



Developed and
assembled in the UK



MIRIDER 20 | MIRIDER 20 GB3

USER MANUAL

MIRIDER

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MiRiDER™

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Welcome to the fold

Thank you for choosing to join the growing MiRiDER community. We're sure riding your MiRiDER 20 (GB3) will create some amazing new experiences and memories to last a lifetime. The MiRiDER 20 (GB3) is designed with a focus on providing reassuring performance ride after ride, using a combination of advanced technology, superior style, and unbeatable quality, your MiRiDER 20 (GB3) was carefully crafted to be the ultimate electric folding bike.

Enjoy your MiRiDER 20 (GB3)





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1. PREFACE

1.1. ABOUT THIS MANUAL

This manual is written for the end user of the MiRiDER 20 (GB3). In this manual you will find all the information you need to correctly use and maintain your e-bike. Please ensure you have read and understood the contents of this manual in full before operation of your e-bike. Keep this manual in a safe place for future reference.





In this manual, the MiRiDER 20 (GB3) will also be referred to as “your e-bike”.

1.2. ORIGINAL INSTRUCTIONS

This manual has been translated into multiple languages. The original manual is written in UK English. All other language versions are translations of the original manual.

1.3. SYMBOLS USED IN THIS MANUAL

This manual contains safety warnings that may result in injury when ignored. Each safety warning is indicated with a signal word. The signal word corresponds with the level of risk of the described hazardous situation.

Symbol	Description
 WARNING	Indicates a hazardous situation which, if not avoided, could result in death or serious injury.
 CAUTION	Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.
 NOTICE	Indicates practices that could damage the product or cause it to not function properly.
	Indicates additional useful information.

1.4. WARRANTY

The following warranty conditions apply to your e-bike. All terms are applicable from the date of purchase:

- A two-year warranty* on the frame, seatpost, and handlebar.
- A two-year warranty* on the motor.
- A two-year warranty* on the battery.
- A two-year warranty* on the electronic cabling, display, throttle, and electronic brake cut offs.
- A one-year warranty on all other parts. Wear parts such as tyres, the chain or drive belt, pedals, freewheels etc. are exempt from this warranty.

The warranty is invalid in the event of:

- Damage that occurs due to the result of using non-original accessories and or parts.
- Damage that occurs for any modifications of the original condition of your e-bike.
- Damage that occurs as a result of a misuse or involvement with a crash.
- Lack of proper maintenance.
- Misuse of the motor and or components.
- Misuse of the controller settings.
- Derestricting the bike.

*To access the full two-year warranty, you must register your e-bike within 30 days from the date of purchase. Please visit www.mirider.co.uk/warranty to register your e-bike. If your e-bike is not registered within this time, the warranty will be limited to one year.

Warranties and complaints are handled by MiRiDER for direct sales. For purchases made via the MiRiDER dealer network, the dealer who you've purchased from is always your first point of contact. MiRiDER in consultation with your dealer will make a definitive decision as to whether the warranty claim is valid. The MiRiDER warranty is for the original owner only and is non-transferable. MiRiDER can only offer a warranty on purchases through a registered dealer or direct from the MiRiDER web store.

1.5. DISCLAIMER

MiRiDER has prepared the warranty conditions with the greatest care. However, we accept no liability resulting from printing and typesetting errors.

Your e-bike is not indestructible and the components will not last forever. MiRiDER bikes are built to withstand day to day stress under normal conditions. We cannot predict the stress of our bikes in extreme conditions, competition, or in the event of a crash. The life of any part will be dramatically reduced and fail without warning in the event of collision or extreme use.

1.6. ASSISTANCE

If you have any questions regarding your e-bike, you can contact us by:

Phone:	+44 1257 228242
E-mail:	hello@mirider.co.uk
Visiting address:	MiRiDER, 3 Croftwood Square, Wigan WN5 0LG, United Kingdom

2. PRODUCT INFORMATION

2.1. PRODUCT DESCRIPTION

The MiRiDER 20 (GB3) is an electric bike for use on paved roads with pedal assist that operates at speeds of up to 25 km/h with a sound pressure level below 70dB(A).

You can manually adjust the pedal assist level as desired while cycling, with the control panel on the handlebars. You can choose between five different assist levels.

Pay attention to your surroundings if you wish to change power level. Only change the setting if it's safe to do so.

The MiRiDER 20 (GB3) is also equipped with a walk assist mode. When activated, your e-bike drives at a speed of up to 6 km/h.

The MiRiDER 20 (GB3) is driven by a hub motor located at the centre of the rear wheel. The hub motor is powered by a rechargeable, removable battery which is built into the frame. The battery can be charged with the provided charger.

On top of that, your e-bike is fitted with three gear ratios.*

- 1st gear: For climbing or riding without assistance.
- 2nd gear: For typical riding.
- 3rd gear: For cruising or riding at maximum speed.

*Only applicable to the MiRiDER 20 GB3

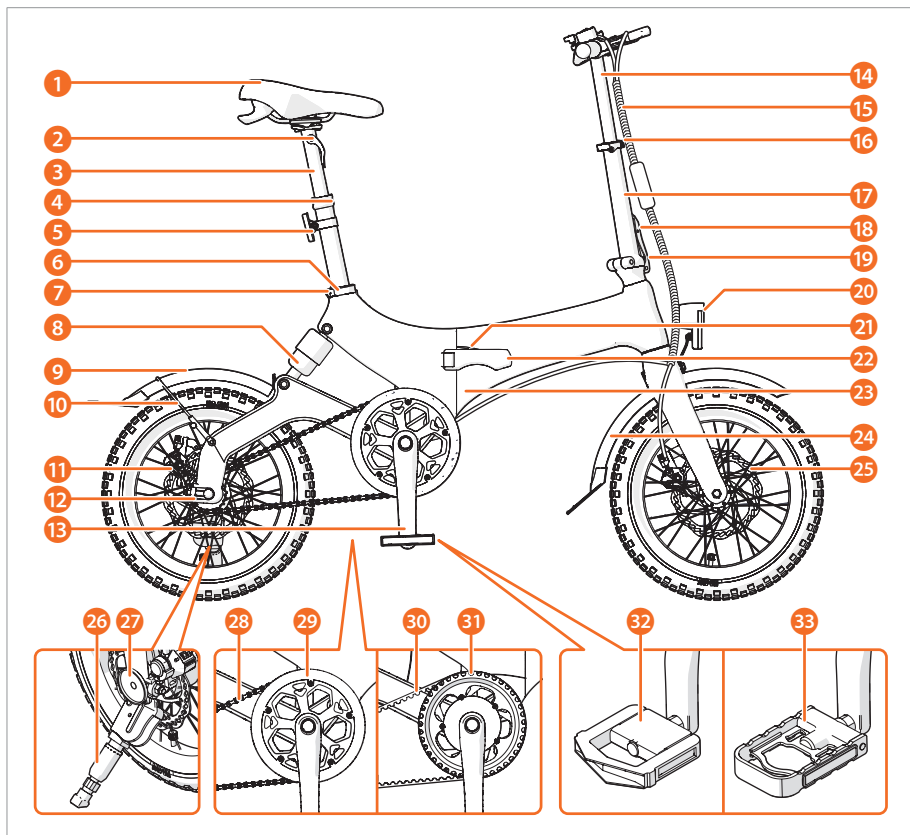
2.2. IMPORTANT SPECIFICATIONS

Product name	MiRiDER 20	MiRiDER 20 GB3
Unfolded dimensions	1540 × 1160 × 650 mm	
Folded dimensions (with saddle)	920 × 720 × 520 mm	
Folded dimensions (without saddle)	920 × 620 × 520 mm	
Net weight	20 kg	21 kg
Max. combined weight (e-bike, rider, and load)	120 kg	

2.3. SYMBOLS AND LABELS ON THE PRODUCT

Symbol	Description
	Indicates that the product complies with all relevant European directives.
	Indicates that the product complies with all relevant United Kingdom directives.
	Indicates that the product must not be disposed with household waste. Recycle this product in an environmentally friendly manner according to local regulations.
	Indicates that the product is free of restricted materials which are hazardous to the environment and pollute landfills and are dangerous in terms of occupational exposure during manufacturing and recycling.
	Indicates a hot surface.

2.4. MAIN PARTS

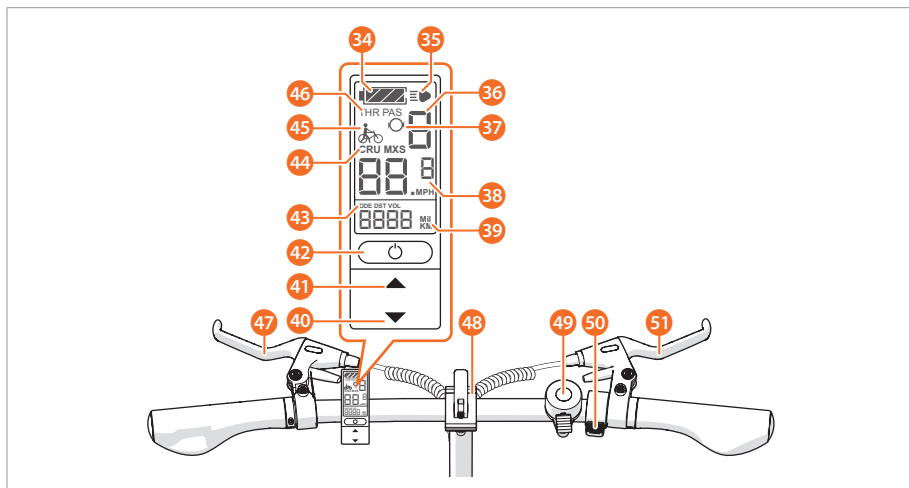


- 1 Saddle
- 2 Seatpost height adjustment clamp
- 3 Telescopic seatpost
- 4 Seatpost clamp
- 5 Reflector
- 6 Seat tube clamp
- 7 Seat tube
- 8 Shock absorber
- 9 Rear mudguard
- 10 Wheel
- 11 Motor
- 12 Rear disk brake
- 13 Crank arm
- 14 Telescopic handlebar stem
- 15 Cables
- 16 Handlebar clamp
- 17 Handlebar stem
- 18 Handlebar stem safety lock
- 19 Handlebar stem latch
- 20 Headlight
- 21 Frame safety lock
- 22 Frame latch
- 23 Frame
- 24 Front mudguard
- 25 Front disk brake
- 26 Kickstand
- 27 Magnet
- 28 Chain¹
- 29 Sprocket¹
- 30 Drive belt²
- 31 Gearbox¹
- 32 Foldable pedal¹
- 33 CNC foldable pedal²

