

Wireless Broadband Router

Troubleshooting Guide

This document provides solutions to common problems encountered with the Wireless Broadband Router. Please refer to this guide before contacting Sony Customer Information Services.

The PCWA-AR800 consists of:

- Broadband Router Unit PCWA-R1
- Wireless LAN Access Point PCWA-A820

In this document, we refer to the Broadband Router Unit as the Router Unit and to the Wireless LAN Access Point as the Access Point.

The PCWA-AR800 can be used at frequency settings of 2.4 GHz and 5 GHz. Change this setting as necessary. (By default, the PCWA-AR800 is set to 2.4 GHz.)



PCWA-AR800

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Preparations

Case 1 No communication between the computer and Wireless Broadband Router

① Are you attempting to establish a connection at a frequency of 5 GHz?
 The default wireless broadband frequency setting is 2.4 GHz. If you want to establish a wireless connection at 5 GHz, access the Access Point Setup page through a wired network, and change the frequency setting to 5 GHz (802.11a). Refer to the separate Quick Start Guide for details about how to display the Access Point Setup page.

② Was your computer properly configured for wireless communication?

When using the Access Point functions under factory default settings, configure the computer as follows.

The factory default settings of the Access Point function are:

- Network Name (SSID): The 6-character identifier printed on the label inside the rear cover of the Wireless Unit

Hint
 For details about the location of the network name (SSID), refer to procedure 3 of the Quick Start Guide.

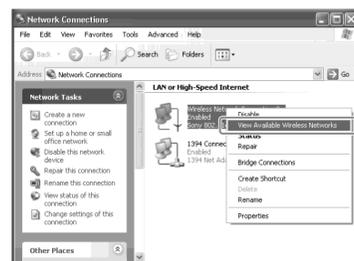
- Security settings
 Encryption (WEP): Disabled
- IEEE 802.11 Mode: 11g, 11b (High multicast rate)

With the Windows Me and Windows 2000 operating systems, perform setup as described in the documentation provided with your Wireless LAN PC Card. With the Windows XP operating system, proceed as follows.

- 1 Click "Start", and then click "Control Panel".
- 2 In "Control Panel", click "Network and Internet Connections", and then click "Network Connections".

Hint
 If "Network and Internet Connections" does not appear, click "Switch to Category View" on the left.

- 3 In the "Network Connections" window, right-click the icon of the wireless network to which you want to connect, and click "View Available Wireless Networks".



- 4 In the "Connect to Wireless Network" dialog box (with Windows XP SP1, the "Wireless Network Connection" dialog box), select the Access Point from "Available Wireless Networks", and click "Connect". (When using the Access Point functions under factory default settings, check the 6-character identifier printed on the label inside the rear cover of the Wireless Unit.)

③ Are the network name (SSID) and security settings configured correctly?

To connect to the Access Point, the network name (SSID) and security settings must be the same at the computer and the Access Point.

Hint
 When using the Access Point functions under factory default settings, use the settings listed in ② above. With the Windows Me and Windows 2000 operating systems, verify the Access Point network name (SSID) and security settings of the wireless LAN PC card as described in its documentation. With the Windows XP operating system, proceed as follows to verify the settings.

- 1 Open the "Connect to Wireless Network" dialog box (with Windows XP SP1, the "Wireless Network connection" dialog box) as described in ② above.
- 2 Select the network name (SSID) of the Access Point from "Available Wireless Networks".
- 3 Make sure that the security settings of the Access Point match those of the computer.
- 4 Click "Connect".
 If the connection is not established, reset the Access Point functions to the factory default settings as described in "Miscellaneous", "Case 1: Forgot settings", and then set up the Access Point functions again as described in the separate Quick Start Guide.

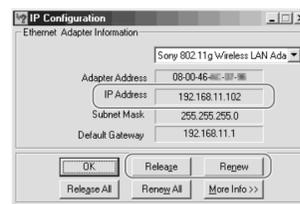
④ Can the IP address of the computer be acquired?
 With the computer setting "Obtain an IP address automatically" enabled, perform the following steps. For information on how to set the IP address of the computer, see Windows Help.

Windows Me operating system

- 1 Click "Start", and click "Run".
- 2 In the dialog box used to specify the file name, enter "winipcfg" (exclude the quotation marks) and click "OK".



