Operating Instructions

5GHz Wireless LAN Access Point

PCWA-A500

© 2002 Sony Corporation
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 product. Record the serial number in the space provided below. Refer to them whenever you call upon your Sony dealer regarding this product.

Model No. PCWA-A500
Serial No.______________

CAUTION

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

FCC ID: AK8PCWAA500
Exposure to Radio Frequency Radiation.
The radiated output power of the Wireless LAN Access Point is far below the FCC radio frequency exposure limits.
Nevertheless, the Wireless LAN Access Point shall be used in such a manner that the potential for human contact during normal operation is minimized.

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.

Declaration of Conformity

Trade Name: Sony
Model No: PCWA-A500
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 damages that are not covered by the warranty.
• Do not touch the device or accessories during thunder storms. Electrical shock could result.
• This device is made for use in the USA only.
• For indoor use only.
• While using the Access Point, do not cover it or turn it on its side. Do not cover the Access Point with objects such as magazines or newspapers or use it in confined, enclosed places, such as the spaces between walls and furniture. Further, do not turn the Access Point on its side while using it. Either situation could cause heat to build up inside the Access Point, leading to overheating and possible fire.
• Carefully place the Ethernet cable, AC adapter, and other wiring. Personal injury or damage to the Access Point could result from people tripping over the Ethernet cable, AC adapter, or power cord. Protect wiring by locating it in places where people do not walk.
• Do not swing the AC adapter. Injury could result if the adapter strikes a person or fragile material, such as glass.
• Keep the Access Point out of the reach of children. Unforeseeable injury could result from swallowing loose parts, etc.
• Place the Access Point on a stable surface. Do not place the Access Point 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 Access Point. The Access Point 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 AC adapter with your Sony Wireless LAN Access Point. To disconnect your Wireless LAN Access Point from the power supply, unplug the AC adapter.
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• In this manual, Microsoft® Windows® Millennium Edition is referred to as Windows Me.
• In this manual, Microsoft® Windows® 2000 Professional is referred to as Windows 2000.
Overview

What you can do with your Wireless LAN Access Point

The 5GHz Wireless LAN Access Point PCWA-A500 is designed for constructing a wireless LAN (Local Area Network) environment. Because the wireless LAN does not require cable connections, client computers can operate anywhere within a specified range.

Connect your Access Point to a power outlet, insert the 5GHz Wireless LAN PC Card PCWA-C500 (sold separately) into your computer, and use the provided software together with the Access Point to construct a wireless LAN environment on multiple client computers (16 or fewer is recommended). In a wireless LAN environment, you can share files and folders on other client computers and let others share files and folders on your computer.

Further, you can connect the Access Point to a DSL modem, cable modem, or ISDN router to access the Internet from a client computer that is equipped with wireless LAN or from a client computer on an Ethernet LAN that is connected to the NETWORK 2 connector.
System requirements

In order to configure the Access Point or check Access Point settings, your computer must satisfy the following hardware and software requirements.

- **A computer installed with a 5GHz Wireless LAN PC Card**  
  (Make sure that the driver required to operate the PC card is installed correctly.)

- **Web browser** (The following browsers are recommended.)
  - Microsoft® Internet Explorer 5 or later
  - Netscape® Communicator 4.75 or later

**Notes**

- Sony cannot assure trouble-free operation for all computers satisfying the specified system requirements.
- To construct a wireless LAN environment, the 5GHz Wireless LAN PC Card PCWA-C500 (sold separately) is required.
- Internet access requires the separate purchase of an Internet connection from an Internet Service Provider (ISP).

About the manuals and Help files

The following manuals and Help files are provided with this product.

- **5GHz Wireless LAN Access Point PCWA-A500 Quick Start Guide**
  This guide contains simple explanations on how to set up and configure the Access Point. We recommend reading the guide before using this product.

- **5GHz Wireless LAN Access Point PCWA-A500 Operating Instructions** (this manual)
  These instructions contain detailed explanations on how to setup and configure the Access Point.

