



Freedom C3H

2024 ELECTRIC BIKES MANUAL

Please read this manual in full prior to operating your new bike

ELECTRIC BIKES Owner's Manual

OWNER'S NAME: _____

DATE OF ASSEMBLY: _____

BIKE SERIAL NUMBER: _____

NOTE: ♦ THIS IS FOR YOUR RECORDS ONLY. YOUR SERIAL NUMBER IS THE NUMBER STAMPED ON THE TOP TUBE. (Please locate the serial number on your bike and write it down on this page. You may be asked for your bike's serial number as a part of warranty requests. You may also be asked to provide this number to law enforcement in the event that your bike is stolen.)

Thank you for purchasing a E-BIKE! This manual contains important safety, performance & maintenance information. Please take a moment to read the manual and review our instructions before start riding & keep the manual for the future reference.



Read this entire manual before assembling or using your new electric bike. Do not modify, disassemble, or replace the original electrical components on your bike. Doing so will invalidate your warranty and could put you in danger. Riding any type of bike comes with some risks which can't be predicted or avoided. Taking proper care of bike components can lower the risk of sudden failure of components but cannot prevent it. These sudden failures could cause serious harm, injury, or death to the rider. If you notice abnormalities in any component on the bike, take it to a licensed mechanic to be repaired or replaced immediately. We assume no liability for harm, injury, or death of the rider.

This manual is not intended to function as a detailed service manual. Our Bikes recommends having your local bike shop mechanic perform a detailed safety check of your bike before your first ride. Ensure your local mechanic is experienced and reputable.

The Freedom C3H can withstand most rain showers without sustaining damage. The bike has an IP rating of 65. This means it is dust tight and can withstand jetting water. See the IP code for more details. It does not mean that the bike and its mechanical and electrical components are waterproof. We do not recommend storing or using the bike in excessively wet conditions. The warranty for the bike does not cover water damage.

For technical assistance or warranty claims, please feel free to contact us directly.

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IMPORTANT: READ ALL INSTRUCTIONS BEFORE USE. RETAIN INSTRUCTIONS FOR FUTURE REFERENCE. WARNING: Basic safety precautions should always be observed when using an electrical appliance to reduce the risk of fire, electrical shock or serious injury.

1. Safety Notes

- **1.1) Personal Safety:**

This e-bike is intended for use on paved roads or paths only. Using the e-bike for any other purpose may result in serious injury. Before you ride this e-bike in a busy area or on public roads, practice riding in a safe area free of hazards. Take time to learn the e-bike's controls and power. It is your responsibility to **identify and follow all local laws and regulations**, including fitting your e-bike with any additional equipment necessary to comply with local laws. At night your e-bike **MUST** have white front lights and red rear lights lit. It **MUST** also be fitted with a red rear reflector and amber pedal reflectors. Use caution when loading your e-bike into a car or when mounting it on a bicycle carrier.

- **1.2) E-bike Safety:**

You must be 18 or over to ride this e-bike. Your e-bike is designed for a maximum permitted overall weight (rider + cargo) of 275lbs. You **MUST** have the bike **inspected or assembled by someone experienced with bike mechanics prior to use. Proper professional assembly is required for upholding the Limited Warranty. We will require proof of professional assembly or post-assembly sign-off by a bike professional for warranty coverage to be applied.** Improper installation could cause serious injury. Do not submerge your e-bike in water. Be aware that the speed at which you are traveling may be faster than you are used to, **especially when accelerating.**

- **1.3) Electrical Safety:**

Only use the charger supplied by ours. Do not store the bike or battery plugged into a wall outlet. Unplug the battery before leaving the bike alone. Never modify the charger in any way. The charger has been designed for a specific voltage, always check that the outlet's voltage is the same as that stated on the rating label. A charger that is suitable for one type of battery pack may create a risk of fire when used with another battery pack; never use the charger with another appliance or attempt to charge this product with another charger. Before use, check the charger cord for signs of damage. A damaged or entangled charger cord increases the risk of fire and electric shock. Keep the charger cord away from hot surfaces and sharp edges. Do not handle the charger with wet hands. Do not store or charge the appliance outdoors. The charger must be removed from the socket before removing the battery, cleaning or maintaining the appliance.

