

Wireless LAN Converter

(IEEE 802.11g: 2.4 GHz/54 Mbps)

Read This First



PCWA-DE30

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 bottom of the Wireless Unit. Record the serial number in the space provided below. Refer to them whenever you call your Sony dealer regarding this product.

Model No. PCWA-DE30

Serial No. _____

CAUTION

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

This device contains the Transmitter Module

FCC ID: H8NWLL3020

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 complies with FCC radiation exposure limits, set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 cm (7.9 in.) between the radiator and your body. This transmitter must not be co-located or operated in conjunction with any other antennas or transmitters.

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.

<p>Declaration of Conformity Trade Name: Sony Model No: PCWA-DE30 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.</p>
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The shielded interface cable recommended in this manual must be used with the equipment to comply with the limits for a digital device pursuant to Subpart B of Part 15 of the FCC Rules and Canadian ICES-003.

Le câble d'interface blindé recommandé dans ce document doit être utilisé avec les appareils pour être conforme aux limitations des appareils numériques telles que spécifiées dans la norme NMB-003 du Canada.

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 and Canada only.
- This device is made 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. 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.
- Exercise care when installing the Ethernet cable, Wireless Unit cable, Power Unit, and power cord. Personal injury or damage to the Wireless LAN Converter could result from people tripping over these. Protect wiring by installing it in places where people do not walk.
- Do not swing the Wireless Unit or Power Unit. Injury could result if they strike a person or fragile material, such as glass.
- Keep the Wireless LAN Converter out of the reach of children. Unforeseen 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.
- When hanging the unit, make sure that the wall is strong enough to support the Wireless Unit. It may fall if the wall is not strong enough, leading to unforeseen accidents. Further, be careful not to drop the unit or the tools used to install it. Doing so could result in unforeseen accidents.
- Avoid locations that are directly exposed to sunlight or heat. Internal overheating could result in fire or damage to the unit.
- Make sure that the 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, leading to fire or damage.
- Use only the supplied Power Unit and power cord 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 these connectors are 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.

For customers in Canada

- This class B digital apparatus complies with Canadian ICES-003.
- 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.
- To prevent radio interference to the licensed service, this device is intended to be operated indoors and away from windows to provide maximum shielding. Equipment (or its transmit antenna) that is installed outdoors is subject to licensing.
- The term "IC" before the equipment certification number only signifies that Industry Canada technical specifications were met.
- The installer of this radio equipment must ensure that the antenna is located or pointed in such away that it does not emit an RF field in excess of Health Canada limits for general population. Refer to Safety Code 6, which can be obtained from the Health Canada Web site at <http://www.hc-sc.gc.ca/rpb>

Pour les utilisateurs au Canada

- Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.
- L'utilisation de cet appareil est autorisée seulement aux conditions suivantes : (1) il ne doit pas produire de brouillage et (2) l'utilisateur de cet appareil doit être prêt à accepter tout brouillage radioélectrique reçu, même si ce brouillage est susceptible de compromettre le fonctionnement de l'appareil.
- Pour empêcher que cet appareil ne cause du brouillage aux services faisant l'objet de licences, il doit être utilisé à l'intérieur et devrait être placé loin des fenêtres afin de fournir un écran de blindage maximal. Si l'appareil (ou son antenne de transmission) est installé à l'extérieur, il doit faire l'objet de licences.
- Le terme « IC » devant le numéro d'homologation signifie simplement que les normes d'Industrie Canada ont été respectées.
- L'installateur de cet appareil radio doit s'assurer que l'antenne soit située ou pointée de manière à ce qu'elle n'émette pas de champs électromagnétiques supérieurs aux limites spécifiées par Santé Canada à l'adresse suivante : <http://www.hc-sc.gc.ca/rpb>

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 encounter with their Wireless LAN Converter.

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

Wireless LAN Converter Setup Utility Help explains how to scan the Wireless LAN Converter.

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**.

Introduction

The Wireless LAN Converter PCWA-DE30 is designed to allow devices such as desktop computers or printers equipped with Ethernet connectors to become part of a wireless network.

Documentation

This product is supplied with the following documentation.



Read This First (this document)

Quick Start Guide
Describes the necessary preparations and settings to connect to the Internet with the 2.4 GHz Wireless LAN Converter PCWA-DE30.

Troubleshooting Guide
Contains solutions to common problems encountered with the 2.4 GHz Wireless LAN Converter PCWA-DE30.

Wireless LAN Converter Setup Page Help
This is Help for the pages used to set up the 2.4 GHz Wireless LAN Converter PCWA-DE30. Refer to it for details about setup page operations and the settings.

