



## MIDTOWN/MIDTOWN XT

**PLEASE READ THIS MANUAL BEFORE ASSEMBLING OR RIDING YOUR E-BIKE**

# USER MANUAL



**WARRANTY VOIDED if used for commercial purposes (i.e. making deliveries)**

This user's manual explains the operation and maintenance of your Slane E-Bike. Diagrams in this manual may differ from actual products; refer to your local dealer's existing products. Slane reserves the right to change or improve their products; further notice will not be given.

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# TABLE OF CONTENTS

## ABOUT THIS MANUAL

- Why You Should Read This Manual.....1
- **WARNING** .....1
- Specifications.....2
- Helmets & Reflectors.....3

## OPERATING INSTRUCTIONS

- Front Wheel Assembly.....4
- Adjusting Handlebar/Saddle.....5
- Adjusting Front Brakes.....6
- Pedal Installation.....6
- Shifter/Derailleur.....7
- Pedal Assist System (PAS).....8
- Powering On.....8
- Throttle.....8
- CB-03 LCD Display/Operation.....9-11
- Error Code Table.....12
- Serial Number .....12
- Riding Safely.....13
- Unlocking, Removing & Inserting the Battery.....14
- Battery Charging.....14-15
- Maintenance/Service.....16
- Cleaning Your E-bike.....17
- Battery Storage.....17
- Flat Tire.....18
- Broken Spoke .....18
- Power-Saving Tips.....19
- Trouble-shooting.....19
- Dealer Info/Purchase Record.....20
- Warranty Info.....20

# WHY YOU SHOULD READ THIS MANUAL

• This manual will help you get the best performance, comfort, enjoyment and safety when riding your new E-Bike. It describes specific care and maintenance procedures that help protect your warranty and ensure years of trouble-free use.

**Pay special attention to the section on battery charging and maintenance.**

• Understanding your new E-Bike's features and operation will help you get maximum enjoyment and safety. By reading this manual before you go on your first ride, you'll know how to get the most out of your new E-Bike.

**It is also essential that your first ride on your new E-Bike be taken in a controlled environment, away from cars, obstacles and other cyclists.**

## WARNING!

**Follow these important safety measures to ensure safe riding.**

- To ensure your safety, read the user manual carefully and check that all bike parts are perfect before riding.
- Overloading is strictly prohibited.
- **Always recharge the battery immediately after each use. Failure to do so may damage the battery.** The charger can remain plugged in for trickle-charge purposes during long periods of storage. For storage periods over one month, the battery should be checked and fully recharged before riding.
- **There is a safety power source inside the battery box of this e-bike. Removing the battery box will expose both jacks in the lower end ( positive pole "+" and negative pole "- "). Please do not touch these poles with your hands at the same time (particularly damp hands). It is prohibited to touch any metal to either pole (i.e., a key, etc.). Doing so will produce an unlimited short-circuit current and will cause severe burns to the body.**
- Don't detach and disassemble spare parts or rebuild this electric bicycle. Purchase spare parts from an authorized dealer of SLANE electric bicycles.
- If you find the cut-power function doesn't happen when using the front or rear brake, have it repaired immediately.
- This bicycle can normally ride under wet conditions to a depth of water that doesn't surpass the electric motor. Allowing the electric motor to be infiltrated by water will cause damage.
- Those under the age of **sixteen** years of age are not permitted to ride this E-bicycle.

# SPECIFICATIONS



	MIDTOWN	MIDTOWN XT
Motor Rated Power (W)	250 Mid-drive	350 Mid-drive
Motor Rated Voltage (V)	36	36
Speed (Km/h)	32	32
Range (km)	30-45	30-40
Load Capacity (lb)	250 lb	250 lb
Front & Rear Brake	Disc	Disc
Suspension	Yes	Yes
Battery Type	Lithium-ion Battery	Lithium-ion Battery
Battery Capacity (Ah)	12	12
Battery Charging Time (Hr)	4-6 hr	4-6 hr
Net Weight (lb)	51	51
Pedal Assist	Yes	Yes
Throttle	Yes	Yes
Tire Size	27.5"x 2.1	27.5"x 2.1

**WARNING!**

**CHARGE THE BATTERY EVERY 30-60 DAYS.**

**DO NOT MODIFY YOUR E-BIKE (YOU MAY LOSE YOUR WARRANTY).**

**RIDING IN RAINY OR SNOWY WEATHER IS AT YOUR OWN RISK.**

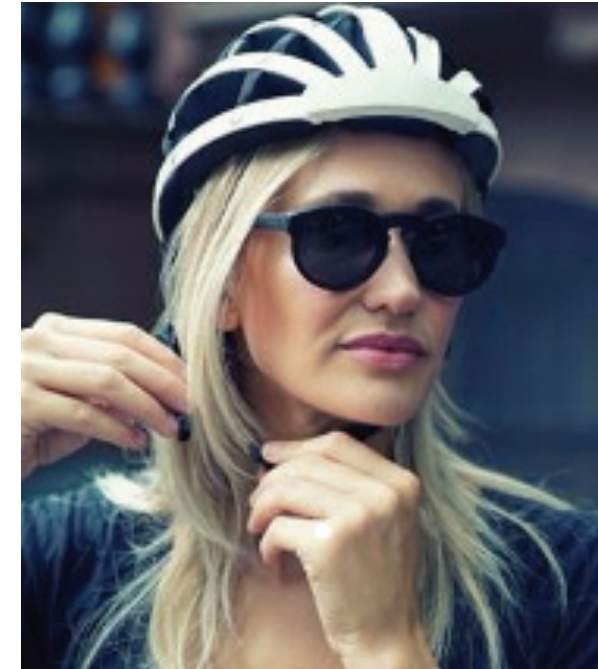
**DO NOT CHARGE THE E-BIKE WHEN UNATTENDED AND DISCONNECT THE BATTERY FROM THE POWER SOURCE AFTER FULLY CHARGING.**

**CHARGING MUST ALWAYS TAKE PLACE IN A DRY AND CLEAN AREA.**

**DO NOT CHARGE THE BATTERY ON A CARPET.**

**TAKE EXTRA CAUTION TO THE BRAKES AND FRONT WHEEL WHEN RIDING DOWNHILL.**

# HELMETS



• **Many Provinces require specific safety devices. It is your responsibility to familiarize yourself with the Province's laws where you ride and comply with all applicable laws, including adequately equipping yourself and your bike as the law requires.**

• It is strongly recommended that you wear a properly fitted bicycle safety helmet at all times when riding your E-Bike.

