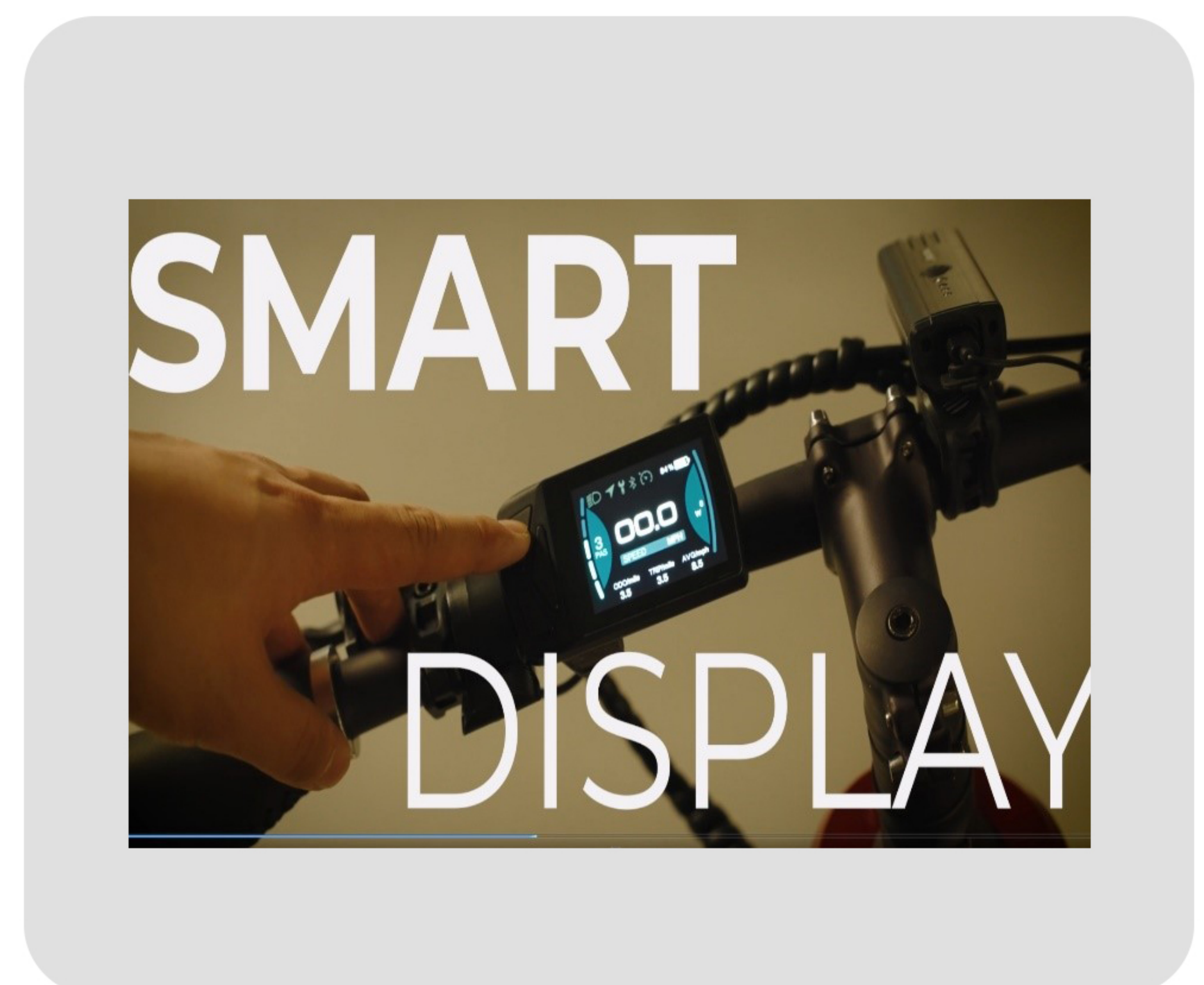
Our self-developed mid-drive motor (750W 48V) provides higher torque and performance compared to conventional hub motors, doubling its power, gaining more benefits from the gear system, and being easier to maintain. It is also placed at the center of gravity of the electric bike, helping to better distribute the bike's weight, making the electric bike more manageable.



