REV 1.6

KARMINA

HX200 e-Bike Mid-Drive System

User Manual

YL-TTP3 / BC110 / K31

English

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Important Notes

1. This manual is primarily for riders. Installation, repairs, and firmware updates must be performed by authorized dealers. Users must not disassemble or modify the motor, controller, or battery.
2. Read this manual and all safety instructions carefully before first use. ◦
3. Do not modify the product. Unauthorized changes (e.g., speed limit removal) or using non-original parts will void the warranty and pose safety risks. ◦
4. For updates, please refer to the official website: www.karmina-ebike.com.
5. Users must comply with local national or regional regulations.
6. Range and performance vary based on environment, weather, load, and tire pressure.
7. Please keep your proof of purchase and this manual in a safe place for future warranty, maintenance, or recycling services. In the event of any discrepancy between the printed version and the electronic version, the latest version on the official website shall prevail.
8. If the bike is impacted or submerged in water, stop using it immediately and contact a dealer. ◦
9. Users must follow the instructions in this manual and ensure the product is used only in safe environments and under legal road conditions. Any liability for accidents resulting from the violation of local traffic regulations, unauthorized modifications, or improper use shall be borne solely by the user.

To prevent harm to individuals as well as damage to property and the surrounding environment, the following sections will detail mandatory compliance items. The hazards and damages that may arise from the improper use of the product are categorized and explained by their level of severity :



Significant risk of death or serious injury.



Risk of death or serious injury.



Risk of injury or property damage.

Safety Instructions

DANGER

During Battery use

1. Do not directly weld the battery or deform, modify, or disassemble it, as this may cause leakage, rupture, or fire. The battery must only be repaired or replaced by an authorized dealer or service center.
2. Do not place the battery near heat sources (such as heaters) to avoid causing battery leakage, rupture, or fire.
3. Do not throw the battery into a fire, heat it, or place it in a high-temperature environment, as this may cause leakage, rupture, or fire.
4. Do not subject the battery to strong impacts or throw it, as this may cause the battery to overheat, rupture, or catch fire. ◦
5. Do not submerge the battery in water or get the battery terminals wet, as this may cause the battery to overheat, rupture, or catch fire.
6. Please use the charger specified by KARMINA. Using a non-original or damaged charger may lead to electric shock or fire.
7. Charging must be conducted in a dry, well-ventilated environment away from flammable materials.
8. Do not plug in or unplug the power plug with wet hands.
9. If battery fluid gets into your eyes, do not rub them. Immediately rinse the affected area with plenty of clean water and seek urgent medical attention for professional treatment.

WARNING

Riding Safety

1. When riding, do not be distracted by operating the display or control buttons.
2. Before riding, check that the wheel sets are secure, and that the brakes and tire pressure are normal. Failure to do so may lead to loss of control or accidents.
3. Before riding, fully familiarize yourself with how to start the e-bike to avoid any accidental startups.
4. When riding at night, ensure the lighting equipment is turned on and kept clean.
5. Do not disassemble this product.
6. The motor casing may heat up during operation; please avoid prolonged contact with bare hands.
7. Do not arbitrarily modify the maximum assist speed or motor parameters; illegal modifications may pose safety risks and void the warranty.

Battery

1. If the vehicle is involved in an impact or submerged in water, please have an authorized dealer inspect the entire bike and the battery's waterproof performance.
2. Do not charge the battery in a high-humidity environment to avoid electric shock.
3. Do not plug in or unplug the charger connector if it is wet to avoid electric shock.
4. If the battery is not fully charged after 6 hours of charging, please stop charging immediately and contact your dealer to prevent the battery from overheating or catching fire.
5. Do not use a battery with visible external damage to avoid battery overheating, rupture, or operational failure.

5. Do not dispose of the battery in general waste. Please hand over the battery to a collection point designated by local environmental authorities to ensure safety and environmental protection. If the battery casing is damaged or leaking, stop using it immediately and have it inspected by a professional agency.
6. Using or storing the battery outside the specified temperature range may lead to fire, injury, or operational failure. The battery operating temperature ranges are as follows:
   Discharge temperature: -10°C ~ 50°C
   Charge temperature: 0°C ~ 40°C

⚠ CAUTION

1. Please regularly check the charger and power cords for damage. If damaged, please replace them before further use.
2. Please avoid allowing individuals with physical, sensory, or mental impairments, or those lacking the necessary knowledge, to use this product.
3. When this product is in use, do not allow children to play near or operate the product.
4. Do not modify this product to avoid system failure.
5. This product is designed as a waterproof device suitable for riding in wet weather; however, do not intentionally submerge it in water.
6. Do not clean the e-bike with a high-pressure washer. If water enters the device due to high-pressure washing, it may lead to malfunction.
7. Please operate the e-bike with care and avoid subjecting it to strong shocks or vibrations.
8. Do not turn the e-bike upside down to avoid crushing the display or its controllers.
9. Although the bicycle can still be ridden after removing the battery, the lights will not function. Please note that this will affect riding safety at night.