The correct helmet should:

- Be Comfortable
- Be Lightweight
- Have Good Ventilation
- Fit Correctly
- Cover Your Forehead

# REFLECTORS

Your E-Bike comes equipped with front/rear wheel reflectors and four pedal reflectors. Reflectors are essential safety devices designed as an integral part of your E-Bike. Provincial regulations require every bicycle to have front/rear wheel and pedal reflectors. These reflectors pick up and reflect streetlights and car lights in a way that helps you to be seen and recognized as a moving cyclist. Check reflectors and their mounting brackets regularly to make sure they are clean, straight, unbroken and securely mounted. Replace damaged reflectors and straighten or tighten any that are bent or loose.

# ASSEMBLING THE FRONT WHEEL

- Open the box from the top, take the bike, parts and accessories box out.
- Carefully remove all protective carton pieces, foam pads, tie wraps, plastic fittings, recycle all material that can be recycled, dispose of the rest.

## ASSEMBLE HANDLEBAR

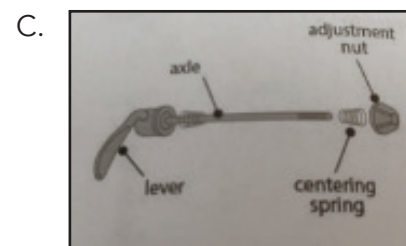
- Remove bolts and front cap of stem
- Slide handlebar into place
- Replace bolts, front cap of the stem and tighten
- Carefully position the handlebar and stem over the bicycle
- Ensure all cables align to each side of the bike without being kinked, twisted or bent.
- Align the handlebar, and tighten the headset bolt.



**NOTE: THE STEM SHOULD BE IN THE PROPER DIRECTION BEFORE ATTACHING THE HANDLEBAR.**

## INSTALL THE FRONT WHEEL

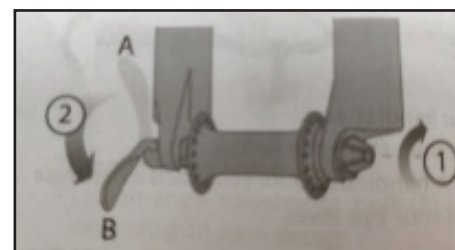
- Insert the front wheel into the fork
- Make sure that the wheel is seated and centered in the fork and the brake disc fits in between the brake linings.
- Lightly apply a thin layer of grease to the axle.
- Insert the axle through the wheel making sure the larger diameter of the spring(s) faces outward (see diagram C).



## QUICK-RELEASE BINDER

This binder is most commonly used to attach wheels to the frame and fork or tighten a seat post into a frame. Binders allow for a tool-free, quicker use than nuts and bolts but require knowledge of proper use.

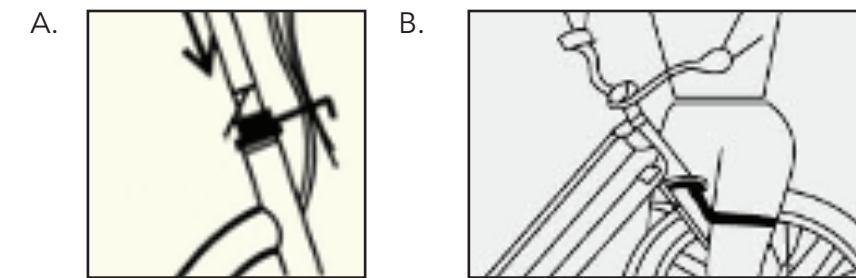
- Put the lever in an opened position (A)
- Tighten the adjustment nut (1) by small increments until you need considerable force to push (2) the lever to its closed position (B) with your fingers or palm.
- Test wheel attachment by lifting the front end of the bike and firmly hit downward on the front wheel with your palm. There should be no play in the connection.



### WARNING!

**IF THE FRONT WHEEL IS NOT FASTENED SECURELY, IT WILL CAUSE THE FRONT WHEEL TO COME LOOSE AND CAUSE AN ACCIDENT.**

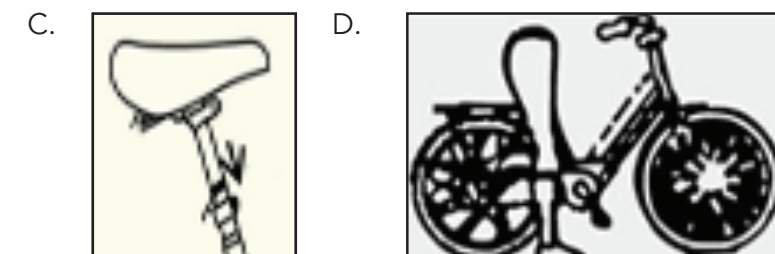
# ADJUSTING THE HANDLEBAR



- Inserted depth of vertical tube of the wheel should be no lower than minimum depth (red safety mark). The safety mark must be below the hexagonal nut (A).
- Stand in front of the wheel, clamp the front wheel with both legs and hold the hand-grip with both hands to adjust the angle degree between the cross tube of hand-grip and vehicle body (B).
- Screw down the fastening screw of the wheel core. The recommended torque should not be less than 18N.m.

# ADJUSTING THE SADDLE

- Inserted depth of saddle tube should be more than minimum depth of insert (safety mark is for reference of minimum depth) to ensure safety.
- Screw down clamping screw of saddle and saddle tube, recommended torque should be no less than 18N.m. (C)
- Loosen the saddle's clamping screw and put it into the saddle tube.
- Tighten the screw, insert the saddle tube into the vertical tube of frame; straddle the saddle to adjust the saddle's position, and then tighten to ensure you can ride comfortably. (D)



## UP /DOWN/TILT SADDLE ADJUSTMENT

The saddle is at the correct height if you can reach the down pedal with one heel when seated on the saddle, and the crank arms are parallel to the seat tube.

