SONY

4-669-393-**11**(1)

5GHz
Wireless LAN Converter

Read This First

CarrierGate

PCWA-DE50

Sony Corporation © 2003 Printed in Japan

WARNING

To prevent fire or shock hazard, do not expose the unit to rain or moisture.
To avoid electrical shock, do not open the cabinet. Refer servicing to qualified personnel only.

Owner's Record
The model and serial numbers are located on the back of the product. Record the serial number in the space provided below. Refer to them whenever you call your Sony dealer regarding this product.

Model No. PCWA-DE50
Serial No._____

CAUTION
You are cautioned that any changes or modifications not expressly approved in this manual could void your warranty.

Exposure to Radio Frequency Radiation.
The radiated output power of the Wireless LAN Converter is far below the FCC radio frequency exposure limits.
Nevertheless, the Wireless LAN Converter shall be used in such a manner that the potential for human contact during normal operation is minimized.

FCC Radio-Frequency Exposure Statement
This equipment generates and radiates radio-frequency energy. In order to comply with FCC radio-frequency radiation exposure guidelines for an uncontrolled environment, this equipment has to be installed and operated while maintaining a minimum body to antenna distance of 20 cm. Based on continuous exposure of 30 minutes.
Users are not permitted to make changes or modify the system in any way.

NOTE:
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 or communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to television reception, which can be determined by turning the equipment off and on, you are encouraged to try to correct the interference by one or more 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.

You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.
If you have questions about this product, call the Sony Customer Information Center at 1-877-760-7669; or write to the Sony Customer Information Center at 12451 Gateway Boulevard, Fort Myers, FL 33913. The number below is for FCC-related matters only.
This device must not be co-located or operating in conjunction with any other antenna or transmitter.

> **Declaration of Conformity**
> Trade Name: Sony
> Model No: PCWA-DE50
> Responsible Party: Sony Electronics Inc.
> Address: 680 Kinderkamack Road,
>   Oradell, NJ 07649 USA
> Telephone: 201-930-6972
> This phone number is for FCC-related matters only.
> 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.

The supplied interface cable must be used with the equipment in order to comply with the limits for a digital device pursuant to Subpart B of Part 15 of FCC Rules.

NOTE:
The power outlet should be installed near the equipment and should be easily accessible.

Safety Information

WARNING
- Opening the unit, for whatever reason, could lead to damage that is not covered by the warranty.
- Do not touch the device or accessories during thunderstorms. Electrical shock could result.
- This device is made for use in the USA only.
- For indoor use only.
- Do not use this equipment on hospital premises. Doing so may cause medical devices to malfunction.
- Do not use this equipment in an aircraft, as doing so could cause the aircraft's equipment to malfunction.
- While using the Wireless LAN Converter, do not cover it or turn it on its side. Do not cover the Wireless LAN Converter with objects such as magazines or newspapers or use it in confined, enclosed places, such as the spaces between walls and furniture. Furthermore, do not turn the Wireless LAN Converter on its side while using it. Either situation could cause heat to build up inside the Wireless LAN Converter, leading to overheating and possible fire.
- Carefully place the Ethernet cable. Personal injury or damage to the Wireless LAN Converter could result from people tripping over the Ethernet cable, Wireless Unit cable, Power Unit, or power cord. Protect wiring by locating it in places where people do not walk.
- Do not swing the Wireless LAN Converter. Injury could result if the adapter strikes a person or fragile material, such as glass.
- Keep the Wireless LAN Converter out of the reach of children. Unforeseeable injury could result from swallowing loose parts, etc.
- Place the Wireless LAN Converter on a stable surface. Do not place the Wireless LAN Converter on wobbly or tilted surfaces. Tipping or falling could result in injury.
- When using wall mounting, make sure that the wall is strong enough to support the Wireless Unit. The Wireless Unit could fall if the wall is not strong enough, leading to unforeseeable accidents. Further, be careful not to drop the unit or the tools used for mounting it. Doing so could result in unforeseeable accidents.