¹ Only applicable to the MIRiDER 20

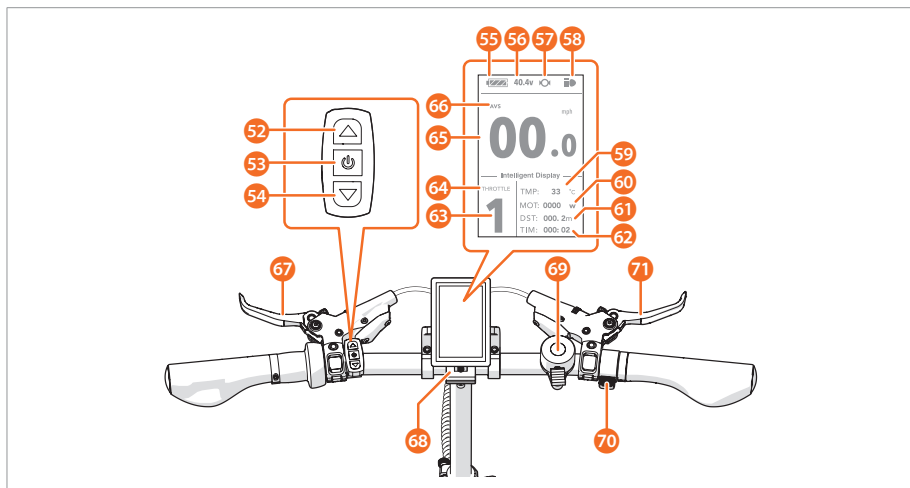
² Only applicable to the MIRiDER 20 GB3

2.5. HANDLEBAR MIRIDER 20



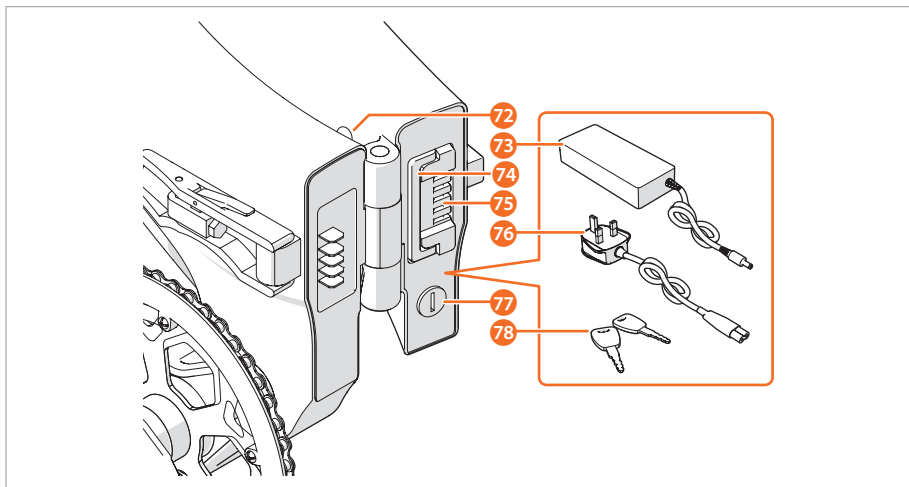
- 34 Battery capacity
- 35 Light indicator
- 36 Power assist level
- 37 Brake display indicator
- 38 Riding speed
- 39 Trip distance or real-time battery voltage
- 40 Down button
- 41 Up button
- 42 On/off/mode button
- 43 Total trip distance (ODO) or Single trip distance (DST)
- 44 Walk assist (CRU) or Maximum speed (MXS)
- 45 Push power assist indicator
- 46 Boost switched on indicator (THR) or Power assist start up (PAS)
- 47 Left brake lever (rear brake)
- 48 Handlebar clamp
- 49 Bell
- 50 Walk assist / Thumb throttle
- 51 Right brake lever (front brake)

2.5.1. Handlebar MiRiDER 20 GB3



- 52 Up button
- 53 Power button
- 54 Down button
- 55 Battery capacity
- 56 Battery voltage
- 57 Brake indicator
- 58 Light indicator
- 59 Ambient temperature
- 60 Power display
- 61 Single trip distance/total trip distance
- 62 Single trip time/total trip time
- 63 Assistance level
- 64 Throttle indicator
- 65 Riding speed
- 66 Average speed/maximum speed
- 67 Left brake lever (rear brake)
- 68 Handlebar clamp
- 69 Bell
- 70 Walk assist / Thumb throttle
- 71 Right brake lever (front brake)

2.6. BATTERY AND CHARGER



- 72 Charger port
- 73 Charger
- 74 Battery handle
- 75 Battery

- 76 Charger power cable
- 77 Battery lock
- 78 Keys

3. SAFETY

3.1. INTENDED USE AND FORESEEABLE UNINTENDED USE

Your e-bike is intended to be used as an electric bike with pedal assist for single person cycling only.

Only use your e-bike as described in this user manual.

Any other use of your e-bike than described in this user manual is regarded as unintended use and may cause injury or damage to the product and void the warranty.

The following is considered as foreseeable unintended use:

- Failure to comply with the instructions in this user manual.
- Unauthorised modifications to the product.
- Use of spare parts or accessories not recommended by the manufacturer.
- Failure to eliminate defects of the products that increase the safety risks.

3.2. SAFETY WARNINGS AND REGULATIONS

WARNING

- Observe the locally applicable (bicycle) traffic rules at all times, including those concerning the use of bicycle lights.
- Do not wear loose or long clothing that may become entangled in the various parts of your e-bike.
- Your e-bike can easily reach speeds of up to 25 km/h. It is recommended to wear a helmet while cycling to prevent head injuries in the event of an accident.
- Always switch on the headlights when cycling in the dark. Cycling in the dark without lights increases the risk of poor visibility and poor visibility for other road users.
- Always watch out for cars, pedestrians, and other cyclists. Be careful when cycling past parked cars. Doors may open unexpectedly.

- Avoid potholes, soft or low verges that could cause a crash, or debris which may cause damage to your tyres.
- Always allow for extended braking distance in adverse weather conditions. Reduce your speed in adverse weather conditions and/or poor visibility.
- Children must be supervised during installation, use, cleaning, and maintenance to ensure that children do not play with your e-bike.
- Do not make modifications to your e-bike. Modifications reduce the lifespan and risk damage to your e-bike and are also hazardous to your safety and that of other road users.
- Do not open the electrical parts or your e-bike. Electrical parts may only be opened by qualified service technician and may only be repaired using original replacement parts.
- Always use original spare parts when replacing parts of your e-bike. Third party spare parts may not operate in the same way or be of the same quality, which may affect the safety of your e-bike.
- Do not touch the brake discs without protection. The brake discs have sharp edges and may become hot after a period of braking.
- Always fully close the frame latch before cycling. If the frame latch is not closed properly, the frame may fold unexpectedly during cycling.
- Always insert the seatpost at least up to the minimum marking into the frame. Not inserting the seatpost far enough into the tube may lead to loss of control of your e-bike during cycling and/or irreparable damage to the seatpost or frame.
- Always adjust the height of the handlebar stem within the indicated range markings. Placing the height of the handlebar stem above the minimum insertion marking may lead to loss of control of your e-bike during cycling or failure of the e-bike.
- Always tighten the handlebar stem clamp to prevent the handlebar stem from moving during cycling.
- Do not adjust the handlebar stem latch yourself without professional advice. Incorrect adjustment may cause the frame to fold unexpectedly during cycling.

- Always tighten seatpost height adjustment clamp to prevent the seatpost from moving during cycling.
- Always tighten the seatpost clamp to prevent the seatpost from rotating or moving during cycling.
- Always tighten the saddle bolts to prevent the saddle from tilting or sliding on the rails during cycling.
- Always tighten the handlebar stem lock latch to prevent the handlebar stem from turning during cycling.
- Always tighten the handlebar clamp to prevent the handlebar from rotating or moving during cycling.
- Do not extend the handlebar stem above the minimum insertion marks. Extending the handlebar stem higher than the minimum insertion marks may lead to loss of control of your e-bike during cycling or damage to the cabling.
- Always remove the battery from the frame before inspection, repair, adjustments, maintenance, storage, or transporting your e-bike by car or aircraft.
- Always keep the battery and the charger away from rain and moisture. Water may cause an electric shock, fire, and/or explosion hazard.
- Always remove the battery from the e-bike before cleaning. Water may cause an electric shock, fire, and/or explosion hazard.
- Do not charge the battery in the frame when the e-bike is wet. Water may cause an electric shock hazard.
- Only charge the battery with the provided charger. Ensure the voltage of the charger matches the voltage of the battery. Non-matching voltages may cause a fire or explosion hazard.
- Always keep the battery and the charger clean. Use a clean fresh cloth to wipe off any dirt. Dirt may cause an electric shock hazard.
- Do not use the battery or charger if there is visible damage. A damaged battery or charger may cause an electric shock hazard.

- Do not use the battery or charger on highly flammable surfaces or in a combustible environment. The heat generated during charging may cause a fire hazard.
- Do not use or store the battery and charger near heat sources and highly inflammable liquids. Using or storing the battery and charger near heat sources may cause an explosion hazard.
- Do not charge the battery unattended. Unattended battery charging may cause a fire hazard.
- Do not store the battery near paper clips, coins, keys, nails, screws, or other small metal objects which may cause short circuiting. Short circuits between the battery contacts may cause a fire hazard.
- As with all mechanical components, the e-bike is subjected to wear and high stresses. Different materials and components may react to wear or stress fatigue in different ways. If the design life of a component has been exceeded, it may suddenly fail, possibly causing injuries to the rider. Any form of crack, scratches or change of colouring in highly stressed areas indicate that the life of the component has been reached and it should be replaced.
- Do not try to unfold your e-bike with the handlebar set too high. Unfolding your e-bike with the handlebar set too high may pull out the connecting cables and may lead to loss of control of your e-bike during cycling or failure of the e-bike.
- Do not lubricate the disc brakes. Lubricating the disc brakes may cause brake failure which may lead to loss of control of your e-bike during cycling.
- Do not lubricate the drive belt. Lubricating the drive belt may cause the drive belt to slip and void warranty.

 **CAUTION**

- Before each journey, check that:
 - the lighting and bell operate correctly and are correctly attached.
 - the brakes operate correctly.

- the brake levers are adjusted correctly. If you can squeeze the lever all the way to the handle, there is air or a leak in the brake line. Do not use the e-bike and have the brake line bled or repaired by an approved MiRiDER dealer.
 - the tyres and rims are free of damage and the wheels can turn unimpeded.
 - the tyres are pumped to the correct pressure. Insufficient tyre pressures may lead to premature wear, reduced grip and higher energy consumption of the e-bike system.
 - there are no sharp particles in the treads of the tyres that may puncture the tyres.
 - the suspension of the front fork works correctly and the front fork is securely attached.
 - all bolts, nuts, latches, and clamps are tight.
 - the frame and the front fork show no deformations, cracks, or damage.
 - the stem and handlebars are correctly and securely attached and the handlebars are at the correct height and angle.
 - the seatpost and saddle are correctly and securely attached and the saddle is at the correct height and angle.
- The above checks should also be carried out after a collision/crash. Do not use the e-bike if a part no longer functions correctly or is broken/deformed.
 - Ensure that the headlight does not shine in the eyes of road users that are facing you. The light can dazzle other road users, which may lead to accidents.
 - Always try out the brakes during the test cycle so you know how hard you must squeeze and how powerful the brakes are. Disc brakes are more powerful than traditional brakes. Always keep in mind which brake levers operate the front and the rear brakes.
 - Only use the walk assist mode while walking with your e-bike. Keep your legs clear from the pedals.
 - Only use your e-bike with both wheels in contact with the ground.
 - Only use your e-bike for one person cycling.

- Always (un)fold your e-bike away from you to prevent entrapment and to make (un) folding easier.
- Always ensure both frame halves are connected when the frame is folded. If both frame halves are not connected properly, the frame may unfold unexpectedly.

NOTICE

- Consult local regulations for the registration and use of e-bikes on public roads.
- Always handle your e-bike with care to avoid damaging the paintwork.
- Do not use sharp objects such as a knife or scissors when opening the packaging to avoid damaging the paintwork.
- Always fold the pedals before folding the frame to prevent damaging the frame.
- Always press the safety catch when unlocking the frame latch to prevent damaging the frame latch.
- Do not force the battery into the frame. Always ensure the battery is the correct way around. Do not attempt to install the battery the wrong way around. Do not attempt to remove the battery whilst locked into place.
- Always correctly and fully insert the battery into the frame. Inserting the battery incorrectly or incompletely into the frame may damage the battery or the frame.
- Always lock the battery in the frame to prevent the battery from falling out.
- Always fold down the battery handle so the handle is flush with the battery before unfolding the frame to prevent damage to the battery handle.
- When the frame is folded, only move your e-bike forward. Moving your e-bike backwards causes the crank arm to rotate which may damage the frame.
- Do not lubricate inside the seatpost. The seatpost has factory installed grease and does not need lubrication in between service intervals.
- Do not use aggressive detergents that may damage the e-bike.
- Do not immerse the e-bike in water or clean the e-bike with a high pressure cleaner.

