Product Registration
產品註冊

Please keep your original receipt as proof of purchase for warranty services. Attach the receipt here and write down the serial number on the product in case you need it.

請將所提列的資料及列印在產品上的序號詳細的填入下面的購買憑證中，並將之妥善保存，以獲得完善售後服務。

J-MEX® Navii Mouse_S/N:	
Dealer:	
Address:	_____
Phone:	
Purchase Date:	/ /

J-MEX
晶翔微系統

Navii Mouse
USER GUIDE
空中飛鼠（滑鼠）
使用手冊

Introduction 簡介

This user guide teaches you how to operate the J-MEX® Navii Mouse smoothly. The Navii Mouse adopts the MEMS gyroscopic technology to sense hand movements in the air and therefore control the cursor on screen.

The Navii Mouse is equipped with a 2.4 GHz RF transceiver to transmit signals to PCs via a USB RF Dongle, with coverage up to10 meters. There are auto-switching channels available to avoid interference from other radio devices.
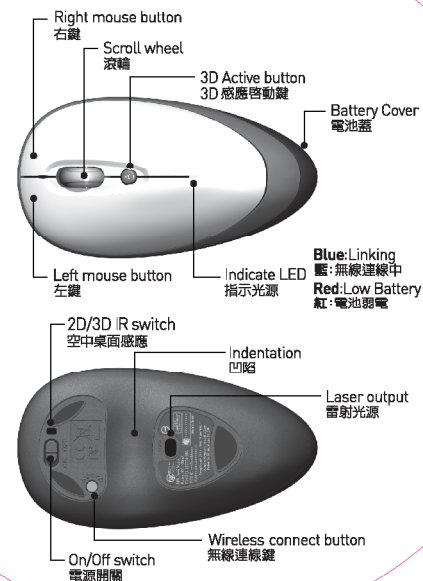
此使用說明將指引使用者能快速學習及操作J-MEX® Navii Mouse。Navii Mouse 是用微機電陀螺儀來感測手部在空中的動作以控制移動螢幕上的游標。

此Navii Mouse配備了2.4 GHz波段的無線傳輸器來傳送訊號及命令到連接於電腦 上的一個USB RF Dongle，來控制游標移動並啓動被選定項目的功能。此無線傳 輸器的訊號傳送範圍可達10公尺，它並藉由自動切換頻道來避免其它無線傳輸 設施的干擾。

Appearance 外觀說明

Right mouse button
右鍵

Scroll wheel
滾輪

3D Active button
3D 感應啓動鍵

Battery Cover
電池蓋

Left mouse button
左鍵

Indicate LED
指示光源

Blue: Linking
藍：無線連線中
Red: Low Battery
紅：電池弱電

2D/3D IR switch
空中桌面感應

Indentation
凹陷

Laser output
雷射光源

Wireless connect button
無線連線鍵

On/Off switch
電源開關

Operation 操作

Moving in the Air

The Navii Mouse senses your hand movements in the Air and therefore controls the cursor. Please follow the descriptions below:

- Put your index finger in the indentation to hold the Navii Mouse in palm;
- Use your thumb to press and hold the "Active" button to activate the 3D motion mode. Do not release it until the cursor is located;
- Or double click the "Active" button to activate the full-time 3D motion mode; The left button and right button are functioned in the same way as standard mouse;
- Use the scroll to change pages;
- By flexing your wrist from left to right or up to down to move the cursor horizontally or vertically; an additional armrest will help you operate the Navii Mouse more comfortably;

Hold the Navii Mouse with the index finger in the indentation
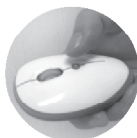
Released the thumb when holding the Navii Mouse

- The LED light flashing in blue indicates the RF transceiver is being linked, while the LED light in red indicates a low power battery.

Dual mode switch suggestions

- Active Air Mode (Press & hold ACTIVE button): Use for accurate selection on small icons for windows applications.
- Full time Air Mode (Press ACTIVE button 2 times): Play games or select on LCD TV home multimedia big icons.

2D Laser Resolution Switch(800/1600 DPI)

- Press LEFT & RIGHT mouse buttons at the same time until LED blue light flash.

Moving on the Table

- The Navii Mouse is also a 2D mouse with high optical resolution, easy to control the cursor movement on the screen.

