SONY

Bluetooth® Laser Mouse VGP-BMS77

User's Manual



X-XXX-XXX(1) © 2008 Sony Corporation Printed in Japan

Thank you for purchasing it.



If it doesn't defend notes for safety, an electric product might become a fire and an accident resulting in injury or death

Please often read this manual and use the product safely. Please keep it in the place in which it is always seen after it reads.

For Safety

The Sony product is designed safely considering it enough. However, an electric product might become an accident resulting in injury or death by a fire and the electric shock, etc. if all wrong of those who use it are done and is dangerous. Please guard the following to prevent the accident

Safety Project Notice

Please read the notice "for this safety" well.

Do not use, when it breaks

Please request repair at the VAIO customer link repair window directly.

Abnormality occurs

- When the smoke comes out
- Abnormal sound
- the water and the foreign material enter inside When the product is
- dropped and/or the cabinet being broken
- ① Power of the mouse is turned off
- Repair is requested at the VAIO customer link repair window





The AC adaptor is not brandished.

It is likely to hit the person and the glass, etc. and to injure.

The power supply code is not damaged.

When the power supply code is damaged, it might cause a fire and the electric shock.

- When setting it up, don't places between the product, the wall, and the rack, etc.
- The power supply code is not processed, and damaged.
- The heavy one is not put, and pulled.
- Doesn't bring close to the heat apparatus.
- When the power supply code is pulled out, pulling it out with the plug without fail.

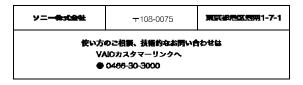
Dust that attach to the plug of the AC adaptor has to be regularly removed. It becomes insulation shortage because of moisture etc. when dust is collected in the plug, and it causes a fire.

If the plug of the AC adaptor is not inserted in the outlet even of the root up to the root firmly, it causes a fire and the electric shock.

It causes a fire and the electric shock not used excluding the AC adaptor of the attachment.

When wiring accessories in the connection cable will make current exceeds ratings flows and it possibly causes a fire.

When having begun to thunder, it causes the electric shock by lightning that doesn't touch the AC adaptor. Please pull out the AC adaptor from the outlet beforehand for a fire, the electric shock, and the product protection when the thunder is forecast.



If the following precaution is not observed, might it injure and a peripheral article is disadvantaged.

In a packed train in crowded places such as the use of the machine

At the place where it has the possibility the person who the heart pacemaker is installed being, there is a possibility of producing effect on operation of the pacemaker with radio wave near.

22 cm or more separating from the installation region of the heart pacemaker

There is a possibility of producing effect on operation of the pacemaker with the radio wave which you use

Inside the medical institution of the hospital and the like, at the vicinity of the medical application electrical machinery and apparatus the knitting machine is not used

Waves to affect the electro-medical equipment to malfunction and cause accidents that may be.

On board the aircraft taking off and landing when not in use

Waves to affect the cause of accidents and malfunctions that may be. The aircraft in the available information, available to airlines to use terms such as please.

This equipment is being used by other radio equipment, such as failure to occur, do not use the machine

Waves to affect the cause of accidents and malfunctions that may be.

These are not observed and to the injured and damage to goods around them.

Do not use a computer other than specified

It might cause the breakdown not used for computers other than specification.

Stable place

The product might drop when putting it on the shaking stand put on a steady place and the inclination, etc. and it cause the injury.

There is a possibility of hurting eyes by the originated laser light.

Pleas avoid to see the mouse back side directly where the lens is set n directly (The laser light is not seen in eyes.)

The connector is neatly connected

- Please do not put the metal piece in the connector. The pin and the pin might be short-circuited, and it cause a fire and the breakdown..
- Please insert straight and connect the connector. The pin and the pin might be short-circuited when diagonally inserting it, and it causes a fire and the breakdown.

The AC adaptor is not touched by a wet hand. The AC adaptor might be pulled out, be opened with a wet hand, and then, it causes the electric shock.

It doesn't touch this machine and the AC adaptor under energizing for a long time.

