

SPECIFICATION Of MOU-903/904/906 Cordless Optical Mouse

REV: 1.0

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CHECK：

APPD：

Part 1.0: General features and description

- Prevent Repetitive Strain Injury on your wrists and arms!
- Radio frequency : 27 MHz, single channel with 256 random ID, no more problems with radio frequency interference .
- Battery suggestion: Two AAA size alkaline batteries for mouse.
- Mouse resolution of 800dpi/400dpi/600dpi counts per inch of motion.
- Sensor detects motion on all kinds of surface, including wood, plastics, pants, etc... (Highly reflective like mirror or deep dark color may not work properly).
- Comfortable shape:
The comfortable shape provides easy control.
- Compatible with windows 98/ME/2000/XP.

Part 2.0: System Requirements

- . IBM PC or compatible system

Part 3.0: Preface

The functionality and performance requirements related to the mouse are defined in this specification.

Part 4.0: Version

- USB Interface
- USB + PS/2 Interface

Part 5.0: Physical characteristics and configuration

Item 5.1: Dimension

Mouse:

Sample 3 SET

Item 5.2: Material

Mouse	Body	ABS
	Wheel	Rubber
Receiver	Body	ABS

Item 5.3: Finish: Texture

Item 5.4: Color: To be defined by ID

Item 5.5: Button

Mouse: 3 Buttons with scrolling wheel, 1 CONNECT button.

Item 5.6: Mechanical Performance

- 5.6.1 Operating force of mouse buttons: $60 \pm 15\text{gf}$
- 5.6.2 Operating force of browser switches: $170 \pm 25\text{gf}$
- 5.6.3 Operating force of wheel scrolling: $20 \pm 10\text{gf}$
- 5.6.4 Operating force of movable: $60 \pm 10\text{gf}$
- 5.6.5 Mouse weight: $87 \pm 5\text{gf}$

Part 6.0: Electrical specification

Item 6.1: Compatibility

- The USB mode is using the low speed interface defined in the USB specification. It's compliant to the USB specification as well as to the HID class specifications.
- The USB mode shall be compatible with IBM PC/PENTIUM and works with operating system such as Windows 98/2000/ME/XP as well as the most software applications.
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Item 6.2: Technical of mouse

Optical sensor for X/Y axis, the precise sensor detects motion on hundreds of surfaces, including wood, plastic, and even your pants leg. (Highly reflective surface or deep dark color surface may not work properly). Wheel button uses a mechanical encoder.

Item 6.3: Sensor Report Rate on Mouse

2300 times per second

Item 6.4: Sensor Light on mouse

Red LED

Item 6.5: Power Requirement (Receiver)

5V/ DC 20mA directly from Computer USB Port

Item 6.6: Operating Angle

The mouse operation angle is 360 degrees.

Item 6.7: Operating Distance

The Mouse operation distance is 1.5 Meter (typically under normal office environment, Mouse to Receiver set),

Item 6.8: ID changeable

The ID is changed by the CONNECT button.

Item 6.9 Battery

6.9.1 Battery Type

The mouse use two AAA alkaline batteries.

6.9.2 Battery Consumption

Mouse have 4 level mode

Operating mode: <20mA @ 3V (white paper) if no mouse movement and mouse click

Sleep mode1: <10mA@ 3V 1.5minute (white paper) after maintaining for approximately 2 minutes

Sleep mode2: <5mA @ 3V (white paper) after maintaining for approximately 6 minutes

Sleep mode3: <02mA @ 3V (white paper)

6.9.3: Low Battery Indicator

When the battery voltage is less than 1.8V, the indicator on front of the rubber wheel should be blinking when moving the mouse.

6.9.4: Battery saving mode, provides for longer battery life

6.9.5: Battery life

3 months under normal operation (alkaline battery)

Item 6.10: Tracking Speed

The unit shall be capable of tracking between 50mm/s and 400mm/s of hand movement on the matt white paper without loss of data.

Item 6.11:Sensor Features

- Optical motion estimation technology
- Complete 2D motion sensor
- No mechanical moving parts
- Accurate motion estimation over a wide range of surfaces
- High speed motion detection up to 16+inches/sec
- High resolution up to 800dpi

Part 7.0: Reliability and environmental specification

Item 7.1: Button Switch Activation

Conditions: 3 cycles per second.

Testing method: a small DC motor fixed with cam automatically presses the key for three times per second. The switch is connected to a calculator. The number displayed on Calculator is pressed cycle of the key.

Result: key tested have a lift cycle of more than 1,000,000.00.

Item 7.2: Drop Shock with Bare Unit

Conditions: Drop the Unit from 76cm height onto floor.

Testing Methods: drop the unit on top, bottom and 4 side of the unit (1 time for each side).

Result: The Unit function properly, no mechanical failure.

Item 7.3: Drop Shock in Gift box

Conditions: Unit have been packed with gift box

Testing Methods: Drop the gift box from 91cm onto a floor, on the 4 corners and 6 sides of the box (1 time for each side)

Result: no content escape from packaging.

Item 7.4: High Temperature Test for operating pattern

Conditions: N/A

Testing Methods: Keep the unit at the temperature of 0 to 40 degrees Celsius and relative humidity of 0% to 95% for 25 hours and then left at ambient room temperature for 2 hours.

Result: the unit work properly

Item 7.5: Heat Cycle Test for Shipment Pattern

Conditions: N/A

Testing Methods: -40 degrees Celsius to 40 degrees Celsius under 0% to 90% related humidity with total time of 40 hours, and then left at ambient room temperature for 2 hours.

Result: The unit work properly

Item 7.6: Vibration Test

Unit shall survive a vibration within a frequency range of 10 to 200Hz at 0.015 square of g/Hz and 200 to 500 Hz at -6dB/oct for X,Y, and Z axis and 0.5 hour per axis.

Item 7.7: WORK Test

Work Voltage : 1.8V-3V

Work (DC +3V) Work current $\leq 20\text{mA}$

Sleep current $\leq 5\text{mA}$

Part 8.0: Use's Guide

Item8.1: use's installing

8.1.1:Put "AAA" mini Rechargeable batteries

8.1.2:Press the CONNECT button on the Receive

8.1.3:Press the CONNECT button on the bottom of the mouse once

(Notes: A : For optimal performance, place the receive at lease eight inches or 10 centimeters away from the mouse or other electrical devices. Such as the computer the computer monitor external drive

B : Make sure you have installed the battery correctly

C : Not to place mouse on surface of red in color or is highly reflective like a mirror

8.1.4 If the mouse does not move after 10 second. do above step again

Item8.2: choose connecting

If you choose USB port you can use it directly.

If you choose ps/2 port , you can need restarting your computer.

Part 9.0: Product Compliance

Item9.1: Actual Compliance Label

The mouse is certified to comply with the limits for class B computing device pursuant, to subpart of part of 15 of FCC rules and CE mark.



FCC NOTE:

The manufacturer is not responsible for any radio or tv interference caused by unauthorized modifications to this equipment.
Such modifications could void the user's authority to operate the equipment.

This product may cause interference to radio equipment and should not be installed near maritime safety communications equipment or other critical navigation or communication equipment operating between 0.150-30 MHz