- **1.4) Brake Safety:**

Regularly check your brakes for signs of wear and tear. Any worn parts must be

repaired or replaced immediately. Be careful while getting used to the brakes. Practice emergency stops in a place clear of traffic until you are comfortable controlling your e-bike. Wet weather reduces your braking power and the grip of the tires. Reduce your speed and be aware of longer stopping distances when cycling in wet conditions. Braking on unpaved surfaces will differ. Be sure to practice braking on different surface types. Ensure that braking surfaces and brake pads are free of wax, grease and oil. Do not pedal and brake at the same time as this will cause excessive wear.

- **1.5) Maintenance:**

Many parts on your e-bike are subject to a higher degree of wear due to their function and depending on their use. Have your e-bike checked regularly at a professional bike shop and have any worn parts replaced. After an accident or crash you must take your e-bike to a bike repair specialist to make sure that it is safe to ride. Be aware that damage may not be visible. Failure to do this may result in serious injury. Any form of crack, scratches or change of coloring in highly stressed areas indicate that the life expectancy of the part has been reached and it should be replaced immediately. Ensure the battery is removed from the bike before carrying out any maintenance. Make sure that all screws and bolts are tightened securely before riding. You must always use genuine replacement parts when performing maintenance on your e-bike. Regularly check the tire pressures (See sidewall of your tire for correct psi range) and regularly check the tread depth of tires.

- **1.6) Additional Warnings:**

The e-bike is intended for use by those at least eighteen years of age. Use by anyone below the age of eighteen is prohibited. Have installation/assembly checked by a professional bike mechanic or completed entirely by a bike mechanic prior to riding. Failure to do so could result in serious injury and/or death. When operating your e-bike: Do not wear earplugs, headphones, headsets, or use a cell phone while riding. Never hitch rides on other vehicles. Never hold an item which interferes with your grip on the handlebars & never be under the influence of alcohol or drugs while riding.

ALWAYS wear a helmet when riding your e-bike. Failure to do so may result in serious injury and/or death. It is your obligation to check all applicable laws for bicycle rules governing operation, equipment, use and appropriate places for operation. Do not exceed local speed restrictions.



Maintain your brakes such that you can at least execute a one-braked-wheel skid on dry, level, clean pavement. Never configure your e-bike such that the handlebars are higher than a rider's shoulders. In addition to front and rear reflectors, you must also ensure that the e-bike is equipped with side reflectors. Never ride your e-bike without the seat provided with the e-bike.

This e-bike is not meant for downhill riding or rocky trails. The e-bike is for paved or smooth surfaces only. Do not ride your e-bike in unsafe weather conditions or when the road surface is comprised, with ice, snow, water, sand, or anything else that could

cause a loss of traction. Failure to follow this rule may result in serious injury and/or death.

Routine maintenance checks are required on your e-bike. Check all important connections, brake functionality, and ensure axel nuts are secured before riding. Failure to do so may result in serious injury and/or death. Do not ride your bike at night without working front lights and rear tail lights. Failure to do so may result in serious injury and/or death.

Keep your e-bike and packaging away from children. Lithium-Ion batteries can be extremely dangerous if stored or used improperly. Please learn proper care of your battery at <http://batteryuniversity.com/> Damage to your lithium battery from misuse could result in serious injury, hazardous smoke and fires, and/or death.

Special precautions must be taken if you transport your e-bike with you during air travel, or if shipped by air courier. Be sure to follow all requirements of airlines and air couriers regarding lithium batteries if you take your e-bike with you during air travel, or if you ship your e-bike by air courier.

- **1.7) Notable Bike Parts:**



| | | | | |
|---------------------|-------------------|------------------------|----------------------|-----------------------|
| 1.BRAKE LEVER | 2.GRIP | 3.HANDLE BAR | 4.SHIFTER | 5.DISPLAY |
| 6.FRONT LIGHT | 7. THUMB THROTTLE | 8. FRONT RACK | 9.FORK | 10. LOCK OUT |
| 11.BATTERY | 12. BATTERY LOCK | 13.FRONT BRAKE CALIPER | 14.FRONT BRAKE ROTOR | 15.SADDLE |
| 16.CLAMP | 17. SEAT POST | 18. VALVE | 19. MOTOR | 20.REAR BRAKE CALIPER |
| 21.SENSOR | 22. RIM | 23. CHAIN | 24.CRANK | 25.REAR DERAILLEUR |
| 26.DERAILLEUR GUARD | 27.PEDAL | 28.KICKSTAND | 29.SEAT STAY | 30.CHAINSTAY |
| 31.SPOKES | 32.TOP TUBE | 33.DOWN TUBE | 34.SEAT TUBE | 35. TIRE |
| 36.STEM | 37.HEAD TUBE | 38.CHAINWHEEL | 39.FRONT MUDGUARD | 40.REAR LIGHT |
| 41.REFLECTOR | 42.REAR CARRIER | 43.REAR MUDGUARD | 44.FREEWHEEL | |