When the skin remains touching for a long time, it might cause the low temperature burn.

The heat not used with this machine and the AC adaptor covered with the cloth oneself, and the case might be transformed, and it cause a fire.

When moving, the AC adaptor has to pull out.

The connected equipment floats from the outlet when moving while connected the plug of the AC adaptor, causes the electric shock, and it causes the breakdown and the injury. Moreover, please do not drop this machine

When not using it for a long time, the plug of the AC adaptor has to pull out.

Please pull out the plug of the AC adaptor from the outlet for safety when you do not use it for a long time.

The power cord/code is not wound around the AC adapter It might cause the disconnection if wrap the power supply code around the AC adaptor

Unless the below-mentioned note is protected, it becomes cause of breakdown

Do not use in such as moisture and dust, oily smoke, steam places. Use will cause trouble in these places.

It does not allow to disassembled and remodel. The cause of breakdown. As for inspection and repair inside please ask the VAIO customer link repair window.

The water and the foreign material are not poured inside. When the water and the foreign material enter, it becomes cause of breakdown. IF the water and the foreign material enter, please consult the VAIO customer link repair window.

Attention on safety of battery

It causes severely injure by the liquid leakage and generation of heat, the explosion, and the ignition and the accidental ingestion and lose one's sight when the battery usage is mistaken, so guard the following.

Don't charge it excluding the specified charge method.

- Don't put it in the fire. The short is not allowed.
 Don't heat it with the microwave oven and the oven. It might be short when carrying, and keeping it with the metals.
- Don't charge and leave it under and near the fire and hot weather.
- When the liquid that leaks from a built-in battery catches one's eye, please consult the doctor at once after washing in clear water.
- Don't strike the built-in batter.
 - Please do not give strong shock, do not put the heavy stuff, and turn the heat by dropping. It causes the breakdown.
- The safety in the following cases is not warrantable.
 - -Not use it in the specified model
 - -Resolved and remodeled

Dismantle a built-in battery

- —Please follow to the regulations and the local self-governing body.
- -Please do not throw into the general rubbish away.

Please take it to the recycling cooperative store.

About the electric wave trouble self-imposed restraint

This device is class B info tech equipment based on the standard of electric wave trouble self-imposed restraint conference (VCCI). The reception trouble might be caused when this device is adjacent to the radio and the television receiver and it is used though this device has aimed to use it by home environments.

Please do it correct handling according to the manual.

About the attestation based on Radio Law

This product has received the attestation as wireless of small electric power data communication based on Radio Law equipment. Therefore, when this product is used, it is not necessary to license the wireless station.

However, when the following matters are done, it is likely to be punished by the law.

- Resolution/remodel this product.
- Peel off the proof label pasted to the bottom of this product.

Moreover, this product is only for the domestic country. It is not possible to use it in foreign countries because of Radio Law in each country.

About the frequency

This machine is 2.4 GHz bandwidth used. Other wireless applications might use the same wavelength. Please use it noting the following matter to prevent the electric wave interference with other wireless applications.

Directions of this machine

This frequency band are operated not only by other homogeneous wireless stations besides the equipment for industry, the science, and the medical treatment such as microwave ovens and production lines of the factory that require the premises wireless station and the license for the movable body identification, but also in a specific small electric power wireless station and the amateur radio station (Hereafter, it is abbreviated, "Other wireless stations"), that do not require the premises wireless station and the license.

1. Please confirm "Other wireless stations" has not been operated in the vicinity before this machine is used.

- 2. Please promptly change the use place of this machine when the electric wave interference is generated between this machine and "Other wireless stations" by any chance or stop the operation of the equipment (the electric wave is stopped).
- 3. Please inquire of the VAIO customer link when trouble and an uncertain point occurs.

2.4 F H 2 This wireless applications use 2.4GHz bandwidth. The FH-SS modulation method is adopted as a modulation method, and the distance is 20m.

About the laser safety standard

The goods concerning the laser standard (JIS C 6802) class agreement. The following acceptable label is displayed in the mouse bottom.

