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# USER MANUAL

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**Model NAME** : 2.4G+Bluetooth+Bluetooth RGB Rechargeable Trachball Mouse

**MODEL NO.** : EM03

**VERSION** : 0.1

**DATE** : 2024.3.19

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Version. #	Revised Date	PIC	Remark
0.1	19/3/2024	ZRW	Preliminary

## Electrical Specification

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## 1. Operating Voltage

Mouse supply voltage: 3.7V (Lithium-ion Battery)

## 2. Current Consumption

Current use :< 25mA

## 3. Sleep Mode

3.1 Electrical Current: <1mA;

3.2 Wake Up: Press any button

## 5. Mouse Pointer Performance

5.1 Resolution: 200-400 (default) -800-1200-1600

5.2 Speed: 30 inches/sec (Max)

5.3 Acceleration: 10G

## 6. LED Indicating Functions

When the battery power is low (battery voltage reduce to <3.4V) the LED will glisten at the frequency of 1Hz

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## 7. Wireless specifications

2.402-2.480 GHz frequency coverage.

GFSK RF transceiver

High Speed RF link data rate Max. 1M bit/s

## Button Functions

1. Left Button: Mouse left button standard function
2. Right Button: Mouse right button standard function
3. Middle Button: Mouse middle button standard function
4. Wheel: Mouse scroll wheel standard function
5. 4 Button: IE Forward function
6. 5 Button: IE Back function
7. Mode switch Button: change to different channel
8. Light switch Button: change the light mode

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# Operation Process

## 2.4G Mode

Turn on the power , default mode is 2.4G mode,Insert the 2.4g receiver, the LED is always on for 5 seconds then goes out, and the pairing is done

## BT Mode

Short press the channel switch key, switch to Bluetooth channel 1,. long press the code key (more than 3 seconds), the light flashes at 1HZ, the computer searches for the Bluetooth device (device name: ProtoArc EM03), select pairing, the LED is always on for 5 seconds, and the pairing is done

## Caution

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**Please use the Mouse in human house only and keep away from water.**

**Don't to fixate the light at the mouse bottom.**

**Children use the mouse with guardian together is necessary.**

**Keep dry. Humidity, liquids, contain minerals that will corrode electronic circuits.**

**Don't use or store in dusty, dirty areas.**

**Don't store in hot areas. High temperature can shorten the life of electronic devices and warp or melt certain plastics.**

**Don't store in very cold areas. Moisture can form inside the case, which may damage electronic circuit boards.**

**Don't attempt to open the case. Non-expert handling of the device may damage the system.**

**Avoid dropping and strong impact.**

FCC COMPLIANCE STATEMENT:

This device complies with part 15 of the FCC Rules.

Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

Reorient or relocate the receiving antenna.

Increase the separation between the equipment and receiver.

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Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

Consult the dealer or an experienced radio/TV technician for help.

**Warning:** Changes or modifications to this unit not expressly approved by the part responsible for compliance could void the user's authority to operate the equipment.

**FCC Radiation Exposure Statement**

The device has been evaluated to meet general RF exposure requirement.

The device can be used in portable exposure condition without restriction.

- **English:** "

**This device complies with Innovation, Science and Economic Development Canada's licence-exempt RSS standards. Operation is subject to the following two conditions:**

**(1) this device may not cause interference, and  
(2) this device must accept any interference, including interference that may cause undesired operation of the device."**

- **French:**"

**Cet appareil est conforme aux normes RSS d'Innovation, Sciences et Développement économique Canada en matière d'exemption de licence.**

**Son fonctionnement est assujetti aux deux conditions suivantes :**

**(1) Cet appareil ne doit pas causer d'interférences; et  
(2) Cet appareil doit accepter toute interférence, y compris les interférences qui peuvent entraîner un fonctionnement indésirable de l'appareil.**