### 1 How to Connect

Download and install the VTB application. Ensure that your phone's "Bluetooth" and "Location Information" or "Location Services" are enabled. Confirm the vehicle is powered on and that the app has obtained the necessary Bluetooth and location permissions. On the main page, select the controller name and tap to connect. Once connected successfully, the current status of the vehicle will be displayed.





## 2. Basic Setup

### 1 D-Gear Switching

D1, D2, and D3 adjust the traction level, representing a percentage of the maximum traction.

10, 15, 20, and 25 indicate the proportional intervals for gear switching.

For example:

If the interval is 10, the traction level for D1, D2, and D3 are 80%, 90%, and 100%, respectively.

If the interval is 15, the traction level for D1, D2, and D3 are 70%, 85%, and 100%, respectively.

### ②EBS(Electronic Braking System)

 Adjust the EBS setting to control deceleration, reducing hand fatigue from frequent manual braking, especially on long downhill stretches. This uses regenerative braking technology to convert kinetic energy into electrical power, extending the bike's range.

·Riders can adjust the deceleration effect based on road conditions for flexible terrain adaptation.

'EBS+' increases the deceleration effect and raises the regen increment, with a maximum increase to 200A.

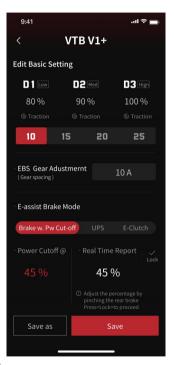
'EBS-' decreases the deceleration effect and reduces the regen increment, with a minimum reduction to 0.

·Set the EBS regen current increment, which is the gear interval, in the app. The maximum interval is 50A.

## 3 Regen Braking

 $\cdot \text{The V1+}$  is equipped with an advanced electronic braking system, providing precise and reliable braking performance.

·Users can switch electronic braking modes in the 'VTB' app, with three options: brake power-off, UPS, and electronic clutch.



#### Note:

Regularly inspect the electronic brake voltage. The standard range is 0.85V - 4.2V to ensure proper operation.

Use the brakes appropriately according to road conditions, especially on steep slopes and slippery surfaces, to enhance safety.

## 3. Mode Settings

#### 1)Ride Mode

·The V1+ allows for quick switching between five ride modes using the 'MODE' combination switch, defaulting to the first five modes from the official mode library.



### 2 Official Mode Library

Users can quickly add mode profiles from the official library to the mode slots. Available options include:

·EASYGO: Easy-to-use mode,low power,slow acceleration,low top speed,no field weakening,suitable for beginners or children.

·ECO: Moderate power and acceleration, no field weakening, offering better power-saving performance. Suitable for daily battery-saving trips.

·Sport:Moderate power, high top speed, low field weakening, suitable for high-speed riding.

·Race:High power, high top speed, moderate field weakening, suitable for high-speed competition.

Boost: Full power, full top speed, violent acceleration, suitable for 0-100 km/h acceleration tests.

·Crawl:High-torque, limited-speed creeping mode, suitable for pushing a cart while walking.

·Gasoline-125:Slower acceleration paired with high top speed, designed for those who prefer the tactile sensation of a gasoline-powered vehicle while seeking exceptional speed.

·Strong-Eco:High power, aggressive acceleration, no field weakening for improved battery efficiency. Provides a strong and explosive feel, with a pronounced ejection effect; not suitable for beginners.

·Slushy:High torque, low power, delicate handling, suitable for particularly slippery but gentle slopes.

·!!MAX TORQ!!:Use with caution! Not for novices! Max torque unleashes the terrifying power of a performance beast.

#### ③Parameter Introduction

Each mode features four adjustable parameters—Speed control, Traction control, Power blast (PB), and High speed torque compensation (HC)—along with two customizable feel curves for throttle response and electric braking. Users can either apply preset configurations from the official mode library or customize settings for optimal riding performance.

· Speed contro

Sets the maximum speed for the current mode, corresponding to full throttle input. Lower settings refine throttle precision by narrowing the speed range per throttle rotation angle. Activating the field-weakening function (enabled above 50%) increases top speed but reduces motor efficiency and accelerates battery drain.

#### · Traction control

This parameter adjusts the wheel torque by setting the maximum motor phase current, which determines the motor's torque and power output. A higher phase current results in stronger acceleration at low speeds. For example, when the motor phase current is low, even at a high throttle input, speed changes remain smoother, providing a more comfortable riding experience. Conversely, a higher motor phase current delivers larger speed changes even with a small throttle input, resulting in a more aggressive riding sensation with a pronounced "pulling" or "jerking" effect.