CLASS 1 LASER PRODUCT

About the leakage current self-imposed restraint, this device suits personal computer standard (PC-11-1988) of corporation Japan Electronics and Information Technology Industries Association (old JEIDA).

Collection and the recycling of a rechargeable battery

The lithium-ion battery can be recycled. Please paste the insulating tape such as scotch tapes to the metal part and have the lithium-ion battery and proposal unnecessary rechargeable battery in recycling cooperation shop. Inquiries concerning the collection, the recycling of a rechargeable battery, and the recycling cooperation shop:

JBRC

Homepage:

http://www.jbrc.net/hp/contents/index.html

Please detach a built-in battery according to the procedure on the back when you annul this machine.

It is dangerous to use it excluding a built-in battery of this machine. Please do not detach built-in battery, except when you annul this machine.

Battery drain

The battery using time might become short when leaving it for a long time to discharge besides the battery relief the current naturally little by little even when not using. We will encourage charging it again before it uses it.

The Battery capacity degradation and exchange of the battery

As for the battery, efficiency keeps decreasing little by little frequency of charge, period of use, attendant upon retention period. 5 For this reason. which has not been fully charged battery life is shorter or longer life may be. Battery life is short and has been the case, we specify a new battery in exchange.

In regard to the exchange of the battery, please inquire to VAIO customer link. At that time, it is not necessary to remove the built-in battery.

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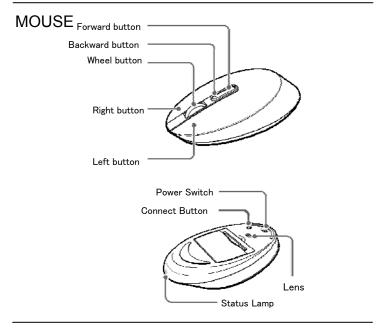
- The Bluetooth word mark and logos are owned by the Bluetooth SIG, Inc., andany use of such marks by Sony Corporation is under license. Other trademarks and Trade names are those of their respective owners.
- All other names of systems, products, and services are trademarks of their respective owners. In this manual, the ™ or ® marks are not specified.
- In this manual, Microsoft® Windows® XP Home Edition and Microsoft® Windows® XP Professional are referred to as Windows XP.
- In this manual, Windows Vista® Home Basic, Windows Vista® Home Premium, Windows Vista® Business and Windows Vista® Ultimate are referred to as Windows Vista.

Attention

This machine might not work correctly by the version of the personal computer and the software used.

Please confirm the system requirements beforehand on the homepage of the VAIO customer link.

Please confirm information on the Bluetooth correspondence of biotechnology on the homepage of the VAIO customer link.



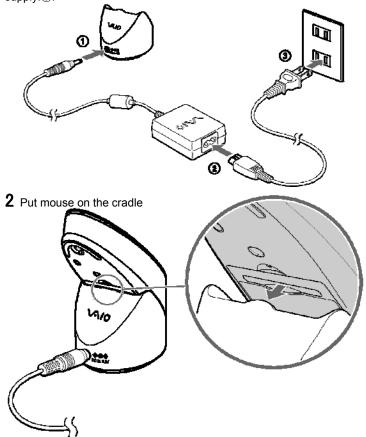
Charging

Attention

「Main specification」 (inside)

When the range of the operating temperature described in the Γ main specification J(back) is exceeded, it is not possible to charge.

1 Connect cradle DC IN 5.2 V�€⊕ connector to AC adapter ①, AC And connect AC adapter to power code2, and inserts it in the power supply.3.



The status lamp lights to the umber color when the charge starts. When the status lamp is turned off, the charge is completed.

Charge time

- When the amount of the remainder of a built-in battery is enough, lamp turns off after amber LED lights 3~4 sec. In the meantime battery is not charging for protection.

 • When mouse's status lamp has flashed amber color, it means
- that remainder of built-in battery not enough. Please charge.

Use personal computer installed the Bluetooth software to connect the mouse. Please see "Bluetooth equipment connection guide" of the attached paper about the method of the connection.