- **Access Point Online Help**
  Online help explains how to set up and use the Access Point. To configure an Access Point, go to the Access Point setup page. For information on how to display the Access Point setup page and online help, see “Displaying the Access Point setup page” (page 16).
Names of parts and functions

1 Built-in antenna (not externally visible)

2 Indicators
   POWER
   Lights green while power is supplied to the Access Point.
   MESSAGE
   Lights when unread logs exceed a certain size. The indicator goes out when the log is displayed.
   WIRELESS
   Lights green when data can be exchanged on a wireless LAN.
   Flashes orange while data is being exchanged on a wireless LAN.
   NETWORK 1
   Lights green when an Ethernet cable is connected to the NETWORK 1 connector.
   Flashes orange while data is being exchanged using the NETWORK 1 connector.

3 Stand/wall-mount adapter
   The stand/wall-mount adapter is retractable and can be used with the arm extended straight down as a stand or with the arm retracted as a wall-mount adapter.
   When extending the arm straight down, it must not be fixed in a position other than that shown in the illustration above.
   To get the best performance from the built-in antenna, position the Access Point so that the front of the unit creates a right angle with the supporting surface.

   NETWORK 2
   Lights green when an Ethernet cable is connected to the NETWORK 2 connector.
   Flashes orange while data is being exchanged using the NETWORK 2 connector.

   🌟 Hint
   All indicators except the POWER indicator flash while the Access Point settings are being changed.
4 **NETWORK 1 connector**
Use an Ethernet cable to connect the Access Point to a DSL modem, cable modem, or ISDN router.

5 **NETWORK 2 connector**
Use an Ethernet cable to connect the Access Point to an Ethernet LAN hub.

6 **DC IN 10 V jack**
Connects to the AC power adapter.

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**Rear view**

7 **Ferrite core storage recess**
Insert the ferrite core of the AC adapter cable (on page 11) into this recess, then insert the cable into the AC adapter cable securing groove to fix it in place. For details, refer to the Quick Start Guide.

8 **AC adapter cable securing groove**
Insert the ferrite core of the AC adapter cable into the ferrite core storage recess, then insert the cable into this groove to fix it in place. For details, refer to the Quick Start Guide.

9 **Serial number label**
The serial number (SERIAL NO.) is printed on this label. The numbers printed below “NO.” are the serial number.

10 **Wall-mounting holes**
When using the stand/wall-mount adapter as a wall-mount adapter, you can mount the Access Point onto the wall by screwing two screws into the holes. (The screws for mounting the Access Point are not provided. Make sure you use a product that is rated to support the weight of the Access Point.)

When mounting the Access Point on a wall, see “Precautions when mounting the Access Point on a wall” (page 24).

11 **ID label**
This label is printed with the ID assigned to the Access Point at the time of shipping. (This ID is also referred to as the Network Name (SSID).) This ID is required when configuring Access Point settings.
12 Factory default switch

Use this switch to return the Access Point settings to the factory default settings.
For details, see “To return the Access Point settings to the factory default settings” (page 13).
About the Access Point initial settings

The Access Point is configured as follows at shipment.
To return the Access Point settings to the factory default settings, see page 13.

**Note**
In the table below, “–” indicates that no setting is made at the time of shipment.

<table>
<thead>
<tr>
<th>Common</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Host Name</td>
<td>homegate</td>
</tr>
<tr>
<td>Administrator Password</td>
<td>–</td>
</tr>
<tr>
<td>Guest Password</td>
<td>–</td>
</tr>
<tr>
<td>Time Server (NTP Server)</td>
<td>–</td>
</tr>
<tr>
<td>DNS Server</td>
<td>–</td>
</tr>
<tr>
<td>Operating Mode</td>
<td>NAT Router Mode</td>
</tr>
</tbody>
</table>

**NETWORK 1**

<table>
<thead>
<tr>
<th>Connection Method</th>
<th>Obtain an IP address automatically</th>
</tr>
</thead>
<tbody>
<tr>
<td>Speed</td>
<td>Auto-Detect</td>
</tr>
<tr>
<td>DHCP Client ID</td>
<td>–</td>
</tr>
</tbody>
</table>