Battery

1. Do not place the battery in direct sunlight, inside a vehicle in hot weather, or in other high-temperature locations.
2. If battery fluid leaks and adheres to the skin, please rinse immediately with plenty of clean water.
3. Keep the battery out of the reach of infants, young children, or pets.
4. When transporting the e-bike in a vehicle, please remove the battery and place it on a stable, flat surface inside the vehicle.
5. Before connecting the battery, ensure that the battery connection port is free of water and dust.
6. Do not move the e-bike while it is charging.
7. When not charging, please keep the battery charging port cover closed.
8. Ensure that the e-bike remains stable and does not tip over while charging.
9. The number on the battery key is required when purchasing a spare key; please keep it in a safe place.
10. When cleaning the battery, please wipe it with a damp cloth that has been wrung out.



Disposal in Countries / Regions Outside the European Union

1. This symbol is valid only within the European Union.
2. Do not place the battery in direct sunlight, inside a vehiclein hot weather, or in other high-temperature locations.
3. When disposing of used batteries, please follow local regulations. If you are unsure, please consult your dealer or distributor.

Product Specifications

HX200 e-Bike Mid-Drive Motor

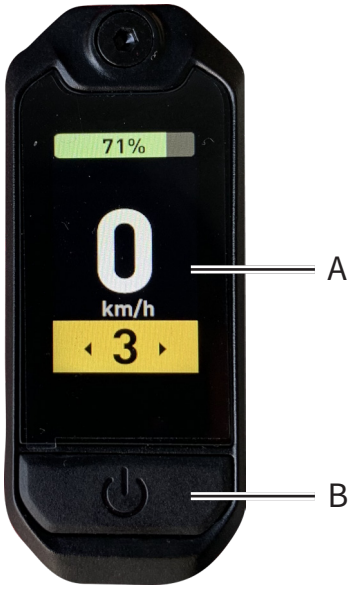
Motor Type	Permanent Magnet Synchronous Motor (PMSM)
Rated Power	250 W
Max Power	520 W
Rated Voltage	DC 36 V
Rated Current	9.8 A
Speed Limit	25 Km / hr
Max Torque	75 Nm
Max Support Cadence	120 rpm
Support Levels	5 Assist Modes
Crank type	ISIS
BB spindle length	128 mm
Chain Line	48.8 mm
Waterproof Rating	IP55
Lamp Power	12 V, 12 W
Supported Display Voltage	27 V ~ 54 V （According to battery power specifications)
Max Estimated Range	103 Km



The power output mode may vary slightly depending on the brand's customization.

Operation Methods

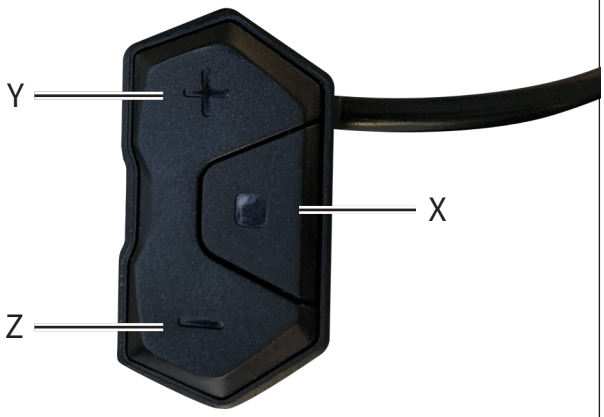
User Interface



Display

A Display Screen

B Power Button



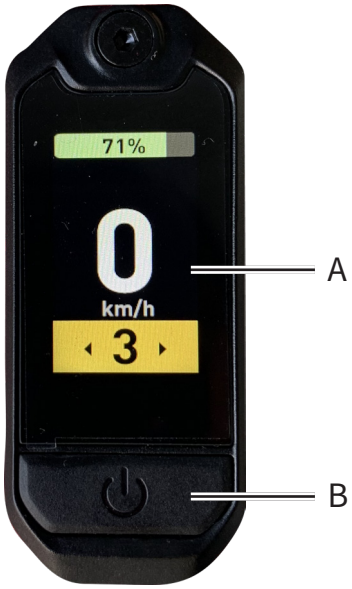
Console

X Function Key

Y + Key

Z - Key

System Power On / Off



Power On

Press and hold Power (B) for 3–5 seconds until the KARMINA logo appears.