Wireless LAN Converter Setup Utility Help
This is Help for the Wireless LAN Converter Setup Utility software. Refer to it for details about Wireless LAN Converter Setup Utility operations.

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- In the manual, the ™ or ® marks are not specified.

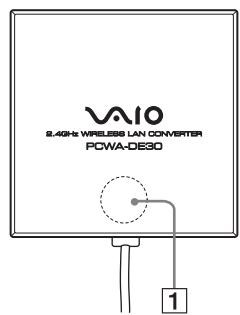


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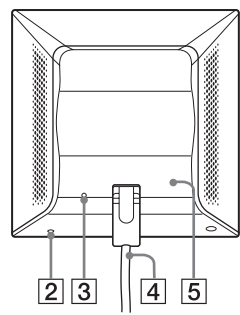
Names of parts and functions

Wireless Unit

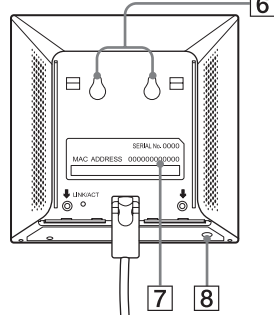
Front



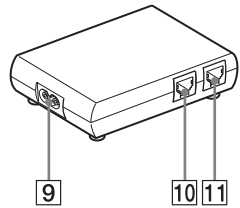
Rear



(With rear cover removed)



Power Unit



1 STATUS indicator

Indicates the 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. half sec. intervals)	Startup in progress Wait until startup is complete.
White flashing (approx. 0.2 sec. intervals)	Wireless LAN Converter quick setup successful with the Quick Setup switch.
Pink lit	Communicating in Peer to Peer Network connection mode.
Red flashing (approx. 6 sec. intervals)	Wireless LAN Converter quick setup failed with the Quick Setup switch because it could not acquire setup information from the Access Point of the PCWA-AR300.
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 (2.4 GHz Wireless LAN Access Point, etc.).
Red flashing (approx. 1.6 sec. intervals)	Wireless LAN Converter in Quick Setup standby mode.
Red flashing (approx. 1 sec. intervals)	Wireless LAN Converter firmware update failed. You must update the firmware again.
Red flashing (approx. half sec. intervals)	<ul style="list-style-type: none">Unit is resetting When you release the reset switch, the Wireless LAN Converter restarts automatically and reverts to its factory default settings.Firmware update in progress Firmware is being updated. Never turn off the power in this condition.

2 Reset switch

Returns Wireless LAN Converter settings to their factory defaults. See the separate Quick Start Guide or Help for details.

3 LINK/ACT indicator

Lights when an Ethernet cable is connected to the NETWORK connector 11.

4 Wireless Unit cable

Connects to the WIRELESS UNIT connector 10 on the Power Unit.

5 Rear cover

Remove this cover if you want to hang the Wireless LAN Converter to a wall and to verify the MAC address. See "Hanging the Wireless Unit" overleaf for details about removing the rear cover.

6 Wall mounting holes

Use these holes to hang the Wireless LAN Converter to a wall. See "Hanging the Wireless Unit" overleaf for details.

7 MAC address label

The Wireless LAN Converter MAC address is printed here.

8 Quick Setup switch

Use this switch to configure the Wireless LAN Converter with the settings of the Wireless Broadband Router PCWA-AR300. Refer to the Quick Start Guide of the Wireless LAN Converter for details.

9 100-240 V AC jack

Connect the supplied power cord.

10 WIRELESS UNIT connector

Connect the Wireless Unit cable 4 here.

11 NETWORK connector

Connect the Wireless Unit to your computer or other device using an Ethernet cable.



Hint

Use a straight-through or crossover Ethernet cable.

Installation Precautions

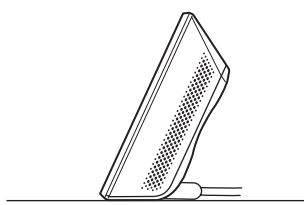
Refer to the separate Quick Start Guide for information about connecting the Wireless Unit and Power Unit.

Installation

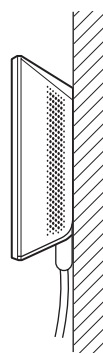
Select a secure location for the Wireless Unit where it cannot drop or fall over. Route the cable to the Wireless Unit to suit the installation location.

Installation examples

- Desktop installation



- Hanging



Notes

- Do not install the Wireless Unit or the Power Unit in insecure locations.
- Do not install the Wireless Unit in a location where it may fall as a result of shock or vibrations, such as on the edge of a shelf.
- Do not install the Wireless Unit in a location where it or its cables may hinder normal movement.