- Avoid locations that are directly exposed to sunlight or heaters.
  Internal overheating could result in fire or damage to the unit.
- Make sure connectors are properly connected.
  – Do not insert any metallic objects inside the connectors. Short-circuiting the pins could cause fire or damage to the unit.
  – Be careful to insert connectors squarely. Crooked insertion could cause pins to short-circuit, possibly causing fire or damage to the unit.
- Use only the supplied Power Unit with your Sony Wireless LAN Converter. To disconnect your Wireless LAN Converter from the power supply, unplug the Power Unit.
- ISDN and telephone lines cannot be connected to the Wireless Unit connector and/or NETWORK connector of the Power Unit.
  If the Power Unit is connected to the network or telephone lines mentioned below, high electric current to the connectors may cause damage, overheating or fire. Connecting to home or business-use telephone lines is strictly prohibited.
  – Telephone lines
  – PBX (private branch exchange)
  – Home or business-use telephone lines
  – Lines other than those mentioned above.
- Do not connect the Wireless LAN Converter to a hub as this affects the correct operation of the Converter.

Getting help

This section describes how to get help and support from Sony, as well as troubleshooting tips for your Wireless LAN Converter.

About Sony's Support Options

Sony provides several support options for your Wireless LAN Converter.

❏ **Read This First** (this manual) contains important information that you should read before using the Wireless LAN Converter.

❏ **Quick Start Guide** explains how to install the Wireless LAN Converter.

❏ **Troubleshooting Guide** provides solutions to the most common problems users have with their Wireless LAN Converter.

❏ **Online Help for the Wireless LAN Converter Setup Page** explains how to configure the Wireless LAN Converter.

❏ **PCWA-DE50 Setup Utility Online Help** explains how to access to the setup screen of the Wireless LAN Converter.

❏ **Access Point Scan Utility Online Help** explains how to scan the Access Point.

❏ **The Sony Wireless LAN Converter support Web site http://www.sony.com/wirelesslansupport** provides the latest information on your Wireless LAN Converter.

❏ **The Sony e-mail support service** answers your questions by electronic mail. Just send your question in an e-mail message and a customer service representative will reply. To send a question to Sony e-mail support, fill out the e-mail form at **http://www.ita.sel.sony.com/support/pc/email.html**.

❏ **The Sony fax-back service** provides you with answers to commonly asked questions. You can use this automated service to request a list of available topics, and then select the topics you want to receive. To contact the Sony fax-back service, call **1-877-760-7669.**

❏ **The Sony Customer Information Services Center** offers information about your Wireless LAN Converter, Wireless LAN PC Card, and other Sony products that work with your computer. To contact the Sony Customer Information Services Center, **call 1-877-760-7669. Open 24 hours/day, 7 days/week**.

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Names of parts and functions

Wireless Unit
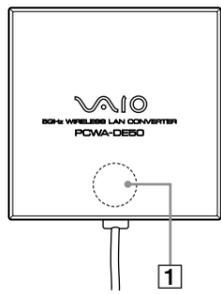
Front panel   **Rear panel**   **(With rear panel removed)**
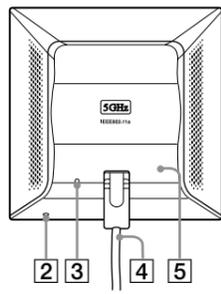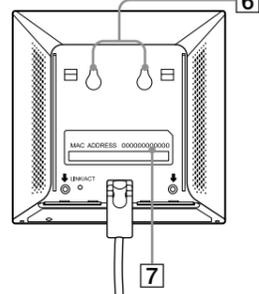
Power Unit
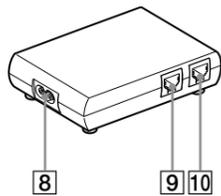
① **STATUS indicator**

Shows the operation status of the Wireless LAN Converter.

Indicator color and lighting pattern	Status
White flashing (approx. 9 sec. lit, 1 sec. out)	Wireless network connection status: Good (strong signal)
White flashing (approx. 5 sec. lit, 1 sec. out)	Wireless network connection status: Fair (medium signal)
White flashing (approx. 2 sec. lit, 1 sec. out)	Wireless network connection status: Poor (weak signal)
White flashing (approx. 1 sec. lit, 9 sec. out)	Nothing connected to the NETWORK connector or connected devices off.
White flashing (approx. 0.4 sec. intervals)	Startup in progress Wait until startup is completed.
Pink lit	Communicating in Peer to Peer Network connection mode
Red flashing (approx. 3 sec. intervals)	Search for wireless network in progress Communication is not yet possible because connection is not established. If this condition continues for a long time, check the settings of the Wireless LAN Converter and the connection target (5GHz Wireless LAN Access Point, etc.).
Red flashing (approx. 0.4 sec. intervals)	• Unit is ready for reset Reset switch is being pressed and unit is now ready for reset. Release reset switch. Wireless LAN Converter restarts automatically, and all settings revert to factory defaults. • Firmware update in progress Firmware is being updated. Never turn power off in this condition.

