

# LONG RANGE E-BIKE EXPERT

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happyrunsports.com

## Tank G100 / Tank G100 Pro ELECTRIC BIKE'S MANUAL



▶ Unbox & Assembly Video

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About Manual

This manual contains details of the product, information on its operation and maintenance, and other helpful tips for owners. Read it carefully and familiarize yourself with the Happyrun Bike before using it to ensure safe use, reduce the risk of damage and premature wear, and prevent accidents. Be sure to retain this manual as your convenient Happyrun Bike information source.

This manual contains many Warnings and Cautions concerning safe operation, and consequences if proper setup, operation, and maintenance guidelines are not followed. All information in this manual should be carefully reviewed.

**NOTICE**

Initial assembly and adjustment of your Happyrun e-bike may be challenging and should be assembled with two people. Pay special attention to areas marked by this Caution Symbol and all information in this manual beginning with NOTICE.

Because it is impossible to anticipate every situation or condition which can occur while riding, this manual makes no representations about the safe use of our bicycles under all conditions. There are risks associated with the use of any bicycle which cannot be predicted or avoided, and which are the sole responsibility of the rider. You should keep this manual, along with any other documents that were included with your bicycle, for future reference, however all content in this manual is subject to change or withdrawal without notice. Visit happyrunsports.com to download the latest version. Assembly and First adjustment of your Happyrun Bike requires special tools and skills, and it is recommend-ed that this be performed by a trained bicycle mechanic if possible.

\*The recommended minimum rider age is 16 and over, and the maximum rider age is 70 and under. Any rider who cannot sit comfortably on an e-bike should not attempt to ride it.

Take down your serial numbers !

Go to page 9 to find your serial numbers

Bike frame number

Motor serial number

IMPORTANT SAFETY NOTICE-READ THIS MANUAL BEFORE OPERATION

Before the operation of your new Happyrun e-bike, it is crucial for your safety and per the manufacturer's requirement, that you thoroughly read and understand this instruction manual.

This manual contains vital information on the operation, maintenance, storage, and comprehensive safety procedures for your e-bike. Failure to follow instructions and heed warnings in this manual may lead to serious &life-threatening accidents, including but not limited to falls, collisions, electrical shock, or even Pre.

Ensure to consult this manual, familiarize yourself with the features and mechanisms of your particular Happyrun e-bike model, and strictly adhere to all safety advice before and during the use of your Happyrun e-bike.

For any questions, ambiguities, or further assistance, please contact Happyrun customer service. Prioritize your safety and the longevity of your Happyrun e-bike - take the time to read this manual in detail.

Important Safety Notice

 **NOTICE:**  
When using this product, basic precautions should always be followed, including the following:

- a)Read all the instructions before using the product.
- b)To reduce the risk of injury, close supervision is necessary when the product is used for children.
- c)Do not put fingers or hands into the product.
- d)Do not use this product if the flexible power cord or output cable is frayed, has broken insulation, or any other signs of damage.
- e)Do not use this product if the flexible power cord or output cable is frayed, has broken insulation, or any other signs of damage.

f)For all equipment, the instructions shall indicate "This equipment is not intended to be used at ambient temperatures less than 45°C (113°F) or above ambient temperatures of -10°C(14°F): "The blanks are to be labeled with the manufacturer's specified ambient temperature ratings.

g)For all equipment, the instructions shall indicate The battery is intended to be charged when the ambient temperature is between 0°C(32°F)and 40 °C(104°F). Never charge the battery when ambient temperatures are outside this range."The blanks are to be pulled in with the manufacturer's specified.

Safety Information  
Avertissement - Risque d'incendie

**Battery Care and Charging:** proper use, charging, and maintenance of the bike's Lithium-Ion battery can lead to a risk of Pre. Never use a charger other than the one provided with your Happyrun e-bike. Always charge the battery in a well-ventilated area away from Bammabke materials.

**Overheating:** Overheating can cause the battery and/or motor to become a hazard. Avoid riding your Happynun e-bike in extremely hot conditions. Stop and allow the bike to cool if it shows signs of overheating.

**Modifications:** Making unauthorized changes to the bike, including the battery electronics, can pose a risk of Pre. Please refrain from making.

RISK OF ELECTRIC SHOCK

**Water Exposure:** Exposure to water can damage the electric elements of your e-bike and may lead to electric shock. Avoid riding in deep water or in heavy rain.

**Maintenance & Repairs:** Never attempt to repair, manipulate, or remove the battery motor, or any other electrical component on your own. Always consult a professional or contact Happyrun customer service.

IMPORTANT SAFETY NOTICE -READ THIS MANUAL BEFORE OPERATION

RISK OF INJURY:

Road Safety: Riding an e-bike, comes with inherent risks. Always adhere to traffic laws, and be aware of your surroundings to avoid collisions and accidents.

Health and Physical Limitations: If you have any health conditions that may be affected by a sudden change in speed or from physical activity, please consult a doctor before use. Those recovering from injury or with mobility issues should take extra caution.

Loading: Overloading the bike surpassing the stated payload limit, can make the bike unstable and increase the risk of damage and accidents.

Please thoroughly read and understand this safety information. Using your Happyrun e-bike responsibly, and adhering to the above warnings and instructions, will allow for a safer, more enjoyable riding experience. Remember, your safety is our primary concern.

