# magnumbikes.com FEEL THE POWER



## Magnum Premium 48V 500W E-bike Manual

## **Table of Contents**

Introduction	
Display Functions	4-12
Riding Your Bike	13
Adjusting the Seat & Handlebar	14
Kickstand & Lights	15
Lubrication & Maintenance Schedule	16
Service checklist	17
Folding your bike	18
Installing & Charging the Battery	19
Battery Info & Safety Instructions	20
Safety Recommendations	21
Maintenance	22
Manufacturer's Warranty	23

# 1. Your Magnum Premium 48V

## 1.1 Introduction

Congratulations on the purchase of your new Magnum Premium 48v folding E-Bike. This bike is equipped with pedals and an auxiliary electric motor. It can be propelled by means of the Pedal-Assist (PAS) function and/or the auxiliary electric motor directly with the throttle. You will thoroughly enjoy riding this new, electrically assisted folding bike.

Riding an e-bike is the future of personal mobility allowing for fun green ecologically responsible transportation.

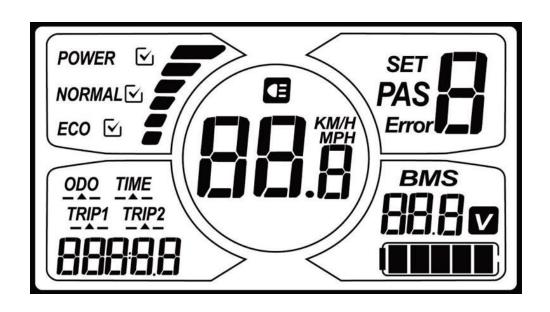
For your safety and for the safety of others, we recommend that you obey all road regulations and wear a protective helmet while riding.

For optimal, safe and enjoyable use of your e-bike, make sure you thoroughly read this user guide before your first use.

Have a pleasant ride!



# **Instruction Manual for C6**

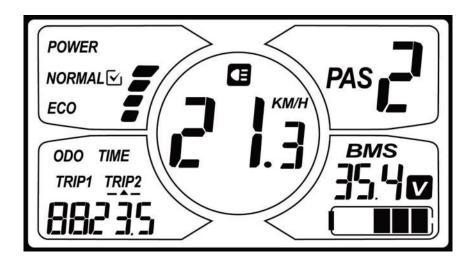


# A Better Display. A Smart Display.

Easy View 4" inch Display Panel. Superior Anodizing Aluminum Alloy Frame. PMMA Waterproof Cable Housing. Easy Control with Large Button.



With the display on, the default indicators are riding speed, trip 2, PAS level, and battery indicator as shown in fig below. Press SET to switch the display information.



## **Section 1**

## 1.1 ON/OFF

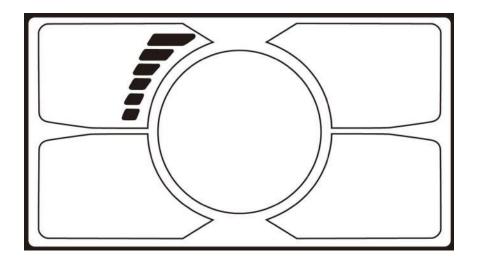
Press ON/OFF then the display is activated. The display will provide power for the controller. Press ON/OFF again to activate the backlight. With display on, press ON/OFF for 3 seconds to turn off power. With the display off, there is no battery power consumption.

<sup>\*</sup>The panel will automatically power-off when speed is 0 km/h for 5 minutes

## **Section 2**

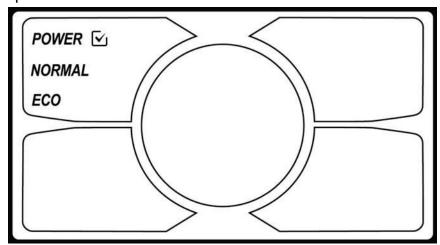
### 2.1 CURRENT INDICATOR

These bars indicate how much energy is required for the terrain.



### 2.2 RIDING MODE SELECTION

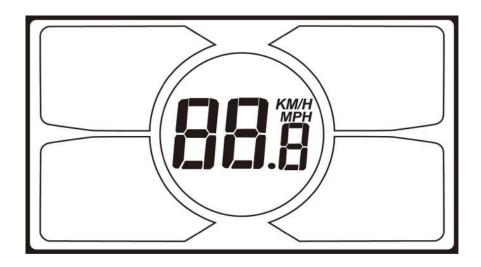
There are three modes for riding mode selection, including POWER, NOR-MAL and ECO. Each mode represents how much effort is being generated by the system. POWER mode exerts more power, NORMAL exerts a normal amount of power, and ECO is an energy saver mode. The default option is POWER.