Hanging the Wireless Unit

- Remove the rear cover of the Wireless Unit by sliding it in the direction of the arrow.

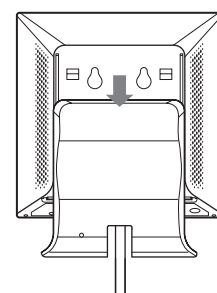
Note

Be cautious when removing and replacing the rear cover of the Wireless Unit.

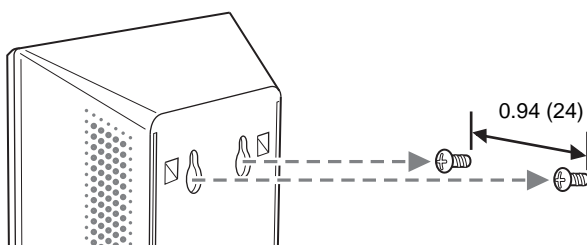


Hint

To replace the rear cover of the Wireless Unit, align the rails on the rear of the Wireless Unit with the grooves in the rear cover, and slide it upwards.



- Using screws or nails, hang the unit to a wall.

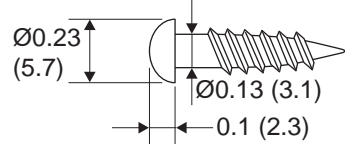


Units: in. (mm)

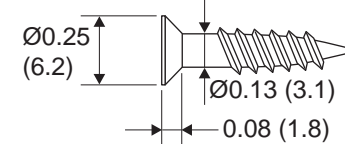
The Wireless Unit does not come with any sort of fittings used in hanging it. Use screws or nails of sufficient strength to support it.

Recommended screws

- Roundhead screws



- Flathead screws



Units: in. (mm)

Notes

- Always use two screws or nails, and make sure that the Wireless Unit is secure on the wall.
- Select a location that will hold the weight of the Wireless Unit when hanging it to a wall. If the selected location cannot hold the weight of the unit, it may fall resulting in damage and/or injury.
- When hanging the Wireless Unit to walls of plasterboard or other brittle material, make sure that the material is strong enough to support the Wireless Unit's weight and use special screw fasteners or other fixtures designed for use with the wall material. If the Wireless Unit is hung with ordinary screws or nails, it may fall.
- When hanging the Wireless Unit to a wall, be careful not to drop it or the tools used for doing the work. Dropping the Wireless Unit or tools may result in damage and/or injury.

Operating Precautions

Power Unit

Use the Power Unit supplied with the Wireless Unit. Using a different power unit may result in damage and/or injury.

Safety

Avoid exposing this product to strong impact, as it could result in damage.

Installation

Do not install the Wireless LAN Converter where it is exposed to the following conditions.

- High temperatures (such as direct sunlight and heaters). The operating range of the Wireless LAN Converter is 5 to 35°C.
- Closed environments (such as closed cars).
- Magnetic fields (near magnets, speakers, or televisions).
- Microwaves (near microwave ovens).
- Excessive dust.
- Unstable or uneven surfaces.
- Frequent vibration.
- High humidity (such as a bathroom).
- Poor ventilation.
- 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 can cause condensation on internal parts. This may prevent the Wireless LAN Converter from operating normally. If this should happen, disconnect the Wireless LAN Converter from the converter or other device to which it may be connected, and discontinue operation for two to three hours.

Emergencies

In case of an emergency, stop the wireless functions by unplugging the power cord.

Specifications

Power

AC100 - 240 V, 50/60 Hz

Power consumption

Approx. 5 W

Interfaces

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

Maximum external dimensions

Wireless Unit: approx. 4.3 × 1.0 × 2.8 in. (W × H × D)

(approx. 110 × 25 × 70 mm)

Power Unit: approx. 3.9 × 3.9 × 1.3 in. (W × H × D)

(approx. 98 × 98 × 33 mm)

Mass

Wireless Unit: approx. 11.3 oz. (including connection cable)

(approx. 320 g)

Power Unit: approx. 4.6 oz.

(approx. 130 g)

Maximum connection distance

Line of sight, approx. 328 ft (100 m)

(The actual connection distance depends on the environment.)

Supported protocol

TCP/IP

Standard compliance

IEEE 802.11b

IEEE 802.11g

Radio frequency

2.4 GHz wireless network: 2.4 to 2.4835 GHz (ISM band)

WEP (data encryption)

64 bits

128 bits

Modulation methods

DS-SS

OFDM

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)

Design and specifications are subject to change without notice.