SAVE THESE INSTRUCTIONS

The Industry Standard of Long-range E-bike

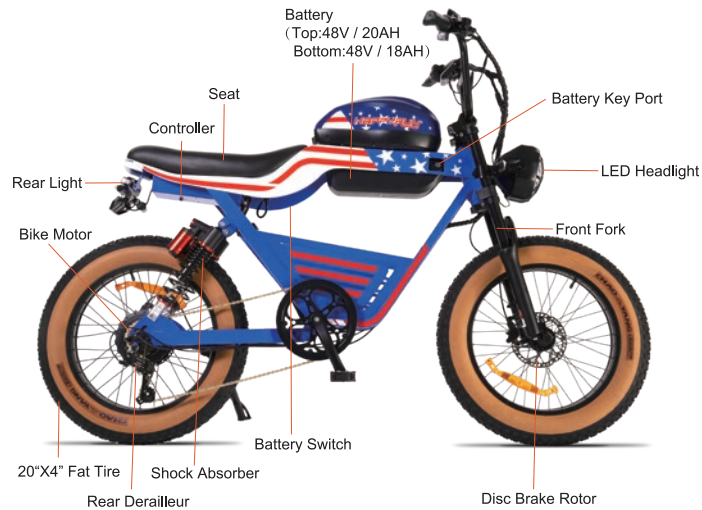
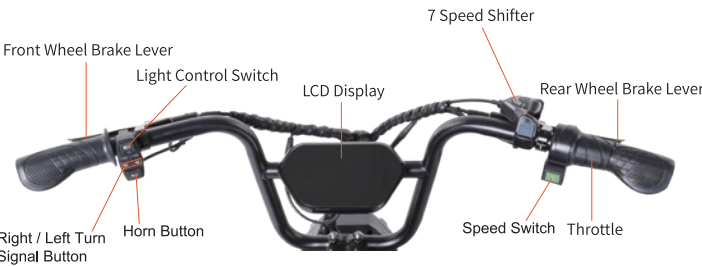
◆ After Bike Assembly

An e-bike that travels more than 60 miles on a paved road at an average speed of 15 mph with a gradient of is called along-range e-bike.

◆ Description of the definition

- The constant need to recharge e-bikes is the biggest pain point for e-bike enthusiasts, who hope that a single charge can cover a week of travel.
- Their average ride frequency is 5 days a week, with an average mileage of 10.48 miles per ride.
- So the weekly mileage for e-bike enthusiasts is 52.4 miles.
- Combined with some other factors in riding, Happyrun believes that an e-bike that can reach 60 miles on a single charge is an authentic long-range e-bike.

Bike Specification



A- Total Length	68"
B- Handlebar Height	47"
C- Wheelbase	45"
D- Seat height	33"
E- Wheel Diameter	24"

Model Number	Tank G100	Bike Frame	High-strength Carbon Steel Frame
Dual Battery	Top: 48V / 20AH Lithium Battery ; Bottom: 48V / 18AH Lithium Battery	Pedal	Alloy Pedals With Reflectors
Motor	1000W (Peak Motor Power: 2000W)	Brake lever	Aluminum Alloy Comfort Grip Levers With Motor Cutoff Switch
Top Speed	1 To 5 Speeds Up To 28+ MPH	Taillight	Integrated Taillight
Riding Range	85+ Miles	Turn Signal	Front and Rear Sequential Turn Signal Lights
Brake	Hydraulic Brakes	Headlight	160 Lumens LED Light
Suspensions	Full Suspensions	Charger	2A Charger
Torque	95N.m	Recommended / Seat Height	5'3"-6'5" / 33"
Display	Large LED Display	Total Payload	400LB Capacity
Front Fork	Aluminum Alloy Front Fork	Working Temp.	14°F ~ 104°F (-10°C ~ 40°C)
Tire	Premium 20 x 4 inch Road Tires	Storage Temp.	-4°F ~ 113°F (-20°C ~ 45°C)
Throttle	Half Twist Throttle	Water Proof Grade	IP54



Model Number	Tank G100 Pro	Bike Frame	High-strength Carbon Steel Frame
Dual Battery	Top: 72V / 18AH Lithium Battery; Bottom: 72V / 18AH Lithium Battery	Pedal	Alloy Pedals With Reflectors
Motor	72V 3000W (Peak Motor Power: 4000W)	Brake lever	Aluminum Alloy Comfort Grip Levers
Top Speed	1 To 5 Speeds Up To 28+++ MPH	Taillight	Integrated Taillight
Riding Range	78+ Miles	Turn Signal	Front and Rear Sequential Turn Signal Lights
Brake	Power-off Hydraulic Brake	Headlight	160 Lumens LED Light
Brake disc	Front 180mm, Rear 203mm	Charger	2A Charger
Suspensions	Full Suspensions	Recommended / Seat Height	5'3"-6'5" / 33"
Torque	120 N.m	Total Payload	400LB Capacity
Display	LED Screen with NFC Unlocking Function	Working Temp.	14°F ~ 104°F (-10°C ~ 40°C)
Front Fork	Upgraded Aluminum Alloy Front Fork	Storage Temp.	-4°F ~ 113°F (-20°C ~ 45°C)
Tire	Premium 20*4.0 Road Tires	Water Proof Grade	IP54
Throttle	Half Twist Throttle	Weight	72 kg (Including Dual Batteries)

## Assembly Instructions

### ◆ Handlebar Installation(4mm Hex Wrench)

Step 1: Loosen the bolts on your bike stem.

Step 2: Center your handlebars and rotate them with align to the marking pointed to in the below image.



Step 3: Tighten bolts to the handlebar stem, but don't tighten completely as you may want to further adjust the angle later to align more precisely. Test the positioning, and adjust the handlebar to your preferred angle. After determining the best position, completely tighten all the bolts on the stem.



#### ⚠ NOTICE:

In addition to the angle, the height of the handlebar can be adjusted by adding or removing the headset spacers if needed. For those without experience, we recommend having a professional make such adjustments for safety reasons.

### ◆ Front Wheel Installation (Tank G100)

Step 1: Please take out the brake disc and fix it on the front wheel with 6 screws.



Step 2: Loosen the front wheel nuts.