② **Reset switch**

Serves to return the Wireless LAN Converter to the factory default condition. For details, refer to the separate Quick Start Guide or Online Help.

③ **LINK/ACT indicator**

Lights up when a link has been established through the NETWORK connector ⑩. While data are being exchanged, the indicator flashes.

④ **Wireless Unit cable**

Connect to the Wireless Unit connector ⑨ on the Power Unit.

⑤ **Rear cover**

Remove this cover when wishing to mount the Wireless Unit on a wall, and when wishing to check the MAC address of the Wireless LAN Converter.

⑥ **Wall mounting holes**

Used for mounting the Wireless Unit on a wall. For details, refer to the separate Quick Start Guide.

⑦ **MAC address label**

This label shows the MAC (Media Access Control) address of the Wireless LAN Converter.

💡 **Hint**

MAC address is a unique identifier assigned to each Ethernet-compatible device. Because a different MAC address is specified for each device, no two devices have the same MAC address. Further, users cannot change MAC addresses.

⑧ **AC 100-240 jack**

Connect the power cord here.

⑨ **Wireless Unit connector**

The Wireless Unit cable ④ is to be connected here.

⑩ **NETWORK connector**

Use an Ethernet cable to link this connector to a computer or another device with an Ethernet connector.

💡 **Hint**

You can use an Ethernet cable with straight-through or crossover wiring.

Precautions

Power Unit

Use only the supplied Power Unit and power cord. Other AC adapters may damage in the Wireless LAN Converter.

Safety

Do not drop the Wireless LAN Converter. Careful handling will help prevent damage.

Installation

Do not place the Wireless LAN Converter where it will be exposed to the following conditions:
- Unstable surfaces.
- High humidity or poor ventilation.
- Excessive dust.
- Direct sunlight or extreme heat.
- Closed cars.
- Magnetic fields (near magnets, speakers, or televisions).
- Frequent vibration.
- Locations where the transmission of radio waves may be obstructed by metal plates or concrete walls.

Operation

Exposure to rapid changes in temperature or very damp environments may cause moisture to condense on internal parts. This may prevent the Wireless LAN Converter from operating properly. If this should happen, unplug the Power Unit from the power outlet and allow the Wireless LAN Converter to dry for two to three hours or until the moisture evaporates.

Cleaning

Clean the casing with a soft cloth lightly moistened with water or a mild detergent solution. Do not use any type of abrasive pad, scouring powder, or solvent such as alcohol or benzene. This may damage the finish of the casing.

Specifications

Power
AC100 - 240 V, 50/60 Hz
(The power cord plug is for use with AC 120 V.)

Power consumption
Approx. 5 W

Interface
100BASE-TX/10BASE-T (RJ-45) (automatic MDI/MDI-X detection)

Maximum external dimensions
Wireless Unit: approx. $3.9 \times 3.9 \times 1.3$ inches (w/h/d) (approx. $98 \times 98 \times 33$ mm)
Power Unit: approx. $4.4 \times 1.0 \times 2.8$ inches (w/h/d) (approx. $110 \times 25 \times 70$ mm)

Mass
Wireless Unit: approx. 11 oz. (approx. 310 g) (incl. connection cable)
Power Unit: approx. 4.6 oz. (approx. 130 g)

Maximum connection distance
Line of sight approx. 328 feet (100 m)
(The maximum connection distance depends on the environment.)

Protocol support
TCP/IP

Standard
IEEE 802.11a (wireless connection)
IEEE 802.3 (wired connection)

Radio frequency
5.15 - 5.35 GHz

WEP (Data encryption)
64 bits/128 bits

Modulation method
OFDM (IEEE 802.11a compliant)

Operating temperature
41°F to 95°F (5°C to 35°C) (no condensation)

Storage temperature
–4°F to 140°F (–20°C to 60°C) (no condensation)

Supplied accessories
- Wireless Unit
- Power Unit
- Power cord
- CD-ROM (Setup disc)
- Read This First (this manual)
- Quick Start Guide
- Troubleshooting Guide
- Limited Warranty

Design and specifications are subject to change without notice.