- Always fully charge the battery before storing to prevent diminishing the battery life.
- Always charge the battery within a temperature range of 10°C - 45°C.
- Always plug the charger into the battery's charging port before plugging the charger into the power outlet. Always disconnect the charger from the power outlet before removing the charger from the battery's charging port.
- Listen to the sound your e-bike produces. If something doesn't sound right or you feel any wobbles/shakes, stop riding your e-bike and identify the problem.
- Never forcefully close the frame latch. If the frame latch does not close properly, check that the frame safety lock is pressed.
- Do not forcefully close the clamps. Overtightened clamps can fail and snap.
- Do not overtighten the bolts. Overtightened bolts can fail and break.
- Do not let the rear wheel dangle from the power cable when maintaining the wheel using a cycle maintenance stand. Letting the rear wheel dangle by the power cable may cause irreparable damage. Always disconnect the power cable and wheel completely from the bike before commencing maintenance.

4. INSTALLATION

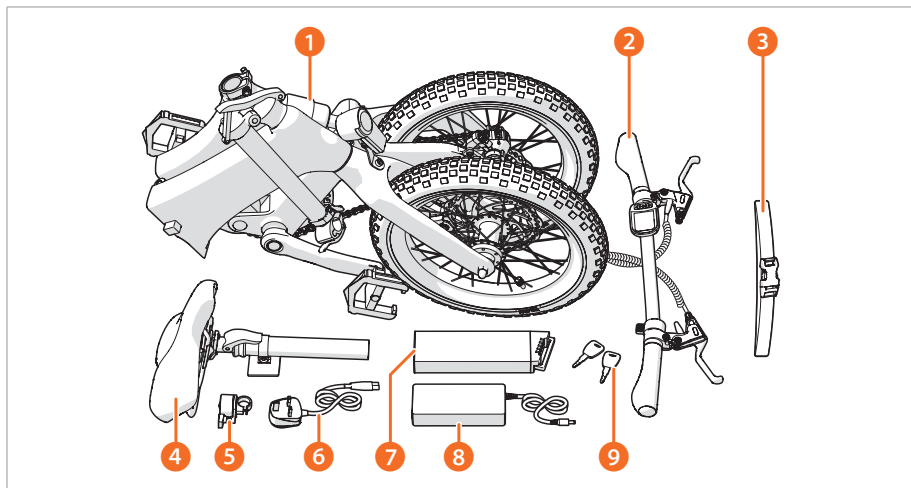
4.1. CONTENTS OF THE PACKAGE

1. Remove your e-bike from the box.
2. Remove the packaging material.

NOTICE

Do not use sharp objects such as a knife or scissors when opening the packaging to avoid damaging the paintwork.

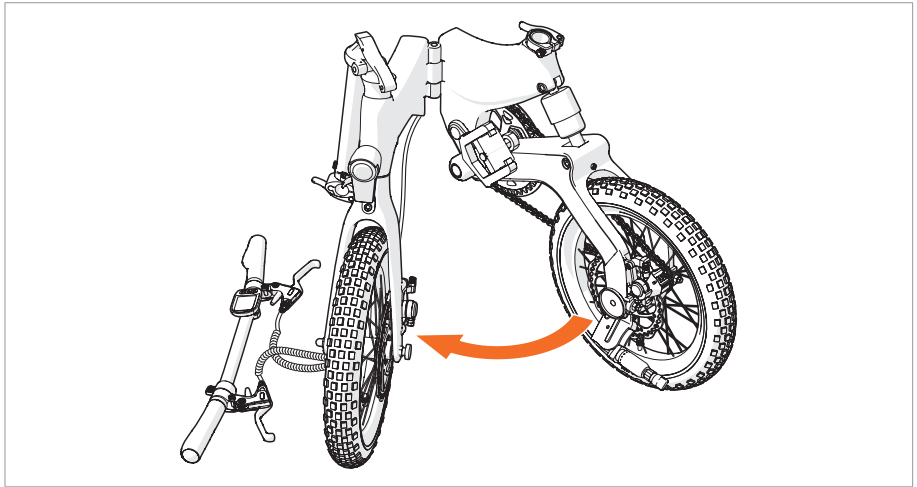
3. Check if all contents are present and undamaged. The delivery contains the following parts:
 - ❶ Keep the packaging material until you have tested your e-bike and are sure everything is intact and works properly.
 - ❷ No rear light is included. It is advised to use a rear light with the e-bike for better visibility for other road users.
 - ❸ Your e-bike comes with two keys. We recommend separating the keys and using one as a spare in case one is lost.



- 1 E-bike
- 2 Handlebar
- 3 Strap
- 4 Seatpost
- 5 Bell
- 6 Charger power cable
- 7 Battery
- 8 Charger
- 9 Keys (2×)

4.2. UNFOLDING YOUR E-BIKE FRAME

1. Remove the strap from the folded e-bike frame. Keep the strap for transport and storage purposes.

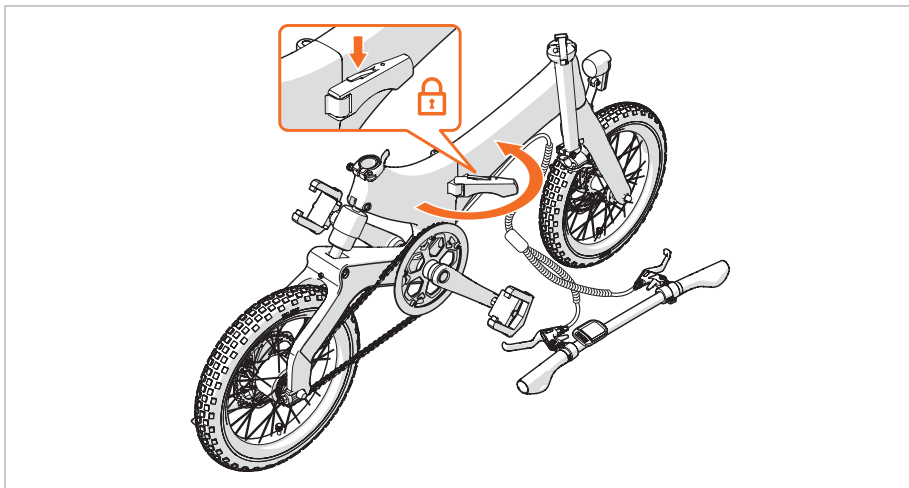


2. Separate the wheel magnet from the other wheel to release the two halves of the frame.

NOTICE

Always fold down the battery handle so the handle is flush with the battery before unfolding the frame to prevent damage to the battery handle.

3. Unfold the frame.



4. Press to release the safety lock.
5. Close the frame latch.

⚠ WARNING

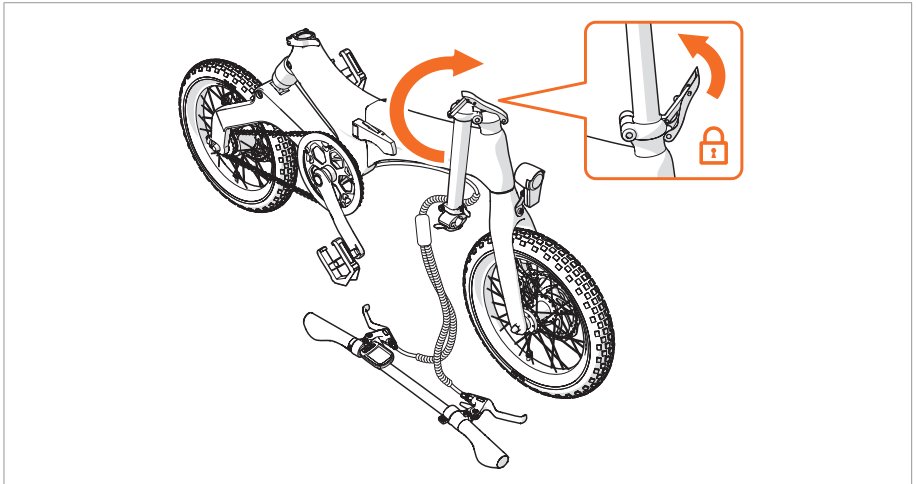
Always fully close the frame latch before cycling. If the frame latch is not closed properly, the frame may fold unexpectedly during cycling.

NOTICE

Never forcefully close the frame latch. If the frame latch does not close properly, check that the frame safety lock is pressed.

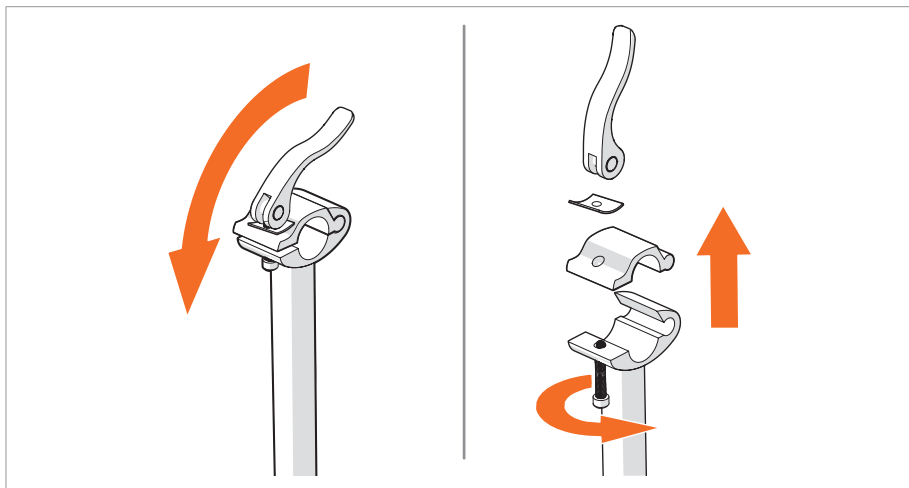
4.3. UNFOLDING THE HANDLEBAR STEM

1. Place your e-bike on the kickstand.

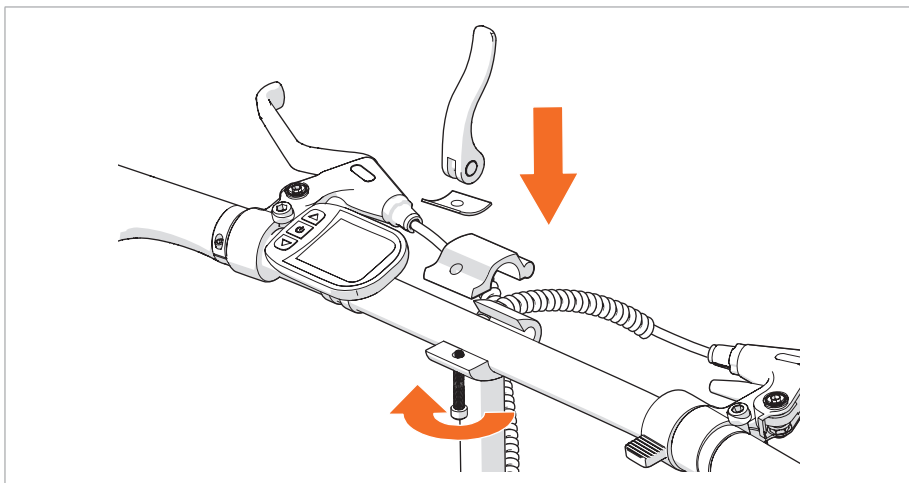


2. Unfold the handlebar stem.
3. Close the handlebar stem latch.

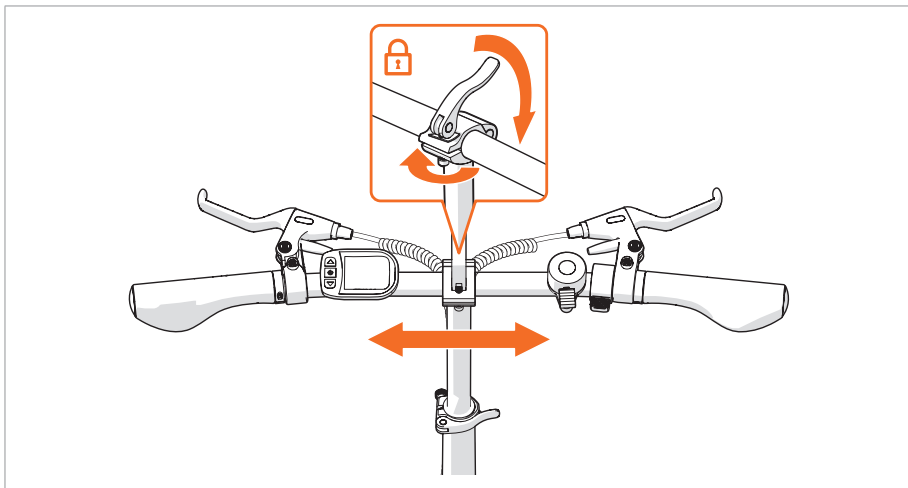
4.4. MOUNTING THE HANDLEBAR



1. Open the handlebar clamp.
2. Hold the clamp of the handlebar clamp and remove the thumbscrew.
3. Remove the washer and slide off the top of the handlebar clamp.