Step 3: Insert the front wheel in between the front fork on the bike. Be sure the fork is resting on the outside of the axle.



### ◆ Front Wheel Installation (Tank G100 Pro)

Step 1: Take out the brake disc and secure it to the front wheel using the 6 screws.



Step 2: Loosen the 4 hex bolts on both sides of the front fork with a hex wrench. Note: Do not remove the bolts entirely, just loosen them.

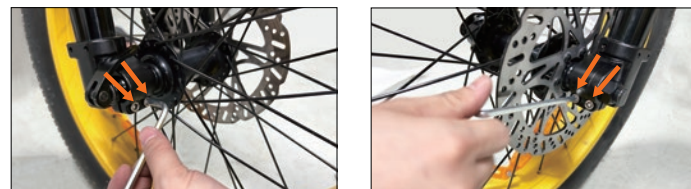
Step 3: Remove the nut from one end of the thru-axle. Align the holes of the front wheel hub and the front fork, then insert the thru-axle completely through these holes.



Step 4: Reattach the nut to the thru-axle and tighten it securely with a wrench. Make sure to tighten the nut fully. Then, tighten the adjustable lever on the other side and fold it back.



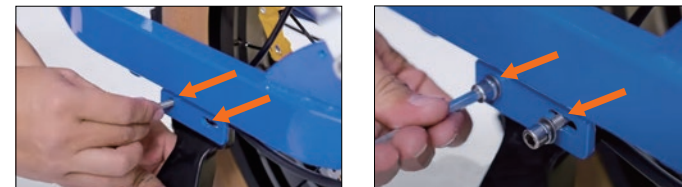
Step 5: Finally, retighten the 4 hex bolts on both sides of the front fork with a hex wrench.



**⚠ NOTICE:** Ensure all screws and bolts are securely tightened.

### ◆ Kickstand Installation

Step 1: Use bolts to secure the kickstand to the bicycle, screw it in by hand as far as possible, and then attach the nuts. Finally, use the provided hex wrench to fully tighten them securely.



### ◆ Rear Fender Installation

Step 1: Secure one side of the rear fender bracket to the bike using the provided screws. Tighten them securely with the supplied hex wrench.



Step 2: Attach the fender to the other side of the fender bracket using screws, and tighten them securely with the hex wrench.

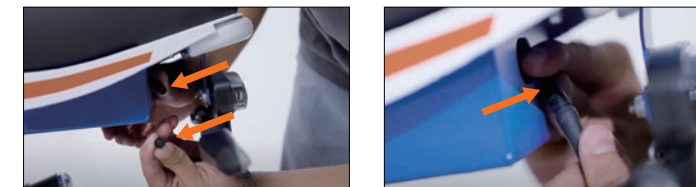


### ◆ Tail Lights Installation

Step 1: Insert the bolts on the integrated taillight through the mounting holes at the rear of the bike. Once inserted, hand-tighten the nuts from the inside, then use a nut wrench to securely tighten them.



Step 3: Connect the tail light wire connectors together. Pay careful attention to the arrows on the wire connectors, making sure the arrows align with each other to avoid damaging the interior circuitry.





### ◆ Pedals Installation

Make sure your pedals are installed on the correct side, as installing on the wrong side will damage the threads. Indicators for the right pedal(R)and the left pedal (L)can be found in two places: the stickers on the plastic cover, and the bottom of the pedal treads.



Before you install the pedals, apply a small amount of waterproof grease onto the spindle. Start threading the pedal on by hand to ensure the pedal is going in perfectly straight, rotating in the direction of the pointer shown on the crank. If it is not spinning smoothly, make doubly sure that you have the correct left or right pedal. After initial hand-tightening, finish tightening the pedals.



### ◆ Front Fender Installation

Step 1: Put the screws through the bike frame and fender in order. Then install the washer and tighten the nut.



### ◆ Front turn signal lights & headlights Installation

Step 1: Align the bolt holes and pass the bolt through all holes, then tighten the bolt.



Step 2: Connect the turn signal light and headlight wires to their corresponding connectors. Carefully align the arrows on the wire connectors to ensure they match, preventing any damage to the internal circuitry.



### ◆ Battery Installation and Removal

**⚠ NOTICE:** There are 2 batteries, one of which is already installed.

**Battery Installation:** Insert the battery into the battery compartment by first inserting the bottom part. Then, push the upper part of the battery until it clicks into place, ensuring it is securely fastened. (a click sound will occur)

**Battery Removal:** To remove the battery, turn the key to the unlocked position and then push the lower part of the battery to release it from the compartment.



### ◆ After Bike Assembly

Step 1: Please write down the serial numbers found on the head tube and motor on the inside front cover of this manual to facilitate failure reporting. Make sure each letter and number is correct.



Bike frame number



Motor serial number

**⚠ NOTICE:**

1. Before using your bicycle, find out about all relevant requirements and regulations that apply in your country or state. There may be restrictions on public roads, bike lanes, or trails. There may also be requirements for helmets, age restrictions, driver's license requirements, or bicycle light regulations.
2. When installing an accessory on your bike, such as a cargo trailer or child trailer, make sure the accessory is compatible and follow the manufacturer's and retailer's instructions.