To check for correct saddle height:

1. Sit on the saddle, and place one heel on a pedal.
2. Rotate the crank until the pedal with your heel on it is in the down position, and the crank arm is parallel to the seat tube. Your leg should be completely straight and just touching the center of the pedal.

Some riders prefer to have the saddle nose tilted slightly up or down. Adjust the saddle tilt by loosening the saddle quick-release, tilting the saddle to the desired position, and re-tightening the saddle quick-release. Make sure it is tight enough so that you cannot move or jiggle the saddle. Small changes in saddle position can have a substantial effect on performance and comfort. Whenever changing your saddle position, make only one directional change at a time until you find the most comfortable position.

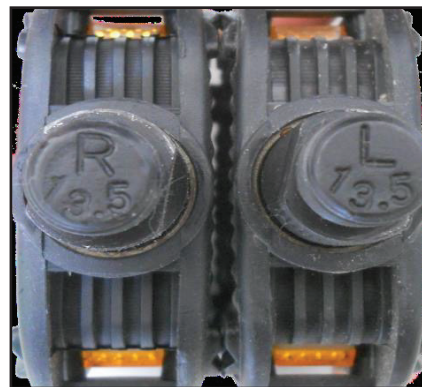
# ADJUSTING THE FRONT BRAKES

1. Insert an elbowed hex key into the screw port of the brake frame, turning the screw left to loosen and right to tighten. Turn to the left gently makes the brake a little loose.
2. Hold the brake tight with your left hand so that the brake is pressed against the brake pad (this holds the brake tight).
3. Then turn the elbowed hex key to the right of the brake until the brake is tight, then release the brake. The brake will automatically return, the brake is in the right direction, so that it will not wear.



# PEDAL INSTALLATION

Pedals are a pair with "R" & "L" (Picture 1): "R" for right, "L" for left. Tighten the pedals in the direction of the threads.



Picture 1



Right



Left

# SHIFTER/DERAILLEUR

## SHIFTER

- This E-bike is equipped with gears, that include:
- A rear sprocket cluster called a freewheel or cog set
  - A rear derailleur
  - One shifter
  - One control cable
  - One front sprocket
  - A drive chain



There are many different types of shifter mechanisms, each preferred for specific applications because of their ergonomic, performance and price characteristics. A downshift is a shift to a lower or slower gear, which makes it easier to pedal. An up-shift is a shift to a higher or faster gear, which makes it harder to pedal. For example, you can downshift to a lower gear to make pedalling easier on a hill. On the other hand, you may up-shift to a higher gear when you wish to go faster. Whether up-shifting or downshifting, the derailleur system requires that the drive chain is moving forward and is under at least some tension. A derailleur will shift only if you are pedalling forward.

**CAUTION: NEVER MOVE THE SHIFTER WHILE PEDALLING BACKWARD. DO NOT PEDAL BACKWARDS AFTER MOVING THE SHIFTER. EITHER OF THESE ACTIONS COULD JAM THE CHAIN AND CAUSE SEVERE DAMAGE TO THE E-BIKE.**

## DERAILLEUR

The derailleur system includes the front and rear derailleur, the shift levers, and the derailleur control cables, all of which must function correctly for smooth gear shifting to occur. The front and rear derailleurs are adjusted in the factory. You will need to inspect and adjust both before riding your E-Bike.

## ADJUSTING THE REAR DERAILLEUR

Shift the rear shifter to the highest number indicated, loosen the cable from the rear derailleur cable anchor bolt, and place the chain on the smallest sprocket. Adjust the high limit screw so that the guide pulley and the smallest sprocket line up vertically. Re-tighten the cable, pull out any slack and re-tighten the anchor bolt securely. When shifting through the gears, make sure that each gear changes quietly and without hesitation. It is necessary to use the barrel adjuster to fine-tune the cable tension by turning it in the direction you want the chain to go. For example, turning clockwise will loosen the cable tension and move the chain away from the wheel, while turning counter-clockwise will tighten cable tension and direct the chain to the wheel.



# PEDAL ASSIST SYSTEM (PAS)

This E-Bike has an electric pedal-assisted driving system. The pedal-assisted driving system consists of a driving unit, a battery, a controller, and various electronic components (harness wires, sensors and switches). It is essential to know that when the pedal assist system is on, the driving unit provides power only while you are pedalling. The amount of power supplied by the unit depends on your pedalling force and the assistance mode/level you set with the handlebar control unit at any time. When you stop pedalling, the pedal assist system will disengage. In all modes/levels, the pedal-assisted driving system reduces progressively. It cuts off as the bike reaches 25KM/h (15.5MPH), or sooner if you stop pedalling. The pedal-assisted driving system re-engages when speed drops below 25KM/H (15.5MPH) as long the pedals are turning.

**DO NOT USE PEDAL ASSIST AND THROTTLE AT THE SAME TIME.**

## POWERING ON

When the throttle or sensor is engaged (powering the motor), and the E-Bike is in motion, the LCD display indicates instantaneous line voltage as measured at the battery terminals-not the available power in the battery pack. The line voltage will wing out from a dead stop or going up a steep hill, the motor will be under a high load and may show a reduced number of LED bars. When the throttle is disengaged (i.e. no power to the motor due to the bicycle being stationary or coasting) the LCD display will indicate the battery pack's voltage. The voltage of the battery pack will rise when no load is on the motor. **The best indication of how much battery life is remaining is to check the LCD display monitor, after reaching cruising speed, on a flat straight road.**

By doing this, the battery voltage will stabilize and give a more accurate reading.