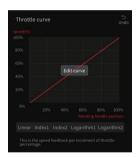
#### · Power Blast (PB)

This parameter adjusts the rate at which traction increases in response to throttle input. A higher PB value means traction builds up faster, providing greater torque for the same throttle input. This setting is ideal for steep climbs, sudden bursts of power, or navigating obstacles. Conversely, a lower PB value means traction builds up more gradually, resulting in lower torque for the same throttle input. This setting is better suited for conditions with poor traction where excessive force could result in wheel spin.

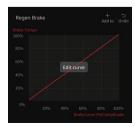
#### ·High speed torque compensation (HC)

This parameter enhances traction during high-speed phases, specifically for executing wheelies (lifting the front wheel) or achieving stronger secondary acceleration. A higher HC value allows the rider to initiate wheelies more easily at higher speeds and increases the top speed. However, this comes at the cost of reduced linear control in the mid-to-high speed range, resulting in less precise handling.

'Throttle curve:Edit custom curves or select pre-existing system curves to configure the baseline feel of the throttle. The default curve is a linear curve, where the relationship between throttle input and speed is linear. This means that as the throttle is twisted, the speed changes uniformly, making it suitable for most riding scenarios. Users can also choose exponential or logarithmic curves based on their actual riding experience and preferences.



Regen brake:Edit custom curves or select the default linear curve to configure the baseline feel of the regen brake. The regen brake curve enhances the braking force of the disc brake by leveraging motor drag. By fine-tuning the curve, users can align it with the disc brake for an optimal and precise braking feel.



## 4.Real-Time Status Monitoring

- ·Users can view real-time status information of the bike through the personal "VTB" app, including the current power consumption, RPM (Revolutions Per Minute), speed, power, Line voltage, Line current, Phase current, throttle voltage, brake voltage, controller temperature, and motor temperature.
- Regularly check the bike's status to ensure driving safety and optimal performance.



# 5.App Advanced Settings

### 1. Controller Bluetooth Password

Used for connecting to the bike controller, typically a four-digit code. Default is no password.

### 2.Maximum Regen Brake Torque

Used to enhance the braking performance of the regen brake; adjust as needed to increase braking force.

### 3.Default Gear on Start-Up

Normally defaults to Neutral (N) for standard riding. Can be set to Drive (D) for racing or special modes.

### 4.Reverse (R) Parameter Settings

Disable Speed: The maximum speed limit when switching to reverse (R), default is 10 km/h. Switching at higher speeds may damage the drivetrain and cause safety hazards.

Gear Shift Delay: The response delay when shifting to reverse (R). Adjust according to personal preference to ensure safe shifting.

Reverse Speed Limit: Set the maximum speed limit when reversing.

## 5.Parking Parameter Settings

Disable Speed: The maximum speed limit when switching to Park (P); default is 10 km/h. Switching at higher speeds may damage the drivetrain and cause safety hazards.

Stall Time: Set the time limit for motor stalling when parked.

## 6.Power-Off Protection Settings

Brake Power-Off Enable: The system will automatically cut motor power when the brake is applied. Kickstand Power-Off Enable: The system will automatically cut motor power when the kickstand is down to prevent accidental motor start-up when parked, enhancing parking safety.

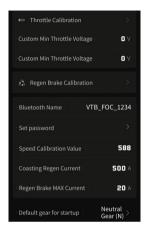
Tilt Power-Off Enable: The system will automatically cut motor power if the bike tilts to a certain angle.

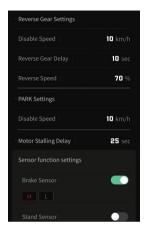
H-High Level, L-Low Level.

Warning: Do not change the level settings.

#### 7. Parameter Calibration

- ·Motor Calibration: Automatically detect and calibrate motor parameters to improve overall performance. Perform motor calibration after replacing the motor or if the performance is noticeably poor and riding feels rough.
- ·Throttle Calibration: Adjust throttle response to improve control accuracy. Perform calibration when replacing the throttle grip or if voltage offset occurs due to aging.
- Regen Brake Calibration: Adjust the linear response of the brake lever to improve braking accuracy. Perform calibration when replacing the brake lever, if voltage offset occurs due to aging, or if the brake feel is incorrect.
- ·Speed Calibration Value: Used for fine-tuning the displayed speed. Perform speed calibration if there is a change in tire size or transmission ratio.





## 4. Firmware Upgrade



Enjoy seamless system updates through continuous OTA service.
Additionally, Vantusi offers select users the opportunity to participate
in beta testing for new firmware. Interested users may contact the
official tea m to secure a soot and experience the latest features.

#### Note

During the firmware upgrade process, ensure your phone remains close to the dashboard or controller and avoid moving the device. Follow the on-screen instructions and wait for the upgrade to complete. Controller updates typically take about 5 minutes when upgrading to the latest version. Dashboard updates require 1–3 minutes under normal circumstances; however, updating across multiple versions in a single session can take 1–2 hours. Please allocate adequate time for the upgrade accordingly.