## **Section 3**

## 3.1 SPEED INDICATOR

This displays the current riding speed of e-bike, as shown below. The speed display is as below. User can select KM/H or MPH in SET 3.

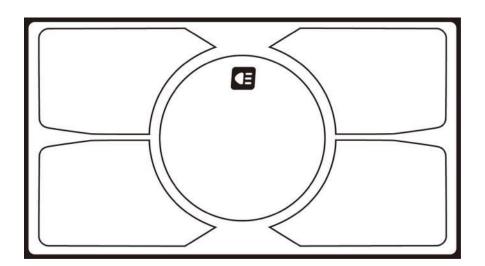


## 3.2 KM/H & MPH

Select KM/H or MPH for the speed and mileage, display will show the currently selected units .

## 3.3 BACKLIGHT INDICATOR

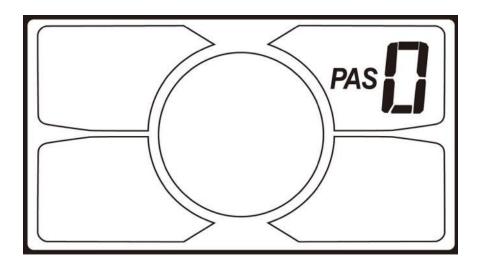
With the power on, click ON/OFF to turn on the backlight. Click it again to turn off the backlight.



# **Section 4**

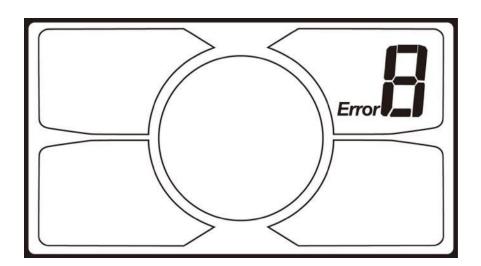
## **4.1 PAS LEVEL SELECTION**

Click UP or DOWN to change the PAS level and change the output power, the default mode is mode 0 and its power ranges from level 0 to level 6.



## **4.2 ERROR CODE INDICATOR**

If there is something wrong with the electronic control system, the display will flash at 1 HZ and show the error code automatically. Different error code represents different fault information.



 $\frak{\%}$  Only get rid of the error will clear the error code display.

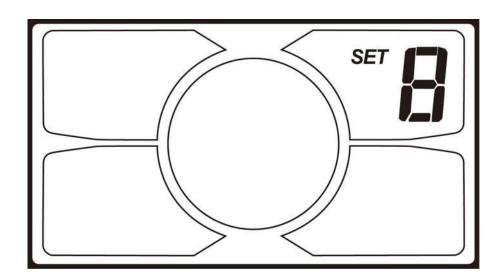
The error code display is as below.

Error Code	Definition
0	normal
1	Current error or MOS damaged

2	Throttle error(detection after turning on)
3	motor without phase position
4	Hall error
5	Brake error(detection after turning on)
6	Under voltage
7	Motor stalling
8	communication controller receiving error
9	communication display receiving error

#### 4.3 SET OPEARATION

Hold the SET for 2 seconds and enter into the setting interface, then number 0 keeps lighting, the display will flash at 1 HZ. Click the SET to switch from 0 to 4 circularly to set interface, click UP or DOWN to select the needed para- meter, and press the SET for 1 second will exit the setting interface.



## 4.3.1 SET 0: Riding mode selection

There are three modes for selection: POWER, NORMAL and ECO. 4.3.2 SET 1: Reset trip 1 distance

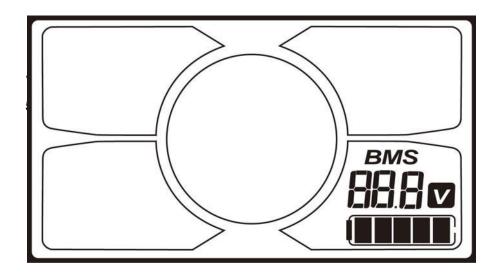
Click the DOWN to reset the trip 1, then the TRIP 1 icon will flash at 1HZ, meanwhile the trip 1 will be cleared.

## 4.3.3 SET 2: Wheel diameter setting

Select the accurate wheel diameter value to ensure the accuracy of speed and mileage on the display.

#### 4.3.4 SET 3: KM/H & MPH

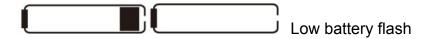
Select KM/H or MPH for measurement, the display will indicate the matched speed and mileage.