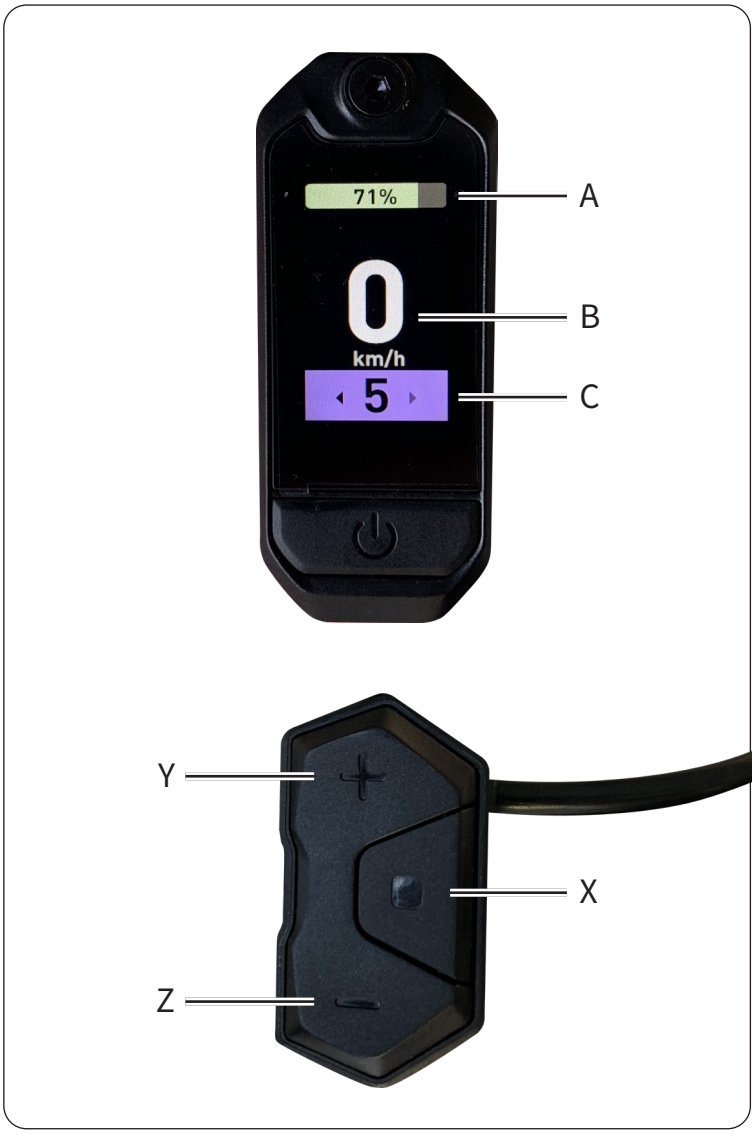
Power Off

Press and hold the Power button (B) for approximately 3–5 seconds until the display (A) turns off, then release the button to complete the power-off process.

To ensure the stability of the torque sensor, do not step on the pedals when the system is powering on.

For riding safety, the system is restricted so that it cannot be powered on while the bike is in motion.

Riding Display



A Battery level of the system power

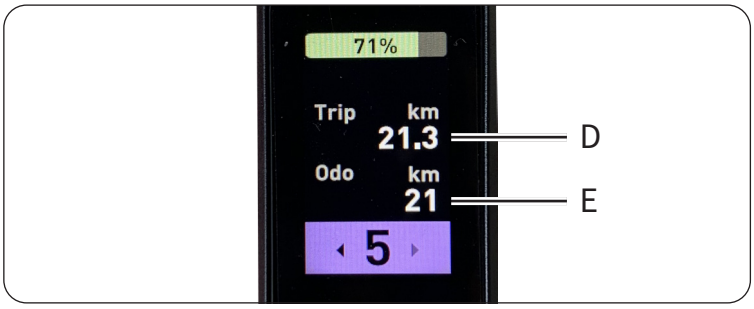
B Current riding speed

C Assist level

1. There are 6 levels in total: Level 0 provides no assistance, Level 1 is the power-saving mode, and Level 5 provides full power output.
2. Short press the "+" Key (Y) and "-" Key (Z) on the controller to switch between levels.