- **1.8) Product Specification:**

| | | | |
|----------------------------------|------------------------------------|-------------------------------|---|
| Battery | 48V 15Ah Lithium Battery | Front Fork | Front Suspension Fork |
| Motor | 500W Rear Mounted Geared Hub Motor | Bike Frame | 6061 Aluminum |
| Display | Colored LCD Display | Brake | Tektro 180mm Hydraulic Disc Brakes |
| Deraillieur | Shimano 10 / 7 speed | Charger | US Standard 3.0A/2.0A Smart Quick Charger |
| Speed | 20 MPH(32 KPH) | Freewheel/Cassette | Shimano 10 speed 11-39T / Shimano 7 speed 14 - 28T |
| Sensor | Intelligent Torque Sensor | Shifter | Shimano triggers |
| Throttle | Thumb Throttle | Tires | CHAOYANG 26"x2.125" & 27.5"x2.25" / KENDA 26"x2.125" & CHAOYANG 27.5"x2.25" |
| Charging Time | 5~6 Hours / 8~9 Hours | Product Weight | 58 lbs (26.5 kg) |
| Recommended Rider Heights | 5.4" ~ 6.4" | Total Payload Capacity | 300 lbs |

(*Our company have the right without notice to the consumer to substitute components of at least equal quality for advertised ebike components in the event of the unavailability of such advertised components.)

2. What's in the box?

Figure1: Bike frame, bike box, fork, saddle, additional box of parts (Figure 2), front wheel, axle skewer, (fenders and rack, if ordered*), stem and handlebars, all zip tied together and padded. *Before removing the packaging material from the bike, remove all items from the box and make sure everything listed above is present. If anything is missing or damaged contact us immediately for assistance.*



Figure2: Tool box with: bolt, pedals, charger, head/tail light, toolkit and manual.



3. Installation Steps: Assembling Your Bike

3.1 Fork/Headset Assembly:

PLEASE COMPLETE STEPS IN ORDER

- Align steered tube with the hole of the head tube, slowly slide through.
- Push Compression ring (the compression ring is the only split ring) flush with head

tube, then slide on headset spacers.

- Slide on the Stem with attach handlebars on top of spacers.
- Tighten on the top cap with attached bolt using hex wrench.
- Once top cap is tightened, align stem and tighten pinch bolts.

WARNING ♦ IT'S VITAL TO TIGHTEN THE BAR CLAMP TO AVOID THE MOVEMENT OF THE HANDLEBARS, AS WELL AS THE COMPRESSION CAP, ENSURING FORK IS INSTALLED CORRECTLY. THIS SHOULD BE COMPLETED BY SOMEONE FAMILIAR WITH BIKE MECHANICS.

3.2 Front Wheel Assembly:



4



5



6



7

- Align the disc rotor so it fits between the brake pads. Do not force it. (Figure 4)
- Place the front wheel axle onto the fork dropouts. (Figure 5)
- Install the quick release skewer. **The narrow part of the cone springs should face inward.**(Figure 6)
- Rotate to tighten and then hand tighten the axle skewer quick release arm. Line up the disc rotor to make sure there is space on each side, so they don't rub. Then make sure the wheel is secure. (Figure 7)

WARNING ♦ IT IS VITAL THAT THE AXLE NUTS HAVE BEEN TIGHTENED. IF

THEY ARE NOT PROPERLY ALIGNED, THE WHEEL MAY COME OFF, CAUSING DAMAGE TO THE BIKE OR YOURSELF.

3.3 Seat Post Assembly:



- Open the seat clamp and insert the seat post. (Figure 8 & 9)
- Adjust the suitable height and rotate the clamp to tighten and then shut it. (Figure 10)

3.4 Seat Clamp Assembly:



- Slide saddle into seat post clamp.
- Using a 6mm hex wrench. Tighten the bolt to 16-17nm of torque.
- The seat post angle is adjustable. Ensure the bolt is correctly torqued. If left loose or over- tightened, the seat post bolt could snap.

NOTE: ♦ SOME GENERATIONS COME WITH THE SEAT POST SEPARATE FROM THE SADDLE. IF ALREADY JOINED, CHECK THAT THE TORQUE ON THE BOLT IS TO 16-17 NM SPEC.

