MINI RF OPTICAL MOUSE

USER'S MANUAL

Model #: DC-2060C

Important Ergonomic Information

Some experts believe that using any mouse or trackball may cause serious injury to hands, wrists, arms, neck, or back. If you feel pain, numbness, or weakness in these areas, see a qualified health professional.

TO REDUCE THE RISK OF INJURY, FOLLOW THESE PRECAUTIONS:

- Take frequent breaks, get up and walk around several times every hour.
- Vary your tasks throughout the day.
- Keep your shoulders relaxed with your elbows at your side. Position your keyboard and mouse so you do not have to reach.
- Adjust your chair and keyboard so your upper arms and wrists are straight.
- Avoid resting your wrists on sharp edges.

System Requirement

- Mouse compatible with standard Microsoft mode
- 3rd button and wheel function require Win98/2000/ME/NT/XP
- 4th & 5th button require Win2000/XP, or required to install additional driver

Before you begin

- Keep this installation guide for future reference! It contains Important Troubleshooting Information.
- Keep your old PS/2 mouse as a back-up device.

Getting Started

Congratulations on your purchase of an **800dpi** RF (Radio Frequency) wireless mouse. By using the advanced RF technology, a 360° of operation is possible, and no line-of-sight is required between the receiver and the mouse. The 800dpi high resolution will bring users the best operation accuracy and efficiency, especially for a display at 1024*768 or higher. It has a double operation speed and only requires 1/4 space by comparing with a 400dpi mouse.

Package Contains

Your DC-2060C Mouse package includes the following:

- 1. Optical Mouse
- 2. Mini Receiver
- 3. Charger base for RF Mouse
- 4. AC Adaptor
- 5. User's manual
- 6. CD-ROM Driver Windows 98/2000/ME/NT/XP
- 7. 2 AAA size of Ni-MH rechargeable battery

Note: If any part is missing, please contact your dealer for a replacement Immediately.

Precaution

! The optical mouse *can not* work on a glass or mirror surface. Avoid operating this mouse on a glossy surface. otherwise, this mouse may not operate normally.

! For consideration of saving battery power, it is strongly recommended to operate an optical mouse on a bright surface with fine texture to obtain lower power consumption of the Agilent high illumination LED. A very dark surface will cause higher power consumption.

! For optimal performance, place the receiver at least 8 inches or 20 centimeters away from other electrical devices, such as the computer, the computer monitor, speakers or other external storage drives.

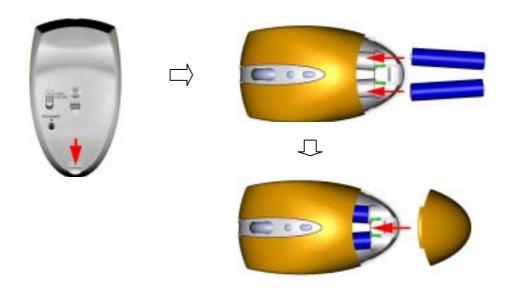
! For a better transmission distance, avoid to use this device on a metal plate or desktop because a large surface of iron, aluminum, copper and other metal will be a shielding or ground to the RF antenna of the mouse and receiver. Operating on a metal may cause the transmission distance shorter.

! If your notebook computer has a metal (contains Al or Mg) case, the metal housing of the LCD panel will isolate partial radiation of the RF signal from the mouse. This will possibly result in reducing the distance of transmission when you operate the mouse right in front of the notebook, and the receiver is connected on the back of the notebook. However, the RF mouse should work properly while you are operating the mouse just beside your notebook computer.

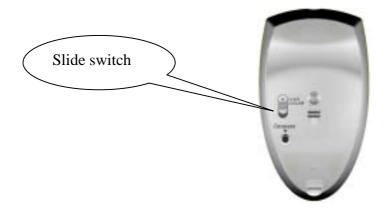
Installation Guide (Mouse)

Step 1. Inserting the Batteries

- 1.Remove the battery cover by pushing down the Tab and the battery cover will spring off.
- 2. There are signs to indicate the polarity of the batteries. Carefully follow the signs to place the batteries don't reverse the polarity!
- 3. Place the batteries cover back and make sure it is firmly Closed.