Safety Checklist

Safety Check	Basic Steps
Brakes	<ul style="list-style-type: none"><li>• Test front and rear brakes for proper function.</li><li>• Ensure brake pads are not overworn and are correctly positioned in elation to rims.</li><li>• Make sure brake control cables are lubricated, properly adjusted and display no obvious what</li><li>• Check that brake control levers are lubricated and tightly secured to handlebars.</li></ul>
Wheels and Tires	<ul style="list-style-type: none"><li>• Tires to within recommended limits displayed sidewalls.</li><li>• Check for bulges or signs of excessive wear. Clean tires to ensure the tread is exposed.</li><li>• Ensure rims run true and have no obvious wobbles or kinks.</li><li>• Check that all wheel spokes are tight and not broken.</li><li>• Check the wheel balance in Pedal Only Mode. If you notice the riding is imbalanced or the rotation of the front wheel makes noise, it means the bolts were not completely tightened or not aligned horizontally.</li></ul>
Chain	<ul style="list-style-type: none"><li>• Check that the chain is called, clean and runs smoothly</li><li>• Use extra care in wet or dusty conditions.</li></ul>
Cranks and Pedals	<ul style="list-style-type: none"><li>• Securely tighten pedals to cranks.</li><li>• Ensure cranks are securely tightened and are not bent.</li></ul>
Derailleurs	<ul style="list-style-type: none"><li>• Check that derailleur(s) are adjusted and functioning properly.</li><li>• Ensure shift and brake levers are attached to the handlebar securely.</li><li>• Check all brake and shift cables for proper lubrication.</li></ul>
Motor Drive	<ul style="list-style-type: none"><li>• Ensure the hub motor is spinning smoothly and the motor bearings are in good working order</li><li>• Check that all power cables running to the hub motor are secured and undamaged.</li><li>• Make sure hub motor axle bolts are secured and all torque arms and torque washers are in place.</li></ul>
Battery Pack	<ul style="list-style-type: none"><li>• Ensure the battery is charged before use.</li><li>• Check for any visible damage to the battery pack.</li><li>• Lock the battery securely to the frame.</li></ul>

Safety Precautions

The following safety notes provide additional information on the safe operation of your Happyrun bike and should be closely reviewed. Improper operation, or failure to confirm the installation, compatibility, and maintenance of any component or accessory may result in serious injury or death.

◆ Before Riding

- All users must read and understand this manual before first use Additional manuals for components used on your bicycle may be provided and should also be read before use.
- Ensure you understand all instructions and safety notes/warnings.
- Follow the safety checklist on page 9 before first use and at regular intervals to ensure correct tightening and setup of your bicycle.
- Ensure the bike fits you properly before first use. Check local rules and regulations before riding.
- It is your responsibility to familiarize yourself with the laws and requirements of operation of this product in the area(s)where you ride.
- Pads should be replaced if **their** friction **components** become contaminated or have less than 1mm thickness or total thickness.

◆ While Riding

- Always wear an approved bicycle helmet whenever using this product and ensure that all helmet manufacturer instructions are used for the fit and care of your helmet. Failure to wear a helmet when riding may result in serious injury or death.
- Acceleration can be unexpectedly strong in pedal assist mode (Pedal Assist level 1-5), as when you pedal the motor assist will suddenly engage Therefore, please pay careful attention when riding. We suggest you use Pedal Only Mode (Pedal Assist level 0 ) when you need to ride at a slow speed to crossroads, at intersections, or when pedestal traffic is present, in order to avoid accidents caused by sudden acceleration.
- Make sure you securely close the thru-axle of the front wheel, checking the wheel balance in Pedal Only Mode. If you notice the riding feels imbalanced, or the rotation of the front wheel makes noise, it likely means the bolts were not completely tightened or didn't align horizontally in the center.
- Off-road riding requires close attention and specific skills, and presents variable conditions and hazards that accompany the conditions. Wear appropriate safety gear and do not ride alone in remote areas. · Off-road riding requires close attention and specific skills and presents variable conditions and hazards that accompany the conditions. Wear appropriate safety gear and do not ride alone in remote areas.
- Shift gears regularly to stay at an optimal cadence range and downshift before coming to a stop. Reduce pedal force before initiating a gear shift to reduce drivetrain wear.
- Always turn the light up while riding at night and always check all reflectors fixed well on the bicycle.

Happyrun E-Bike Use and Care

The following table of contents provides general guidance on Happyrun ebike variable power assist settings and their effects on both range and performance. This content will apply broadly to most riders, but multiple factors will affect individual results including rider fitness and weight, terrain, proper maintenance, etc. While Happyrun hopes and believes you will thoroughly enjoy your e-bike, no guarantees of universal performance characteristics for all owners can be given.



Battery Charging

◆ Charging Procedure for On-bike Charging

Step 1: Check the battery power indicator on your display.



Figure 1

**⚠ NOTICE:**  
This order helps extend the battery life and effectively reduces battery damage caused by improper charging.

◆ Charging Procedure for Off-bike Charging

Step 1: Use the key to unlock the battery. While holding the battery with one hand, detach the battery by turning the release switch located on the underside of the frame (fig.2) (fig.3) .

Step 2: Of the charger into the battery charging socket (fig.1).

Step 3: Connect the power plug (100V-240V plug) to the power socket.



Figure 2



Figure 3

**⚠ NOTICE:**  
Please keep your key and its spare in a safe place. Once lost, they are difficult to copy. The key number correlates to the number on the keyhole. If you have the keys, you can give us the key number to get new keys.

Step4: Check the battery status (fig. 4):

Light Status	Charging Status
Red on charger	Charging
Green on charger	Fully charged
Yellow on battery	40%-60% power
Red on battery	<40% power



Figure 4

◆ After Charging

1. Please unplug the main power supply first by removing the plug from the power socket, then remove the DC port from the battery. You can then check the battery status on the display screen.
2. Hold the battery with one hand and turn the release switch with the other hand to install the battery. Lock the battery when finished to prevent theft.

**⚠ NOTICE:**  
If your battery displays abnormal charging behavior, such as:

- Longer-than-expected charge time
- Strange smell, smoke, or liquid emanating from battery and/or charger
- Overheating battery and/or charger

Please stop charging and contact Happyrun Bike immediately.

◆ Charging Tips

- The battery can be recharged on or off the bike.
- A new battery may take longer to be fully charged when depleted.
- The charger will automatically stop charging once the battery pack is fully charged.
- You can recharge the battery after short rides as it does not have a memory effect.