3.5 Pedal Assembly:



- Screw each pedal into a crank by hand. The pedals are marked with an R and L, **the left pedal tightens to the left.**
- Use an adjustable wrench to finish tightening the pedal in place.

NOTE: ♦ THERE ARE TWO PEDALS INCLUDED IN THE BOX WITH YOUR BIKE. THE PEDALS SCREW INTO THE ENDS OF THE CRANKS WITHOUT EXTRA NUTS, SCREWS OR PINS. BEFORE INSTALLING PEDALS, CONFIRM THAT THE LEFT PEDAL IS MARKED "L", AND THE RIGHT PEDAL IS MARKED AS "R". FAILURE TO USE THE CORRECT PEDAL ON THE CORRECT SIDE WILL RESULT IN A STRIPPED CRANK ARM.

3.6 Air Fork Operation:

The top left of the fork crown is the air valve. Use a shock pump to reach the desired amount of stiffness or sag.

The dial on the top right is a lockout. Turning this to the locked position will lock the fork from compressing and in this mode, it acts as a rigid fork. This is for climbing hills, or riding on smoother roads.

3.7 Detailed Torque Settings:

Saddle Clamp Bolt: 16-17nm (unless otherwise marked) Crank Arms: 39nm
Compression Cap (bolt): 4-5nm

Stem/Steerer Clamp: 8-9nm (unless otherwise marked)

Handlebar Clamp: 8-9nm (unless otherwise marked), tighten evenly in a cross pattern

3.8 Spoke Tension:

| | | | | |
|-------------|---------|-----|------------|-------------------|
| Freedom C3H | F-Left | 13G | 133-151KGS | Park tools, 30-31 |
| | F-Right | 13G | 104-117KGS | Park tools, 28-29 |
| | R-Left | 13G | 114-130KGS | Park tools, 33-34 |
| | R-Right | 13G | 150-172KGS | Park tools, 35-36 |

4. Battery Connection & Removal

- Insert the key into the battery keyhole.
- Turn the key in a clockwise direction (At 90 degrees).
- Pull out the battery.
- Replace battery with key in the same position, then turn the key to lock. This model's battery lock automatically returns to the locked position.

NOTE: ♦ ALWAYS KEEP THE CHARGE PORT COVERED TO PROTECT AGAINST MOISTURE, WHICH CAN DESTROY THE BATTERY. THIS IS ESPECIALLY IMPORTANT IF YOU LIVE IN A WET CLIMATE.

5. Charging the Battery:

WARNING ♦ DO NOT LEAVE CHARGING BATTERY UNATTENDED

The battery's voltage is indicated by the 4 LED lights located on the top of the battery, and also on the display unit located on the handlebars. Battery Level is indicated using 3 different colors; Blue when full, Green when half or less than full, red when low battery. Your battery must be charged in an ambient temperature, on a non-flammable & dry surface, away from any sources of heat, humidity or flammable materials. Also, it must not be covered.

Follow the steps when charging battery:

Step 1. Turn the bike off. The LCD will be off.

Step 2. Plug the charger (which is off) into the socket and then insert the charger plug into the battery.

- The **red** LED lights on: The battery **is being charged**. (A)
- The red LED light becomes **green**: The battery **is fully charged**, and you can unplug the charger. (Figure B)



(A)



(B)

NOTE: Depending on the charge level when plugged in, it takes 3-6 hours for the battery to fully charge when using the standard charger supplied with the bike.

Do not leave the battery unattended while plugged into the charger. Do not store the batteries connected to the charger.

6. Color LCD Display Instructions



6.1 Power On/Off

Press and hold MODE button for 2 seconds to power on and off. The Display automatically shuts down when the bike is not used for 10 minutes.

6.2 Assist Level Operating

The assist level ranges from Level “0” to Level “5”. Level “1” is the minimum power and Level “5” is the maximum. To change the assist level, press the UP or DOWN buttons until desired level is displayed in the top right corner.

6.3 Speed & Mileage Mode Switch

Pressing the MODE button displays the following in this order: RUNNING SPEED→TRIP DISTANCE→TRIP TIME→ MAXIMUM SPEED→AVERAGE SPEED→MOTOR POWER.

6.4 Backlight On/Off

Press and hold UP button for 2 seconds to turn on/off the display backlight and headlights if wired.

6.5 Walk/Push Assist (4mph)

Press and hold DOWN button for 2 seconds enters the walking mode until released.