As for the Bluetooth software there are times when operation differs depending upon the personal computer of errand. Concerning the how to use, the electronic manual which belongs to the personal computer itself of errand please view together

Connection is cut off

Please turn the power switch of the mouse to OFF

The operation distance of the mouse

Operational distance usually has designated the mouse as within largest approximately 10m from the personal computer. But, there are times when carry-over factor of radio wave becomes extremely short depending upon use environment, does not operate normally.

When the mouse does not operate normally, please make sure to use with the below-mentioned environment

- You use at the place where just it is far from the other radio equipment be made
- The mouse is used at the close place with the personal computer
- The mouse pad is used

while using mouse

When the mouse is moved, moving the pointer on the screen in the same direction.

It explains here about mouse's basic use method.

Attention

- It is likely not to operate correctly on mouse pad including transparent material according to characteristic of the laser sensor. In that case, please avoid on such a material or use mouse pad for a laser sensor.
- As for fluor plastics PTFE (polytetrafluoro-ethylene) that the mouse uses as foot pad is more slip compared to the desk and mouse pad because of low friction material of its feature.

Speed of the pointer is adjustable

With the below-mentioned procedure, speed of the pointer can be adjusted

Windows XP:

- [Start] it clicks the button, [the control panel], [the printer and the other hardware], [the mouse], [pointer option] clicks in order of the button.
- 2. With item of speed regulation, necessary adjustment is done

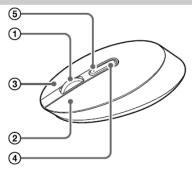
Windows Vista:

- [Start] it clicks the button, [the control panel], [the mouse], [pointer option] clicks in order of the tub
- 2. With item of speed regulation, necessary adjustment is done.

Attention

- Indication of the picture speed regulation are times when it differs depending upon the type of personal computer which has been used.
- When adjusting the speed of the pointer, the home page of VAIO customer link (http://vcl.vaio.sony.co.jp/) please verify

Basic Function



Turn power switch ON on the back side of mouse.

1.Wheel button

The scroll operation can be done easily by clicking the scroll bar of the window when the wheel button is used. Moreover, the auto scroll function can be used by pushing the wheel button.

2.Left button

Use to open document and picture file made. When the mouse is used, this button is chiefly used.

3.Left button

Use to copy document and picture file made and check those details. Short cut menu is displayed to do various operations and the settings at once

4.Forward button

5.Backward button

The page displayed in Internet Explorer can be moved to ahead and the following page.

Resolution switch

1. A left button and a right button are pushed at the same time while pushing the CONNECT button on the back of the mouse.

The status lamp alternately blinks to green and orange, and it becomes a resolution switch mode.

2. The following buttons are pushed according to the resolution.

800 dpi: left button. 1200 dpi: wheel button

Attention in use

Use and the inventory location

Please do not use in the place where direct sunshine strikes and do not keep it where a lot of moistures exists and where the temperature is high and temperature is various.

Operation

- Please put and use it on the horizontal place.
- Please avoid a rapid temperature change. It might be dewy internal.

Bluetooth communications

- The 2.4 GHz band used by Bluetooth and wireless LAN devices is also used by various other devices. Bluetooth devices incorporate technology that minimizes interference from other devices using the same wavelength. However, communication speed and achievable distances may be reduced. Interference from other devices can also stop communications altogether.
- The data transfer rate will vary depending on distance and obstacles between devices, device configuration, radio interference, operating system, software application, and so on. In some cases, communication may be interrupted.
- Communication range will vary according to whether walls or other obstacles are located between devices, the material used in walls, the presence of radio frequency interference and other environmental conditions, and the type of software being used.
- If wireless LAN and Bluetooth functionality are used at the same time on the same personal computer, communication speed may be reduced due to electromagnetic interference, and other unwanted effects may occur.