4. There is a slide switch on the button of the mouse for selecting correct battery type. Be sure to side the switch to correct according to the type of battery when installing batteries.



Step 2. Synchronize the RF Mouse

Once the batteries are fully charged, remove the mouse from the cradle; if the mouse is in sleep mode. click the mouse button once to wake it up.

1. Plug the receiver into the charger's USB port, Notebook Computer's USB ports

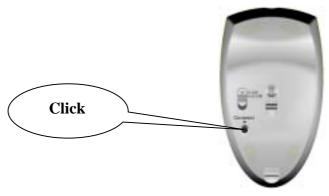
or into the keyboard's USB port.



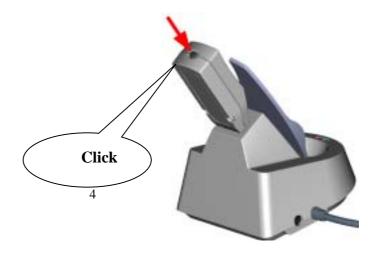
2. Bring the mouse within 1 ft range from the receiver, Hold the mouse upside-down and use a pointed object, such as a pen tip, to click the "CONNECT" button once. Do Not depress the CONNECT button longer then 1.5 seconds. (The red sensor light will go off when the "CONNECT" button is pressed down.)

! Please poke the Mouse Connect button first, and then click the receiver's

button!



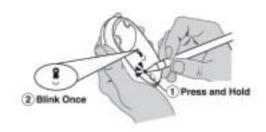
3. Click the receiver's connect button once (located on the back of the receiver) the LED will start blinking, when the connection is established.



- 4. Move the mouse around on the desk, the mouse cursor should be moving and the mouse is ready to use.
- 5. If the synchronization is not successful for some reason please (1) Remove the batteries and unplug the receivers (2) Wait for 20 sec then try the steps 1 to 4 again.

Note: * During normal use, please make sure that the mouse is no more than 3 ft away from the receiver in order to have reliable connection.

** The LED on the receiver will light up or blink while the mouse is being used.



Note: Be sure to press the connect button firmly in procedure, if the connect button is not depressed steadily the red light will be on before 2 seconds expire. This will result in a change of channel and ID. Don't panic, just re-connect the mouse to the receiver, and do step4 again.

Operation Guide

Battery low indication

When the voltage level of the battery goes down under the preset level, the scrolling wheel will flash at least three times on moving or clicking the mouse. Although the mouse can still work for a while, the user, at this time, should have a new set of batteries ready for replacement. Or, if the user has a companion charger base, and Two re-chargeable batteries are inside the mouse, charge the mouse as soon as possible.

Power off the mouse

- 1. Be sure the mouse is **NOT** in sleep mode. If it is, press any key to wake it up.
- 2. Press and hold the Connect button on the bottom of the mouse for more than 2 seconds. (The red light will go off while the Connect button is depressed.)
- 3. Wait until the red light flash once. Release the Connect button.
- 4. Now, the mouse is in power off mode. No operation can be done.

Power on the mouse

To activate the mouse again, press the Connect button on the bottom of the mouse once. (**DO NOT** depress the Connect button for more than 1.5 seconds when resuming the mouse from power off mode.) The red light will turn on, and the mouse is ready for normal operation.

Operations on power saving mode

In order to conserve battery power, the mouse is designed to reduce power consumption gradually from standby mode to sleep mode, if it is not operated.

Standby mode – Around 2 seconds after the mouse stops moving, it enter into standby mode.

Sleep mode – If the mouse is left intact for around 8 minutes, it goes to sleep mode and shuts down the optical sensor to maintain minimum power consumption. No moving operation is possible in this mode.

Wake up the mouse

This mouse can work promptly under Standby mode so users might not be able to tell the existence of this mode. But, in sleep mode, users have to press any button to wake up the mouse for normal operation.