6.6 Change Settings

Once the eBike is powered on, holding both the UP and DOWN buttons for 2 seconds will access the general settings. To store the selected settings and exit, hold the MODE button. To cancel the operating and not store the settings data, hold the DOWN button. This will return you to the previous menu. If there are no operations in one minute, the display will exit the settings state. The settings can only be accessed when the bike is parked.

NOTE: ♦ THE DISPLAY MAY VARY BASED ON GENERATION. PLEASE REFER TO OUR ONLINE USER MANUAL BASE FOR UPDATED OR PREVIOUS MODELS.

7. Error Code Troubleshooting

In the event of a problem with the electrical components of your bike, the display will show an error code. Compare the code with this list below and how to resolve:

7.1 Error Codes/Source of the Error:

| Code | Error | Source of the Error |
|-------------|------------------|--|
| 21 | Current error | Check wire connections |
| 22 | Throttle error | Check the wire connection for the throttle |
| 23 | Motor error | Check the wire for the motor |
| 24 | Motor Hall error | Check the wire connection for motor |
| 25 | Brake error | Check the wire connection for brakes |

| | | |
|----|--------------------------------|--|
| 30 | Communication fault | |
| 31 | Display MOSFET short circuited | |
| 32 | on/off button is stuck | |
| 33 | - button is stuck | |
| 34 | Over voltage | |

8. Maintenance And Service

Properly maintaining your level ensures its longevity and smooth operation. Before assembling your bike, please watch the video we have prepared for you. If you have questions during the assembly process, please contact us directly.

Once you're up and running, please make sure to:

- When cleaning your bike, use a damp cloth and gentle dish soap. Note: DO NOT use a pressure washer pr sprayer.
- Periodically apply a light bicycle lubricant to moving parts, including the links of the chain, derailleur pivots, and shifter.
- If you ride in wet / humid environments clean and dry electric connections and apply an anti corrosive.

All bicycles will need periodic tune-up pr adjustments by a professional. An annual "check-up" is beneficial. Your bike's service schedule will depend on the frequency of its use. In between expert services at a bike shop, we suggest:

- Keep tires inflated to their recommended pressure (30-50)PSI / 2.0-3.5 BAR / 200-350 KPA) and check weekly.
- Clean the drivetrain and lubricate the chain (monthly)

For more information about further recommended maintenance, please feel free to contact us.

9. Warranty Information

NOTE: (full warranty terms listed on website)

All electric bikes come with a One-Year Limited Warranty from date of purchase.

Defective items or parts will be replaced and shipped to the holder of the warranty only. Warranties are not transferable to parties other than the original purchaser. All purchases must be made directly from us. If purchase was not made on us, you must register your product at our warehouse or by emailing us with the original receipt of purchase.

The warranty covers product defects only that were already present at time of handover. It does not cover normal wear and tear, product misuse, act of God, accident, commercial use, alterations, modifications, improper assembly, water damage, extreme riding, installation of electrical or mechanical components that have been modified, altered or replaced with third-party parts, operator error and improper follow-up maintenance. The warranty is only upheld if the user has followed all the rules in the owner's manual. We reserve the right to make judgment determinations of proper use based on the evidence provided and may require photos and/or videos of the items in question. Professional assembly is required for upholding the Limited Warranty. We will require proof of professional assembly or a post-assembly sign-off by a bike professional for warranty coverage to be applied. The components that are covered are: Frame, Fork, Saddle, Stem, Headset, Tires, Battery, Derailleur, Shifters, Brakes, Hubs, Freewheel or Cassette, Chain, Internal Controller, Display, Grips, and Motor.

- **9.1) How to Handle Warranty Claims:**

In the event the E-Bike is damaged during shipping, we will file a claim with the shipping company for major damage and send a replacement part when necessary. Minor scratches to components don't necessitate replacement or any refund, but for major aesthetic damage a credit may be issued, or replacement sent if the item is severely damaged. We will not cover any damage caused when owner sets up their own shipping option including using a freight forwarding or similar service.

We will cover parts involved in handling the guarantee within the 30-day period after purchase. It is the owner's responsibility to immediately inspect your bike on receipt, maximum within 3 days. Shipping claims are time sensitive. To quickly resolve the issue, the owner must send an email with a photo and/or video.

After the first 30-days we will ship replacement parts of defective items within one year at no charge. The owner will be responsible for labor. Warranty parts will be shipped within the Canada only at our cost. It will be necessary to send an email with a photo so we can cover the warranty.

We reserve the right to make judgment determinations of proper use based on the evidence provided and may require additional photos and or videos of the item or issue in question

GET IN TOUCH

If you have any further questions/comments,
please feel free to contact us.