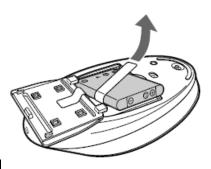
lacktriangle

Remove Battery

Remove the cover on the back of the mouse



Remove cellophane and take out battery



CAUTION

RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE.
DISPOSE OF USED BATTERIES ACCORDING TO THE INSTRUCTIONS.

After-sales service

Check first when you have trouble

Please see again examine this manual

Please contact the VAIO customer link when the condition is still bad.

Please see the written guarantee about the VAIO customer link.

Repair during guaranteed term

Based on the content of the description of the written guarantee. However, It might be assumed repair fee even though in the guaranteed term. Please see the written guarantee in detail.

Repair after guaranteed term passes

The function can be maintained by the repair with charge

Repair

The repair of the Bluetooth laser mouse take place in our company. Our designated vendor will receive and deliver the mouse from/to the customer house. Please contact the VAIO customer link in detail.

About the repair parts for the repair

In terms of environmental protection, Sony might use the reproduction parts or substitutes. Moreover, please acknowledge beforehand that Sony by occasion will collect exchanged parts as an ownership thing.

The possession periods of parts

After discontinuance of manufacturing, our company has had the performance parts (parts necessary to maintain the function of the product) for the repair of the Bluetooth laser mouse for six years. We will make it to the period of being able to repair this part possession period.

Please inform as follows when you consult.

• Model Name: VGP-BMS77

• Serial Number: Inside Battery Box

- State of breakdown: as detail as you can
- Purchase Date:

Main Feature

■ Mouse

Communication

Bluetooth Ver.2.0+EDR

method

Reading method Laser sensor

Resolution 800/1200/1600 account

Frequency 2.4 GHz(Bluetooth)

Power voltage DC 3.7 V (built-in battery)

Battery life About 1 month (full charged)

Communication Max. 10 m

distance

Dimension 56.4(W) x 34.1(H) x 121.7(D) mm

Weight 110 g(battery imbedded)

■ Cradle

Dimension 62.2(W) X 56.5(H) X 75.8 (D) mm

Weight 45 g

■ Others

System Windows XP or Windows Vista

AC adapter Input : AC100 - 240 V 50/60 Hz

(imbedded AC100 V [power cord)

Output : DC 19.5 V

Working 5°C∼35°C

temperature

Working moisture 20%~80%

Storage $-20^{\circ}\text{C} \sim 60^{\circ}\text{C}$

temperature

Storage moisture 10%~90%

Attachments cradle(1)

AC adapter(1)

Power cord(1) Li-On battery (1) User manual (1) Warranty card(1)

Troubleshooting

Before you consult VAIO customer link, already 1 times please try checking. When even then condition is bad, please consult VAIO customer link.

Condition	Action
The mouse does not turn on when I set the power switch to ON.	Other mouse buttons are being pressed while the power switch is set to ON. → If the power switch is set to ON while other mouse buttons are being pressed, the mouse will not turn on. Be sure not to press any other buttons when setting the power switch to ON.
Nothing happens when I press a mouse button.	 ■ The software is not compatible. →Use a supported software. ■ The mouse batteries are exhausted →Replace the batteries. For details, see "Inserting Batteries into the Mouse". ■ The mouse and the personal computer are not communicating →Perform the steps in "Enabling Communication between the Mouse and Your Personal Computer" to ensure that proper communication is possible. →Turn off the mouse, wait a few seconds, turn on the mouse, and then reestablish communication. →In some operating environments, the usable distance may be notably shorter, preventing normal operation. In such case, use the mouse farther away from other electronic devices such as other computers and displays. →If the mouse is too far from your personal computer, communication is not possible. Bring the mouse and your personal computer closer together ■ The mouse is being used on an unsuitable surface. → Due to the characteristics of the laser sensor, the mouse may not work properly on transparent surfaces or on a mouse pad that has a clear surface. Avoid sing on such materials, or use a Commercially-available mouse pad that is compatible with a laser sensor mouse. ■ The CONNECT button is pressed while operating the mouse →When the CONNECT button is pressed

The scrolling features do not work.

- The operating system is not compatible.
- → Use a supported operating system.

computer.