**NOTE: THE KEY IS ONLY USED FOR REMOVING AND INSERTING THE BATTERY (SEE PAGE 14).**

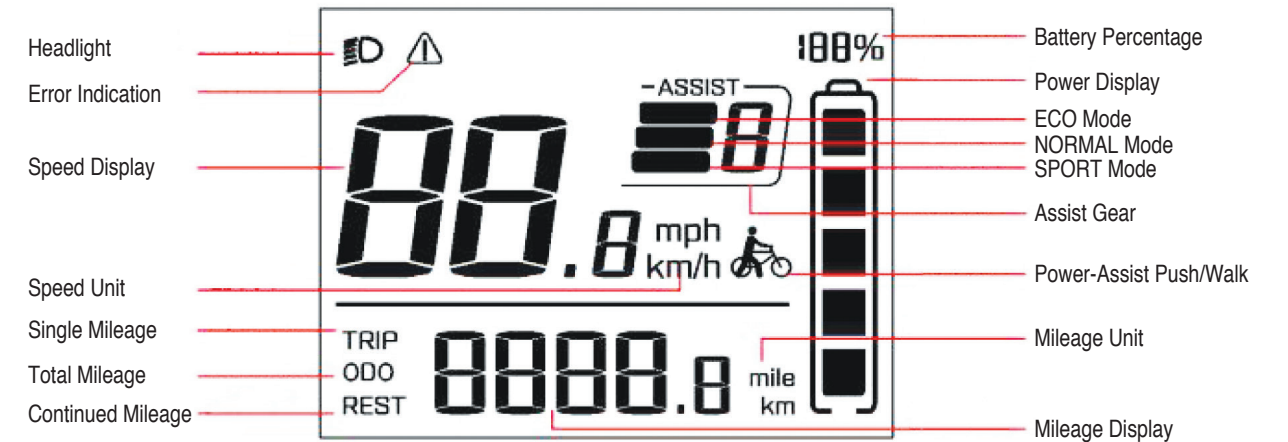
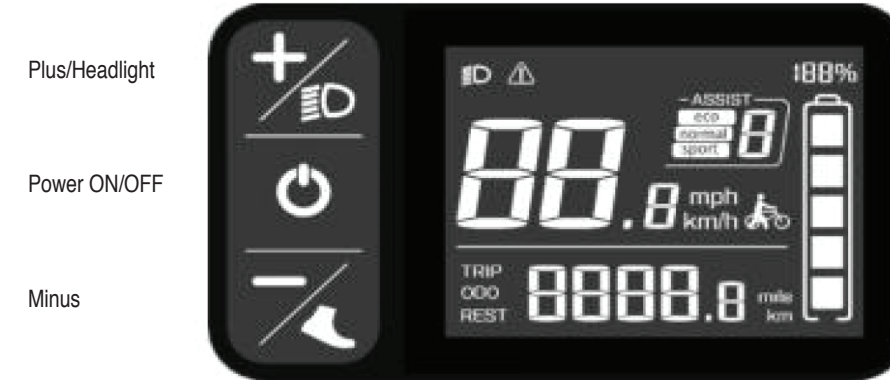
## THROTTLE

Your left hand will control the thumb throttle. Press the thumb throttle slowly to avoid a sudden rush of speed forward. The speed of the bike will increase as you press down on the thumb throttle. Release the thumb throttle and apply the brakes to stop your bike. You will control the speed of the bike by using both the thumb throttle and the brakes. Braking cuts the power to the motor.



**NOTE: THE MIDTOWN THUMB THROTTLE HAS A SAFETY FEATURE THAT ONLY ACTIVATES ONCE THE E-BIKE IS IN MOTION. THE THROTTLE WILL NOT ACTIVATE WHILE STATIONARY.**

# CB-03 LCD DISPLAY/OPERATION



There are three buttons that operate the LCD Display

1. Plus (UP)
2. Power ON/OFF (MODE)
3. Minus (DOWN)

In the following instructions, replace the Power button with the word "MODE," the Plus button with "UP," and the Minus button with the word "DOWN."

### POWER ON/OFF

Long press the MODE button. Note: The Display automatically turns off if the E-bike is idle for more than 5 minutes.

### DISPLAY INTERFACE

After turning on the Display it will default to show real-time speed, total mileage (km) and battery percentage. Short press the MODE button to cycle between total mileage (km), single mileage (km), and real-time voltage (reserve).

### POWER-ASSIST/PUSH

Press and hold the DOWN button. After 2 seconds, the E-Bike enters the state of electric assist (the display will show the Power-Assist Push symbol). By releasing the DOWN button, the E-bike will immediately stop power output and return to its previous state. Only use the Power-Assist/Push function when pushing/walking the E-bike. Do not use the Power-Assist Push function while riding.

### TURN ON/OFF THE HEADLIGHTS

Long press the UP button for 2 seconds to turn on the headlight (the display will show the Headlight symbol). To reduce the brightness of the back-light, turn on the headlights. Long press the UP button again for 2 seconds to turn off headlights and restore back-light brightness.

### PEDAL-ASSIST

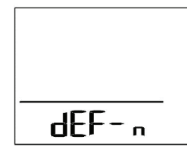
Short press the UP/DOWN button to select pedal assist and change the motor's output power. The default output power range of the display is Level 0-5. Level 0 stops the power output; Level 1 is the lowest power, and Level 5 is the highest power. Level 1 is the default.

### SINGLE MILEAGE RESET

After pressing the UP and MODE buttons simultaneously for more than 2 seconds, the display will reset to single mileage.

### RESET (Picture 1)

To reset the display to default factory settings, press the DOWN and MODE buttons simultaneously for more than 2 seconds.



Picture 1

### BATTERY POWER LEVELS (Picture 2)

There are five bars on the battery symbol that indicate battery capacity levels. When the battery capacity is high, the five segments will light up. When the battery capacity is low, the frame of the battery symbol will flash at a frequency of 1HZ prompting you to charge the battery immediately.