**“Power of over 140Nm from  
Mid drive 750W motor”**

**Top Secret's** Adaptive Pedal Assist detects the gradient of the road and pedaling parameters to create a natural feeling of power with tailored assistance.

Adaptive Pedal Assist System (PAS) allows you to easily climb normal slopes by cranking up the pedal at the same time as the throttle on the handlebar, and can be ridden by pedaling like a conventional bicycle.





# Lithium-ion battery(48V20Ah) pack

Lithium-ion battery (48V20Ah) battery pack\_(LG Energy Solution) can be used on a single charge to drive 130km when using PAS (pedal assist system function), making reasonably long-distance riding possible.

The battery pack is designed to prevent overcharging, overcurrent, dust protection, and overheating, and is also manufactured with a detachable method that allows direct charging and mobile charging.



## Safety Features



Section of inflation-free tyre



Section of polyurethane solid tyre

Airless tires were installed to solve the safety problems of existing bicycle tires. Airless tires have characteristics such as non-inflating, non-rupturing, bulletproof, explosion-proof, flame retardant, anti-slip, reduced heat generation, easy handling, and exchangeability.



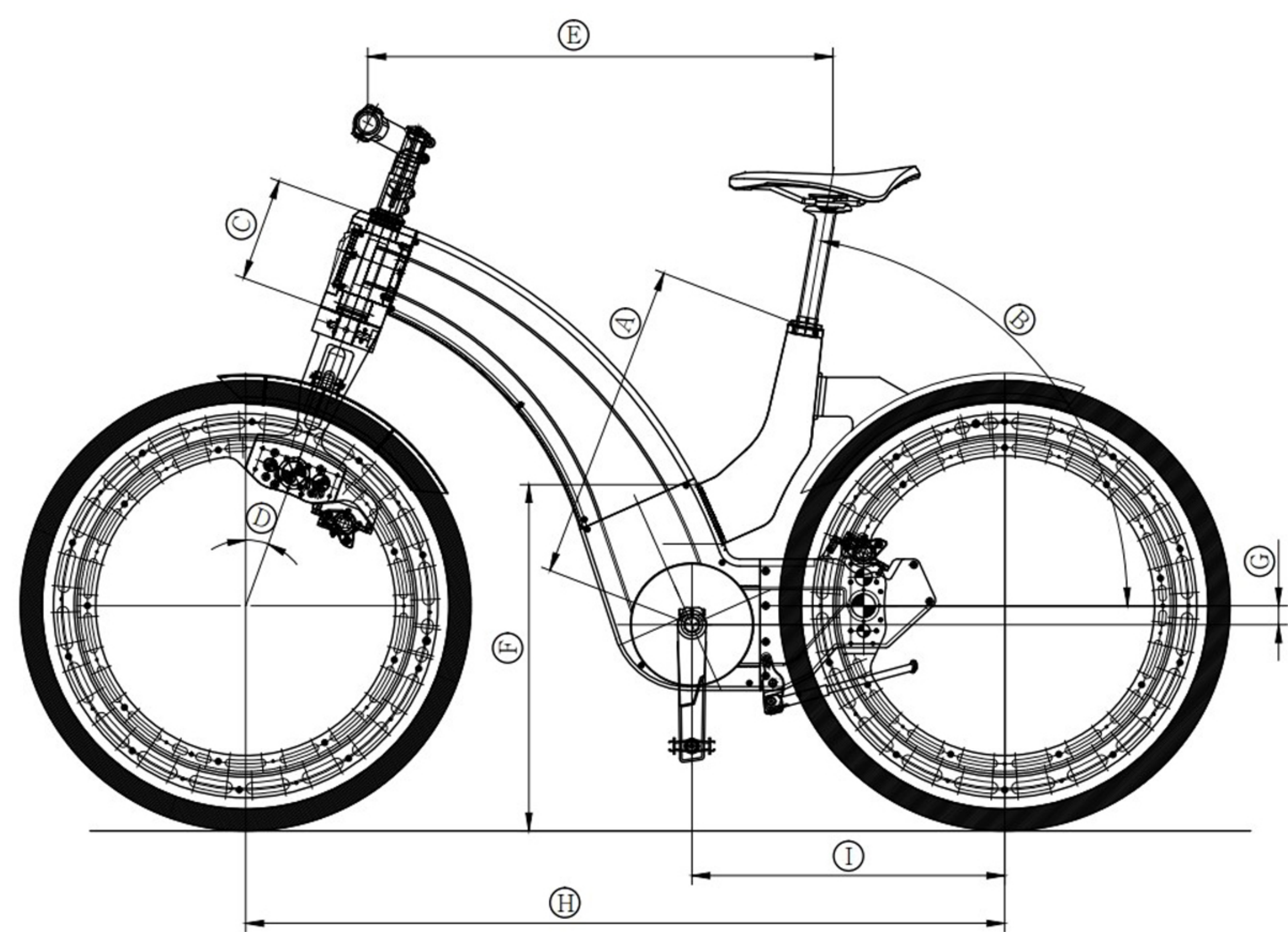
Section of general pneumatic tyre

The gear that transmits wheel power has been developed with special heat treatment to prevent wear, and the large gears of the wheel body and driving part are manufactured to be



# Dimensions

An ambient light sensor detects darkness and automatically turns on and off the ultra bright headlamps and tail lights. So you can stay safe no matter when you ride.



Wheel Size		26"
A	Seat Tube	446mm
B	Seat Tube Angle	80°
C	Head Tube Length	144,5mm
D	Head Angle	20°
E	Effective Top Tube	651mm
F	Stand Over	485mm
G	Chain Stay Length	26.5mm
H	Wheelbase Length	1,062mm
I	Pedal Wheel Center	438mm
Total Length		1,694mm



# Light System

An ambient light sensor detects darkness and automatically turns on and off the ultra bright headlamps and tail lights. So you can stay safe no matter when you ride.