Charger base

This innovative design of patented charger base is an ideal accessory to your PC system with an RF optical mouse. For those who also own a notebook, and wish to work on their desk top PC while at home, and on their notebook while traveling. The charger base provides a convenient way of attaching and detaching the mini USB receiver to and from the PC system. So, when you are traveling with your notebook, and wish to bring your wireless optical mouse, you need only to pull out the mini receiver from the charger base, rather than to bring the whole charger with receiver inside.

This charger base is proposed to be used with the above Specified model of Mini Wireless Optical Mouse.

Keep this guidance for future reference!

Precaution

For optimal performance, place the receiver & charger base at least 8 inches or 20 centimeters away from other electrical devices, such as a computer, a computer monitor, speakers or other external storage drives.

Installation Guide (Charger base)

Step 1. Installing the rechargeable batteries

To use the charger base, you have to replace the original disposal AA batteries in your wireless optical mouse with qualified rechargeable batteries. To replace the batteries, please follow the steps below:

- 1. Remove the battery cover by moving the opening tabs on the bottom case and pull the battery cover (the top cover of the mouse) out. Pull out your original disposal batteries.
- 2. There are signs to indicate polarities of batteries' positive and negative ends. Carefully follow the signs to place the rechargeable batteries.
- 3. Place the batteries cover back and make sure it is firmly closed.

Battery Warning!

When replace the rechargeable batteries, please use heavy-duty Ni-MH rechargeable batteries only.

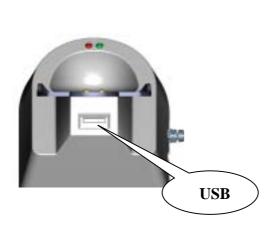
Do not mix different type or different brand batteries together!!

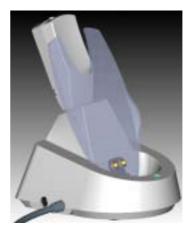
Step 2. Connecting the power

- 1. Connect the AC adapter into an AC power outlet.
- Connect the DC output connector of the adaptor into the DC jack on the left side of the charger.
- 3. The red LED on the top front end of the charger will light up to indicate that Power line is well established.

Step 3. Connecting the charger to PC system

Before you go on, plug the mini USB receiver into the USB receptacle on the rear top of the charger base.





Please follow the steps below to finish the connection:

- 1. Plug the USB cable connector of charger into a USB port of your PC system.
- 2. Turn on the computer, if it is off.
- If you have not registered the mini USB receiver to your computer, please have your original Windows CD in hand, and follow Windows' instructions to finish up the registration of a new USB device.

PS/2 mode (Optional)

If you purchased a combo mode (USB+PS/2) wireless optical mouse, there comes a USB to PS2 adapter with your mouse set. You can easily identify the PS2 end and the USB receptacle of the adapter.

Please follow the steps below to finish the connection:

- 1. Turn off your computer, if it is on.
- 2. Remove your current PS/2 mouse.
- 3. Plug the USB cable connector of the charger into the USB receptacle of the adapter, and plug the PS2 end of the adapter into the PS/2 mouse port of your computer.
- 4. Turn on the computer, and the receiver (now in PS/2 mode) will be automatically recognized by the system.

Step 4. Full charge the batteries

1. Turn the mouse to its bottom side and you will see a slide switch of "battery type".

Make sure it's positioned on "Ni-MH" battery mode.

Battery type

- 2. Put the wireless optical mouse with its rechargeable batteries on the correct location of the charger. The green LED will light up to indicate charging process is undergoing.
- 3. Before you use the wireless optical mouse, you have to charge the batteries as full as possible. It will take about 5 hours to fully charge the Ni-MH batteries inside the mouse.
- 4. When batteries inside the mouse are charged to full, the green LED becomes flashing. You may take the mouse off the charger, or just leave it on the charger to maintain the batteries in full-charged condition.





