

# eeZee Mouse **CURSOR** Operating Instructions

## 1.0 System Requirements

**Hardware:** Host computer or other device with powered USB connector

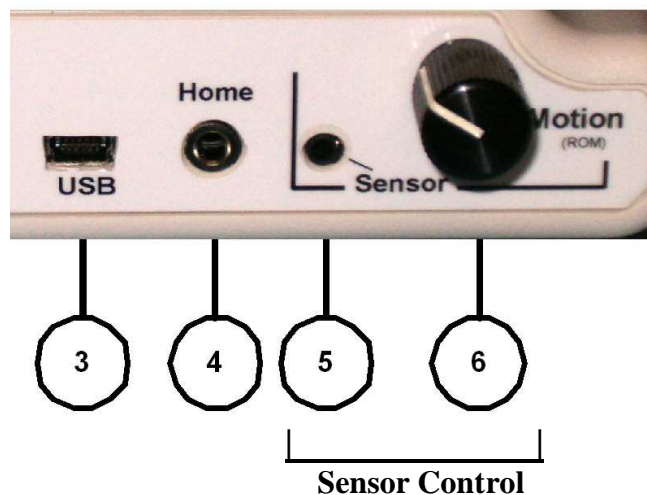
**Software:**

- Microsoft Windows™: **7, Vista,** XP, ME, 2000, 98(with CD)
- OSX™ 8.0 or above
- Unix™ / Linux / Other utilizing standardized HID drivers

**Compatibility:** Can be used at the same time with all other hardware, or click/drag software.

## 2.0 Controls

### **Rear Panel**



- 3) **USB** – USB input connector. Accepts standard USB mini-B cable from the host computer or other device.
- 4) **Home** – External Home input jack. Accepts switch from most manufacturers using standard 3.5 mm plugs. Switch closure to ground activates Home command. Same functionality as Home button on top of unit.
- 5) **Sensor** – Body Sensor input jack. Accepts LaZee Tek’s Body Sensor cable. This proprietary interface is not compatible with other equipment.
- 6) **Motion** – Range of Motion (**ROM**) adjustment. The higher the motion setting (CW), the more movement is required of the Body Sensor to achieve the same result.

2.0 Controls - continued

**Front**

- 7) **Home** – Home button sets a new home position for the sensor when activated.



**Button Functions**

The eeZee Mouse CURSOR provides only cursor movement. All mouse button functions must be provided by another means. The eeZee Mouse CURSOR is fully compatible with and can be used in conjunction with any other hardware device, and also any software product such as click/dwell etc..

## 3.0 Basic Functionality

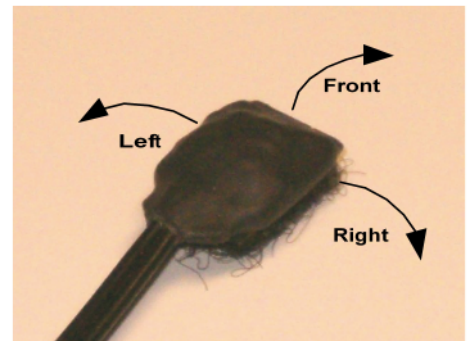
### Body Sensor

The body sensor is used to control the computer cursor. The Body sensor utilizes tilt sensor technology, and provides highly precise signals to control the cursor. It is operated by tilting slightly: forward/backward to control the up/down cursor movements and right/left respectively. A virtual joystick in space. . Because of its tiny size and extremely low weight, it can literally be worn anywhere the user needs it! Any part of the user's body can become a joystick.

*Most importantly is to attach the sensor firmly to the activating surface and to support the cable so that it doesn't interfere with sensor travel during operation.*

As a starting point, the user selects the "HOME" position. Cursor movement will not occur when the sensor is in this position. The HOME command performs electronic leveling, calibrating the sensor to its present position. This eliminates the need to level the sensor before use. The HOME position is updated each time the "HOME" button or external home switch is activated.

As the sensor is tilted, it sends signals to move the cursor. Tilting the front of the sensor up moves the cursor up, while tilting the front downward moves the cursor down. Returning it to the home position stops the cursor. Tilting the left side of the sensor downward moves cursor left. Tilting two directions at same time move the cursor diagonally. This provides smooth accurate cursor movements in any direction



Cursor speed is proportional to the degree of sensor tilt. Tilt the sensor very slightly to move the cursor very slowly. Tilting the sensor farther increases the cursor speed until the maximum Motion setting is reached. Moving beyond this will not increase cursor speed any faster.