# Black Box Camera



1080P FULL HD camera for safety from accidents while riding a bicycle. 8 hours of continuous recording, low power consumption, 120-degree wide viewing angle, PIR infrared heat detection recording, compatible with up to 128GB memory card, automatic night mode shooting when the surroundings become dark without any additional operation, standby time up to 30 days when the battery is fully charged,

# Smart Display

The smart display is made of high-quality materials, making it durable and practical.

It supports Bluetooth function and map navigation, so you can check road conditions on the display screen without looking at your phone. Also IP67 waterproof





# Color Options

## TOP SECRET Hubless E-Bike COLOR Personalize your ride



**Ocean Blue**



**Cherry Red**



**Sandy Brown**



**Khaki Green**



# Specification

Describes the detailed specs and options of the hubless e-bike Top Secret.



Bike Weight	58lb(26kg)
Range	Average 80 Miles(130km) When PAS mode is activated
Max Rider Weight	110kg
Main Frame	Titanium material & aircraft material aluminum
Motor	48V 750W MID-drive Motor
Maximum torque(Nm)	≥140
Electric Drive Speed	Compliance with bicycle safety speed regulations 25km/h
Display	DP B02 UART or CAN (5min auto off; 0-5assist mode; assist walk function)
Battery	48V20Ah 960Wh Li-ion(LG Energy Solution Cell)
Charging Time	48V4A(5H)_Basic, 48V15A(1H)_ Option
Charger	54.6V 4A & 54.6V 15A_Option
Brakes	SHIMANO Hydraulic disc brake system_ Basic Shimano XTR Brake lever & Hydraulic Disc brakes - Option
Tire Type	Airless tire(Non pneumatic Type) 26X1.95
Light	Front / Rear - Basic
Saddle	Selle SMP full carbon saddle (made in Italy) - Option
Handlebar, Stem, Seat post	Titanium material - Option
Pedals	Aluminum alloy clip pedal - Basic Shimano XTR Pedal - Option
Water Resistance	IP65
Bike driving type	3 systems applied: Pedaling, PAS, Throttle
Made in	Korea



# Optional Accessories

Want more out of your ride?  
Upgrade your TOP SECRET E-Bike  
with these optional Accessories.