Bars	Capacity Range	Example
5 bars	80%≤SOC≤100%	
4 bars	60%≤SOC < 85%	
3 bars	40%≤SOC < 60%	
2 bars	20%≤SOC < 40%	
1 bar	5%≤SOC < 20%	
LOW	0%≤SOC < 5%	

Picture 2

**WARNING: DO NOT LET THE BATTERY LEVEL DROP BELOW 1 BAR FOR LONG PERIODS BEFORE CHARGING.**

**IMPORTANT: PLEASE READ PAGES 14,15 &17 FOR BATTERY CHARGING, MAINTENANCE AND STORAGE.**

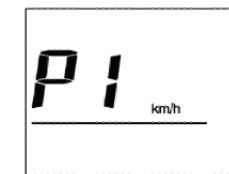
You can change or view the following on the LCD Display: unit, speed limit, wheel diameter, back light and sleep.

### ENTER/EXIT SETTING

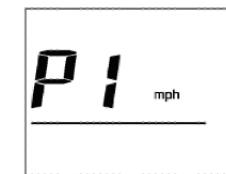
Press and hold the UP and DOWN keys simultaneously in the power-on state. The system enters the setting state. Long press the "MODE" button for 2 seconds to exit the setting state; if there is no operation for 30 seconds, the Display will return to normal riding status. In the setting state, the parameter to be set will flash. Press the "UP/DOWN" key to adjust the parameter setting value, and short press the MODE button to switch the setting items. Long press the "MODE" button to save and exit the setting state.

### METRIC OR STANDARD SETTING (Picture 3)

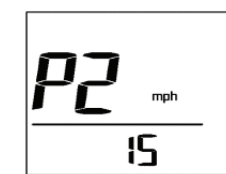
When the speed position displays P1, press "UP/DOWN" to choose mph or km/h on the Display. After the setting is complete, short press the "MODE button" (<0.3 seconds) to enter the speed limit setting.



Picture 3



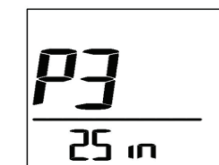
Picture 4



### SETTING THE SPEED LIMIT (Picture 4)

When the speed position displays P2, the mileage position shows the speed limit value. The minimum is 12km/h, and the maximum is 32km/h. After setting the speed limit value, short press the MODE button (<0.3 seconds) to enter the wheel diameter setting.

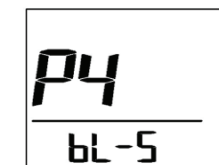
**WARNING: CONSULT YOUR LOCAL BY-LAWS REGARDING SPEED LIMITS OF ELECTRIC-POWERED BICYCLES. ALWAYS RIDE WITH CAUTION AND WITHIN THE SPEED LIMITS.**



Picture 5

### WHEEL DIAMETER SETTING (Picture 5)

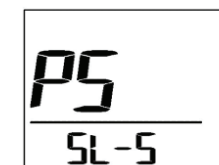
When the speed position displays P3, the unit is inch. The wrong wheel diameter selection can cause abnormal speed. After the setting is complete, short press the MODE button (<0.3 seconds) to enter the back-light brightness setting.



Picture 6

### BACK-LIGHT BRIGHTNESS (Picture 6)

When the speed position displays P4, and the middle position of the UP/DOWN level displays 1-5; 1 is the darkest, and 5 is the brightest. The default back-light brightness of the display is 1. After the setting is complete, short press the MODE button (<0.3 seconds) to enter the automatic shutdown time setting.



Picture 7

### AUTO SHUTDOWN SETTING (Picture 7)

When the speed position displays P5, press the "UP/DOWN" button to display 1-9, representing the automatic shutdown time (unit: minutes). After the setting is complete, short press the "MODE button" (<0.3 seconds) to enter the level setting. The default automatic shutdown time of the display is 5 minutes.

## ERROR CODE DISPLAY

The display will show an ERROR code to indicate a malfunction. Please refer to The ERROR CODE TABLE below.

# ERROR CODE TABLE

CODE	DEFINITION/SIGNIFIES
03	BRAKE PROBLEM
04	THROTTLE PROBLEM
06	LOW VOLTAGE PROBLEM
07	OVER VOLTAGE PROBLEM
08	MOTOR HALL PROBLEM
09	MOTOR PHASE LINE PROBLEM
10	MOTOR HAS REACHED THE HIGH TEMPERATURE POINT
11	MOTOR TEMPERATURE SENSOR PROBLEM
12	CURRENT SENSOR PROBLEM
15	CONTROLLER TEMPERATURE SENSOR PROBLEM
21	SPEED SENSOR PROBLEM
30	COMMUNICATION PROBLEM

## SERIAL NUMBER

Your E-Bike's Serial Number can be found on the front stem tube. Please take note of this number and record it on page 20 of this manual.



# RIDING SAFELY

- Once you have completed the initial battery charge, you are ready to ride.
- **It is your responsibility to know and abide by all local laws that govern and restrict electric bicycle use.**
- Before riding, familiarize yourself with all the different parts of the e-bike and always make sure that all the electrical components are in good condition and working order. i.e. battery power level, tire pressure and brakes.

Hold onto the handlebars with both hands. Assume a well-balanced position on the E-Bike and push off with your foot. Your left hand will control the throttle. Press down on the thumb throttle slowly to avoid a sudden rush of speed forward. The speed of the E-Bike will increase as you press down on the throttle. Release the throttle and apply the brakes to stop your E-Bike. You will control the speed of the E-Bike by using both the throttle and the brakes. Squeezing the brake handles cuts power to the throttle.

## RIDING ON THE ROAD

- Obey the same road laws as all other road vehicles, including yielding to pedestrians and stopping at red lights and stop signs.
- Ride predictably and in a straight line. Never ride against traffic.
- Use correct hand signals to indicate turning or stopping.
- Ride defensively. To other road users, you may be hard to see.
- Concentrate on the path ahead. Avoid potholes, gravel, wet road markings, oil, curbs, speed bumps, drain grates and other obstacles.
- Expect the unexpected such as opening car doors or cars backing out of concealed driveways.
- Be very careful at intersections and when preparing to pass other vehicles.
- Familiarize yourself with all the bike's features: practice braking and the use of horns.
- Don't carry packages or passengers that will interfere with your visibility or control of the bike. Don't use items that may restrict your hearing.
- Maintain a comfortable stopping distance from all other riders, vehicles and objects. Safe braking distance is subject to weather conditions.