■ The program you are using is not compatible with the scrolling features.

manuals provided with your personal

- → The scrolling features only work with programs that use a scroll function
- \rightarrow Some programs do not support the scrolling features.

The pointer does not move when I

→ Processing performed by Windows or other software may temporarily disable the

move the mouse.

- mouse. Wait a few moments for the processing to finish before using the
- → You may find some useful solutions in your personal computer's operating instructions. Refer to the manuals provided with your personal computer.
- The mouse batteries are exhausted.
- → If the power does not come on when the power switch is set to ON, replace the batteries. For details, see "Inserting Batteries into the Mouse".
- The mouse is not set to ON.
- → Set the power switch on the bottom of the mouse to ON.
- The mouse and your personal computer are not communicating.
- → Perform the steps in "Enabling Communication between the Mouse and Your Personal Computer" to ensure that proper communication is possible.
- → In some operating environments, the usable distance may be notably shorter, preventing normal operation. In such case, use the mouse farther away from other electronic devices such as other computers and displays.
- → If the mouse is too far from your personal computer, communication is not possible. Bring the mouse and your personal computer closer together.
- The mouse is being used on an unsuitable surface.
- → Due to the characteristics of the laser sensor. the mouse may not work properly on transparent surfaces or on a mouse pad that has a clear surface. Avoid using on such materials, or use a commercially-available mouse pad that is compatible with a laser sensor mouse.

does not move smoothly across the screen.

The mouse pointer →Due to the characteristics of the laser sensor, the mouse may not work properly on transparent surfaces or on a mouse pad that has a clear surface. Avoid using on such materials, or use a commercially-available mouse pad that is compatible with a laser sensor mouse.

Exiting power-saving mode with the mouse is not possible.

→ Press any key or the power button on the keyboard.

The mouse does not move smoothly after returning from the power saving mode.

→Deactivate the Bluetooth connection, wait a few seconds, and then reestablish connection.

The mouse is not found when the Bluetooth device search is performed.

- The mouse is unable to be detected.
 - → Press the CONNECT button located on the bottom of the mouse, and then try the search again.
- The power switch on the mouse is set to OFF.
 - → Check the power switch setting on the bottom of the mouse.
- The Bluetooth function on your computer is not activated.
- Make sure that the Bluetooth function is activated.
 - →For details, refer to the manuals provided with your personal computer.

I am asked to input Input "0000" as the key. a key at the time of authentication.

To prevent fire or shock hazard, do not expose the unit to rain or moisture.

WARNING

Owner's Record

The model number and the serial number are located inside the battery compartment of the mouse. Record the serial number in the space provided below. Refer to this number whenever you call your Sony dealer regarding this product.

Serial No	

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.

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.

For questions regarding your product or for the Sony Service Center nearest you, call 1-888-476-6972 in the United States or 1-800-961-7669 in Canada.

IMPORTANT NOTE:

FCC Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. End users must follow the specific operating instructions for satisfying RF exposure compliance.

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

IC Statement

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.

For customers in the U.S.A. and Canada

This equipment complies with FCC/IC radiation exposure limits set forth for uncontrolled equipment and meets the FCC radio frequency (RF) Exposure Guidelines in Supplement C to OET65 and RSS-102 of the IC radio frequency (RF) Exposure rules. This equipment has very low levels of RF energy that it deemed to comply without maximum permissive exposure evaluation (MPE). But it is desirable that it should be installed and operated with at least 20cm and more between the radiator and person's body (excluding extremities: hands, wrists, feet and ankles). Caution - The use of optical instruments with this product will increase eye hazard.

CLASS 1 LASER PRODUCT PRODUIT LASER DE CLASSE 1

Located on bottom side

For customers in other countries and regions

The equipment is classified as a CLASS 1 LASER PRODUCT and complies with the Laser Products Safety Standard IEC/EN 60825-1. You can find the following sticker on the bottom of this equipment.

CLASS 1 LASER PRODUCT

VGP-BMS77(J)_X-XXX-XXX-XX(1)