**NETWORK 2**

<table>
<thead>
<tr>
<th>IP Address</th>
<th>192.168.11.1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Netmask</td>
<td>255.255.255.0</td>
</tr>
<tr>
<td>DHCP IP Address Pool Size</td>
<td>16</td>
</tr>
<tr>
<td>Speed</td>
<td>Auto-Detect</td>
</tr>
</tbody>
</table>

**WIRELESS**

<table>
<thead>
<tr>
<th>Network Name (SSID)</th>
<th>ID printed on the ID label at the rear of the product</th>
</tr>
</thead>
<tbody>
<tr>
<td>Encryption (WEP)</td>
<td>Disabled</td>
</tr>
<tr>
<td>WEP Key</td>
<td>–</td>
</tr>
<tr>
<td>Key Length</td>
<td>40 bits (5 characters)</td>
</tr>
<tr>
<td>Frequency (Channel)</td>
<td>5.180 GHz (Channel 36)</td>
</tr>
</tbody>
</table>
To return the Access Point settings to the factory default settings

To return the Access Point settings to the factory default settings, hold down the factory default switch for approximately one second while the power of the Access Point is ON. For information on the location of the factory default switch position, see “Names of parts and functions” on page 9.

About the indicator display

When you press the factory default switch, the MESSAGE indicator flashes orange. If you continue to press this switch, the WIRELESS, NETWORK 1, and NETWORK 2 indicators flash green, and the operation to return the Access Point settings to the factory default settings begins. When the indicators stop flashing, the Access Point settings have been returned to the factory default settings. For setting details, see page 12.

Note

If you perform this procedure, all previously set data will be lost.

MAC address

You can check the MAC address for the Access Point NETWORK 1 connector on the Status Display screen. For details, see “Confirming the status of the Access Point” (page 21).
Configuring the Access Point settings

To configure the Access Point settings, use a computer that is connected to the Access Point using the 5GHz Wireless LAN PC Card PCWA-C500 or a computer that is connected to the Access Point NETWORK 2 connector using an Ethernet connection.

Before configuring the Access Point settings

Connecting to the Access Point using a Wireless LAN PC Card

• Insert the Wireless LAN PC Card into your computer, and install the PC card driver.

• Install the Wireless Panel software provided with the Wireless LAN PC Card.

• Configure the wireless connection with the Access Point after you have configured the computer communication settings on the Wireless Panel.

Hint
For details, refer to the manuals provided with the Wireless LAN PC Card.

Connecting the Access Point to the Internet

To connect the Access Point to a DSL modem:

In the DSL modem operating manual supplied by your ISP, check whether your ISP uses the PPPoE connection method or the router-type DSL modem connection method. Depending on the connection method, perform one of the following.

For PPPoE connections:

• Check the following using the data supplied by your ISP.

  (1) Account ID (Also referred to as the “User Account” or the “User ID”)
  (2) Account ID password
  (3) Service Name (Only when specified by your ISP)
  (4) Access Concentrator Name (Only when specified by your ISP)
• Select Connect using DSL from NETWORK 1 Settings in Easy Setup (page 19) or from NAT Router Mode Settings in NETWORK 1 Settings in Advanced Setup (page 20).

For **router-type DSL modem connections:**
Select Bridge Mode in Advanced Setup (page 20).

**To connect the Access Point to a cable modem:**
In the cable modem operating manuals supplied by your ISP, check whether your ISP uses the DHCP connection method (where the IP address is automatically assigned to your computer) or the fixed IP address method (where you set the IP address for your computer manually). Depending on the connection method, perform one of the following procedures.

**For DHCP connections (the IP address is automatically assigned to your computer):**
• Check the DHCP Client ID in the data supplied by your ISP. (Only when specified by your ISP)
• Select Obtain an IP address automatically (DHCP) from NETWORK 1 Settings in Easy Setup (page 19) or from NAT Router Mode Settings in NETWORK 1 Settings in Advanced Setup (page 20).

**For fixed IP address connections (you have to set the IP address for your computer manually):**
• Check the IP address assigned to your computer which is provided by your ISP.
• Select Use the following IP address from NETWORK 1 Settings in Easy Setup (page 19) or from NAT Router Mode Settings in NETWORK 1 Settings in Advanced Setup (page 20).