◆ Precautions

- While charging, please keep your battery away from direct sunlight, liquid, dirt or debris, and metal objects. Do not allow the battery to be charged in environments under 14° Fahrenheit (-10° Celsius) and over 104° Fahrenheit (40° Celsius).
- Do not cover the charger when charging.
- Keep the battery away from children while charging.
- Make sure to only use an approved Happyrun ebike charger purchased directly from Happyrun ebike for your specific bike serial number.

### ◆ Before Riding

Ensure that the battery has been properly secured to the bike before each use by grasping the battery pack and pulling upwards, testing the security of the pack.

### ◆ Battery Maintenance

- Do not fully drain your battery. Turn off the power when the battery charge is low.
- Fully charge the battery after each use, no matter how much power is used. This will prolong the battery life. If battery power is not used for a long time, store the battery with a full charge and charge it once a month.
- The Happyrun ebike can be safely ridden in light rain. However, riding through very heavy downpours or through flooded streets is not recommended, as the crank and/or motor can get wet, which may cause damage.
- Keep the battery away from open flame and other high-temperature heat sources. Do not expose the battery to direct sunlight or recharge immediately after use in high-temperature weather.

### ◆ Dual Battery Switch Button

The red button located under the seat of the bike is used to switch between the two batteries. Pressing the button to the "I" side switches to the top battery, pressing the button to the "II" side switches to the bottom battery. Pressing the button to "O" turns off both batteries. Please note that only one battery can be used to supply power at a time.



#### ⚠ NOTICE:

It is not recommended to make any modifications to the battery or the motor. If the battery is tampered with, and there are any problems with the altered battery or motor, it will not be covered under Happyrun's warranty.

### ◆ Throttle-only

The throttle mode is similar to how a motorcycle or scooter operates, alleviating the need to pedal or providing an additional boost simply by twisting the throttle. Happyrun ebike can reach speeds of up to 28+MPH with throttle mode, which not only allows you to travel faster, but also reassures riders with extra power whenever needed, depending on traffic conditions and rider energy levels. If you are an adventurer who chases after speed and distance without compromising comfort or safety, the throttle-assisted Happyrun would be your perfect companion.

### ◆ Pedal-only

In this mode, the Happyrun will perform like a normal bike, as you'll be riding without any assistance from the motor. This mode is especially useful if you run out of battery, or are looking for more intensive resistance training.

We suggest that you select a lower assistance level when you first ride your Happyrun Bike. After becoming more comfortable with the riding characteristics of our e-bike, and more familiar with the varying range requirements of your most common destinations and commuting routes, you can then make any needed adjustments to pedal assist settings, as well as throttle use frequency, riding position, etc.

#### ⚠ NOTICE:

Shift gears regularly for optimal cadence and downshift before stopping the bike. Before shifting gears, reduce the force of your pedal strokes to avoid premature wear.

## Riding Limitations

Following are some limitations needing riders' careful attention to ensure the mid-drive motor does not overheat or become damaged from excessive loading:

- Do not attempt to ride up hills steeper than 15% grade.
- Use the pedals to assist the motor when climbing hills and accelerating from a stop.
- Avoid sudden starts and stops.
- Generally accelerate at a moderate pace, rather than aggressively

## Parking & Transport

Follow these basic parking, storage, and transport tips to ensure your bike is well cared for, both on and off the road:

- When walking with the bike, turn off the power to avoid accidental acceleration, or use Walk Mode.
- Though our bikes are water resistant (IPX4 Water Resistance), please do not park your bike outdoors in cold or inclement weather for extended periods.
- When parking, switch the power and any lights off to conserve battery, remove the key from the bike, and ensure the battery is secured and locked to the frame.
- In public places, help keep your Happyrun Bike safe and secure from theft by always locking it up.
- Make sure to not park, store or transport your Happyrun Bike on a rack that is not designed for the size and weight of the bike. When storing or carrying your bike on a rack for transport, remove the battery to reduce the weight and make lifting or loading easier.

## Operation

NOTE: Be sure all the items you installed are properly torqued, tightened and connected. If you have any questions, contact us.

### ◆ Initial Ride

NOTE: Users can ride the e-bike like a normal bicycle with the power turned ON or OFF. However, the pedal assist and throttle will activate only if the power is turned ON.

We recommend that you ride your e-bike with the pedal assist off at first, to get familiar with the braking and gear shifting.

Then, you can start testing the pedal assist levels incrementally to gain familiarity with the optimal settings for your riding style.

SAFETY CHECK BEFORE EACH RIDE

- The battery pack must be charged and properly installed.
- The display must turn on and function properly.
- The brakes must function properly.
- The tires must be inflated to the proper psi.
- The front and rear lights must work properly.
- The cable connections must be tight.

### ◆ Using The Brakes

The e-bike is equipped with front and rear disc brakes. Their main function is to slow down or to stop the bicycle.

NOTE: Apply the rear brake before using the front brake in low-traction conditions.

- The brake on the front wheel is controlled by the lever on the left-hand side of the handlebar.
- The brake on the rear wheel is controlled by the lever on the right-hand side of the handlebar.
- The front brake provides the majority of the e-bike's stopping power.
- When slowing down on slippery surfaces, use the rear brake first before applying the front brake.
- A signal wire from each brake lever automatically turns off the motor when either brake is being used. This feature prevents undue wear on the electric motor and battery.

Your new brakes will undergo a "bedding-in" period and will wear down after the first 40-50 full stops. The brakes will reach 100% of their grip capacity after this period. Adjust the brake lever so that it adapts to the newly bedded-in brakes.