4. Place the handlebar on the bottom of the handlebar clamp.
5. Insert the top handlebar clamp and place the washer.
6. Place the clamp of the handlebar clamp upright on the thumbscrew and slightly fasten the thumbscrew.



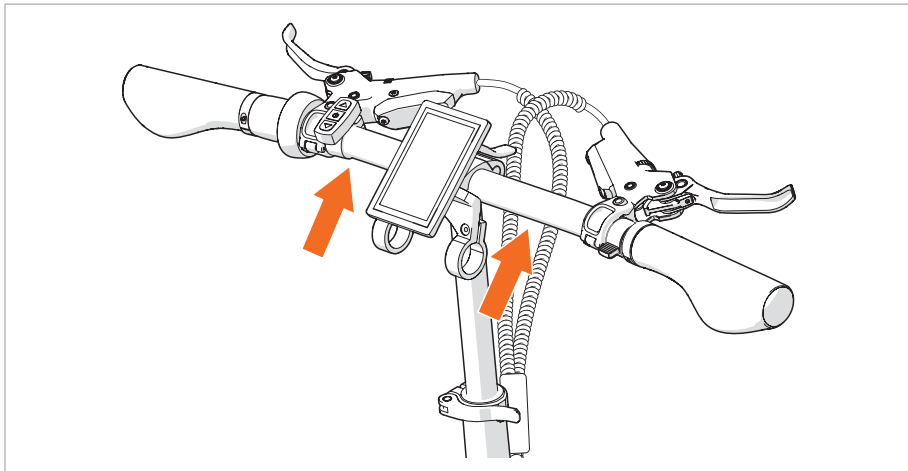
7. Align the handlebar centred on the handlebar stem.
 8. Fasten the thumbscrew.
 9. Close the handlebar clamp.
- i** If the handlebar can still move, the handlebar clamp is not tight enough. To adjust the clamp force, follow the instructions in chapter 4.8 *Adjusting the clamp force*.

⚠ WARNING

Always tighten the handlebar clamp to prevent the handlebar from rotating or moving during cycling.

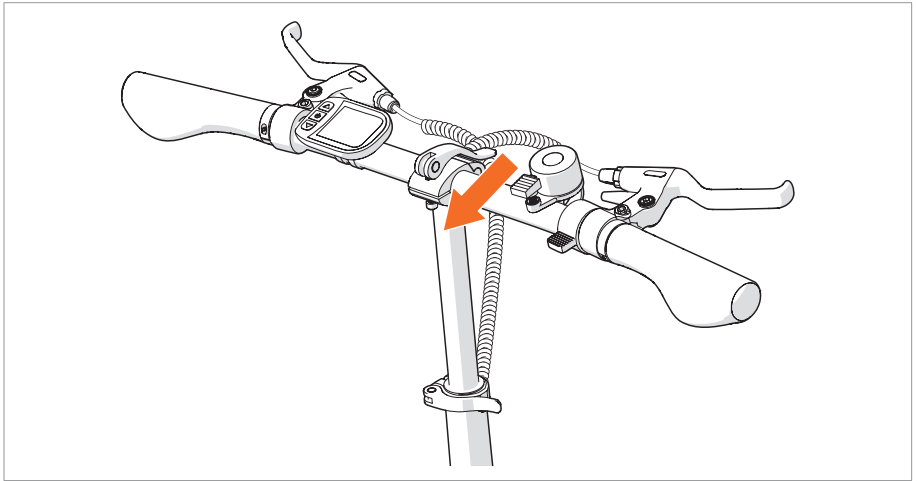
4.5. MOUNTING THE LCD SCREEN*

*This chapter is only applicable for the MiRiDER 20 GB3 or any MiRiDER with an upgraded LCD screen.



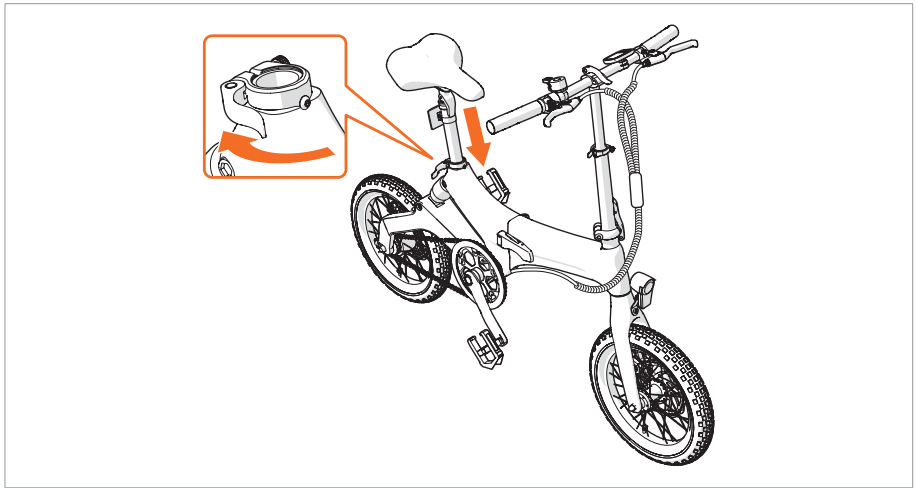
1. Remove the bolts from the mounting clamps with a M4 Phillips screwdriver.
2. Place the mounting clamps around the handlebar.
- i** Make sure the rubber inserts stay in place.
- i** Make sure the display is centred.
3. Tighten the bolts back on the mounting clamp with a M4 Phillips screwdriver.

4.6. MOUNTING THE BELL



1. Unscrew the bolt with a M5 Phillips screwdriver.
2. Place the bell on the handlebar.
3. Fasten the bolt with a M5 Phillips screwdriver.

4.7. INSERTING THE SEATPOST



1. Open the seatpost clamp.
2. Insert the seatpost into the seat tube.

⚠ WARNING

Always insert the seatpost at least up to the minimum marking into the frame. Not inserting the seatpost far enough into the tube may lead to loss of control of your e-bike during cycling and/or irreparable damage to the seatpost or frame.

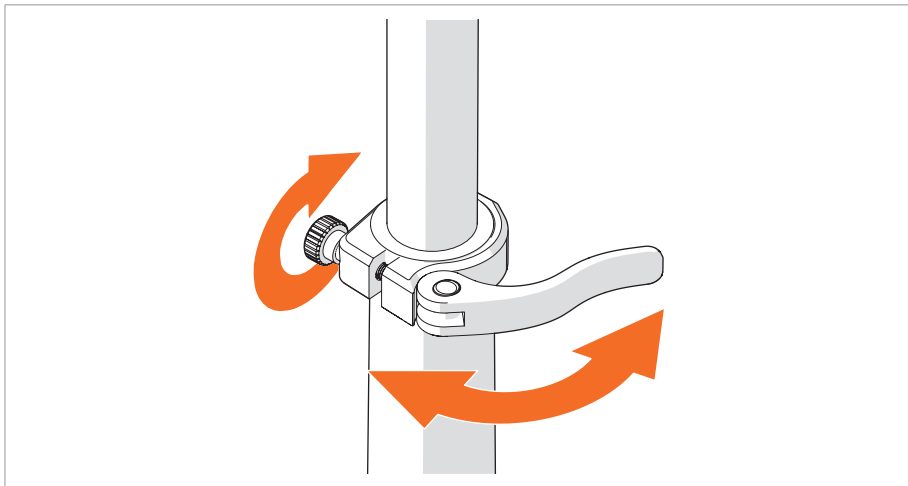
3. Align the saddle with the frame.
4. Close the seatpost clamp.

5. Check that the saddle does not rotate.
- i** If the saddle can still rotate, the seatpost clamp is not tight enough. To adjust the clamp force, follow the instructions in chapter 4.8. *Adjusting the clamp force.*

⚠ WARNING

Always tighten the seatpost clamp to prevent the seatpost from rotating or moving during cycling.

4.8. ADJUSTING THE CLAMP FORCE



1. Open the clamp.
 2. Tighten the thumbscrew.
 3. Close the clamp.
- i** If you cannot close the clamp by hand, the clamp is too tight. Open the clamp and slightly loosen the thumbscrew and close the clamp.

NOTICE

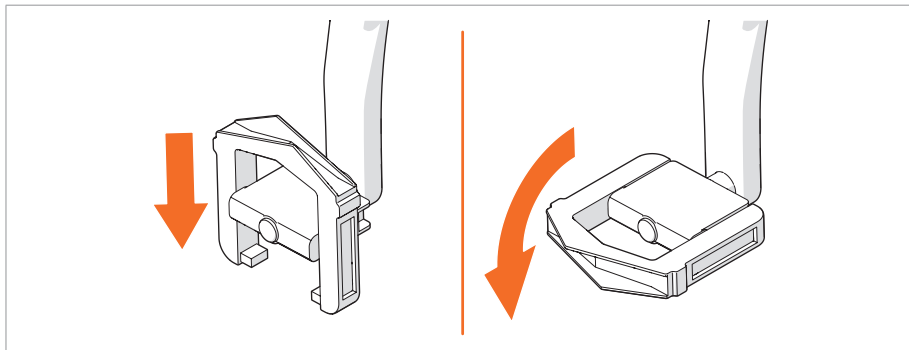
Do not forcefully close the clamps. Overtightened clamps can fail and snap.

5. PREPARATION

5.1. FOLDING AND UNFOLDING THE PEDALS

5.1.1. Foldable pedals*

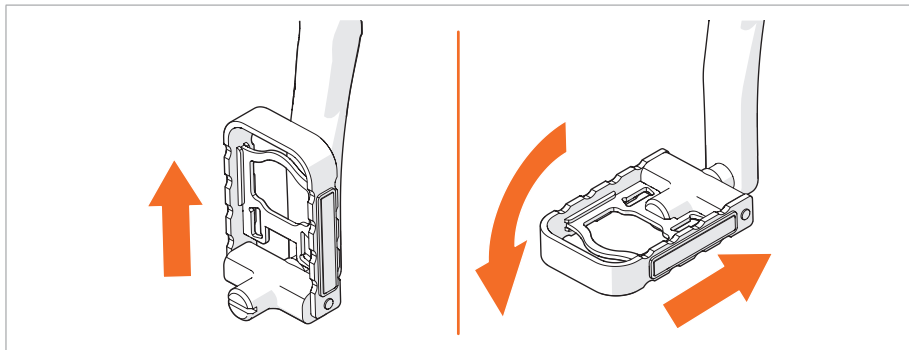
*This chapter is only applicable for the MiRiDER 20.