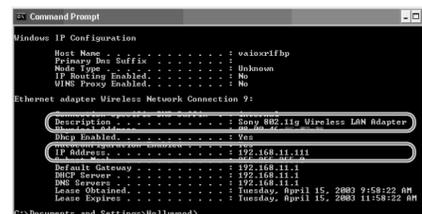
- 3 From the list in the "IP Setup" dialog box, select the Wireless LAN interface that you are using (PC card, computer internal wireless LAN, etc.).
- 4 Make sure that an IP address is shown in the "IP address" text box.
- 5 If the IP address is "0.0.0.0" or an address starting with "169.254." is displayed, click "Release", and then "Renew".



Note
 If an IP address starting with "169.254." is displayed, a suitable IP address was not obtained with "Obtain an IP address automatically" and your Windows operating system assigned an address to the wireless LAN PC card or Wireless LAN Converter. In this condition, correct network connection is not possible. Perform the setup again as described in the separate Quick Start Guide.

Windows 2000 and Windows XP operating systems

- 1 Click "Start", point to "Programs" ("All Programs" when using the Windows XP operating system) and then "Accessories", and click "Command Prompt".
- 2 In the command prompt window, enter "ipconfig /all" (exclude the quotation marks) and press the Enter key.
- 3 Verify the IP address setting information of the Wireless LAN interface that you are using (PC card, computer internal wireless LAN, etc.).



Hint
 The "Description" field shows the name of the Wireless LAN interface.

- 4 If the IP address is "0.0.0.0" or an address starting with "169.254." is displayed, enter "ipconfig /renew" (exclude the quotation marks) and press the Enter key. A new IP address is assigned.

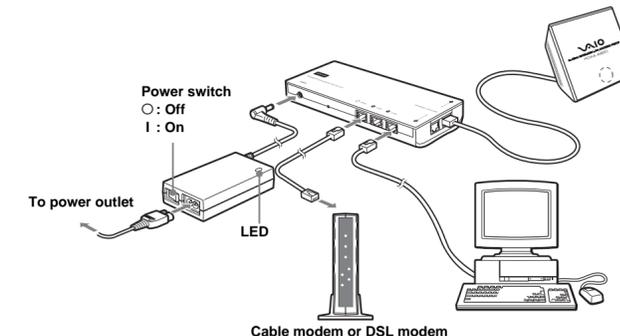
Note
 If an IP address starting with "169.254." is displayed, a suitable IP address was not obtained with "Obtain an IP address automatically" and your Windows operating system assigned an address to the wireless LAN PC card or Wireless LAN Converter. In this condition, correct network connection is not possible. Perform the setup again as described in the separate Quick Start Guide.

Connections

Case 1 Cannot display the Setup Page (an error message appears)

If entering "http://192.168.11.1/" in the address field of the Web browser does not open the Setup Page, check the following.

- ① Can the IP address of the computer be acquired?
 See "Preparations", "Case 1: No communication between the computer and Wireless Broadband Router", item ④.
- ② Are the Access Point and Router Unit power connections correct?
 When powered properly, the Status indicator of the Router Unit is lit and the Status indicator of the Access Point is flashing slowly.
- ③ Is the AC adapter power switch on?
 Make sure that the AC adapter is properly connected and verify that the power switch is on.



- ④ Is the Ethernet cable correctly connected?
 Make sure that an end of the Ethernet cable is connected to a LAN connector of the Router Unit. Connect the other end of the Ethernet cable to your computer.
- Hint**
 The Ethernet port of your computer is on its back panel.

- ⑤ Is the Windows XP "Internet Connection Firewall" function enabled?
 If the "Internet Connection Firewall" function is enabled, communication may not be possible. See "Miscellaneous", "Case 4: Computer firewall function and browser proxy settings" for details.
- ⑥ Is the Web browser of the computer used for the Wireless Broadband Router setup configured to use a proxy server?
 Make sure that there are no proxy settings enabled for the IP address of the Wireless Broadband Router. See "Miscellaneous", "Case 4: Computer firewall function and browser proxy settings" for details.

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Router Functions

Case 1 The Internet Gateway is shown as a network connection. What does this mean?



It means that the Router Unit is recognized as the Internet Gateway. If you disconnect the Router Unit from the network, the indication disappears.

Case 2 Cannot connect to the Internet

Are the WAN settings correct?

Select from the following depending on the connection method specified by your Internet service provider.

- When connecting by DHCP (having an IP address assigned to the computer automatically), select "Obtain an IP address automatically". In this case, please confirm the DHCP client ID (in cases where it is particularly specified).
- When connecting by a fixed IP address (manually assigning the computer IP address), select "Use the following IP address". In this case, enter the IP address for your computer specified by your Internet service provider.