◆ **Shifting The Gears**

The e-bike is equipped with a 7-speed shifter, one ever for down-shifts and a thumb button for up-shifts. Choose the lower gears when starting off from a stop or when riding slowly or climbing steep hills. Use higher gears when riding at speed. When using this bike as a normal bike, you will get used to using the gear settings that are most comfortable for your ride and trip. The gear shifter is located on the right side of the handlebar. Rotating the right handlebar grip will change the gear selection. The gear shifting system and pedal assist control system are entirely independent; neither affects the other's performance. A derailleur moves your chain from one gear to another. You shift gears by changing the position of a shift lever (also called a shifter), which controls the derailleur. Shift gears only when the pedals and chain are moving forward. Decrease the force on the pedals as you shift gears. Reduced chain tension helps the chain shift gears quickly and smoothly, which decreases chain , derailleur , and gear wear . Do not shift gears when you ride over bumps to prevent dropping or jamming the chain or missing a gear.



7-speed shifter

◆ **Pedal Assist Control System**

The pedal assist control system also is known as a "pedelec". The pedal assist uses cadence sensors that measure your pedaling. This information transfers to the bike's controller, which generates the needed power. The control system can be used to maintain a constant level of pedal assist.

**USING THE PEDAL ASSIST CONTROL SYSTEM**

1. Press the battery power button to turn on the battery.



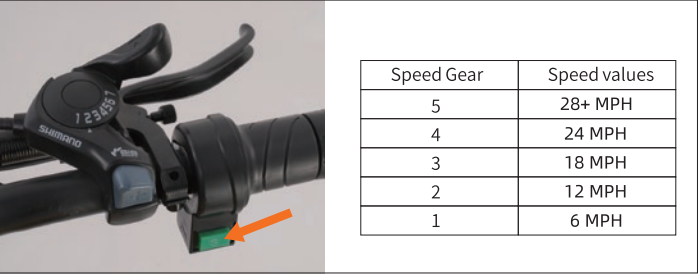
Battery Power Button

2. Press the "S" button for 1 second until a beep sounds, then, touch the NFC card to the top left NFC icon to turn on the controller. The LCD display will turn on and indicate the battery's charge level and select pedal assisted level.



NFC Card

3. Use the "S" button to select the desired pedal assist level.



Selecting Pedal Assist Leve

The LCD will indicate the pedal assist level that you select. Once you start pedaling, the controller will make the motor turn accordingly .

The e-bike will now maintain a constant pedal assist until:

- The brakes are applied
- The "S" button is pressed to adjust the pedalassist level
- You stop pedaling
- The battery pack runs down completely

**NOTE:** If the battery pack level is low, we recommend selecting a lower assist level. Keep in mind that the battery management system can deactivate the pedal assist support to protect the battery pack level from getting too low. Be sure to charge the battery pack fully before each ride.

4. To turn the headlight on or off, press "  "

5. Turn off the battery power button after each ride to avoid draining the battery pack.

◆ **Throttle Operation**

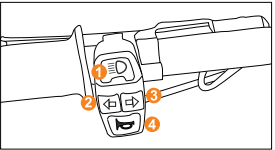
Use the throttle and pedal assist at the same time or you can just use the throttle feature to ride the e-bike. The throttle control is located on the right-side handlebar.

**To use the throttle feature:**

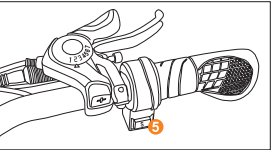
1. Turn on the battery and the controller.
2. Set the LCD to the desired setting.
3. Rotate the throttle control to increase the e-bike speed.



◆ **Button Overview**



Left Handlebar

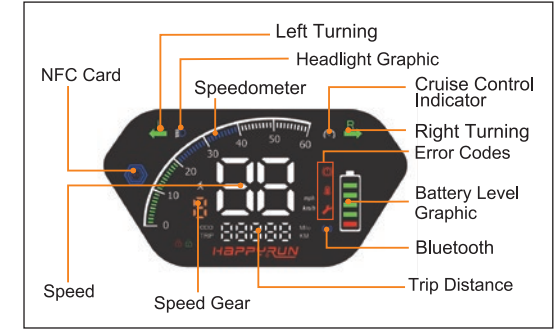


Right Handlebar

- ❶ Headlight Button
- ❷ Left-turn Signal
- ❸ Right-turn Signal

- ❹ Horn
- ❺ Speed Switch

◆ Main Display Screen Overview



Advanced Matrix Display Screen

The main display shows several important metrics:

HEADLIGHT GRAPHIC

The headlight graphic appears when you turn on the LED headlight.

ASSIST LEVEL

The assist level indicator displays which assist mode the bike is in. The assist levels progress in the following order:

1 ➡ 2 ➡ 3 ➡ 4 ➡ 5 ➡ 1 ➡ 2 ➡ 3 ➡ 4 ➡ 5

BATTERY LEVEL GRAPHIC

The battery level graphic is a graphical representation of how much charge remains in the battery. More bars will appear in the graphic when the battery is charged. Less bars will appear when the battery is depleted.

SPEED(MPH)

The speed indicator shows the current speed that the e-bike is traveling. The speed can be shown in mph depending on which unit setting is used. The speed sensor picks up information from the rear wheel.

TRIP DISTANCE(MILE)

The trip distance keeps track of how far the bike has traveled.

Speed Button Functions and Definitions

1. **Power On:** When the bike is off, press and hold the button for 1 second to turn it on.
2. **Power Off:** When the bike is on, press and hold the button for 2 seconds to turn it off.
3. **Gear Switching:** Press the button once to cycle through the gears (0-5).
4. **Metric/Imperial Unit Switching:** While holding the brake lever, press the button twice to switch between kilometers and miles.

⚠ **NOTICE:** This step applies exclusively to the G100.