Operation 操作

在空中操作

Navii Mouse感應手部在空中的移動來控制個人電腦上的游標移動。
使用者請依照下述的方式來操作空中飛鼠：

- 將食指放置在凹陷處，自然握持於掌中；
- 以拇指按住Active鍵，控制移動游標；
- 或者是雙點擊Active鍵後，便啟動全時的3D移動控制模式，而可以持續地控制游標在螢幕上移動；
- Navii Mouse的左鍵及右鍵的功能則與傳統滑鼠的左右鍵相同；
- 轉動滾輪讓顯示內容換頁；
- 讓手腕從左到右或是從上到下移動，可分別地控制游標水平或是垂直移動；若手臂依靠在扶手或是一支撐物上則可以更舒適地操作Navii Mouse；

以食指置於凹陷處
握持Navii Mouse

拇指可自由移動按壓按鍵

- LED閃藍光表示RF無線傳輸器正在連線中，當LED閃紅光時，則表示電池弱電了。

雙橫切換使用時機建議

- 非全時空中模式（按住Active鍵）：建議於視窗應用程式精確小圖示選擇時使用。
- 全時空中模式（連按二次Active鍵）：建議於遊戲或液晶電視多媒體大圖示選擇時使用。

2D雷射解析度切換（800/1600 DPI）

- 同時按住Navii Mouse左右鍵至藍燈閃爍即可切換！

在桌面上操作

- Navii Mouse兼具高光學解析度，也適用於2D視窗應用程式順暢的操作。

Power Saving Mode
省電模式

The Navii Mouse will go into sleeping mode to save battery power if no button is pressed or no motion is detected for a few seconds duration.

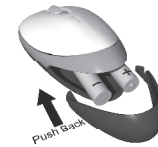當在一段數秒鐘的設定時間內，沒有按壓按鍵或是沒有偵測到空中或是桌面運動，則Navii Mouse便會進入省電的睡眠狀態。

Battery Installation and Information 電池安裝之相關訊息

The Navii Mouse requires two AAA batteries. To change batteries:

Navii Mouse須要兩顆AAA電池。電池的更換方式是：
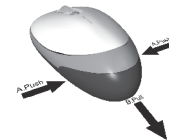
1 Remove Battery Cover (Push then pull)
移開電池蓋（先按壓再拉開）

2 Insert two AAA Batteries into the compartment
將兩個AAA電池置入電池盒中

3 Push back the Battery Cover
蓋回電池蓋，換裝完成。

ON/OFF Switch
電池開關

This switch turns on or off the Navii Mouse.
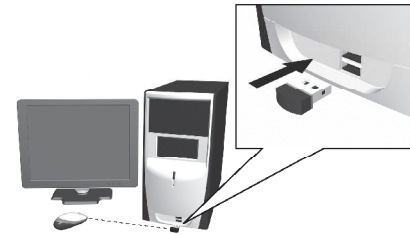
用電源開關來啓動或是關閉Navii Mouse。

Slide the Switch to left to turn it on and right to turn it off.

電源開關鍵推向左是啓動，向右則是關閉。

Transceiver Dongle Installation
外接無線傳輸器之安裝

The Navii Mouse pairs with a USB transceiver RF Dongle plugged into the USB port on a PC. Please refer to the diagram below.

Navii Mouse採用了一個USB RF無線傳輸器，其係外接於個人電腦的一個USB埠上，來接收RF無線訊號。

註:本品需搭配J-MEX RF Dongle 使用
Note: This product needs to pair with J-MEX RF Dongle for use

Setting Up the RF Transceiver 設定RF無線傳輸器

- Insert the USB Dongle into an available USB port on PC;
- Press and release the Connect button on the Mouse;
- Move the Mouse close to the USB Dongle;
- The LED light will be flashing in blue for 4 times when the Mouse completes linking the RF Dongle,

- 將USB外接無線傳輸器RF Dongle接入PC上的一個USB埠；
- 按壓並放開Navii Mouse上的一個連接鍵；
- 讓Navii Mouse接近此USB RF Dongle；
- 當Navii Mouse與此USB RF Dongle 連線時，LED會閃動藍光四次後，表示連線完成。

Troubleshooting
故障排除

- If the Navii Mouse does not function at all, it may be caused by the disconnection of the USB transceiver RFDongle. Please reset the Transceiver following the procedure above.
- When the cursor on the screen cannot be moved, it indicates the motion sensing function is probably not activated. Please refer to the Navii Mouse Operation section to activate the motion sensing function.
- If the cursor is moving erratically, it indicates possible radio interferences. Move the RF Dongle away from other electronic devices such as monitors, speakers or radios.
- If the batteries are out of power, the LED light will be flashed in red. Please replace the old batteries.