**When using an ISDN router:**
Select Bridge Mode in Advanced Setup (page 20).

**Note**
Depending on your ISP, you may not be permitted to connect a router-type access point to a DSL or cable modem. For details, check the contract terms for your ISP.
Displaying the Access Point setup page

To configure Access Point settings, go to the Access Point setup page. Use one of the following three methods to display the Access Point setup page.

- Display the Access Point setup page using the Wireless Connection Easy Setup Wizard provided on the Wireless LAN PC Card. (page 17)
  
  **Note**
  This method can only be used with Windows Me or Windows 2000.

- Display the Access Point setup page from the Wireless Panel. (page 17)

- Display the Access Point setup page by entering the IP address in the web browser. (page 18)
  
  **Note**
  If your web browser is configured to use a web proxy server, set the browser proxy settings so that the browser does not use a proxy server for the Access Point IP address. (The factory default setting for the Access Point IP address is 192.168.11.1.)

**Hints**

- The Access Point setup page for configuring Access Point settings is saved in the Access Point internal memory. To display the Access Point setup page, it is not necessary to connect to the Internet.

- When using an Ethernet connection to display the Access Point from your computer, see “Display the Access Point setup page by entering the IP address in the web browser.” (page 18).
Depending on the firmware version of the Access Point you are using, the displayed screen may differ from that shown above.

**Display the Access Point setup page using the Wireless Connection Easy Setup Wizard provided on the Wireless LAN PC Card**

This method can only be used with Windows Me or Windows 2000.

1. **Connect the Access Point to the AC adapter.**

   **Hint**

   There is no power switch on the Access Point. Refer to the Quick Start Guide (separate sheet) when connecting the Access Point to the AC adapter.

2. **Start the Wireless Connection Easy Setup Wizard.**

   **Hint**

   To Start the Wireless Connection Easy Setup Wizard, install the Wireless Panel and follow the onscreen instructions. However, you can start the Wireless Network Easy Setup Wizard any time you like.

   For details, refer to the Quick Start Guide.

3. **Follow the onscreen instructions to configure the communication settings for your computer.**

   After you have configured the communication settings for your computer, follow the onscreen instructions to display the Access Point setup page.

**Display the Access Point setup page from the Wireless Panel**

1. **Connect the Access Point to the AC adapter.**

   **Hint**

   There is no power switch on the Access Point. Refer to the Quick Start Guide (separate sheet) when connecting the Access Point to the AC adapter.

2. **Double-click the Wireless Panel icon (Received Signal Level indicator) on the taskbar.**

   The main screen for the Wireless Panel appears.

3. **Click AP Settings.**

   The web browser starts with the Access Point setup page displayed.
Display the Access Point setup page by entering the IP address in the web browser.

1  Connect the Access Point to the AC adapter.

💡 **Hint**

There is no power switch on the Access Point. Refer to the Quick Start Guide (separate sheet) when connecting the Access Point to the AC adapter.

2  Start up your web browser.

3  Type “http://192.168.11.1/” in the URL entry field, then press Enter.

The Access Point setup page is displayed.

💡 **Hints**

- The IP address above is the factory default setting for the Access Point. If the IP address has been changed, contact your network administrator.
- When using the NAT Router mode, the Access Point IP address is set to the default gateway for that network.
- When using the Bridge mode, contact your network administrator for the Access Point IP address.

### About the Access Point password

You can set two types of Access Point passwords, administrator password and guest password. Neither of these passwords is set when the Access Point is shipped from the factory. Therefore, all users are able to configure Access Point settings and display the status of the Access Point. If you want to restrict the privileges of users, you can set a password as described on the Easy Setup page or the various mode setting pages of Advanced Setup.

Passwords and restrictions on executable functions are as follows.