X Function Key

Use the function key to switch between the information displayed on the riding interface.

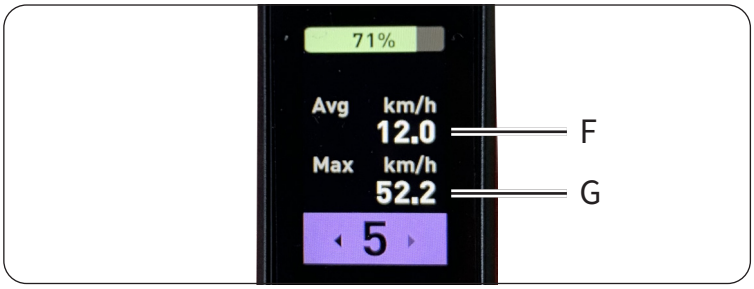


D Trip Distance

Used to record the distance of a single ride; can be reset manually.

E Total Distance

The total distance traveled since the first use; cannot be reset manually.



F Average Speed

The average speed of the current trip.

G Maximum Speed

The highest speed recorded during the current trip.

Walking Assist Mode



Walking Assist Mode is designed to provide assistance when pushing the bike on foot.

C Walking Assist Mode

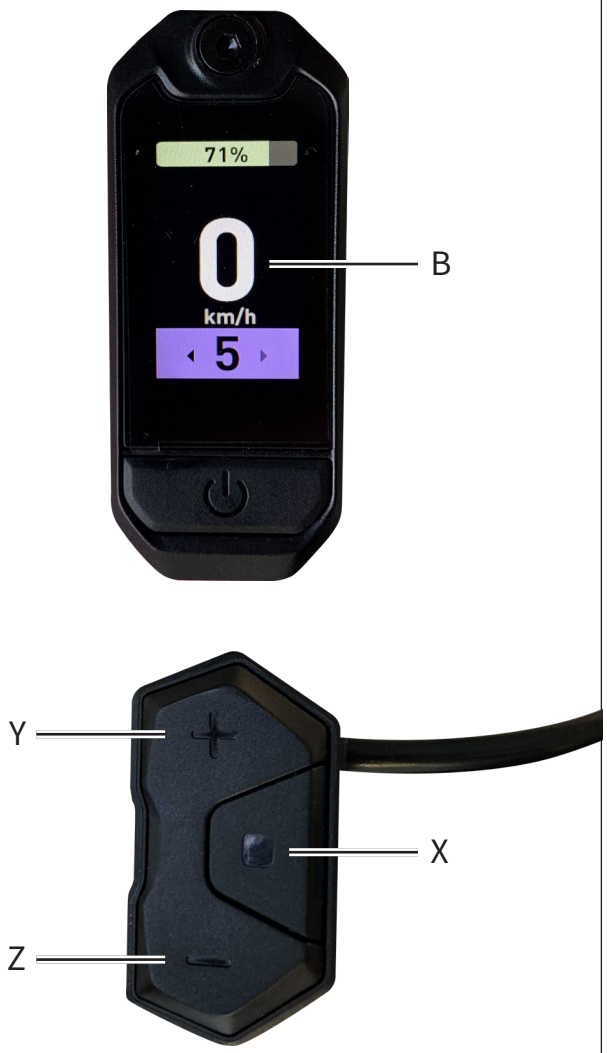
1. Press and hold the "-" Key (Z) to start Walking Assist Mode.
2. Release the "-" Key (Z) to exit Walking Assist Mode.

Z - Key

CAUTION

In Walking Assist Mode, the e-bike will move forward automatically without the need for pedaling. Before activation, please ensure that the surrounding environment is safe and suitable for use. Ensure you are fully prepared to guide the bike before starting the mode to prevent accidents.

Settings Menu



Press and hold the "+" Key (Y) and "-" Key (Z) simultaneously to enter the menu interface.

The menu interface can only be accessed when the vehicle speed is 0, as shown in Figure B.