1. Push the pedal inwards.
2. Rotate the pedal 90°.
3. Release the pedal.

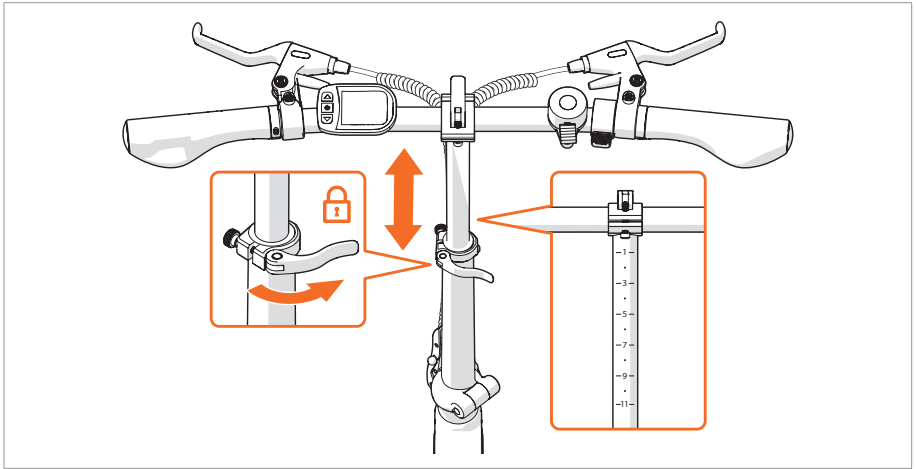
5.1.2. CNC foldable pedals*

*This chapter is only applicable for the MiRiDER 20 GB3.



1. Pull the metal centre of the pedal.
2. Rotate the pedal 90°.
3. Release the metal centre of the pedal.

5.2. ADJUSTING THE HANDLEBAR STEM HEIGHT



1. Open the handlebar stem clamp.
2. Place the handlebar at the desired height within the range indicated on the side of the stem.

⚠ WARNING

- Always adjust the height of the handlebar stem within the indicated range markings. Placing the height of the handlebar stem above the minimum insertion marking may lead to loss of control of your e-bike during cycling or failure of the e-bike.
- Do not try to unfold your e-bike with the handlebar set too high. Unfolding your e-bike with the handlebar set too high may pull out the connecting cables and may lead to loss of control of your e-bike during cycling or failure of the e-bike.

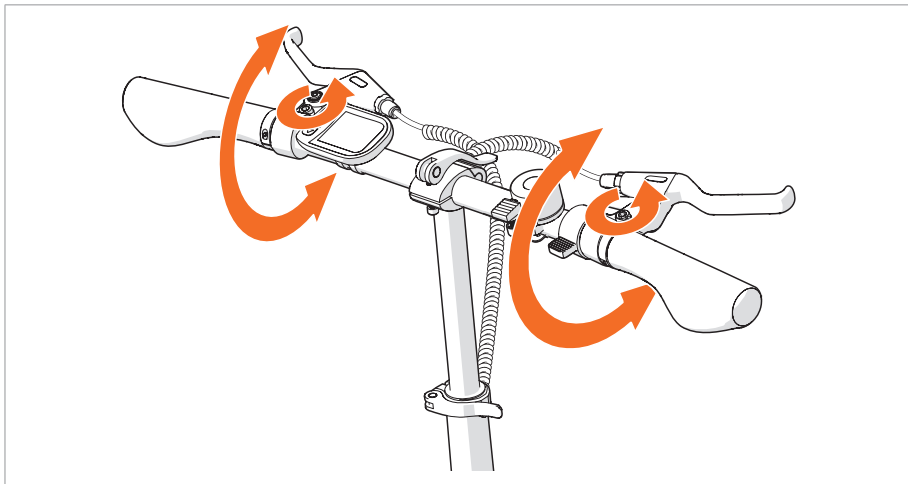
3. Close the handlebar stem clamp.

i If the handlebar stem can still move, the handlebar stem clamp is not tight enough. To adjust the clamp force, follow the instructions in chapter 4.8. *Adjusting the clamp force.*

⚠ WARNING

Always tighten the handlebar stem clamp to prevent the handlebar stem from moving during cycling.

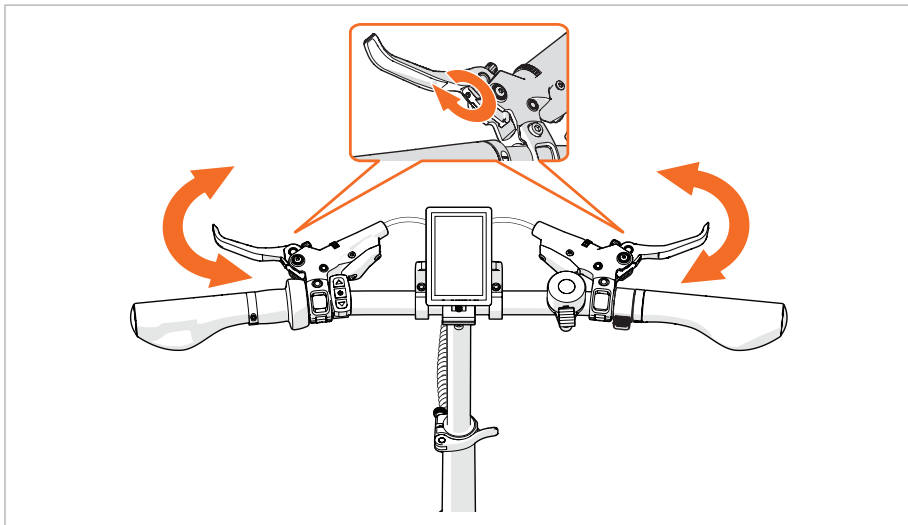
5.3. ADJUSTING THE BRAKE LEVERS



1. Loosen the clamp bolt(s) until the lever can rotate around the handlebar.
2. Twist the clamp until you can easily reach the lever with your hand on the handle.
3. Tighten the clamp bolt(s).

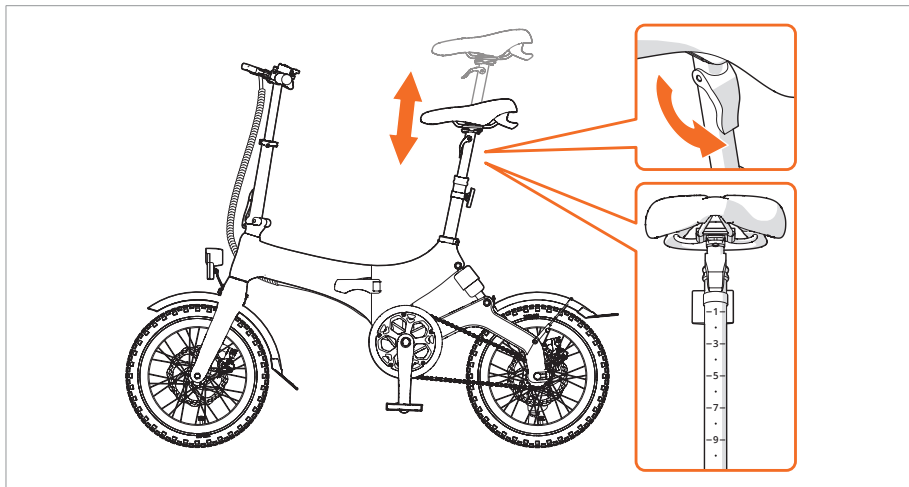
5.4. ADJUSTING THE BRAKE LEVERS FOR SMALLER HANDS*

*This chapter is only applicable for the MiRiDER 20 GB3.



Tighten the Allen bolt with a size 2 Allen key to reduce the distance between the brake lever and the grip.

5.5. ADJUSTING THE SADDLE HEIGHT

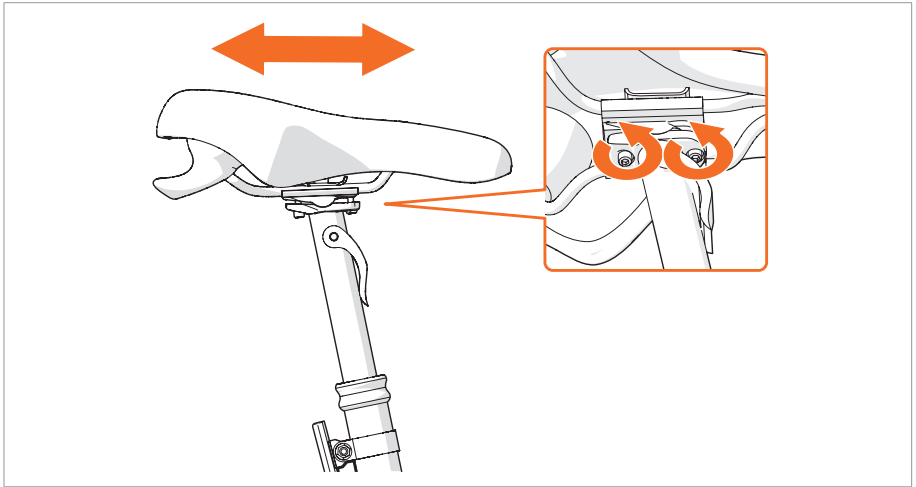


1. Open the seatpost height adjustment clamp.
2. Adjust the saddle to the desired height within the range indicated on the side of the post.
3. Close the seatpost height adjustment clamp.

⚠ WARNING

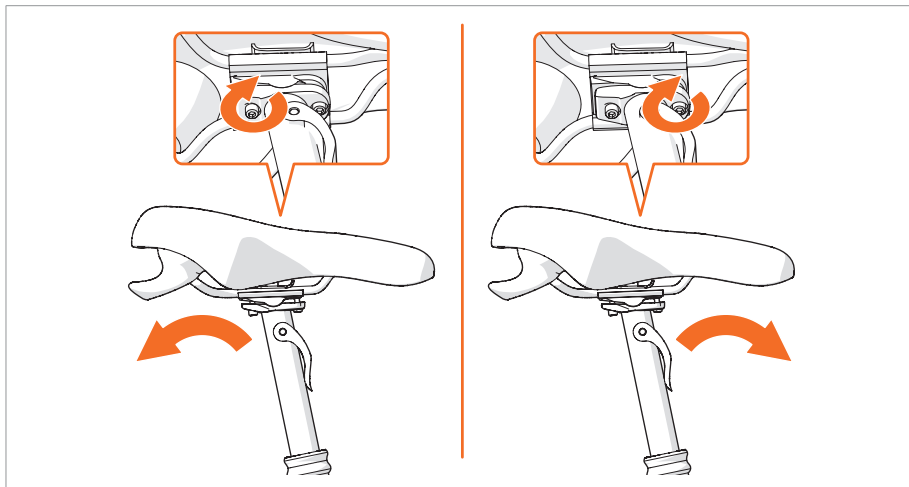
Always tighten seatpost height adjustment clamp to prevent the seatpost from moving during cycling.

5.6. ADJUSTING THE SADDLE HORIZONTAL POSITION



1. Loosen the two Allen bolts under the saddle using a size 5 Allen key.
2. Move the saddle forward or backward as desired.
3. Tighten both Allen bolts.