### Password types and ability to use executable functions

<table>
<thead>
<tr>
<th>Function</th>
<th>Administrator</th>
<th>Guest</th>
</tr>
</thead>
<tbody>
<tr>
<td>Status display</td>
<td>Possible</td>
<td>Possible</td>
</tr>
<tr>
<td>Easy Setup</td>
<td>Possible</td>
<td>Not possible</td>
</tr>
<tr>
<td>Advanced Setup</td>
<td>Possible</td>
<td>Not possible</td>
</tr>
<tr>
<td>Display Indicator</td>
<td>Possible</td>
<td>Not possible</td>
</tr>
<tr>
<td>Firmware update</td>
<td>Possible</td>
<td>Not possible</td>
</tr>
</tbody>
</table>
Administrator password

If you set an administrator password, you will be requested to enter a user name and password when you open the Access Point setup page.

To open the Access Point setup page, type admin in the dialog box’s User Name text box, then type the password that you set in the Password text box.

Guest password

If you set a guest password, you will be requested to enter a user name and password when you open the Access Point Status page.

Type guest in the User Name text box, then type the password that you set in the Password text box.

Notes

• If no administrator password is set, a guest password cannot be set.
• If the administrator password is cancelled, the guest password is also cancelled.

Configuring and changing settings for the Access Point

There are two types of Access Point settings:

Easy Setup

For those who are not familiar with networks, it is recommend that you use Easy Setup. However, if the Access Point is connected to an ISDN router or router-type DSL modem, you must make settings in Advanced Setup.

• If you configure settings in Easy Setup, the Access Point operates in NAT router mode.
• When making a PPPoE connection to your ISP using a DSL modem or when using a cable modem, you can normally configure all of the required settings in Easy Setup.

Note

If you configure settings in Easy Setup after you have already configured settings in Advanced Setup, the Advanced Setup settings are lost, and the settings are switched to those in Easy Setup.
Advanced Setup

Here, you can configure advanced settings for the Access Point. Further, you can select an operation mode for the Access Point from the following two types:

(1) NAT Router mode
   Similar to Easy Setup, the Access Point operates in NAT router mode, but you can configure slightly more advanced settings.

(2) Bridge mode
   The Access Point operates as a network bridge. Select this mode when using an ISDN router or router-type DSL modem.

1 Follow the steps for Displaying the Access Point setup page (page 16) to display the Access Point setup page.

2 Click Easy Setup or Advanced Setup.

3 If an administrator password has been set, you are requested to enter a password. Type admin in the User Name text box, and enter the password, then click OK.

   The Access Point setup page appears.

   ☀️ Hint

   The administrator password is not set when the Access Point is shipped from the factory. For details, see “About the Access Point password” (page 18).

   If the Access Point settings (Network name (SSID) or data encryption) have been changed, you must use the Wireless Panel to change the communication settings on your computer. For details, refer to the Wireless LAN PC Card Operating Instructions or the Wireless Panel Help.

Confirming the firmware version for the Access Point

You can confirm the Access Point firmware version on the Access Point Status page. For details, see “Confirming the status of the Access Point” (page 21).
Confirming the status of the Access Point

Perform the following steps to confirm the current status of the Access Point.

1. Follow the steps for Displaying the Access Point setup page (page 16) to open the Access Point setup page.

2. Click Status.

3. If a guest password has been set, you are requested to enter a password. Type *guest* in the User Name text box, and enter the password, then click OK.

    The status of the Access Point is displayed.

**Hints**

- The guest password is not set when the Access Point is shipped from the factory. For details, see “About the Access Point password” (page 18).
- Also, you can display the Access Point Status page using the administrator user name “admin” and its password.
Connecting

Connecting to a DSL modem, cable modem, or ISDN router

If the Access Point is connected to a DSL modem, cable modem, or ISDN router, computers that are connected to the Access Point can connect to the Internet via the Access Point. Multiple computers can connect to the Internet via the Access Point simultaneously.

**WARNING**

In the following cases, **set the Access Point to Bridge mode** before connecting to the Access Point. If you mix up the NETWORK 1 and NETWORK 2 connectors when the Access Point is in the NAT Router mode, problems may occur, such as network anomalies or not being able to communicate with the Access Point.

- When the Access Point is connected to an ISDN router
- When the Access Point is connected to an existing LAN operating over a DHCP server

For details on setting methods, see “Configuring the Access Point settings” (page 14).
1. Connect the Access Point’s NETWORK 1 connector to a DSL modem, cable modem, or ISDN router using an Ethernet cable as shown in the illustration below. When the Access Point is connected to an Ethernet LAN, connect the NETWORK 2 connector and the hub using an Ethernet cable.