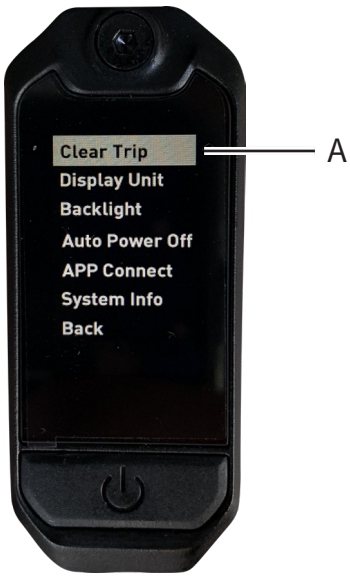
X Function Key
Y + Key
Z - Key



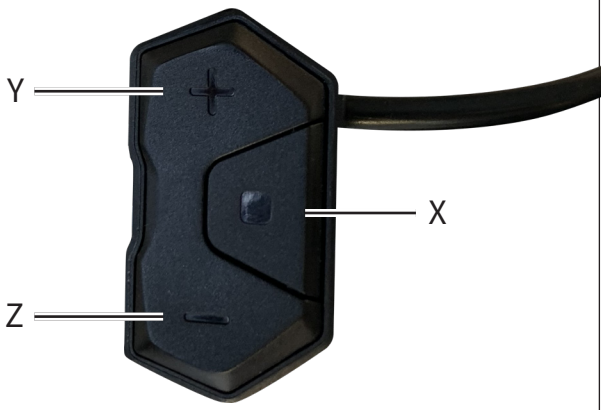
Menu Interface

1. Short press the "+" Key or "-" Key to select your desired option.
2. Short press the Function Key to enter the selected option.
3. Press and hold the "+" Key and "-" Key simultaneously for 3 to 5 seconds to exit the current menu settings.

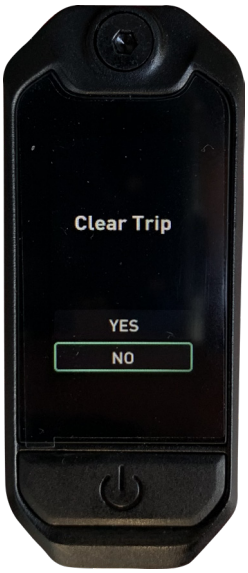
Clear Trip



Clears the data for Trip Distance, Maximum Speed, and Average Speed .



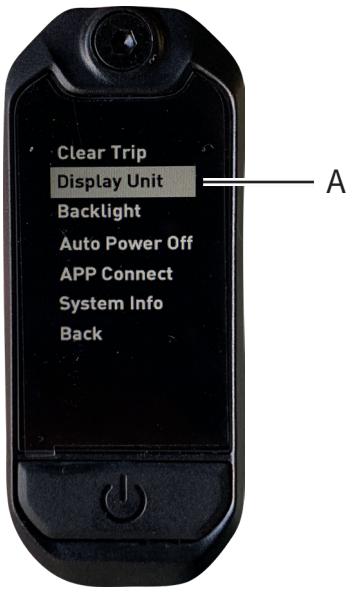
X Function Key
Y + Key
Z - Key



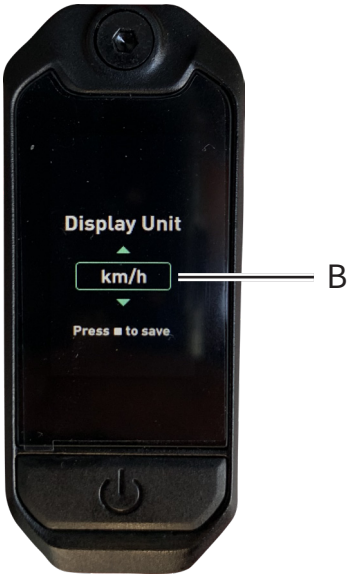
The system will confirm before clearing.

Short press the "X" Function Key to execute.