5.7. ADJUSTING THE SADDLE ANGLE

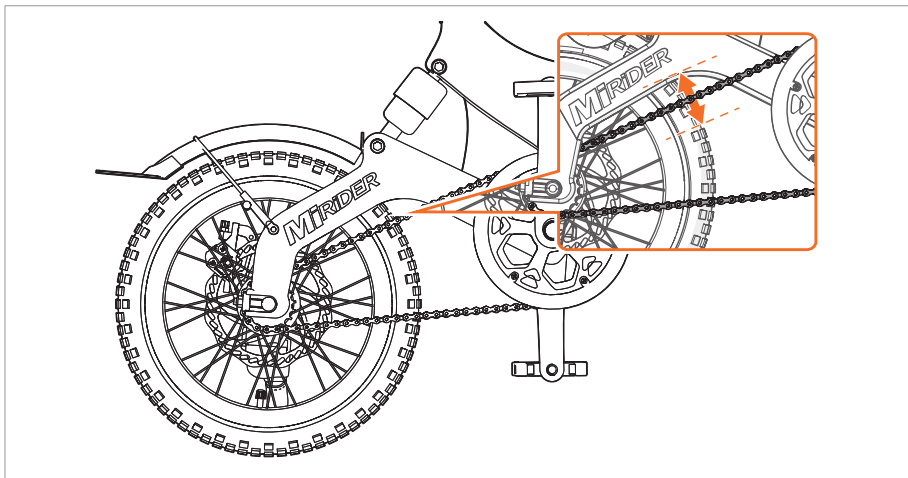


- To tilt the saddle forward: Loosen the rear bolt of the saddle and tighten the front bolt of the saddle using a size 5 Allen key.
- To tilt the saddle backwards: Tighten the rear bolt of the saddle and loosen the front bolt of the saddle using a size 5 Allen key.

5.8. CHECKING AND ADJUSTING THE CHAIN OR BELT TENSION

5.8.1. Checking the drive chain or belt tension

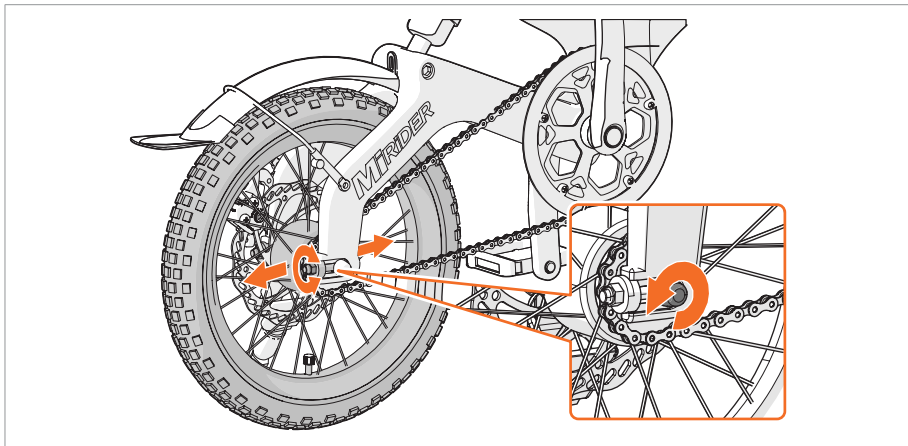
Your e-bike has a drive chain or belt that needs to be properly tensioned for the best riding experience and to reduce wear. To check the tension of your chain or belt:



Push the drive chain or belt in the middle between the two sprockets down or up. The belt should move about 10 mm down or up if tensioned properly.

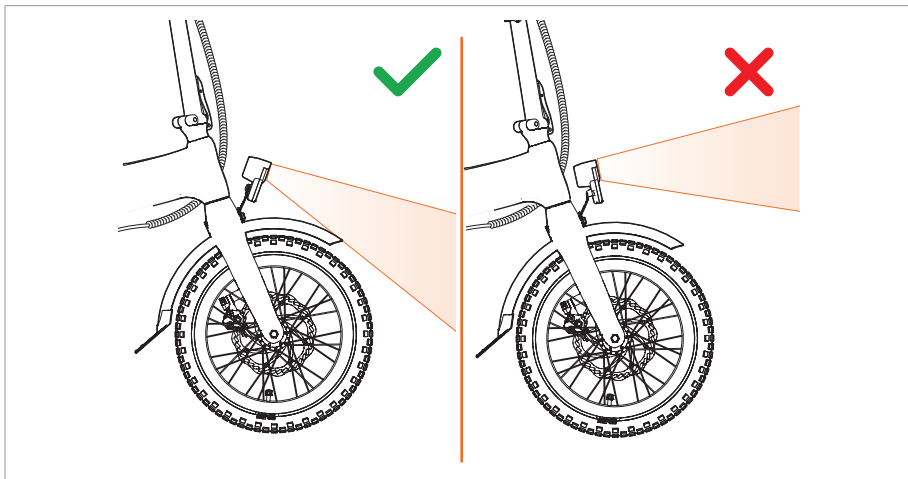
- ❗ If the belt moves more than 10 mm, the belt is too loose. If the belt moves less than 10 mm, the belt is too tight.

5.8.2. Changing the drive chain or belt tension



1. Loosen the hub nuts on either side of the rear axle. Do not remove the nuts.
2. Screw the tensioner nuts on both sides clockwise (tighter) or anticlockwise (looser) to adjust the tension of the drive chain or belt. Make sure both sides are equally tensioned.
3. When the drive belt is properly tensioned, retighten the hub nuts.

5.9. ADJUSTING THE HEADLIGHT



Tilt the headlight until the light beam shines on the road ahead of you as far as possible while still fully touching the ground.

⚠ CAUTION

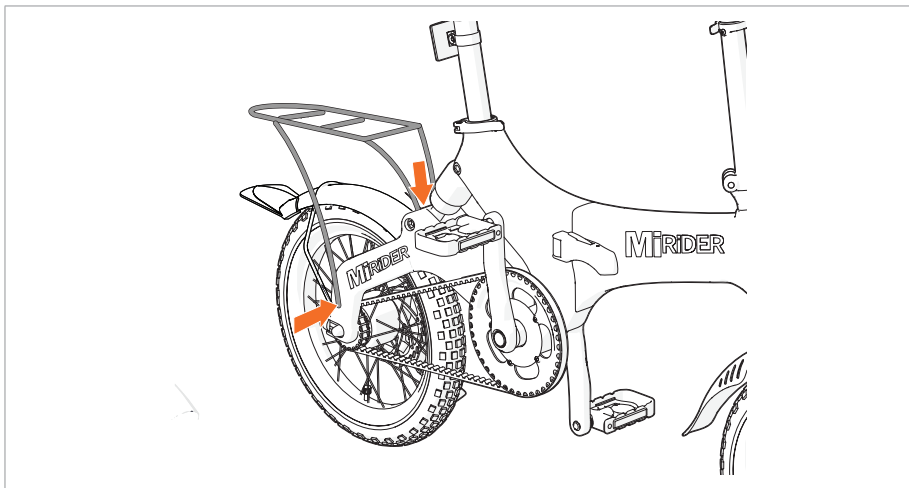
Ensure that the headlight does not shine in the eyes of road users that are facing you. The light can dazzle other road users, which may lead to accidents.

5.10. INSTALLING THE OPTIONAL REAR RACK*

*Separately available as accessory: MR351 Rear luggage rack.

CAUTION

- The rear rack is rated for a maximum load of 25 kg. Never exceed the maximum rated load for the rear rack.
- The added luggage on the front and/or rear rack is included in the max. combined weight (120 kg). Do not exceed the maximum rider weight limit when loading the front and/or rear rack with luggage.
- The front and rear rack are not supposed to be used to mount child seats to.
- Always tighten the bolts to the mentioned torque specifications in this manual.
- Never modify or alter the front or rear racks.
- When loading the racks with items, make sure the items do not cover the reflectors or lights of the bike and make sure there are no loose hanging items that can be caught between the wheels. Always balance the load of items on the racks.
- The added weight of a loaded rack can influence the behaviour of the bicycle. Always carefully test ride the bicycle after loading the racks.



1. Unscrew and remove the mudguard.
2. Line the bottom of the rear rack up with the bolt holes near the rear axle.
3. Insert the 2 screws. Do not tighten the 2 screws.
4. Line the bolt, washer, rear rack and 10 mm spacer up with the mudguard mounting hole.
5. Tighten the top screw, and 2 bottom screws to 3 - 6 Nm to secure the rear rack into place.

⚠ CAUTION

Always make sure the bolts are tightened properly. Check the bolts at least once a month. See Chapter 8.3.1. Checking your e-bike.

5.11. GETTING USED TO YOUR E-BIKE

We recommend giving your e-bike a test run in a place with little or no traffic. This allows you to become familiar with the different assistance levels in a controlled environment. Start with the lowest assistance level and increase throughout the trip.

⚠ CAUTION

Always try out the brakes during the test cycle so you know how hard you must squeeze and how powerful the brakes are. Disc brakes are more powerful than traditional brakes. Always keep in mind which brake levers operate the front and the rear brakes.

6. USE

6.1. SWITCHING YOUR E-BIKE ON AND OFF

1. Press the power button to switch on the display.
2. Press and hold for 2 seconds to switch off the display.

6.2. SETTING THE ASSISTANCE LEVEL

You can adjust the assistance level while stationary or while cycling. You can view the assistance level on the LCD screen. There are five levels of assistance.

Press the up button to increase assistance level or press the down button to decrease assistance level.

6.3. SWITCHING THE HEADLIGHTS ON AND OFF

Press and hold the up button for 4 seconds to switch the headlights on/off.

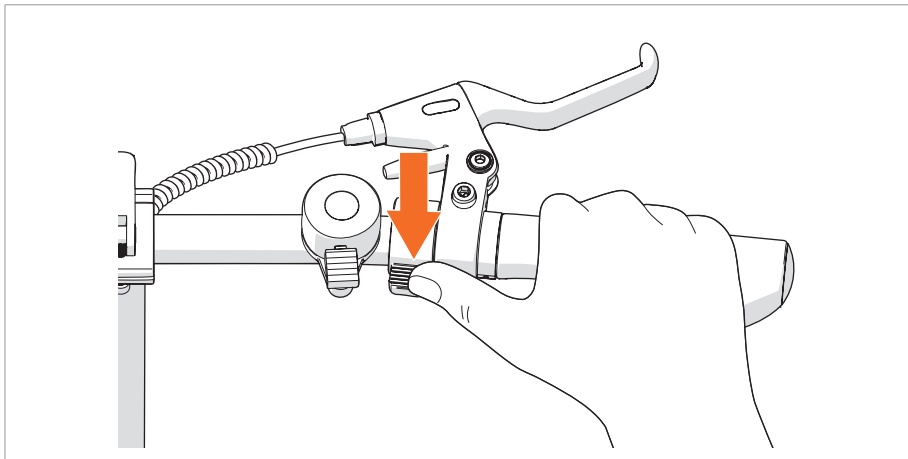
6.4. PREVIEWING DISPLAY FUNCTIONS

Press the power button to show the different information pages on the display.

6.5. USING THE THROTTLE

You can use the throttle for two purposes:

- Giving you a power boost from a standing start.
- Giving you a power boost, equivalent to the level five power assistance, when pedalling.



1. Push and hold the throttle with your thumb to enable the power boost.
2. Release the throttle to disable the power boost.

6.6. USING THE WALK ASSIST

You can use walk assist to aid in pushing your e-bike while walking.