## RIDING IN WET CONDITIONS

- Brake earlier; it will take a longer distance to stop.
- Decrease your riding speed, avoid sudden braking, and take corners with caution.
- Be more visible on the road by wearing reflective clothing and using safety lights.
- The local standard weight is 90kg (including the rider weight); do not overload.
- Potholes and slippery surfaces such as line markings, train tracks and wood become more hazardous when wet.

## NIGHT RIDING

- Ensure that the front lights (if equipped) are on.
- Wear reflective and light coloured clothing.
- Ride at night only if necessary. Slow down and use familiar roads with street lighting.

## PARKING

- Shut off the power switch after you get off to prevent an unintentional abrupt start-up of the bicycle
- Do not start-up E-Bike frequently while resting to ensure the battery, motor, and electric switch's service life.
- Shut off the power after parking and remove the key.
- When the E-Bike power is on, and a person does not sit on the saddle: do not press down on the throttle; otherwise, it will cause the E-Bike to rush forward.



# BATTERY CHARGING

**NOTE: YOU CAN CHARGE THE BATTERY WHILE IT'S ON THE BIKE (DURING RIDING SEASON) OR REMOVE THE BATTERY AND CHARGE IT INDOORS (IN COLDER WEATHER/WINTER MONTHS).**

- Always be sure to turn the bike power switch to "OFF" after each use. If you leave the power switch in the "ON" position or your product has not been charged for an extended period, the battery may reach a stage when it no longer holds a charge.
- Do not use other brands to charge this Slane battery.
- Do not use this Slane battery for a different brand of E-Bike.
- The charger has a 110V circuit; please do not dismantle.
- When the charger is being used or stored, prevent liquid or metal from entering the charger. The charger should be free from falling over to avoid injury.
- When using the charger, it should be left unobstructed.
- The charger is for indoor use only. When in use, keep it in a dry, well-ventilated area.
- If you detect an unusual odour or the temperature is too high during charging, stop charging immediately and take it back to Your Slane E-bike Dealer for inspection/repair.

## WARNING!

**WHEN THE BATTERY IS BEING REMOVED FOR CHARGING PLEASE NOTE THAT THE ELECTRODE "+" "-" SHOULD NEVER BE TOUCHED BY HANDS (ESPECIALLY WET HANDS). THE ELECTRODES SHOULD NEVER TO BE TOUCHED BY OTHER METAL OBJECTS**

## UNLOCKING, REMOVING & INSERTING THE BATTERY

- To remove the battery: turn and hold the key to the unlock position to release the battery from the frame (Picture 1).
- Grasp the top of the battery and gently pull the battery away from the frame. Carefully lift it out of its base (Picture 2).
- To insert the battery: make sure the key is in the unlock position, carefully insert the battery into the base and push the top of the battery toward the frame until it clicks into place.

**NOTE: THE KEY IS ONLY REQUIRED FOR REMOVING/INSERTING/LOCKING THE BATTERY. KEEP YOUR SPARE KEYS IN A SAFE PLACE.**



Picture 1



Picture 2



Battery removed from the frame

# BATTERY CHARGING

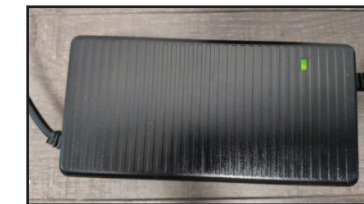


- Remove (rotate to open) rubber stopper in the charging hole. Plug the output plug of the charger into the socket of the battery.
- Plug the power input plug (110-220V) into a household power socket to start the charging process.
- After charging is finished, pull out the power input plug (110-220V), then pull out the output plug.

**WHEN CHARGING, ALWAYS KEEP THE BATTERY IN AN UPRIGHT POSITION**



**Red Light Indicator: Charging**



**Green Light Indicator: Charged**

**WARNING! USE THE ATTACHED CABLES OF THE BATTERY CHARGER FOR THE BATTERY-CHARGER ONLY!**

## DURATION OF BATTERY CHARGING

- When the input and output terminal are connected, the charger's red indicator light will light up to show that the power is connected.
- It will take 5-8 hours to charge the battery for the first time. When the charger's indicator light turns green, showing that the battery is fully charged, it will switch to trickle charge mode to prevent over-charging. It takes 2-8 hours for regular charging.
- This charger has a protection device for over-charging. Long-time charging should not be more than 24 hours because it will affect the lifetime of the battery. Check the battery pack before using it for the first time.
- The charger doesn't need to be grounded.
- During charging, place the charger in a safe location out of the reach of children
- The battery pack is supplied partially charged. To ensure full battery pack capacity, completely charge the battery pack before using it for the first time.
- Retailers should charge the batteries as soon as receiving the E-Bike from the supplier.
- Even with proper care, rechargeable batteries do not last forever. Every time a battery is discharged and subsequently recharged, its relative capacity decreases by a small percentage. You can maximize the life of your battery by following the instructions in this manual **(see PAGE 19)**.
- Fully charge the battery once you receive it for the full recommended charge times.

### Lithium battery recommended charging time: 6-8 hours.

- For a complete, 100% charge, leave the battery on the charger for one full hour after the charger indicator light turns green.
- Never charge batteries for longer than 24 hours.
- Li-ion batteries do not have a "memory." Partial discharge/charge cycles will not harm the battery's capacity or performance.

# MAINTENANCE/SERVICE

Technological advances have made the E-Bike and the components more complex than ever before. The pace of innovation is increasing. This ongoing evolution makes it impossible for this manual to provide all the information required to properly repair and maintain your E-Bike. To help minimize the chances of an accident and possible injury, you must have any repair or maintenance performed by your dealer, not explicitly described in this manual.

Your maintenance requirements are determined by everything from your riding style to geographic location. Consult your dealer for help in determining your maintenance requirements. How much of your E-Bike service and maintenance you can do yourself depends upon your level of skill, experience, and special tool availability.