## 5.1.1 Battery residual capacity indicator



The battery capacity viewing area have five segments, each segment represent 20% battery capacity. When the capacity is full, the five segments are all light up. If the battery capacity is low, the battery viewing area will flash, it indicates that the battery is severely insufficient and need to be recharged immediately.



## **5.1.2 Battery voltage**

It displays the current voltage of the battery.

#### 5.2 POWER OFF AUTOMATICALLY AFTER 5 MINUTES

When the riding speed is 0 km/h for 5 minutes, the system will power off automatically.

## **Section 6**

### **6.1 DISTANCE INDICATOR**

With the display on, press SET to switch the mode to select ODO, trip land trip

#### 6.1.1 ODO

The ODO records the driving mileage from start using, the accumulated value cannot be cleared.

## 6.1.2 Trip 1

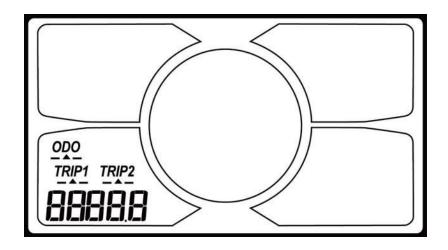
When the riding mileage >=500km, Trip 1 will be reset automatically. The value will be accumulated without resetting.

## 6.1.3 Trip 2

Trip 2 represents the last driving distance for 30s after turning on the display, it can be reset automatically and start to record the current distance.

## **6.2 TRIP TIME INDICATOR**

The riding time parameter is automatically reset after shut down.



# 3.0 Using Your Bike

## 3.1 Riding your bike

Before riding, make sure that you activate the battery by switching the key to the ON position.

The LED lights located on top of the battery indicate its current charge level.

Turn on the display unit that is on the handlebars (see 1.3).



Select your desired level of assistance and begin to pedal.

You'll find that the motor will engage as soon as you start pedaling.

WARNING: Turning the pedals one half of a rotation will immediately engage the motor. Beware not to turn the pedals while the unit is powered on when not riding.

When you use the brakes, the electronic brake sensor located on the brake levers will immediately cut the power to the motor for added safety.

The left brake lever controls the front brake while the right brake lever controls the rear brake.

You can also use your bike without any electric assistance by turning off the battery (switching the key to OFF) or by adjusting the assistance level on your LCD display to 0. The motor will then feature zero resistance and you'll be freewheeling. Select the appropriate mechanical gear by activating the 7 speed gear lever located on the right hand side of the handlebar.

## 3.2 Adjusting the height of the seat and handlebar

#### The height of your seat can be adjusted:

Release or open the lever, adjust the seat height to the desired position without ever exceeding the mark carved onto the seat's tube then close the lever returning it tightly to the locked position. The seat's height should be set so that your legs can be extended comfortably when the corresponding pedal is in the lowest position.



#### **Handlebar Height**

Maximum comfort is usually obtained when the handlebar height is equal to the height of the seat. You may wish to try different heights to find the most comfortable position without ever exceeding the mark carved onto the tube.

## 3.3 Propping up the bike on its kickstand

The bike is equipped with a lateral kickstand. Always prop up the bike upon its kickstand on a flat and stable surface.



## 3.4 Lights

The front LED headlight has its own autonomous power supply using AA batteries.

The light can be turned on and off using the switch located on top of it. The LED lightbulb has a lifespan lasting several years.

Please see your dealer to obtain a replacement when necessary.



Verify that the brakes and the front and rear lights are working properly before each use. Also check the pressure of the tires to ensure they are correctly inflated.

Be sure to lock the folding frame and stem of your bike tightly into place before use.

If you ride your bike on a regular basis, the tension of the hinges' adjustment and locking systems can loosen slightly with time. Whenever necessary, adjust the tension of the various joints screws and folding mechanisms on your bike.

This bike is not designed for rough usage, such as jumping, riding up or off of sidewalks, or riding on unpaved roads and bumpy terrain.

For your own safety, no modifications should be made to the bike.

Please note: If you use your bike frequently, it is recommended that you inspect the state of the fork, the frame, the suspension and the fasteners. The materials and components may be subject to wear and tear with regular usage and exposure to the elements. If you have any doubts about the integrity of your bike please contact your dealer who will proceed with the necessary inspections.