Display Unit

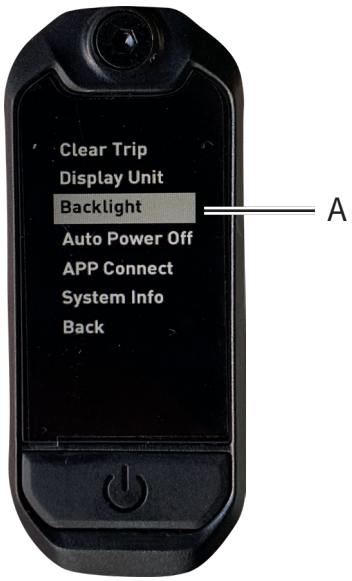


A. Selection the "Display Unit" option and enter.



B. Switch between metric and imperial units for speed and distance.

Backlight

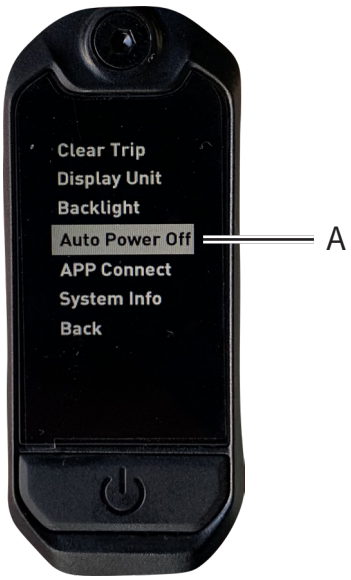


A. Selection the "Backlight" option and enter.

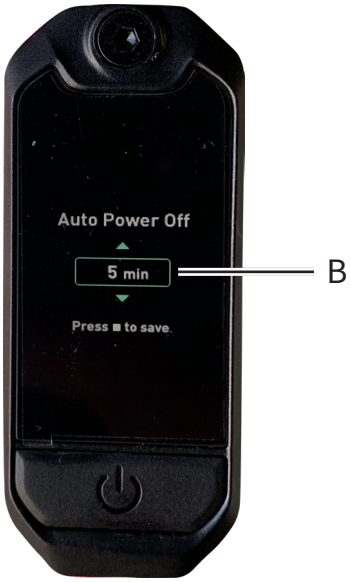


B. Adjust the display brightness from level 1 to 5, with level 5 being the brightest.

Auto Power Off



A. Selection the "Auto Power Off" option and enter.



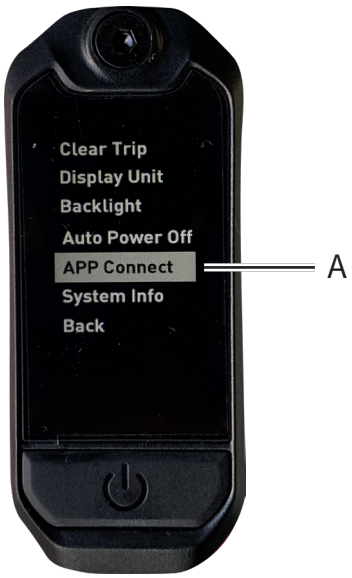
B. Set the Auto-Off timer.

1. Selectable options: 3 min / 5 min / 10 min / 30 min / 60 min / Off
2. When set to "Off," the Auto-Off function will be disabled.

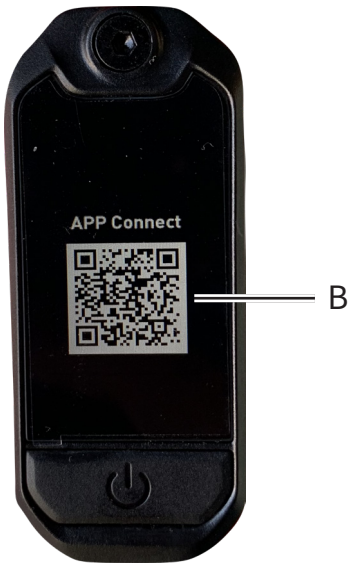
APP Connect

Please download the Bikewise Pro app before using it for the first time.



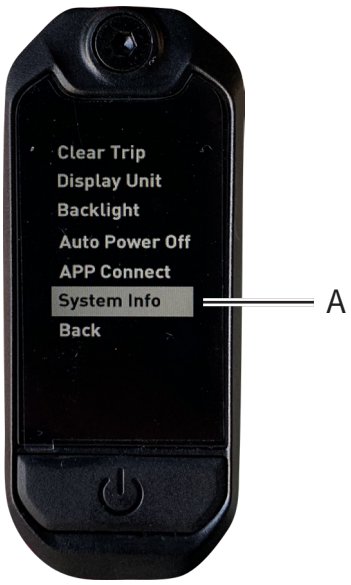


A. Selection the "APP Connect" option and enter.

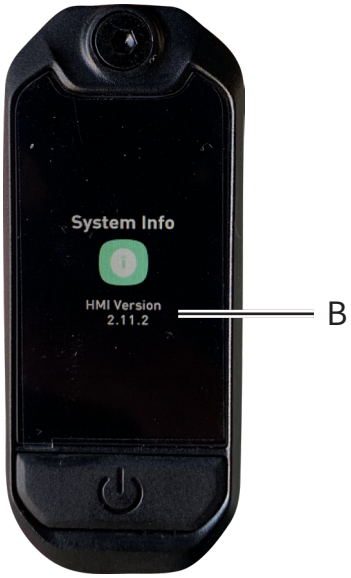


Use the app and scan the QR code at location B to pair the device.