## 1. Lithium-ion Battery (48V20Ah) (LG Energy Solution Cell)

An extra battery pack for long-distance driving or a battery pack for immediately exchanging a discharged battery and a charged battery.



## 2. Smart Helmet (This is the main feature. All in One)

### Features

Action Camera, Bluetooth, Hands-free, Voice Control, LED Turn Signals, Phone call, GPS Navigation, Intercom



## 3. Fast Power Charger (54.6V15Ah)

### Input voltage

110-240Vac / Frequency : 47-63Hz

Operating temperature : -10 °C to +50 °C

Small size : 285\*125\*55mm / Light weight : 1.6kg

### Protection functions

Overvoltage / Over temperature / Overcurrent

Short circuit and polarity, Light weight,

Small size, Stable, High Efficiency, Safe, etc.

Accurate limits of **voltage and current**, prevent full charge and overcharge





# Optional Accessories

## 4. Italian-made full carbon SELLE SMP saddle

"Top" design seat and a 100% carbon structure. The Full Carbon model is the top of the SMP4BIKE range and it is intended for cyclists looking for the lightest weight possible. The patented features by Selle SMP, such as the completely free central channel, the original eagle-beak nose and the raised rear give these models an interesting aerodynamic touch. Suited for thin people with narrow pelvises.



## 5. Air Seat Saddle Suspension System

The air seat saddle suspension system is located between the saddle and the seat post and absorbs shock from the road surface while riding, reducing the shock



## 6. Multi-function Headlight

Material : ABS plastic / 500 lumens high brightness

Battery : 3,000mAh.

The USB Interface meets the charging needs of multiple devices, Charges fast, and the large-capacity battery lasts worry-free

Weight : 205g (Headlight+Bracket +Horn)





# Optional Accessories

## 7. Shimano XTR

### Brake lever & XTR Hydraulic Disc brakes sets

#### FEATURES

- Seamless operation  
Quicker rebound between actions maintains rider concentration Greater flexibility and action-optimized cockpit layout Update brake lever shape.
- High rigidity : 10% stiffer than M9000 even under high temp conditions
- Lightweight : Magnesium master cylinder 26g lighter (vs. BL/BR-M9000 with disc brake rotor)
- Quicker brake engagement with shorter free stroke



### Hydraulic Disc Brake 2-Piston Caliper (BR-M9100)

#### FEATURES

- High-performance brake control : Higher braking force with reduced input force at finger tips highly linear response, and braking power, stroke, and time lag reduced by 30% compared with M9000
- High rigidity : New high rigidity brake hose and 1-piece aluminum caliper
- Lightweight : 26 g lighter (vs. BL/BR-M9000 with disc brake rotor)
- Straight hose connection