Refer to the separate Quick Start Guide for details.

Case 3 I changed the LAN settings of the Router Unit, but I can no longer connect to the Router Unit or network

See "Case 1: No communication between the computer and Wireless Broadband Router", item ④ to release and renew the IP address of your computer so that it matches the LAN settings of the Router Unit. Alternately, you can restart the Router Unit, which automatically releases and renews the IP address of your computer.

Note

In "Case 1: No communication between the computer and Wireless Broadband Router", item ④, we recommend that you release and renew the IP address only when it is "0.0.0.0" or it starts with "169.254". In the case above, you must release and renew the IP address, regardless of the displayed address.

Access Point Functions

Case 1 Clicked the "Refresh" button under "Access Point List", but nothing appears in the list

① Did you wait long enough?

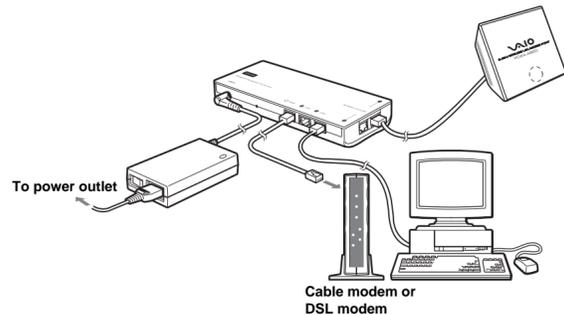
The scanning process may take some time. After clicking "Refresh", wait at least 30 seconds before checking the results.

② Can the IP address of the computer be acquired?

See "Preparations", "Case 1: No communication between the computer and Wireless Broadband Router", item ④.

③ Is the Access Point connected correctly to the Router Unit?

Make sure that connections are as shown.



④ Is the Windows XP "Internet Connection Firewall" function enabled?

See "Miscellaneous", "Case 4: Computer firewall function and browser proxy settings" for details.

Case 2 Several Access Points are listed, but I do not know which one to select

The "Access Point List" shows the MAC addresses of all the Access Points found. Use the MAC address to identify the Access Point.



Check the MAC address of the Access Point to which you want to connect. The MAC address is located on the label inside the rear cover of the Wireless Unit.

Case 3 The user name and password input dialog box appears despite the lack of settings

Enter "admin" in the "User name" text box, and then click "OK". Do not enter anything in the "Password" text box.

Case 4 Unable to connect after Access Point functions settings are made

Did you change the wireless connection settings of the computer to match the Access Point functions settings?

If the network name (SSID) and security settings of the Access Point are changed, the wireless connection settings of the computer must be changed accordingly. For information on how to do this, refer to the documentation of the wireless LAN PC card or the Wireless LAN Converter.

Case 5 If "Easy Setup" is used after "Advanced Setup", what about items not included in "Easy Setup"?

If you reconfigure the unit with "Easy Setup" after using "Advanced Setup", the items not included in "Easy Setup" are set as follows.

Item	Setting
Frequency (Channel)	2.4 GHz (Auto Select)
Broadcast Network Name (SSID)	Yes
IEEE 802.11 Mode	11g, 11b (High multicast rate)
Super A/G	Disable
Turbo Mode	Disable
Access Control	Accept all
Connection Method	Obtain IP address automatically (DHCP)
Speed	Auto-Detect
Setup Switch	Enable

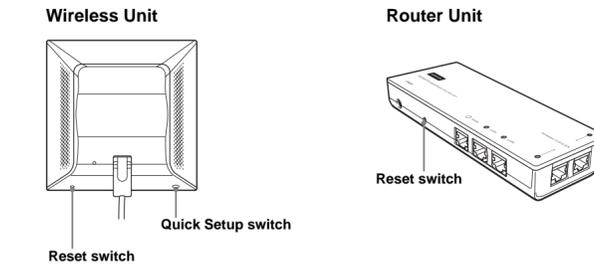
The Super A/G and Turbo Mode functions of the PCWA-AR800 are supported by the Wireless LAN Converter PCWA-DE80 and Wireless LAN PC Card PCWA-C800S. Compatibility of the Super A/G and Turbo Mode functions with third party Wireless Client devices is not guaranteed.

Miscellaneous

Case 1 Forgot settings

Reset the Access Point and/or Router Unit, as described below.

To perform a reset, the Wireless Broadband Router must be on. It is possible to reset both units or only the unit for which you have forgotten the settings. When you forget the Access Point settings, press the Reset switch on the Wireless Unit. When you forget the Router Unit settings, press the Reset switch on the Router Unit. Hold the switch for at least a second, and then release it. The Wireless Broadband Router restarts automatically, and the settings of the unit whose Reset switch is pressed revert to their factory defaults. Repeat the setup procedure.