Notes

- Use a category 5 Ethernet cable when connecting to the Access Point.
- Normally, an Ethernet straight-through cable is used when connecting a communication device to the NETWORK 1 connector, but depending on the device you may need to use an Ethernet cable with crossover wiring. When connecting to the Access Point, use the same type of cable that you would use to connect the communication device to your computer. For details, refer to the operating instructions for the communication device you are using.
- When connecting the hub to the NETWORK 2 connector, use an Ethernet straight-through cable. When connecting the computer directly to the Access Point, use an Ethernet crossover cable.

Hints

- The cable supplied with the Access Point is an Ethernet straight-through cable.
- For details on how to use the DSL modem, cable modem, or ISDN router, refer to the respective operating instructions.
Precautions when mounting the Access Point on a wall

When mounting the Access Point on a wall, the screw size and spacing of mounting holes is as follows. Note that no brackets are provided for mounting the Access Point on a wall.

Use screws or nails that meet the following requirements.

**Notes**

- Using two screws or other fasteners, ensure that the Access Point is securely set on the wall. When fastening the Access Point to a wall with screws, retighten them after mounting the Access Point.
- Select a location that will hold the weight of the Access Point when mounting it on the wall. If the location cannot hold the weight of the Access Point, the Access Point may drop and cause an accident.
- When mounting the Access Point on walls made of plasterboard or other fragile material, make sure that the material is strong enough to support the unit’s weight and use special screw fasteners or other fixtures that are made for use with that material. If the unit is fastened with ordinary screws, there is a danger that it may fall.
- When mounting the Access Point on the wall, be careful not to drop the Access Point or the tools used for doing the work. Dropping the unit or tools could result in unforeseeable accidents.

**Hanging the Access Point from screws set in a wall:**

Head diameter: 0.24 to 0.29 inches (6.0 to 7.5 mm)
Body diameter: 0.14 to 0.15 inches (3.5 to 4.0 mm)
Length: 1.2 inches (30 mm) or more

2.82 inches (71.5 mm)
Fastening the Access Point to a wall with screws:

Body diameter: 0.14 to 0.29 inches (3.5 to 7.5 mm)
Length: 1.2 inches (30 mm) or more

2.82 inches (71.5 mm)
Precautions

AC adapter

Use only the supplied AC adapter. Other AC adapters may cause a failure in the Access Point.

Safety

Do not drop the Access Point. Careful handling will help prevent damage.

Installation

Do not place the Access Point 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.
- Magnetized locations (near magnets, speakers, or televisions).
- Locations exposed to frequent vibration.
- Locations where the transmission of radio waves may be obstructed by metal plates or concrete walls.

Operation

Exposure to cold-to-hot temperature extremes or very damp environments may cause moisture to condense on internal parts. This may prevent the Access Point from operating properly.

If this should happen, unplug the AC adapter from the power outlet and let the Access Point sit 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
AC 100 to 240 V, 50/60 Hz
(The power cord plug is for use with AC 120 V.)

Power consumption
Approximately 7 W

Maximum external dimensions
Approx. 6.3 × 9.2 × 1.9 inches
(Approx. 159 × 233 × 48 mm) (w/h/d)
The stand is 3.6 inches (approx. 91 mm) in depth.
Approx. 6.3 × 8.7 × 2.2 inches
(Approx. 159 × 219 × 55 mm) (w/h/d)
(With the stand folded)

Mass
Approx. 42.4 oz
(Approx. 1.2 kg)
(Not including the AC adapter.)

Maximum communication distance
Approximately 330 feet (100 m) in direct line of sight with no obstacles
(The maximum communication distance depends on the environment.)

Recommended number of units connected
16 units or less (number of clients)

Protocol support
TCP/IP

Standards
IEEE802.11a/IEEE802.11 (wireless connection)
IEEE802.3 (wired connection)

Radio frequency
5.15 to 5.35 GHz

Data transfer speed (logical value)
Wireless connection: 54 Mbps max.
Wired connection: 100 Mbps max.