# Optional Accessories

## 8. Shimano XTR Pedals

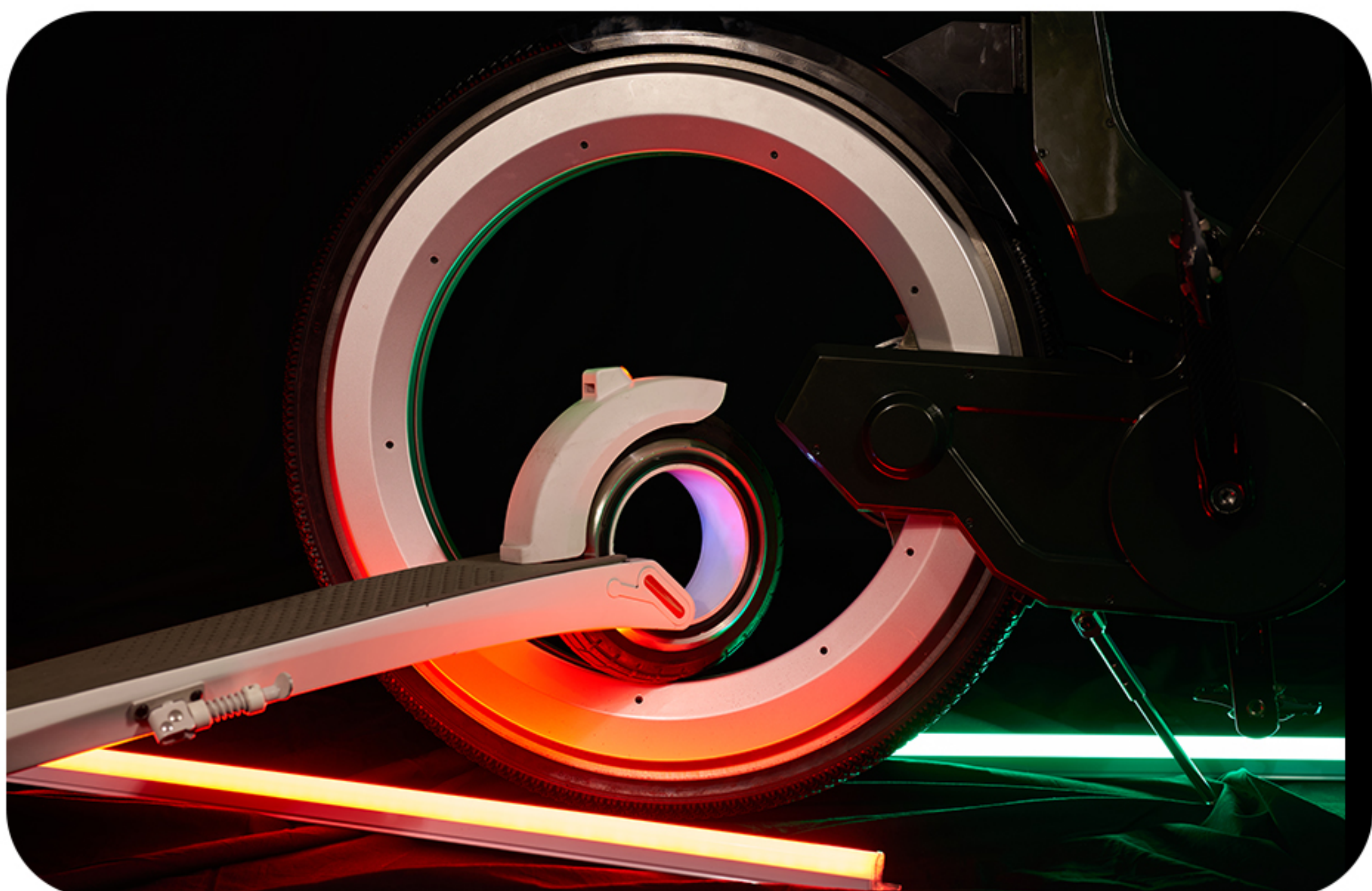
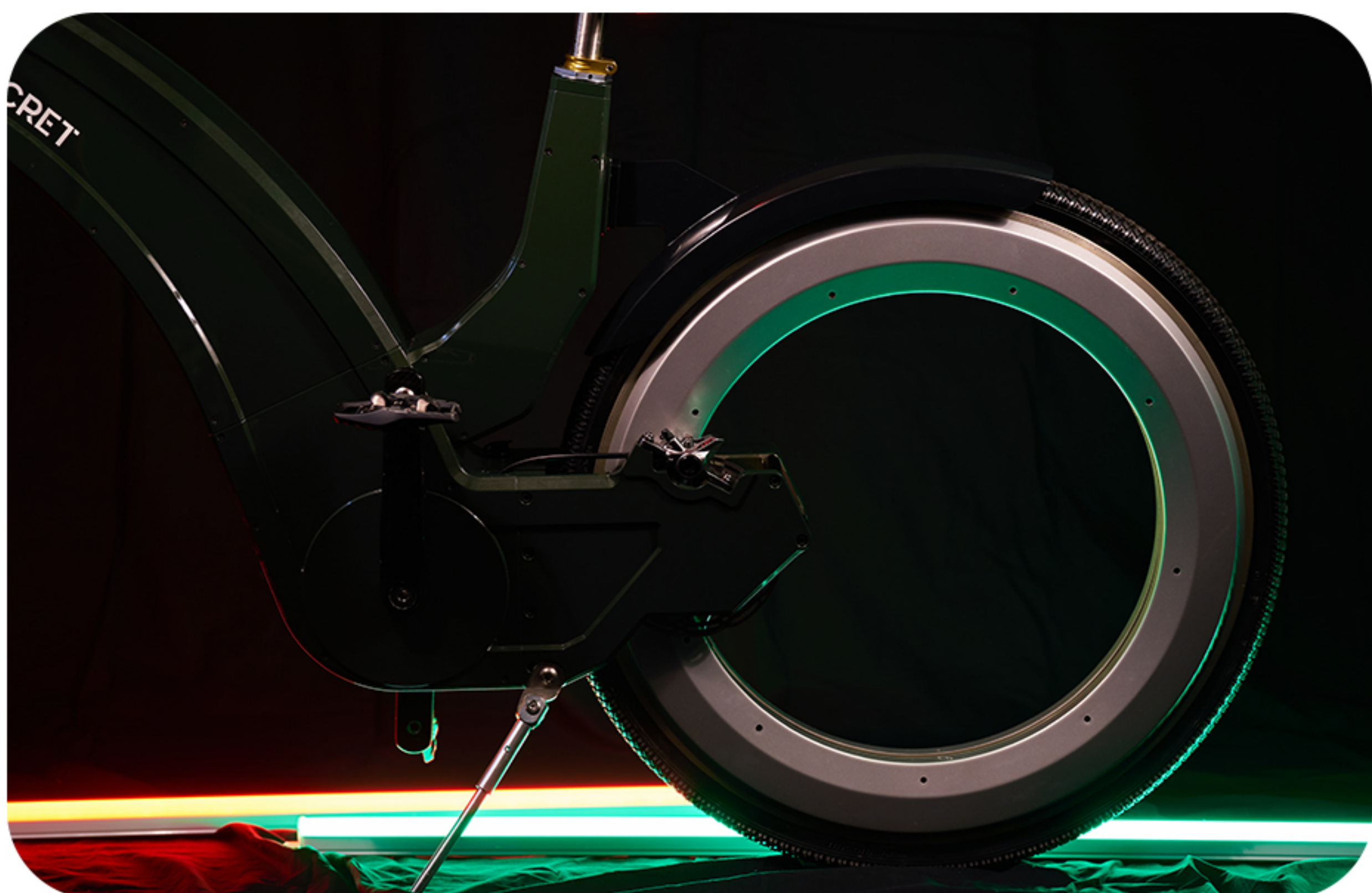
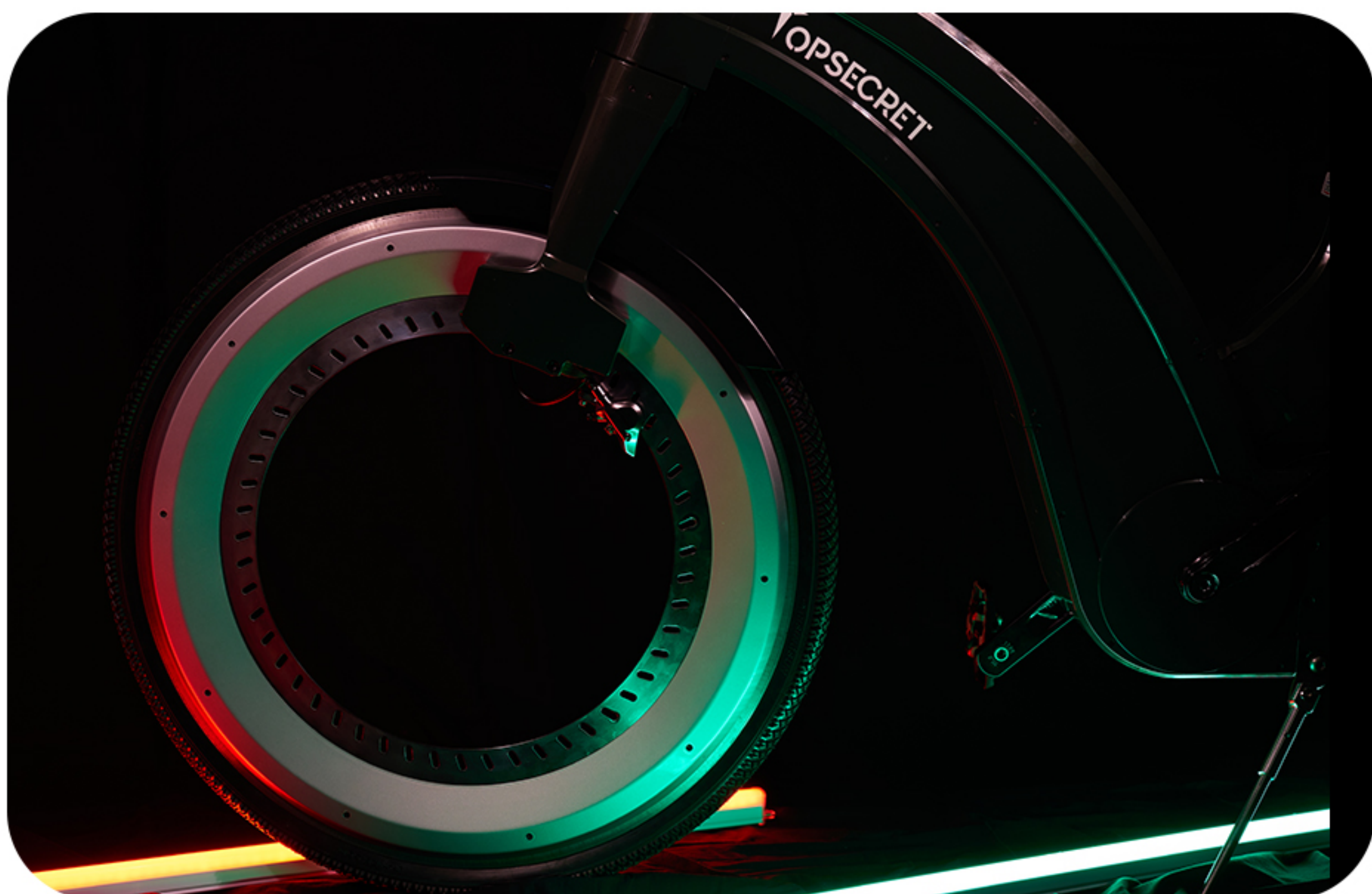
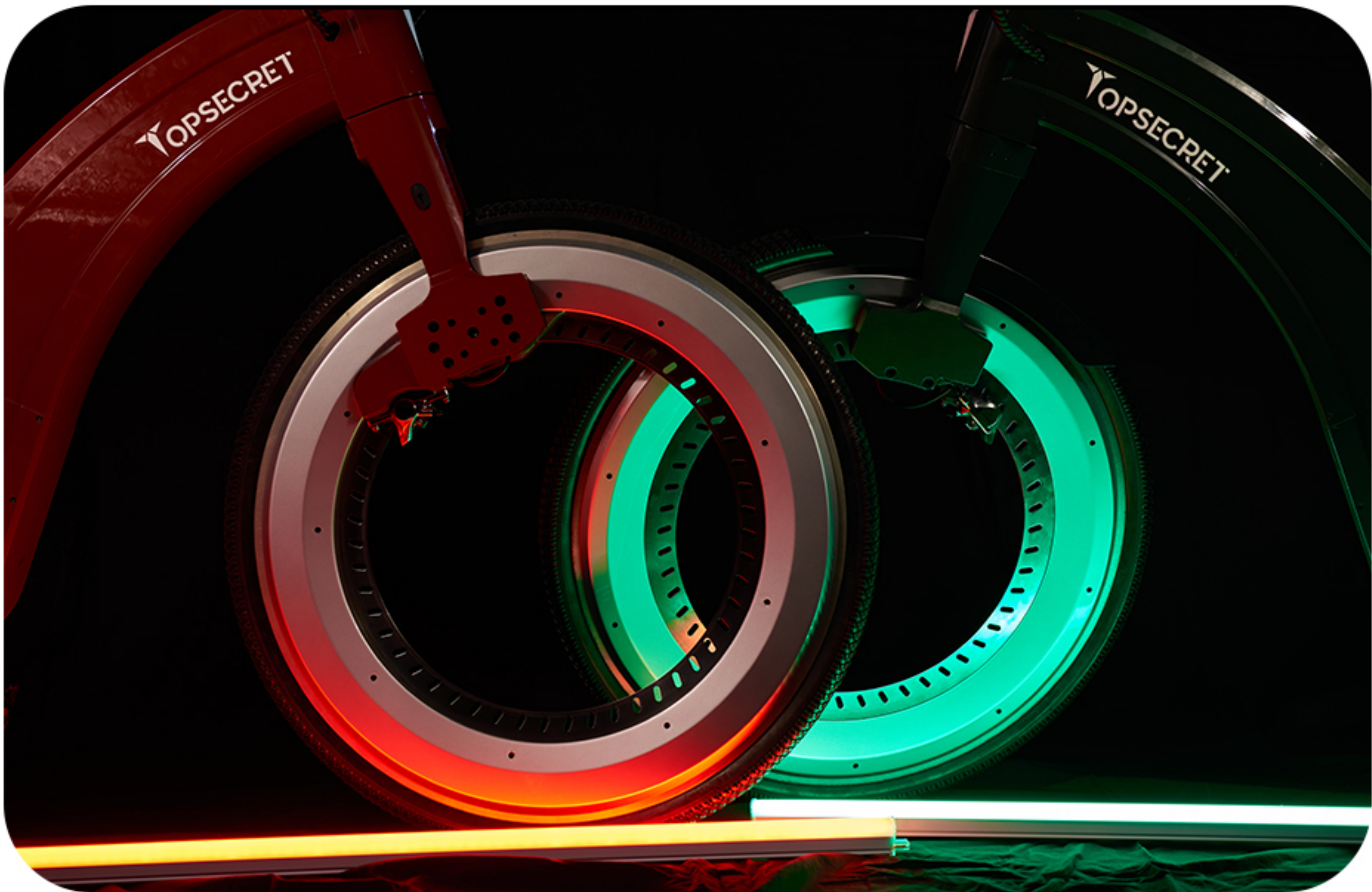
### FEATURES

- The pedal shoes have a wide area to reach due to their long size.
- Wide bearing arrangement for increased rigidity and uniform load distribution
- Wider platform increases stability and control even when not fastened
- Pedal design protects the bidding mechanism
- Thinner axle housing makes it easier to remove mud and dust
- Fix pedal with 8mm hexagon wrench (hexagon wrench not included)
- Spring tension can be adjusted with a 2.5mm hex wrench (hex wrench not included)
- Double sided cleats
- SM-SH51 cleats included
- 405g (left, right set)





# Detail Gallery





# Detail Gallery

The Prototype of the hubless Velomobile three-wheeled electric bicycle Top Secret V1 will be released in the second half of 2024.







#908,96, Gamasan-ro, Geumcheon-gu, Seoul, 08501 Republic of Korea  
T. +82.2.882.7128 F. +82.2.872.5508 E-mail: [topsecret@jnbmobility.com](mailto:topsecret@jnbmobility.com)