- 若Navii Mouse似乎不運作，可能是Navii Mouse與外接的USB RF Dongle 斷線。請依上述的無線傳輸器連線方式重新設定。
- 當Navii Mouse以空中操作來控制游標，卻發生游標固定在螢幕上而不移動時，可能是移動感測功能沒有被啓動。請參考上述的Navii Mouse操作說明來啓動移動感測功能，讓游標可被在空中移動的Navii Mouse來控制。
- 若有游標飄忽不定的問題，可能為其它無線電的干擾。此時請將此外接的RF Dongle 自相鄰的其它電子設施，例如監視器、揚聲器或無線電之訊號源處移開。或將Navii Mouse靜置桌面三秒鐘後再行使用。
- 電池弱電時，LED指示燈會閃紅光，請更換新的電池。

Product Name 2.4GHz RF Wireless Laser Mouse (3D)
Model Name Navii Mouse
Brand Name J-MEX

Number of channels	78 channels
Carrier frequencies	2402MHz~2479MHz
Channel bandwidth	1MHz
Modulation	GFSK
Method of frequencies generation	16MHz Crystal
Transmitter aggregate Data rate or modulation bit rate	125 kbps
Transmitter or Transceiver	Transceiver
Transmitter modulation (Amplitude, frequency, phase ,pulse , other)	GFSK
Transmission range	10 m in free space
Antenna Gain	Antenna gain →0.06dBi
Antenna Type	PCB printed meander line antenna
Power source	2 x AAA Alkaline Batteries in series connection
Nominal DC voltage	3.0 V
Operating voltage	2.0~3.3 V
Extreme Temperature range	0 °C ~+ 50 °C

System requirments
Windows-based computer   Windows® XP | Windows® Vista | Windows® 7

Linux-based computer   Ubuntu | Linpus

Package Contents
J-MEX® Navii mouse | User guide | 2 AAA batteries

Date Rate
100 data frame per sec

Motion Resolutions
Laser 800/1600 dpi for 2D motion application on table, and 600 dots/90 arc degrees for 3D motion application in the air

Federal Communication Commission Interference Statement

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 of the following measures:

• Reorient or relocate the receiving antenna.
• Increase the separation between the equipment and receiver.
• Connect the equipment to an outlet on a circuit that is different from the receiver connected.
• Consult the dealer or an experienced radio/TV technician for help.

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.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

美國聯邦通訊委員會電磁波干擾聲明

本設備已經過測試，依照FCC條例之第15段規範，符合B類數位設施之規定。本規定是設計來，針對設施設置在住居所內而生有害的電磁波干擾時，提供合理的保護。即此設備會產生，使用以及可以輻射無線頻率能量，並且，若未遵循相關指示來安裝或使用時，便會對無線通訊產生有害的電磁干擾。然而，此處並不保證此等電磁干擾不會在一特定的安裝設備上發生。若此設備不會對無線電或是電視接收造成有害的電磁波干擾，此等干擾可藉開啟或關閉設備的電源來確定，在此啟勵使用者去嘗試藉由下述的測量方式，去校正此電磁干擾。
● 調整接收天線的方位或是重新定位。
● 增加設備及接受器間的間隔。
● 將設備接到電路板上的電源插座上，而此電路板與接收器所接的不同。
● 徵詢供應商或是有經驗的無線電/電視技術員以尋求協助。

此設施符合FCC條例之第15段規範。且遵循下述的兩個條件來操作，即 (1) 此設施不會造成有害的電磁干擾，以及 (2) 此設施可接受接收到的任何的電磁干擾，包括造成不希望出現之運作的電磁干擾。

FCC 警示：須遵守規範的契約者，在未經明確批准下所作的變換或是修改將使得操作此設備的使用者授權失效。

Technical Support:

Please visit our website for more technical support.
www.jmex.com.tw

IMPORTANT NOTE:
FCC Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20 cm between the radiator & your body.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

The availability of some specific channels and/or operational frequency bands are country dependent and are firmware programmed at the factory to match the intended destination. The firmware setting is not accessible by the end user.

NCC Statement

This device complies with NCC pattern certification and is approved to be a low power radio frequency electric device, any change of frequency, increment of power or modification of original designed characteristics and functions are not allowed without approved.

技術支援：

請參訪公司網站，以尋求更多的技術支援。
www.jmex.com.tw

重要提示：
FCC輻射暴露聲明

本設備符合為未受控環境所提的FCC輻射暴露規定。此設備應遵守輻射器與人體之間最小20公分的距離來安裝及操作。

某些特定頻道及／或操作頻帶的可利用情況則國家的不同而不同，此特性可在工廠中以韌體規劃來符合一預定的目的。然，終端使用者不得作韌體設定。

NCC警語

經型式認證合格之低功率射頻電機，非經許可，公司、商號或使用者均不得擅自變更頻率、加大功率或變更原設計之特性及功能。

低功率射頻電機之使用不得影響飛航安全及干擾合法通信；經發現有干擾現象時，應立即停用，並改善至無干擾時方得繼續使用。前項合法通信，指依電信法規定作業之無線電通信。低功率射頻電機須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾。

Specification
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