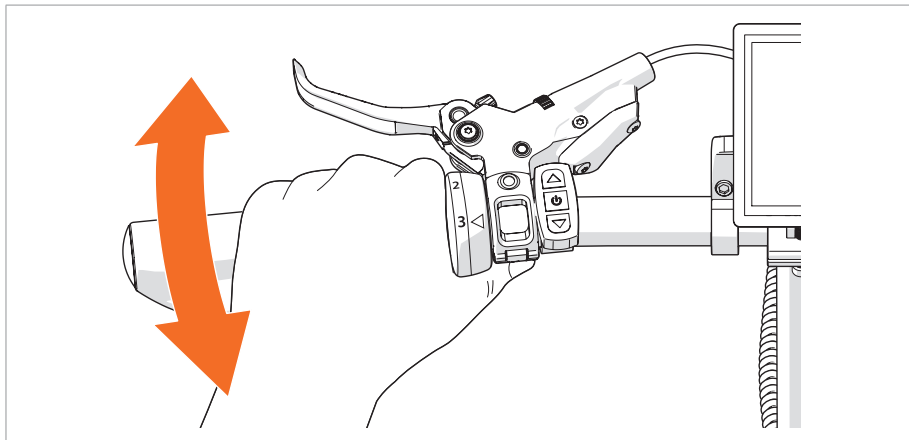
1. Press the power button to switch on the display.
 2. Push and hold the throttle with your thumb to enable the walk assist.
 3. Release the throttle to disable the walk assist.
- i** If the walk assist is not being used, switch off your e-bike to prevent accidental activation of the motor if a pedal is being pushed.
 - i** In event of an emergency, pull the brakes to disable the walk assist instantly.

CAUTION

Only use the walk assist mode while walking with your e-bike. Keep your legs clear from the pedals.

6.7. SHIFTING GEARS*

*This chapter is only applicable for the MiRiDER 20 GB3.



Twist the grip shifter to shift between the gears.

6.8. RESETTING THE TRIP DISTANCE AND TIME

1. Press the up and down button until the trip distance and single trip time indicators flash.
- i** Only applicable for the MiRiDER 20 GB3: If the lines on the display turn yellow, wait until the lines turn white and repeat step 1.
2. Press the power button.

7. AFTER USE

7.1. FOLDING YOUR E-BIKE

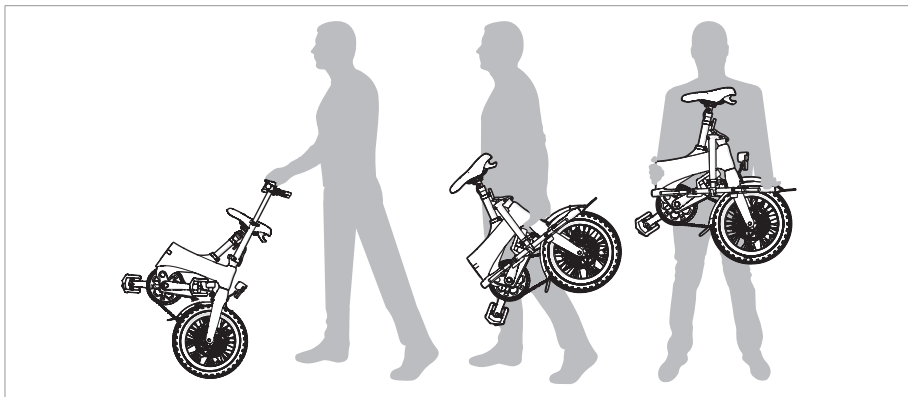
1. Open the handlebar stem clamp.
2. Collapse the telescopic handlebar stem to the lowest height.
3. Close the handlebar stem clamp.
4. Pull the handlebar stem safety lock up and open the handlebar stem latch.
5. Fold the handlebar stem.
6. Open the seatpost clamp.
7. Collapse the seatpost to the lowest height.
8. Close the seatpost clamp.
9. Fold the pedals. Follow the instructions in chapter 5.1. *Folding and unfolding the pedals.*
10. Stand on the right side of your e-bike.
11. Press the frame safety lock.
12. Open the frame latch.
13. Fold your e-bike until the front half attaches to the wheel magnet.

NOTICE

Always lock the battery in the frame to prevent the battery from falling out.

14. Put the strap around your e-bike.

7.2. TRANSPORTING YOUR E-BIKE



You can transport your folded e-bike in three ways:

- Carrying your e-bike in front of you using both hands.
- Carrying your e-bike at your side using one hand.
- Using the handlebar to push your e-bike in front of you.

NOTICE

- When the frame is folded, only move your e-bike forward. Moving your e-bike backwards causes the crank arm to rotate which may damage the frame.
- Always lock the battery in the frame to prevent the battery from falling out.

7.3. CHARGING THE BATTERY

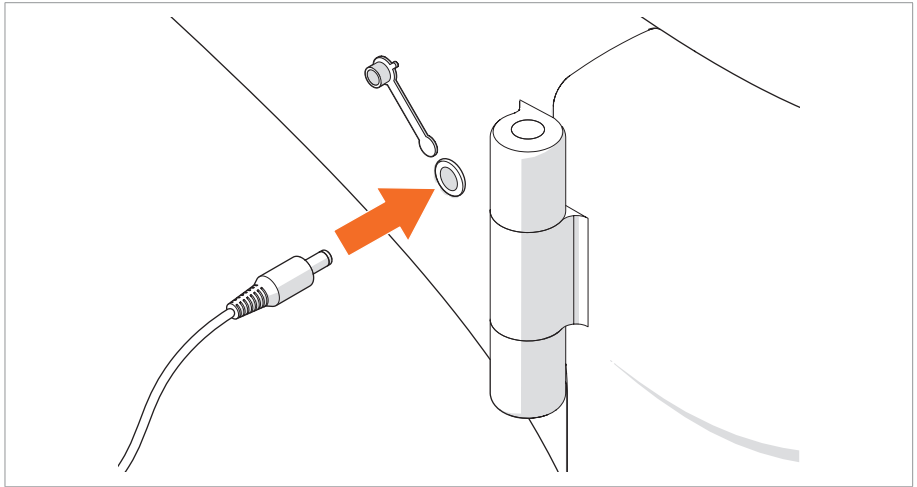
WARNING

- Only charge the battery with the provided charger. Ensure the voltage of the charger matches the voltage of the battery. Non-matching voltages may cause a fire or explosion hazard.
- Do not use the battery or charger if there is visible damage. A damaged battery or charger may cause an electric shock hazard.
- Do not use the battery or charger on highly flammable surfaces or in a combustible environment. The heat generated during charging may cause a fire hazard.
- Do not use or store the battery and charger near heat sources and highly inflammable liquids. Using or storing the battery and charger near heat sources may cause an explosion hazard.

NOTICE

- Always charge the battery within a temperature range of 10°C - 45°C.
- Always plug the charger into the battery's charging port before plugging the charger into the power outlet. Always disconnect the charger from the power outlet before removing the charger from the battery's charging port.

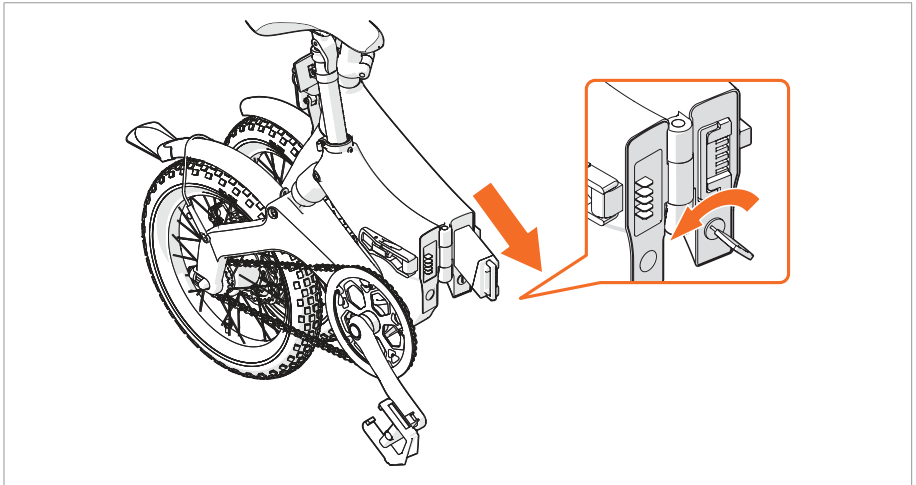
7.3.1. Charging the battery via the frame



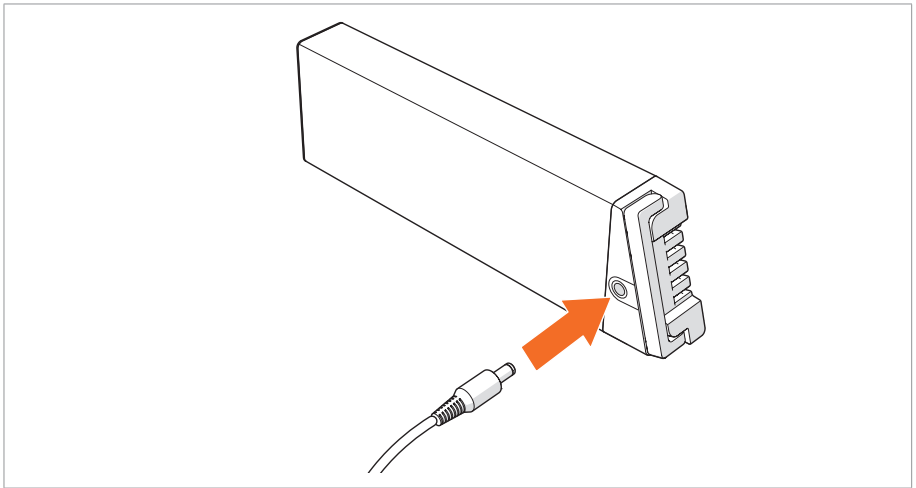
1. Remove the dust cap from the charging port.
2. Insert the appliance plug of the power cable into the charger.
3. Open the cover cap.
4. Insert the charging plug of the charger into the charger port on the frame.
5. Insert the power plug of the power cable into a power socket.
6. Switch the power socket on.
- i** The charging indication LED is red while charging the battery and green when the battery is fully charged.
7. Unplug the charging plug when the charging indication LED lights up green.
- i** Make sure the battery indicator on the display shows a full charge after fully charging the battery.

7.3.2. Charging the battery separately

1. Stand on the non-drive side of your e-bike.
2. Press the frame safety lock.
3. Open the frame latch.
4. Fold your e-bike until the front half attaches to the wheel magnet.



5. Unlock the battery lock with the key.
6. Pull out the battery using the battery handle.



7. Insert the appliance plug of the power cable into the charger.
8. Insert the power plug of the power cable into a power socket.
9. Insert the charging plug of the charger into the charger port on the battery.
10. Switch the power socket on.
 - i** The charging indication LED is red while charging the battery and green when the battery is fully charged.
11. Unplug the charging plug when the charging indication LED lights up green.
 - i** Make sure the battery indicator on the display shows a full charge after fully charging the battery.
12. Place the battery back in the frame.

NOTICE

- Do not force the battery into the frame. Always ensure the battery is the correct way around. Do not attempt to install the battery the wrong way around. Do not attempt to remove the battery whilst locked into place.
- Always correctly and fully insert the battery into the frame. Inserting the battery incorrectly or incompletely into the frame may damage the battery or the frame.
- Always lock the battery in the frame to prevent the battery from falling out.
- Always fold down the battery handle so the handle is flush with the battery before unfolding the frame to prevent damage to the battery handle.

8. MAINTENANCE

8.1. SERVICE PLAN

WARNING

As with all mechanical components, the e-bike is subjected to wear and high stresses. Different materials and components may react to wear or stress fatigue in different ways. If the design life of a component has been exceeded, it may suddenly fail, possibly causing injuries to the rider. Any form of crack, scratches or change of colouring in highly stressed areas indicate that the life of the component has been reached and it should be replaced.

It is recommend to have your e-bike checked and serviced by a MiRiDER dealer at least once annually or every six months if you use your e-bike daily. The check-ups and adjustments prevent breakage and costly repairs. Choose a service to have your wheels professionally trued and tensioned as part of the ongoing service level to prolong the life of your e-bike.