WEP (data encryption)
64 bits
128 bits

Modulation method
OFDM (IEEE802.11a compliant)

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

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

Supplied accessories
• Operating Instructions
• Quick Start Guide
• AC adapter
• Power cord
• Ethernet cable (straight-through wiring)
• Warranty card
• Other printed materials

Design and specifications are subject to change without notice.
Getting help

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

About Sony’s Support Options
Sony provides several support options for your Wireless LAN Access Point.

☒ This Operating Instructions explains how to use your Wireless LAN Access Point.

☒ Quick Start Guide explains how to install the Wireless LAN Access Point.

☒ Access Point Online Help explains how to configure the Access Point.


☒ 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.sony.com/wirelesslansupport/

☒ 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 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 Access Point, 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.
**Glossary**

**Channel number**

The frequency used for wireless communications. Wireless communications are available only among client computers and Access Points that use the same channel.

**Client**

A computer connected to a LAN (Local Area Network). Also may be called a client computer.

**DHCP (Dynamic Host Configuration Protocol)**

DHCP lets network administrators centrally manage and automate assignment of client computer IP addresses.

**DNS (Domain Name System)**

A system that translates host names into IP addresses.

Networks that use the TCP/IP protocol, such as the Internet, use a set of numbers like 192.168.0.1 (IP address) to identify a computer. However, since the IP address is hard to memorize, DNS was developed to allow a name like “www.sony.com” to identify a computer for convenience. DNS servers manage these translations from host names into IP addresses.

**LAN (Local Area Network)**

A network which is accessible only to its members, unlike the Internet which is open to an unlimited number of people. A LAN may be built for different purposes. For example, you can build an office LAN that is accessible only to members of the same department or a home LAN that is accessible only to family members.

**PPPoE (PPP over Ethernet)**

PPPoE is a software protocol that uses a DSL modem to access the Internet.

With PPPoE, the client does not set a static IP address. Instead, an IP address is assigned dynamically whenever the client accesses the Internet.

**Protocol**

The formal specifications that define the procedures for computers to follow when transmitting and receiving data.

**TCP/IP (Transmission Control Protocol/Internet Protocol)**

TCP/IP is the network communications protocol that is used to communicate over the Internet. TCP is a connection-oriented protocol for establishing reliable, sequenced data transfer. TCP ensures that data reaches its destination.

IP assembles and addresses data packets for transmission to their network destinations.
WAN (Wide Area Network)
A network that interconnects remote LANs through the Internet or telephone lines.

WEP
IEEE802.11-compliant security system.
Using the WEP key as the password, only client computers and Access Points that have the same ID and password may log on to the same wireless LAN for file sharing.
# Troubleshooting

## Problems related to the Access Point:

Read the Troubleshooting section of this guide before calling Sony Customer Information Services. If you still cannot resolve the problems after referring to these sources, call Sony Customer Information Services.

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Cause/Remedy</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Access Point is not operating properly or does not operate at all.</td>
<td>➔ The Access Point is not supplied with power. Connect the Access Point to a power outlet with the supplied AC adapter.</td>
</tr>
<tr>
<td></td>
<td>➔ There is an obstacle between the Access Point and the computer containing the Wireless LAN PC Card, or they are too far apart from each other.</td>
</tr>
<tr>
<td></td>
<td>➔ Remove the obstacle between them. Or place the Access Point and the computer containing the Wireless LAN PC Card closer together. (The maximum communication distance depends on the environment.)</td>
</tr>
<tr>
<td>The NETWORK 1 or NETWORK 2 indicator is not lit.</td>
<td>➔ The cables are not properly connected. Check that you have connected the correct cables.</td>
</tr>
<tr>
<td>None of the indicators except the POWER indicator are lit.</td>
<td>➔ The indicator display setting is turned OFF. Turn the power off, then turn it back on again. Or follow the steps for displaying the Access Point setup page (page 16), open the Access Point homepage, and change the indicator display using the &quot;Switch&quot; button in Display Status.</td>
</tr>
</tbody>
</table>
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