Note

When resetting the Access Point, be careful not to press the Quick Setup switch by mistake.

Case 2 The power cord is plugged to the AC outlet, but the indicators do not light

① Is the AC adapter power switch on?

Hint

When the AC adapter power switch is on, the LED on the adapter is lit.

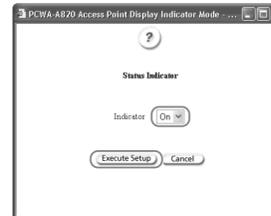
② Is the "Status Indicator" setting of the Access Point set to Off?

Open the Setup Page of the Access Point, go to the Access Point "Management" page, and set "Status Indicator" to On.

1 Click "Status Indicator" and "Change".



2 Select "On" from the list and click "Execute Setup".



3 When the completion message appears, click "Close".

Case 3 After pressing the Quick Setup switch, the Status indicator starts flashing red

If the Quick Setup switch is held down for more than one second, the Status indicator starts to flash red. 30 seconds later, the Status indicator begins flashing slowly white to indicate normal operation.

Note

The Quick Setup switch is used in setting the separately available Wireless LAN Converter PCWA-DE80 or PCWA-DE30.

For information on how to use the Quick Setup switch, refer to Wireless LAN Converter PCWA-DE80 or PCWA-DE30 Quick Start Guide.

Case 4 Computer firewall function and browser proxy settings

The "Internet Connection Firewall" function is enabled

When the Windows XP "Internet Connection Firewall" function is enabled, it may prevent the computer from being accessed externally (this function is disabled by default). This function can prevent connection to your network when you change your Wireless LAN Converter or Access Point settings. If this happens, disable the "Internet Connection Firewall" function as described here, connect to the network, and then re-enable the function.

- Click "Start", and then click "Control Panel".
- In "Control Panel", click "Network and Internet Connections", and then click "Network Connections".

Hint

If "Network and Internet Connections" does not appear, click "Switch to Category View" on the left.

- In the "Network Connections" window, right-click the icon of the wireless network that you want to use, and click "Properties".
- Click the "Advanced" tab and (if selected) clear the "Protect my computer and network by limiting or preventing access to this computer from the Internet" check box.
- Click "OK".

Refer to Windows XP Help for details about the "Internet Connection Firewall" function.

Note

Make sure that you take appropriate security measures when the "Internet Connection Firewall" function is disabled. Except when configuring the Access Point, it is strongly recommended that you enable the "Internet Connection Firewall" function at all times.

When using a personal firewall software provided standalone or as part of an antivirus or network security software

Antivirus scanning and network security software sometimes includes a function called a "personal firewall", intended to prevent unauthorized access by other computers. Depending on the software, the security level of this function may initially be set to a high level. If this high security level setting is left enabled, other computers may be unable to access your computer. This can cause problems such as not being able to connect to the network when changing the Wireless LAN Converter or Access Point settings. In this event, lower the security level to allow the network connection. Refer to the software instructions or Help for details.

Notes

- Make sure that you take appropriate security measures.
- For questions about firewall functions, contact your firewall software manufacturer.

Proxy settings

Make sure that no proxy settings are enabled for the IP address of the Wireless Broadband Router.

Note

While the proxy server settings are disabled, it may not be possible to display other pages except the Wireless Broadband Router Setup page.

Example 1: Using Microsoft Internet Explorer

- On the "Tools" menu, click "Internet Options". The "Internet Options" dialog box appears.
 - On the "Connection" tab, click "LAN Settings". The "Local Area Network (LAN) Settings" dialog box appears.
- #### Hint
- If there are dial-up profiles in the "Dial-up" box, make sure that you select the "Never dial a connection" check box.
- If the "Use a proxy server for your LAN (These settings do not apply to dial-up or VPN connections)" check box is selected, clear the check box and click "OK".
 - When the Wireless Broadband Router setup is complete, return the proxy setting to its original condition.

Example 2: Using Netscape

- Start the Web browser on the computer used for the Wireless Broadband Router setup.
- On the "Edit" menu, click "Preferences".
- In "Category", click "Advanced" and click the "Proxies" button.
- Select "Direct connection to the Internet" and click "OK".
- When the Wireless Broadband Router setup is complete, return the proxy setting to its original condition.

Java settings

Make sure that the Java settings of your Web browser are enabled. If they are not, do so.