System Info



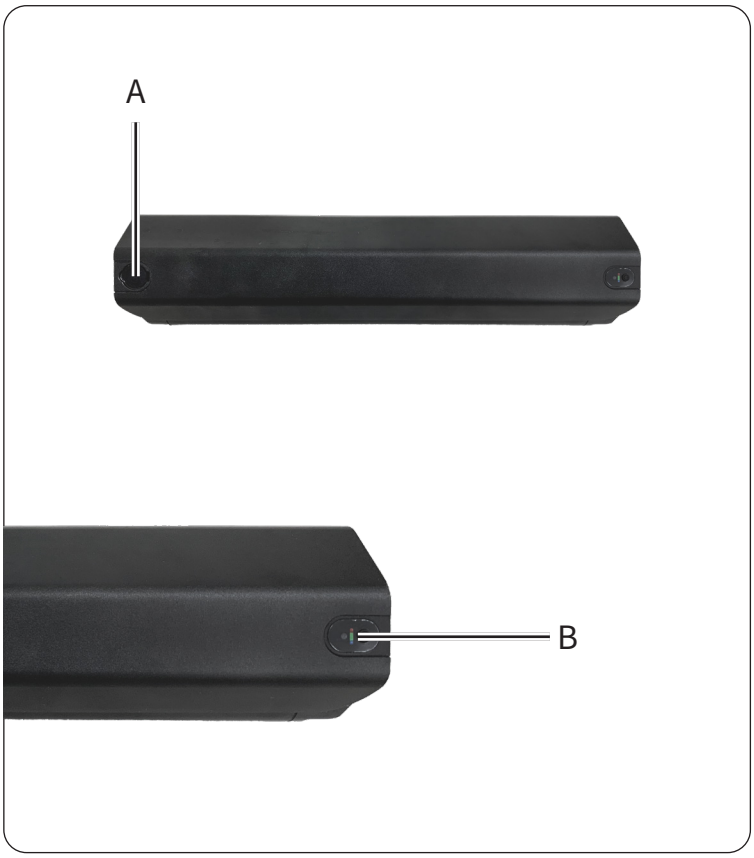
A. Selection the "System Info" option and enter.



B. View the display system version information.

Battery

Battery and Accessories



Battery

A Charging Port

B Battery Level Lamp

0 ~ 29% : Flashing Red

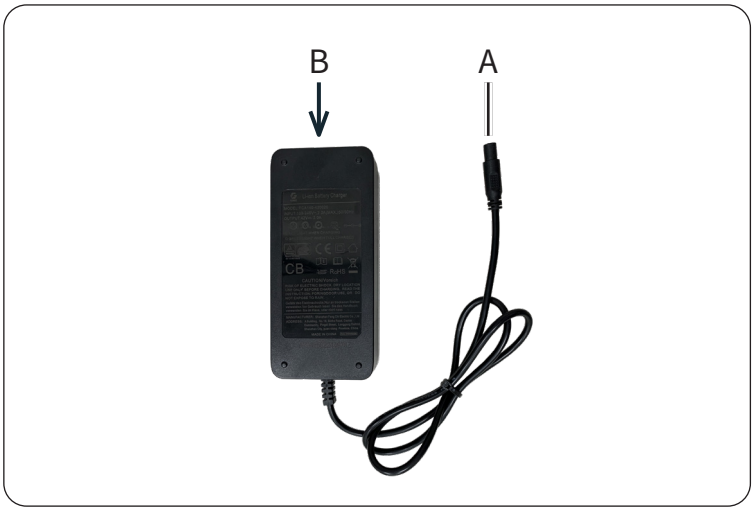
30~79% : Flashing Green

80~99% : Flashing Blue

100% : Solid Blue

Model : TTP3-104
Voltage : 36 V
Rated Capacity : 13.6 Ah
Rated Energy : 489.6 Wh
Max Output Current : 15 A
Weight : 2.8 Kg

If the Drive remains inactive for more than 4 hours after power-on, the battery will enter Sleep Mode.