GENERAL SPECIFICATIONS

- 800dpi hardware resolution
- Digital Radio Frequency wireless mouse with receiver
- 2 channels and 256 ID selections for your options to prevent interruption
- 5 buttons design with scrolling wheel
- Ergonomic design for comfortable grip

Electromagnetic Characteristics (EMC)

This unit complies with Part 15 of FCC Rules. Operation is subject to following two conditions:

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

Tested To Comply
With FCC Standards

• **CE - Type acceptance**: ETS 300 220 short range devices

Transmitter

Distance: 3 feet typical

Power: 2.4V DC (Two AAA size of Ni-MH Rechargeable battery)

Carrier Frequency: 27 MHzDimensions: 98*56*37 mm

Weight: 86 grams

Receiver

Interface: USB

Power: 5V DC, 100mA MAX connected to host computer

Dimensions: 63*22*16 mm (without counting the extended USB connector)

Weight: 16 grams

Recharge

Charging Current: 110 m A typical

Power: 5VDC, 450 m ADimensions: 81*70*96mm

Weight: 90 grams

ELECTRIC SPECIFICATIONS

Operating Voltage Transmitter: 2.4 V DC (powered by batteries)

Receiver: 5V DC (powered by USB port)

Operating Current Transmitter: 45mA, operate on a white paper

Receiver: 16mA typical

Standby Current
 Stand by 1 current: 8m A for 2sec.

Stand by 2 current: 6m A for 8 minutes.

Stand by current: 240u A.

Modulation Type FSK

Troubleshooting

1. Mouse does not function

- If mouse is not functional, please turn off the computer first.
- Check the receiver and make sure it is firmly attached to the USB port of the computer.
- Check the placement of batteries and see if they are properly connecting.

 The "+" and "-" on the batteries must match the "+" and "-" on the slots. If the batteries aren't inserted correctly, the device won't work.
- Restart the computer again. If the LED inside the receiver does not light up when moving the mouse, please re-connect the mouse to the receiver.
- Q: The mouse cursor can be moved only left & right during operation (it could Be caused by low battery or the optical sensor's data error).
 - **A:** Please take out one of batteries and put it back for a power reset and then redo the connect procedure.
- Q: Mouse does not work after waking up from power off mode by pressing The connect button once.
 - A: This might be caused by not very precisely depressing the connect button to wake up the mouse. Users can gain back normal operation by pressing connect button on the mouse first, and then pressing the one on the receiver. As soon as the LED inside the receiver starts flashing, the mouse is ready to operate.

! Optical sensor mouse functions best on surfaces with details for tracking It may not function on reflective, reflective pattern or non-visible detail surfaces!

2. Reducing Interference with Other Wireless Devices

- Reducing Interference with Other Wireless Devices: All 27MHz radio-based devices are subject to interference from other 27MHz radio-based devices, such as cordless telephones, cordless baby monitors, and cordless toys. It may help to move the receiver unit and the base unit of other wireless devices (such as cordless telephone cradle) as far apart as possible. You may need to try several times for a location that is best in your operating environment.
- Move the receiver and the mouse closer to each other so that the receiver is relatively shorter in distance to the mouse than to other 27MHz transmitters. You may need to re-establish the "connection".

Note: Avoid to uses this device on a metal surface because a large surface of iron, aluminum, copper, or other metal may act like a shielding to the RF antenna of the mouse and the receiver.

3. Interference with other RF wireless mouse

If the interference comes from other same model of RF wireless mice, please "Setting up connection between mouse and receiver" of the installation guide to switch to a new RF channel. A new identification code is also generated upon the completion of channel switching.

Normally, the effective transmission distance is about 3 feet, depending on the environment. If the effective distance between the mouse and the receiver is bad, try to change the location of the receiver.

4. If you have difficulty connecting the wireless mouse:

- Increase the distance between the set of wireless mouse and other radio device units.
- Turn off the other wireless devices, or their base units, that are in close proximity to the receiver of this wireless mouse.
- Try connecting the wireless mouse and its receiver again.
- To verify that your device is connected and working properly, open a document and try the device.

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 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.

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.

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.