5. **Trip/Total Odometer Switching:** Press the button three times to switch between trip distance and total distance.
6. **Zero Start/Non-Zero Start Switching:** While holding the brake lever, press the button five times to toggle between zero start and non-zero start modes. **Note:** The bike always defaults to zero start when powered on.
7. **NFC Card Writing:** Press the button nine times to write to an NFC card.

◆ Turning The E-Bike On And Off



NFC

HOW TO TURN THE E-BIKE ON

When the eBike is off, press the 'S' button for 1 second until a beep sounds. Then, touch the NFC card to the top left NFC icon. The eBike will power on.

HOW TO TURN THE E-BIKE OFF

Once the e-bike is stable, press and hold the 'S' button for 2 seconds until a beep sounds. The LCD display will power down, indicating the bike has shut off.

ADJUSTING THE ASSIST LEVELS

HOW TO ADJUST THE ASSIST LEVELS

When the bike is on, push the “S” button. The assist speed will advance by one level then repeats the cycle (1st gear to 2nd gear to 3rd gear to 4th gear to 5 gear, again 1st gear ).

1 ➡ 2 ➡ 3 ➡ 4 ➡ 5 ➡ 1 ➡ 2 ➡ 3 ➡ 4 ➡ 5

◆ Error Codes

The electronics system has some ability to self-diagnose and report a limited set of faults. The faults will appear on the screen as error codes. The chart below explains the meaning of each error code.

ADVANCED MATRIX DISPLAY -ERROR CODE CHART		
Error Code	Error	Notes
	Fault Indicator	Lights up in case of a malfunction. Contact technical support.
	HighTemp Alert	When lit, stop the e-bike, and wait for temperature drop before resuming.
	Brake Fault	A normal symbol when braking. It need to be repaired if it appears when not braking. Contact technical support.
E1	Motor failure	Contact technical support.
E2	Handlebar failure	Contact technical support.
E3	Controller failure	Contact technical support.
E5	Brake failure	Contact technical support.
E6	Communication	Contact technical support.



Basic Troubleshooting

SYMPTOMS	POSSIBLE CAUSES	SOLUTIONS
Throttle and pedal assist not working	<ul style="list-style-type: none"><li>• Battery off</li><li>• Battery installation</li><li>• LCD display not on</li><li>• Discharged battery</li><li>• Brake sensors engaged</li></ul>	<ul style="list-style-type: none"><li>• Turn on battery</li><li>• Reseat battery</li><li>• Turn on LCD display</li><li>• Charge battery</li><li>• Inspect brake lever</li></ul>
Reduced speed	<ul style="list-style-type: none"><li>• Low battery power</li></ul>	<ul style="list-style-type: none"><li>• Charge battery</li></ul>
Reduced battery range	<ul style="list-style-type: none"><li>• Low battery power</li><li>• Low tire pressure</li><li>• Heavy load on bike</li><li>• Driving on rough terrain</li><li>• Using throttle only</li></ul>	<ul style="list-style-type: none"><li>• Charge battery</li><li>• Inspect tire</li><li>• Adjust bike load</li><li>• Adjust route</li><li>• Include pedal assist use</li></ul>
Battery does not charge	<ul style="list-style-type: none"><li>• Charger not properly connected</li><li>• Battery temperature</li><li>• Damaged charger</li><li>• Issue with battery</li></ul>	<ul style="list-style-type: none"><li>• Inspect connections</li><li>• Visit our website for best practices</li><li>• Replace charger</li><li>• Contact Support Team</li></ul>
E-bike making strange noises	<ul style="list-style-type: none"><li>• Loose hardware</li><li>• Issue on drivetrain</li><li>• Issue with motor</li></ul>	<ul style="list-style-type: none"><li>• Tune-up and inspection needed</li><li>• Maintenance needed</li><li>• Contact Support Team</li></ul>

For additional troubleshooting, go to our FAQ section on our website at : <https://happyrunsports.com/pages/contact-us>

Happyrun Bikes Warranty

<https://happyrunsports.com/pages/contact-us>

At HAPPYRUN Bikes, we take great pride in the quality and durability of our products. We're confident that you will be impressed as well, and we stand behind all of our products. Every e-vehicle we sell is covered by a limited warranty against manufacturing defects subject to the terms below:

COVERED PRODUCTS

- This warranty applies only to products, parts, and components (hereafter PRODUCTS) that have been manufactured, assembled, or sold in new condition by HAPPYRUN Bikes(hereafter, HAPPYRUN)
- This warranty applies only to replacement/repair of PRODUCTS in case of a manufacturing flaw in materials or workmanship, in accordance with the Scope of Warranty Service, and subject to any and all exclusions, limitations, and procedures explained below.
- This warranty is not transferable in any way and may not be exercised by anyone other than the original retail buyer(hereafter BUYER) of the PRODUCTS, only if the BUYER has retained constant ownership of the PRODUCTS since their original purchase of the PRODUCTS and only to PRODUCTS purchased in new condition either:

WARRANTY PERIOD

- Battery packs are covered for a period of 1 year on manufacturer defects only. We DO NOT cover wear and tear or USAGE on your battery.
- Other electronic components are covered under warranty for a period of 1 year from the date of purchase.
- Bicycle frames are covered by a 1-year warranty against manufacturing defects.
- Mechanical components are covered by a 1-year warranty against manufacturing defects.
- For all PRODUCTS, this warranty expires 1 year from the date the PRODUCTS were delivered to the BUYER unless excluded from warranty or otherwise voided from cover age under warranty.

- New Bike Guarantee -we offer full replacement of defective parts with free shipping within the first 30days of your bike order. After 30 days the customer is responsible for all return shipment costs to HAPPYRUN. HAPPYRUN Bikes will pay for shipping to the customer only.