All other service maintenance and repair should be performed in a properly equipped facility by a qualified E-Bike mechanic using the correct tools and procedures specified by the manufacturer.

Your E-Bike will last longer and work better if you break it in before riding it hard. Control cables and wheel spokes may stretch or sear when a new E-Bike is first used and may require readjustment by your dealer. Your mechanical safety check will help you identify some things that need readjustment. Even if everything seems fine, it is best to take your E-Bike back to the dealer 30 days after purchase for a checkup. Another way to judge when it's time for the first checkup is to service the E-Bike after 10 to 15 hours of use. If you think something is wrong with the E-Bike, take it to your dealer before riding it again.

**WARNING**  
**MANY E-BIKE SERVICE AND REPAIR TASKS REQUIRE KNOWLEDGE AND TOOLS. DO NOT BEGIN ANY ADJUSTMENTS OR SERVICE ON YOUR E-BIKE IF YOU HAVE THE SLIGHTEST DOUBT ABOUT YOUR ABILITY TO COMPLETE THEM CORRECTLY. IMPROPER ADJUSTMENT OR SERVICE MAY DAMAGE THE E-BIKE OR CAUSE AN ACCIDENT RESULTING IN SEVERE INJURY OR DEATH.**

For your safety and enjoyment, and to ensure a longer life for your E-Bike, inspect and maintain your E-Bike regularly. The proper condition and function of these systems are critical. You must check specific systems and components before every ride.

## BEFORE EVERY RIDE

- Perform a mechanical safety check to make sure all components are in good working order.

## AFTER EVERY LONG OR HARD RIDE, IF THE E-BIKE IS EXPOSED TO WATER OR GRIT, OR AT LEAST EVERY 100 MILES

- Clean the E-Bike.
- Lightly oil the chain, freewheel cogs and rear derailleur pulley bushings. Wipe off excess oil. Lubrication is a function of climate. Talk to your dealer about the best lubricants and the recommended lubrication frequency for your area.

## AFTER EVERY LONG OR HARD RIDE, OR EVERY 10 TO 20 HRS OF RIDING

- Squeeze the front brake and rock the E-Bike forward and back. Does everything feel solid? If you feel a clunk with each forward or backward movement of the E-Bike, you probably have a loose headset. Take your E-bike to your Dealer for inspection.
- Lift the front wheel off the ground and swing it from the side. Does it feel smooth? If you feel any binding or roughness in the steering, you may have a tight headset. Take your E-bike to your Dealer for inspection.
- Make sure all bolts, nuts and mounting hardware are tight.

# CLEANING YOUR E-BIKE

To avoid damage or accidents caused by wet inner electrical parts, **do not wash your E-bike with a high-pressure washer.** Clean off dirt on any painted metal or plastic parts with a damp cloth using a mild cleaning product. Dry off immediately. Use lubrication oil to maintain any metal parts of the bike. **Never apply oil to the front or back brake rubber, hand brake levers, rim, tires, battery or controller.**

# BATTERY STORAGE

## STORING YOUR BATTERY FOR AN EXTENDED PERIOD

- Charge your battery every 30-60 days to avoid capacity loss. Batteries will slowly self-discharge when left unused for an extended period. Your battery lifespan and capacity will be permanently reduced if you allow the battery cells to reach a critically low voltage.
- Always disconnect your charger from the wall outlet and battery before storing the battery.
- Avoid storing your batteries in extreme hot or cold temperatures. Do not store outdoors.
- Batteries should be kept in a cool, dry place. Do not allow batteries to accumulate condensation; this could cause shorting or corrosion.
- The recommended storage temperature for Li-ion batteries is between 32-77°F (0-25°C).
- Avoid exposing the battery to extreme heat (104°F or higher) for long periods.

**Q: Is it normal that the batteries get warm when recharging?**

**A:** Yes, the batteries will become warm to the touch during the recharging process due to increased internal resistance and less energy conversion efficiency from electric energy to chemical energy.

**Q: How long will my batteries last before needing replacement?**

**A:** Average battery life depends on use and conditions. Even with proper care, rechargeable batteries do not last forever. Conservatively, an SLA battery will come to the end of its useful after ~350 full discharge charge cycles. In contrast, LI-ION batteries will last more than 800 cycles. A partial charge/discharge counts fractionally against those numbers; running the battery down halfway then recharging it completely uses up one half of a charge cycle. "End of useful life" refers to the point at which a battery can no longer supply 60% of its original rated capacity in ampere-hours. After this point, the aging process will accelerate; the battery needs replacing.

**WARNING**  
**LIKE ANY MECHANICAL DEVICE, AN E-BIKE AND ITS COMPONENTS ARE SUBJECT TO WEAR AND STRESS. DIFFERENT MATERIALS AND MECHANISMS WEAR AT DIFFERENT RATES AND HAVE DIFFERENT LIFE CYCLES. ONCE A PART IS NO LONGER WORKING OR DAMAGED, IT CAN SUDDENLY AND CATASTROPHICALLY FAIL, CAUSING SEVERE INJURY OR DEATH TO THE RIDER. SCRATCHES, CRACKS, FRAYING AND DISCOLORATION ARE SIGNS OF STRESS-CAUSED WEAR AND INDICATE THAT A PART REQUIRES REPLACING.**

# FLAT TIRE

If you get a flat tire, remove the wheel and depress the tire valve to let all the air out of the tube. Remove one bead of the tire from the rim by grasping the tire at a point opposite the valve stem with both hands lifting and peeling one side of the tire off the rim. If the bead is too tight to unseat it with your hands, use tire levers to lift the bead carefully over the tire rim. Push the valve stem through the wheel rim. Remove the inner tube. Carefully check the outside and inside of the tire for the puncture cause and remove it. If the tire has a cut, line the inside of the tire in the area of the cut with tape, a spare patch, a piece of an inner tube, or a dollar bill-whatever will keep the cut from pinching the inner tube. Patch the tube (follow the instructions in your patch kit) or use a new tube. Reinstall the tire and tube. Slip one tire bead over the rim. Insert the tube valve through its hole in the rim, feed the tube carefully into the tire's cavity. Inflate the tube just enough to give it some shape. Start at the valve stem, use your thumbs to seat the tire bead inside the rim, and work your way around both sides of the wheel until the entire bead is seated in the rim. Be careful not to pinch the tube between the tire bead and the wheel rim. If you have trouble getting the last few inches of bead over the edge of the rim with thumb pressure, use a tire lever and be careful not to pinch the tube.