Charger

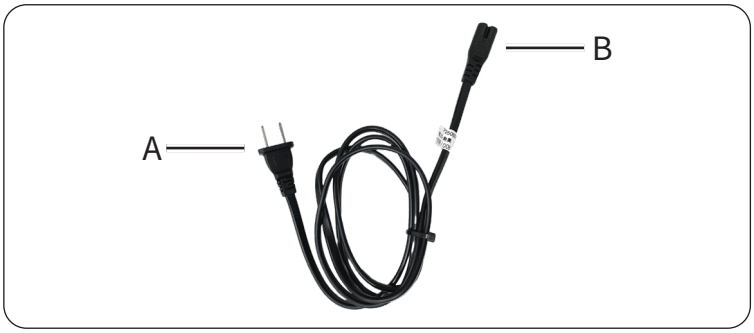
A Charging Plug

Connects to the charging port of the battery.

B Power Cord Port

Used to connect the AC power cord.

Model : FCA140-420020
Input : 100-240 V ~, 2.0 A (Max), 50/60 Hz
Output : 42 V , 2.0 A
Charging Time : 7 hours (10%~100%)



AC Power Cord

A Power Plug

The plug style may vary depending on the country or region.

B Charging Connector

Used to connect to the power cord socket on the charger.



Battery Lock Key

A A Key Code
The information required when purchasing replacement keys.

The key used to lock the battery in place.

Proper Battery Usage

1. **Charge at any time:** The battery can be charged regardless of the remaining power level.
2. **Use official chargers only:** Always use the dedicated charger provided by KARMINA to charge the battery.
3. **Charge promptly when empty:** If the battery is depleted, please recharge it as soon as possible.
4. **Long-term storage:** If the product will not be used for an extended period, maintain the battery level at at least 70% and recharge it every 6 months.

The battery can be removed for charging or charged while installed on the bike. However, please avoid moving or bumping the battery during the charging process.

Remove The Battery



Rotate the front wheel by approximately 80° to facilitate the battery removal process.



Insert the battery lock key into the battery lock.



1. Turn the battery lock key counter-clockwise (CCW) until the lock clicks.
2. The end of the battery will pop out slightly, but it will not fall out completely.



Push the battery out from the gap using a small amount of force.



Now the battery can be fully removed. The removal process is complete.

Install The Battery



- Before installation, ensure the battery is oriented correctly.
- In this example, the power port is at the bottom, and the lock is at the top.



- Using the power port end as a pivot point, fit the battery into the frame's battery compartment.
- In this example, the bottom is the power port pivot, and the top is the lock.



- Press the battery in clockwise until the lock clicks.
- There is still a visible gap between the battery and the frame, meaning the installation is not yet complete.



1. Firmly push the battery into the frame compartment to close the gap.
2. Keep the gap closed and rotate the key clockwise to engage the lock.



Remove the lock key to complete the battery installation.

Error Code

Error Code	Problem causes	Solution
E01	Hall Sensor Error	Please turn off the power and contact your local dealer or authorized service provider for assistance.
E02	Locked Rotor (Torque、Throttle)	1. Please turn the power off and back on. 2. If the issue persists, please contact your local dealer or authorized service provider for assistance.
E03	Torque Runaway Protection	1. Please turn the power off and back on. 2. If the issue persists, please contact your local dealer or authorized service provider for assistance.
E04	Throttle Runaway Protection	1. Please turn the power off and back on. 2. If the issue persists, please contact your local dealer or authorized service provider for assistance.
E05	Low Battery Voltage At Startup	Please turn off the power and charge the battery.
E06	Hight Battery Voltage At Startup	Please turn off the power and replace the battery.
E07	Instant Low Battery voltage	Please turn off the power and charge the battery.
E08	Overcurrent Protection	1. Please turn the power off and back on. 2. If the issue persists, please contact your local dealer or authorized service provider for assistance.
E09	Controller Thermal Protection	Please turn off the power and stop riding for about 15 minutes to allow the system to cool down.
E0A	Motor Thermal Protection	Please turn off the power and stop riding for about 15 minutes to allow the system to cool down.
E0B	Low Battery	Please turn off the power and charge the battery.
E0D	Lamp error	Please turn off the power and contact your local dealer or authorized service provider for assistance.
E0E	Speed sensor error	Please turn off the power and contact your local dealer or authorized service provider for assistance.
E0F	Cadence sensor error	Please turn off the power and contact your local dealer or authorized service provider for assistance.
E10	Torque sensor error	Please turn off the power and contact your local dealer or authorized service provider for assistance.
E30	Communication error	1. Please turn the power off and back on. 2. If the issue persists, please contact your local dealer or authorized service provider for assistance.

Please sign and stamp the following fields to facilitate future warranty

Owner	Outlet / Retailer

Date of Sale :

KARMINA

www.karmina-ebike.com

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Taichung City 4818, Taiwan