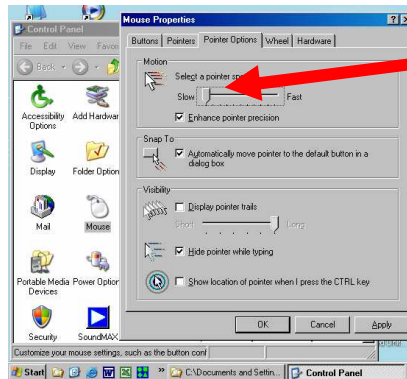
The "Motion" adjustment sets the Range of Motion (ROM) required for full cursor speed. The ROM is how far the sensor needs to be tilted to move the cursor at full speed. A minimum Motion setting will require the user to move very little in order to achieve full speed. While the "Motion" control selects how far a user must tilt the sensor to reach full speed, the maximum speed setting is set in the mouse properties menu. ( 4.0 Setup – Step 1 )

The tilt sensor is reported to be the most reliable and accurate positioning system ever used in assistive technology computer control. One of its characteristics is that the sensor detects all movements, intentional and not so. When this is understood, the sensor can be installed and operated properly, thus providing the user the best computer control system available.

Refer to our Operational Notes section on the website for detailed explanations of various topics.

## 4.0 Setup

1. On host computer **reduce mouse speed settings to slightly above minimum**. Increase when needed as user becomes familiar with operation. Menu is located (in XP): Start Menu / Settings / Control Panel / Mouse / Mouse Properties / Pointer Options . Similar menus are available in other operating systems.



2. Determine appropriate placement of eeZee Mouse.
3. Set Range of Motion (ROM) adjustment to mid point or above, depending on users abilities.
4. Connect the Body Body Sensor connector to the **Body Sensor** input jack. Position Body Sensor in desired operating position on user’s head, foot, or **anywhere in between!**
  - a. Body Sensor must be oriented so as the cable exits toward the rear.
  - b. Body Sensor must be attached firmly to activating surface.
  - c. Attach Body Sensor cable clip to support cable.
5. If desired, connect switch to external **HOME** input jack or output of latch/timer device. Use of a Latch/Timer can greatly enhance this feature. A timer function can provide a delay between release of the switch and actual setting the Home position, giving user time to reposition after switch activation.
6. Connect small end of **USB** cable to eeZee Mouse.
7. Using standard ESD precautions connect large end of USB to host computer.
  - a. First time eeZee Mouse is connected to computer, it may be recognized as New Hardware. If so, wait several seconds for the “New Device Ready for Use” message.
  - b. Ignore cursor movements until Step 2 below.

## 5.0 Operation

1. With user in normal computer operating position:
  - a. Look at the center of the computer screen and keep Body Sensor motionless for ~ 1 second.
  - b. Set the HOME position by momentarily activating the HOME function either via external switch or pressing the button on top of eeZee Mouse.
  - c. Tilting the Body Sensor in any direction will now begin cursor movement.
2. Locate cursor and begin operation!
  - a. If cursor is off screen, moving in a circular pattern can aid in finding it.  
(Activating the CTRL key can aid in finding a lost cursor, if that option is enabled in mouse properties menu.)
3. Setting Range of Motion (ROM) A minimum setting of ROM will generate cursor movement with very little movement of the Body sensor. An ROM setting of maximum will require greater movement of the body sensor to move the cursor. Try different ROM settings until the desired body sensor movement is found. Adjusting the ROM control changes the HOME position. After any ROM adjustment, the HOME position may need to be set again.
4. Mouse maximum speed settings are adjusted by the Mouse menus (Setup step 1) This is the speed the cursor travels at full movement of the body sensor. The body sensor controls are proportional, this setting also indirectly affects the slower speeds as well. It is usually best for new users to begin with the menu settings at or near minimum. Adjust as skill level improves. The Speed settings **Rule of Thumb: (Crawl before walking!)**
  - a. Reduce Speed If Frustrated or having difficulty controlling the cursor
  - b. Increase Speed – Bored and desire faster response
  - c. Increase speeds if desired as skill develops.
5. For technical support:
  - a. Web: [www.lazeetek.com](http://www.lazeetek.com)
  - b. Email: [support@lazeetek.com](mailto:support@lazeetek.com)
  - c. Phone: 260 351-3274