## CAUTION

Using any tool other than a tire lever will likely puncture the tube. Check to make sure the tire is evenly seated around both sides of the rim and that the tube is inside the tire beads. Push the valve stem into the tire to ensure that its base is seated within the tire's beads. Inflate the tube slowly to the recommended pressure, all the while checking to make sure that the tire beads stay seated in the rim. Replace the valve cap, and install the wheel onto the E-Bike.

### WARNING:

**RIDING YOUR E-BIKE WITH A FLAT OR UNDER INFLATED TIRE CAN DAMAGE THE TIRE, TUBE, AND E-BIKE AND CAUSE YOU TO LOSE CONTROL AND FALL.**

# BROKEN SPOKE

A wheel with a loose or broken spoke is much weaker than a fully tensioned wheel. If you break a spoke while riding, you will have to ride much more slowly and carefully because the weakened wheel could break additional spokes and become useless.

### WARNING:

**A BROKEN SPOKE SERIOUSLY WEAKENS THE WHEEL AND MAY CAUSE IT TO WOBBLE, STRIKING THE BRAKES OR THE FRAME. RIDING WITH A BROKEN SPOKE CAN CAUSE YOU TO LOSE CONTROL AND FALL.**

Twist the broken spoke around the spoke nest; it will keep it from flopping around and getting caught between the wheel and the frame. Spin the wheel to see if the rim clears the brake pads. If the wheel does not turn, try turning the brake cable adjusting barrel(s) clockwise to slacken the cable and open up the brakes. If the wheel still won't turn, open the brake's quick release and secure any loose as best you can. Walk the E-Bike, or if you must, ride it with extreme caution because you now have only one working brake.

# POWER-SAVING TIPS

- The life of the battery depends on using it correctly.
- Use Pedal-Assist when riding uphill.
- Charge your battery promptly and at regular intervals if you don't ride your E-bike for long periods.
- Press down on the throttle slowly; do not press it too quickly when you speed up.
- In general, riding at a consistent speed of 15-18km/h will save the most power.
- Avoid excessive braking when you ride your E-bike.

# TROUBLE-SHOOTING

	Analysis of Malfunction	Solution
E-Bike won't start	<ol style="list-style-type: none"> <li>1. Low voltage of battery</li> <li>2. Bad connection between battery case and socket</li> <li>3. Power lock switch is not in the correct position</li> </ol>	<ol style="list-style-type: none"> <li>1. Charge the battery</li> <li>2. Clean any dirt off the connection points (*)</li> <li>3. Turn to correct position</li> </ol>
Fails to adjust the speed or max speed is relatively slow	<ol style="list-style-type: none"> <li>1. Low voltage of battery</li> <li>2. The throttle is loose</li> <li>3. The throttle or speed sensor is damaged</li> </ol>	<ol style="list-style-type: none"> <li>1. Charge the battery</li> <li>2. Tighten the throttle</li> <li>3. Take in to qualified technician (*)</li> </ol>
Motor doesn't work after switching on	<ol style="list-style-type: none"> <li>1. Wire connection is loose</li> <li>2. Connectors of motor wire connection are loose or damaged</li> </ol>	<ol style="list-style-type: none"> <li>1. Re-connect</li> <li>2. Take in to qualified technician (*)</li> </ol>
Not getting enough mileage after a charge	<ol style="list-style-type: none"> <li>1. The tire's air pressure is low</li> <li>2. Not enough charging or charger fault</li> <li>3. Too much up slope, heavy dead wind, braking too much, carrying big load</li> <li>4. Battery has been discharged completely for long period of time, not charged in time, the battery is aging or damaged</li> <li>5. Charging during low temperature/freezing can affect the mileage</li> </ol>	<ol style="list-style-type: none"> <li>1. Inflate tire</li> <li>2. Fully charge or change the charger</li> <li>3. Use pedal-assist more often</li> <li>4. Change the battery</li> <li>5. Charge the battery indoors</li> </ol>
Charger doesn't charge	<ol style="list-style-type: none"> <li>1. Socket of charger falls off or is loose between plug and socket</li> <li>2. Burnt fuse in battery case</li> </ol>	<ol style="list-style-type: none"> <li>1. Tighten socket and connector</li> <li>2. Change the fuse</li> </ol>

**\*Consult your dealer as needed and always use approved replacement parts, especially the safety-critical components.**

# DEALER INFO AND PURCHASE RECORD

**Fill in immediately and retain as a record of your purchase.  
Retain your sales receipt for any possible warranty claims\***

Your name: \_\_\_\_\_

Address: \_\_\_\_\_

Date purchased: \_\_\_\_\_

Place of purchase: \_\_\_\_\_

Model & brand information: \_\_\_\_\_

Wheel size: \_\_\_\_\_

Color: \_\_\_\_\_

Serial number: \_\_\_\_\_

## WARRANTY POLICY\*

PARTS DESCRIPTION	WARRANTY	DESCRIPTION OF PROBLEM
Motor	1 Year	Not Working
Controller	1 Year	Functional Failure
Charger	1 Year	Functional Failure
Lithium-Ion Battery	1 Year	Not Working
Handlebar, Frame, Front Fork, Steering Column, Rear Flat Fork	1 Year	Broken

**\*Note: The warranty starts on the purchase date of the E-bike.  
The warranty covers quality problems and or functional failures.  
The warranty does NOT cover tires, tubes, chains or spokes.  
The warranty does NOT cover misuse or accidents caused by the rider.  
WARRANTY IS NOT TRANSFERABLE**

**WARRANTY VOIDED if used for commercial purposes (i.e. making deliveries)**

THANK YOU FOR CHOOSING



HAVE FUN AND RIDE SAFE!