# 3.5 Recommended Lubrication Schedule

Frequency	Component	Lubricant	How to Lubricate
	Chain	Chain Lube or Light Oil	Brush On or Squirt
	Derailleur Pulleys	Chain Lube or Light Oil	Brush On or Squirt
Weekly	Derailleurs	Oil	Oil Can
	Brake Calipers	Oil	3 drops from oil can
	Brake Levers	Oil	2 drops from oil can
Monthly	Shift Levers	Lithium Based Grease	Disassemble
Every Six Months	Freewheel	Oil	2 squirts from oil can
	Brake Cables	Lithium Based Grease	Disassemble
	Bottom Bracket	Lithium Based Grease	Disassemble
	Pedals	Lithium Based Grease	Disassemble
Yearly	Derailleur Cables	Lithium Based Grease	Disassemble
	Wheel Bearings	Lithium Based Grease	Disassemble
	Headset	Lithium Based Grease	Disassemble
	Seat Post	Lithium Based Grease	Disassemble

**Note**: The frequency of maintenance should increase with use in wet or dusty conditions. Do not over lubricate - remove excess lubricant to prevent dirt build up. Never use a degreaser to lubricate your chain

## 3.6 Routine maintenance

## 1. Recommended values of the nut torque.

Front Wheel Nuts	22-27	Newton Meters	16.2 - 19.8	ftlb.
Rear Wheel Nuts	24-29	Newton Meters	17.5- 21.3	ftlb.
Seat Binder Nut	12- 17	Newton Meters	8.8- 12.5	ftlb.
Seat Pillar Clamp Nut	15- 19	Newton Meters	11.0-14.0	ftlb.
Brake Anchor Nut	7- 11	Newton Meters	5.1-8.1	ftlb.
Crank Cotter Pin Nuts	9-14	Newton Meters	6.6- 10.3	ftlb.
Brake Centre Bolt	2-17	Newton Meters	1.5- 12.5	ftlb.

## 2. Service Checklist

Frequency	Task
Before every ride	Be sure batteries are fully charged
	Check tire pressure
	Check brake operation
	Check wheels for loose spokes
After every ride	Be sure to fully charge batteries
	Quick wipe down with damp
Weekly	Lubrication as per schedule2.6
	Inspect wires
	Inspect connectors
	Check derailleur adjustment
	Check brake adjustment
	Check brake and gear cable adjustment
Monthly	Check tire wear and pressure
	Check wheels are true and spokes tight
	Check hub, head set and crank bearings for looseness
	Check pedals are tight
	Check handlebars and stem are tight
	Check seat and seat post are tight and comfortably adjusted
	Check frame and fork for trueness
	Lubrication as per schedule2.6
	Perform safety check
Every six months	Lubrication as per schedule 2.6
	Check all points as per monthly service
	Check and replace brake pads, if required
	Check chain for excess play or wear
Yearly	Lubrication as per schedule 2.6

# 3. Folding your bike

Folding is completed in several steps as below, and only takes a few seconds.

## 3.1 Folding the handlebars' shaft

Remove the plastic cover; Untighten the lever and free the hinge; Press the lock button; Fold the handlebar.

## 3.2 Folding the pedals

Push the pedals inward, and then push down to fold them while holding the crank arm for stability.



## 3.3 Folding the frame

Pull the lever outward loosening and freeing the hinge; Remove the lever from its hinge by swinging it outward toward the bicycle crank then pull upward.

You will then hear the safety pin release and disengage from the frame.

You can now fold the frame in half.



... Your bike is now folded!

**Note:** While it isn't necessary to remove the battery during the folding process the bike will be easier to transport without it.

# 4. The Battery

## 4.1 Installing and removing the battery

To remove the battery, turn the key to the unlock position so that the lock disengages from the battery guide rail. Fold your seat up by pressing on the lever beneath the saddle. Remove the battery by pulling it upward along the guide rail. The battery must remain vertical when removing it from the track.

When reinserting the battery be sure to hold it all the while. **Do** not let it fall into its socket, this may damage the connecting pins below.



## 4.2 Charging the battery

#### Never let a battery be charged unattended.

The battery's voltage level is indicated by the LED lights located on top of the battery, as well as on the display unit located on the handlebars. Your battery must be charged in an ambient temperature, on a non-flammable and dry surface, and away from any sources of heat, humidity or flammable materials. The battery and charger must never be covered while charging.

Here are the steps to follow when charging your battery:

Step 1	Turn the battery off by switching the key to the OFF position.
Step 2	Plug the charger into the wall socket and then insert the
	charger's plug into the battery.
Step 3	The charger's LED indicator while light up in the following manner:
	The red LED light on indicates: the battery is being charged. (A)
	The red LED light turning green (B) indicates:
	The battery is fully charged and you can now unplug the charger.



It takes 6.5 hours for the battery to be fully charged when using the standard charger that's supplied with your e-bike.