It is recommended to have your e-bike checked by a MiRiDER dealer after the first 100 miles or 6 weeks of use, as some parts take time to bed in and may need adjusting to keep optimised performance.

It is recommended to have the gearbox of your e-bike serviced every 500 miles, as the gearbox requires adequate lubrication with specialist oil.

Visit mirider.co.uk/try-a-mirider for a list of established MiRiDER dealers.

Use the maintenance logbook from chapter 12.7. to record the service history of your e-bike.

8.2. MAINTAINING YOUR E-BIKE YOURSELF

8.2.1. Checking your e-bike

NOTICE

Listen to the sound your e-bike produces. If something doesn't sound right or you feel any wobbles/shakes, stop riding your e-bike and identify the problem.

Part	Interval	Maintenance check
Brakes	Before every ride	Check that the front and rear brakes offer sufficient stopping power.
Tyres	Before every ride	Check that the tyre pressure is within recommended pressure range.
	Monthly	Check for wear and cracks.

Part	Interval	Maintenance check
Wheels	Monthly	Check for damage.
	Monthly	Check for lateral movement and spoke condition.
Wires	Monthly	Check for visible damage.
Bolts	Monthly	Check for loose bolts.
Chain ¹	Monthly	Check the chain's tension.
	Weekly	Clean and lubricate the chain.
Drive belt ²	Monthly	Check the belt's tension.
Throttle	Before every ride	Check that the throttle is disabled when released.
Headlight	Before every ride	Check that the headlights work.
Frame	Monthly	Check the frame for visible damage.

¹ Only applicable to the MiRiDER 20

² Only applicable to the MiRiDER 20 GB3

8.3. TIGHTENING THE BOLTS

Your e-bike is not indestructible. You may be required to adjust your e-bike whilst out cycling. It's advisable to carry a Allen key multi tool set 2 – 8 mm with you. You may periodically have to tighten a bolt or adjust your bike.

8.4. REPLACING THE INNERTUBE

Your e-bike wheels have innertubes filled with sealant to prevent punctures. If the hole in the innertube is too big, the sealant will leak out along with the air.

When a hole occurs in the innertube, you will need to replace the innertube. It's advisable to carry a spare innertube, pump, and puncture kit with you whilst cycling. Visit our YouTube channel for more information on how to change your innertube. See chapter .

NOTICE

Do not let the rear wheel dangle from the power cable when maintaining the wheel using a cycle maintenance stand. Letting the rear wheel dangle by the power cable may cause irreparable damage. Always disconnect the power cable and wheel completely from the bike before commencing maintenance.

8.5. LUBRICATING THE CHAIN*

*This chapter is only applicable for the MIRIDER 20.

⚠ WARNING

Do not lubricate the drive belt. Lubricating the drive belt may cause the drive belt to slip and void warranty.

1. Degrease and clean the chain.
2. Relubricate the chain once per week to keep optimised performance and to prolong the life of your e-bike.

8.6. CLEANING YOUR E-BIKE

WARNING

Always remove the battery from the e-bike before cleaning. Water may cause an electric shock, fire, and/or explosion hazard.

NOTICE

- Do not use aggressive detergents that may damage the e-bike.
- Do not immerse the e-bike in water or clean the e-bike with a high pressure cleaner.

Clean your e-bike at least once per month to prolong the life of your e-bike. If you commute in wet and muddy conditions or ride off-road more, you may need to increase your cleaning intervals.

1. Clean your e-bike with a soft, non-abrasive cloth and mild detergent using water.
2. Use a fresh clean cloth when cleaning disk rotors to avoid contamination.
3. Clean the reflectors on the e-bike to ensure you remain visible in traffic.

9. STORAGE AND SECURITY

9.1. STORAGE

Store your e-bike in a secure, cool, and dry space.

Store the battery and the charger in a dry place at room temperature.

NOTICE

Always fully charge the battery before storing to prevent diminishing the battery life.

9.2. SECURITY

Remove the battery from the frame before leaving your e-bike for any amount of time. Always ensure your e-bike is locked up securely to avoid theft.

10. TROUBLESHOOTING

Problem	Cause	Solution
Power assistance is not functioning.	There is no power.	Check if the battery is installed correctly.
		Make sure the battery is charged.
		Make sure all cables are connected properly.
The battery is not lasting for a sufficient amount of time.	The battery is not fully charged.	Make sure the battery is charged.
	The tyre pressure is low.	Check tyre pressure is within the minimum and maximum range. Underinflated tyres can cause excess battery drain and premature wear.
	The battery efficiency is reduced after extended use.	Use the power assistance levels efficiently.
	The power assistance is set on the highest level.	Purchase a new battery.

Problem	Cause	Solution
The display is not working.	There is no power.	Check if the battery is installed correctly.
		Make sure the battery is charged.
		Make sure all cables are connected properly.

11. DISPOSAL



Indicates that the product must not be disposed with household waste. Recycle this product in an environmentally friendly manner according to local regulations.

If the e-bike is defective, please contact your MiRiDER dealer. It may still be possible to repair the e-bike. If you still need to dispose the e-bike, please follow the local regulations.

To prevent possible harm to the environment or human health from uncontrolled waste disposal, recycle the e-bike responsibly to promote the sustainable reuse of material resources.

Always remove the battery from the e-bike before disposal. The battery may contain toxic heavy metals and meet the requirements of hazardous waste.

12. APPENDICES

12.1. TECHNICAL SPECIFICATIONS

Mechanical configuration

Product name	MiRiDER 20	MiRiDER 20 GB3
Seat height from ground	760 – 920 mm	
Brake system	Front and rear disk brake	
Tyre dimension	20 × 1.75 - 20 × 2.125 inch	
Frame material	Diecast magnesium	
Suspension	Rear spring shock absorber	

Battery specifications

Product name	MiRiDER 20	MiRiDER 20 GB3
Battery type	Samsung Li-ion battery	
Battery capacity	36 V / 7.0 Ah	
Battery weight	1.3 kg	
Charging current	2.0 A	
Power consumption	0.2 Wh per charge	
Rated input	10 – 240 V 50/60 Hz 2.0 A	

Battery specifications

Rated output	42 V 2.0 A
Charging temperature	0°C – 45°C

Function parameters

Product name	MiRiDER 20	MiRiDER 20 GB3
Maximum motor speed	25 km/h	
Maximum range	72 km – dependant on rider weight and terrain	
Max. combined weight (e-bike, rider, and load)	120 kg	
Climbing angle	>15°	
Throttle	Without pedalling: up to 6 km/h With pedalling: 25 km/h	
Stopping distance (dry conditions)	5 m (speed at 20 km/h)	
Stopping distance (wet conditions)	10 m (speed at 15 km/h)	
Working temperature	-10°C – 50°C	

Motor specifications

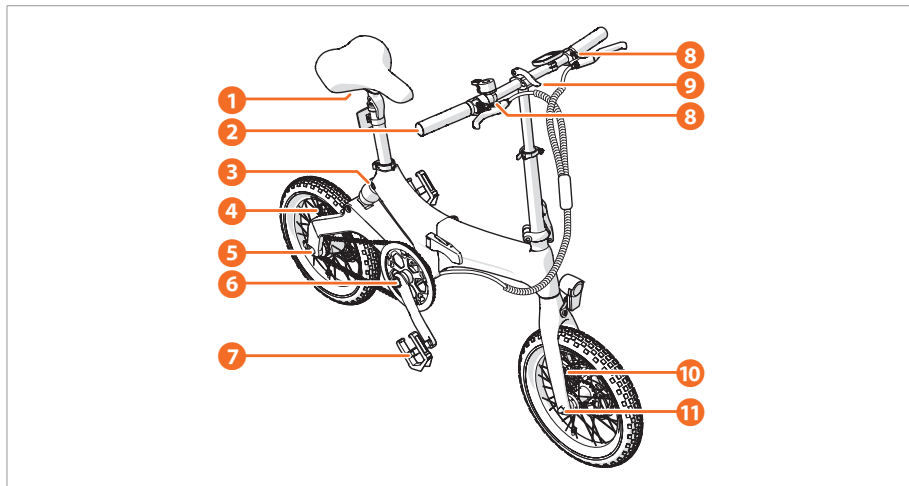
Product name	MiRiDER 20	MiRiDER 20 GB3
Rated voltage/wattage	36 V / 250 W	
Torque	40 Nm	
Max. combined weight (e-bike, rider, and load)	120 kg	
Climbing angle	>15°	
IP rating	IP54	

Rear rack specifications

Product name	MR351 Rear luggage rack 20 inch	
Product manufacturer	MiRiDER, Unit 3, Croftwood square, Wigan, WN50LG	
Max. carrying weight	25 kg	
Max. compatible wheel size	20 × 2.125 inch	
Batch number		

12.2. TORQUE VALUES

Take the torque values into account when replacing or adjusting parts, or doing any maintenance.



- 1 Saddle bolts: 12 Nm
- 2 Locking grips: 2 - 4 Nm
- 3 Shock eyelet bolts: 8 - 10 Nm
- 4 Rear brake calliper: 6 - 8 Nm
- 5 Rear axle: 30 - 40 Nm
- 6 Crank Bolts: 30 - 45 Nm
- 7 Pedal Axel: 40 - 43 Nm
- 8 Brake Levers: 4 - 5 Nm
- 9 Handlebar clamp bolt: 12 Nm
- 10 Front brake calliper: 6 - 8 Nm
- 11 Front axle: 30 - 40 Nm

12.3. SPARE PARTS AND ACCESSORIES

The following spare parts are available for your MiRiDER e-bike:

- Hydraulic disc brake set
- Innertubes*
- Mudguards
- Handlebars
- Telescopic seat stem
- Replacement tyres & upgraded tyres
- Wheel magnet
- Brake pad set
- Pedals
- MiRiDER 20 GB3 oil

*The innertubes fitted to your e-bike are Schrader valve and are also available from your local bike store.

To purchase spare parts or accessories, please contact your MiRiDER dealer or visit **www.mirider.co.uk**

12.4. ADDITIONAL RESOURCES

For additional instructional and how-to video's, visit www.mirider.co.uk/videos or visit our YouTube channel **www.youtube.com/@MiRiderUK**

12.5. SOCIAL MEDIA HANDLES

Join our growing MiRiDER community for more exciting content!

Facebook: MiRiDER Community

Instagram: @mirideruk

12.6. EC DECLARATION OF CONFORMITY

MiRiDER LTD
3 Croftwood Square
Wigan
WN5 0LG
United Kingdom

Declares under our sole responsibility that the product:

Product name: MiRiDER
Function: Foldable e-bike
Type: 20, 20 GB3

Conforms with the provisions of the following EC directives:

EMC Directive 2014/30/EU
Machinery 2006/42/EC

The following Harmonized standard were applied:

Cycles - Electrically power assisted cycles - EPAC Bicycles
EN15194:2017

This product carries the UKCA and CE Mark, which was first affixed in 2024.

Signed:



Date: 01/01/2024

Position: Sales Director

12.7. MAINTENANCE LOGBOOK

12.7.1. Identification

Product code	
Order number	

12.7.2. Maintenance work

Maintenance		Stamp
Repair		
Comments		
Date		
MiRiDER dealer		
Km cycled		

Maintenance		Stamp
Repair		
Comments		
Date		
MiRiDER dealer		
Km cycled		

Maintenance		Stamp
Repair		
Comments		
Date		
MiRiDER dealer		
Km cycled		

Maintenance		Stamp
Repair		
Comments		
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Km cycled		

Maintenance		Stamp
Repair		
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Date		
MiRiDER dealer		
Km cycled		

MiRiDER™

mirider.co.uk

MiRiDER LTD

3 Croftwood Square
Wigan WN5 0LG
United Kingdom

www.mirider.co.uk
support@mirider.co.uk
Phone +44 (0)1257 228242

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