WARRANTY EXCLUSIONS

The intent of this warranty is to ensure that the BUYER of any new PRODUCTS sold by HAPPYRUN or any HAPPYRUN product sold by an authorized HAPPYRUN dealer will receive a quality product, free of manufacturing flaws. This warranty should not be considered to be an insurance policy against any damage occurring after the products are received, nor as explicit or implicit acceptance by HAPPYRUN of responsibility for the consequences resulting from the failure of any PRODUCTS irrespective of whether the failure itself is covered by this warranty.

In addition, the following situations are excluded from this warranty or lead to exclusion from this warranty:

- Warranty claims not made in accordance with Warranty Claims Process (explained below)
- PRODUCTS with technical alterations that have been made without the approval of the manufacturer
- PRODUCTS with alterations to or additions to which use incompatible or non-original parts
- Damage to or failure of PRODUCTS resulting from weather or ordinary wear and tear.
- Theft, robbery, vandalism, intentional damage, damage resulting from bumps and scrapes after possession of the PRODUCTS has been transferred to the BUYER.
- PRODUCTS that haven't been manufactured or sold by HAPPYRUN
- Incidental/consequential damage or injury
- PRODUCTS that have been used or transported inappropriately or improperly (e.g., by loading a HAPPYRUN bike above the maximum weight recommendation)
- PRODUCTS with damage resulting from improper maintenance (e.g, storing battery fully discharged over the winter)
- Any electrical component that has been opened, altered, partially disassembled, or completely disassembled except by HAPPYRUN or an authorized HAPPYRUN dealer.

- Any PRODUCTS that have been disassembled in a manner not authorized by HAPPYRUN or that have had repairs attempted by anyone not authorized by PRODUCTS
- PRODUCTS that have been damaged due to improper adjustment or worn components
- PRODUCTS with damage resulting from an accident
- PRODUCTS that have been lent, leased, or rented commercially
- Bicycles not registered with HAPPYRUN by the BUYER within 60 days of delivery/sale
- Warranty shall not apply to PRODUCTS and/or situations in accordance with the terms of a specifc sale (e.g., scratches and dents to scratch & dent discounted merchandise)
- Cleaning of any PRODUCTS
- PRODUCTS that were not purchased by BUYER in new condition
- HAPPYRUN BIKES will not pay for any third-party service or part replacement unless agreed upon prior to the fix.
- HAPPYRUN BIKES will not pay for return shipping on any damaged or defective product or component.
- HAPPYRUN BIKES will not cover any damage resulting in use of a third-party battery charger.
- HAPPYRUN BIKES will not cover any damage that may occur during shipping if the owner sets up their own shipping option or if the bike is shipped using a freight forwarder or similar service.

The Scope Of Warranty Service

In case of a warranty claim within the warranty period for a non-excluded situation HAPPYRUN agrees to repair or replace the failed warrantied PRODUCTS with equivalent parts/accessories/components at the discretion of HAPPYRUN, by HAPPYRUN, an authorized HAPPYRUN dealer, or by a third-party with the approval of HAPPYRUN.

Replacement parts may not be identical to those being replaced.

Any additional non-warranty work done concurrently with a warranty repair/replacement will be subject to ordinary parts/labor fees. This includes anything not included by the warranty as well as anything excluded from the warranty.

No service, repair, or parts replacement provided under warranty will extend the original warranty period.

Warranty Claims Process

- Register your Bike within 60 days of purchase. Other products do not require registration.
- If you suspect that any part/component is defective, not attempt to repair or replace it yourself or to have it repaired or replaced before contacting HAPPYRUN--doing so may invalidate your warranty and may cause additional damage, not necessarily limited to the PRODUCTS in question, and may also create the risk of injury.
- Contact HAPPYRUN via email to submit your warranty claim:support@happyrunsports.com. HAPPYRUN Bikes will not replace any part without first seeing photos or video of the damaged part.
- We will contact you to make plans for inspection and any warranty repairs
- All claims to this warranty must be made through HAPPYRUN Bikes. Proof of purchase may be required with any warranty request. Before making a warranty claim, we suggest that you contact our Technical Support team at [support@happyrunsports.com](mailto:support@happyrunsports.com) as there may be a simple fix for your problem. Valid warranty claims will be processed through HAPPYRUN Bikes within one year of initial purchase.

SEVERABILITY

The invalidity or unenforceability of any provisions of this Agreement shall not affect the validity or enforceability of any other provision of this Agreement, which shall remain in full force and effect. Any provision of this agreement deemed to be invalid or unenforceable shall be interpreted, unless prohibited by law, in accordance with the provision's intent and in consideration of applicable laws and corresponding industry standards.

SHIPPING DAMAGE CLAIMS

IMMEDIATELY inspect your product(s) for damage. Freight damage claims are extremely time sensitive. We will not accept freight damage claims later than 14 days from receipt of the product. Note any damage to your product(s) on the Bill of Lading before you and the driver sign-off on the shipment. Take pictures of any damage that is found, and date the images when possible. Keep all packaging and paperwork until the inspection process is complete. Whenever possible, report damage claims within 10 days of delivery to a HAPPYRUN Bikes' customer support representative. Please contact our Customer Support team for return/replacement instructions at [support@happyrunsports.com](mailto:support@happyrunsports.com)

We stand behind the warranty of our products and can assure you we learn every lesson along the way, bringing it into our services.

Service and support exist because in the real world, there are a lot of variables that will interact with your bike. So, we want you to be sure that we are here to help you and help you have the best riding experience. Your help will always be appreciated. We value your time and attention immensely.

Our goal is to be the friend when you have a doubt, or when you need to move the way you desire. Always feel free to read our materials and to reach out with any questions.

Register your HAPPYRUN Bike on our website:

<https://happyrunsports.com/pages/contact>

**Model Names: Tank G100 / Tank G100 Pro**