## 4.3 Battery range and lifespan

#### 4.3.1 Range

The bike's range per charge ranges from 35 to 55 miles, as it depends on a variety of factors (degree of assistance used, topology, rider's weight, frequent stops/start-ups, hills, tire pressure, etc...)

#### 4.3.2 Battery

Your battery is of Lithium-NCM composite. It contains a limited amount of energy, which diminishes as it is being used. The battery has a rated 700 life cycle lifespan and can be fully charged and discharge 700 times before reaching a working efficiency of 80%.

Optimal conditions to extend the lifespan of the battery suggest keeping the battery at 20-80% capacity. Depleting the battery entirely and overcharging it can decrease the lifespan of the battery.

#### Maintenance

If you don't use your bike for a period of time exceeding 2 months, store it in a dry non humid area to protect the electronic components and make sure that the battery is not completely discharged.

**Note:** Never store a completely discharged battery as it might result in permanent damage. During the winter or long storage periods, it is recommended that you recharge the battery every 3 months. Don't forget to switch it off. Store your battery at a temperature of 60° - 80°f.

## 4.4 Battery safety instructions

The battery is an electric component made up of chemical elements. For your safety, it is imperative that you obey the following rules:

Always handle with great care

Always keep away from children

Do not disassemble, drop hit, pierce or

submerge it

Keep away from temperatures exceeding 120°f

Do not touch the positive and negative contacts

located at the bottom of the battery

Don't sleep near a battery that is charging

Only use the charger provided by the manufacturer

Do not use if damaged



## Safety and Maintenance

# 4.5 Safety recommendations

#### Helmet

Always wear a bicycle helmet while riding to ensure your safety.

#### **Tires**

Inspect the wear of your tyres on a regular basis and verify the tire pressure at least once a month. Tire pressure is recommended to be 40-65 PSI depending on the weight of the user. Please check the recommended PSI on your tire as well.

#### **Brakes**

Be sure to check the brakes and brake levers before riding.

Important: The required braking distance will increase on a wet or slippery surface

#### Seat- post

The shock absorbing spring on the seat post should be covered if a child-seat is fitted onto the bike in order to prevent injury to the child's fingers.

#### Reflector

When luggage is attached to the rear carrier be sure it does not cover the reflectors and/ or bicycle lights.



#### Gears

The chain derailleur and crank must be kept clean and well lubricated at all times. If the chain. If you hear a grinding or clicking noise coming from the derailleur or the gears take care to adjust and lubricate them properly before riding.

#### Carrier

The maximum load allowed on the rear carrier is 50Lbs. This luggage carrier is not designed to pull a trailer or carry a heavy child. The bicycle may react differently (particularly with regard to steering and braking) when carrying a heavy load, please use caution to ensure stability at all times.

Ensure that any luggage fitted to the luggage carrier is secured in place and no loose straps that can get caught in any of the wheels are exposed. Be sure to distribute luggage evenly between the two sides of the luggage carrier.

WARNING: As with all mechanical components, your bicycle is subject to wear and tear. Different components may react to wear and tear and fatigue in different ways. If the life of a component has been exceeded, it may suddenly fail possibly causing injuries to the rider. Any cracks, scratches or change of coloring in highly stressed areas indicate that the life of the component has been reached and it should be immediately replaced.



#### 5.2 Maintenance

#### Caution:

Bike maintenance and repair require specific skills and the appropriate tools. Do not repair your bike or change any of its settings if you have any doubt regarding your ability to correctly proceed with such work. Contact a local dealer or professional if needed. Any adjustments or repairs that are not properly done can damage the bike and lead to accidents resulting in extensive injuries and will void the manufacturer's warranty. Use only original replacement parts for all safety-critical components.

#### Cleaning

Always remove the battery when cleaning. Use soapy water to rinse and clean with a damp sponge when necessary. Do not use a high pressure washer!

#### **Maintenance**

Your bike is safe for the environment. Used parts must be disposed of in appropriate selective sorting recycling bins. A battery that no longer works must be returned to your dealer so that he may pass it on to a recycling company. *Motor:* 

The motor does not require any sort of maintenance.

#### Chain:

It is recommended that you lubricate the bike's 7 speed gearwheels and chain on a regular basis using appropriate products (ask your dealer for advice).

# 7. Warranty

You are provided with a one year limited manufacturer's warranty from the date of purchase. Details regarding the warranty coverage and registration of your product can be viewed on the Magnum Bikes webpage below

http://www.magnumbikes.com/warranty/

Thank you for choosing Magnum Bikes Have a safe and pleasant ride!

