

Wireless LAN unit User's Guide

ELPAP03



Notations Used in This Guide



General information indications

Attention	Indicates procedures which may result in damage or injury if sufficient care is not taken.
	Indicates additional information and points which may be useful to know regarding a topic.
	Indicates a page where detailed information regarding a topic can be found.
Procedure	Indicates operating methods and the order of operations. The procedure indicated should be carried out in the order of the numbered steps.
[(Name)]	Indicates the name of the buttons on the remote control or the control panel. Example: [Esc] button
"(Menu Name)"	Indicates configuration menu items. Example: "Image" - "Brightness"

Supplied Items List

See the following check list to make sure that you have all of the supplied items. If anything is missing or damaged, please contact your dealer.

☐ Wireless LAN unit



 \square Screw (plus head screw M2 × 8)



☐ Document CD-ROM (This Guide)

Thank you very much for purchasing this product. Read this document carefully to use this unit safely and correctly. To allow you to solve any unknown points quickly, keep this information close to hand.

So that you can use the product safely and correctly, symbols are applied in the documentation and on the product to indicate possible harm to the user or to others and the risk of damage to property. The indications and their meaning are as follows. Make sure you understand them properly before reading the guide.

	This symbol indicates information that, if ignored, could possibly result in death or personal injury due to incorrect handling.
♠ Caution	This symbol indicates information that, if ignored, could possibly result in personal injury or physical damage due to incorrect handling.

Marning

- May exert electromagnetic interference on, and cause malfunction of, cardiac pacemakers. Before use, ensure that electromagnetic interference does not occur.
- May exert electromagnetic interference on, and cause malfunction of, sensitive medical equipment. Before use, ensure that electromagnetic interference does not occur.
- Use of this product on aircraft may be restricted in some countries. Use of this product is based on due diligence with regard to regulations.

Caution

- This unit should only be used for Epson projectors. If it is installed on another device such as a computer, it may result in computer failure, damage, or malfunctions.
- Do not disassemble or remodel this unit. This may result in burns.

Precautions



Notes on Handling and Storage

- Do not store in locations with high temperatures or high humidity. It may in particular be damaged or deformed if left in a vehicle with the windows shut, or placed it locations with unusually high temperatures for extended periods such as in direct sunlight.
- Do not get it wet. This may cause malfunctions to occur.
- Do not use near microwave ovens. Wireless communication may be interrupted by electromagnetic interference generated by microwave ovens.
- Do not drop it, subject it to shocks, or place heavy objects on it.

Frequency Precautions

The frequency band for this unit is 2.4 GHz/5 GHz. This frequency range is the same frequency bandwidth as industrial, scientific, and medical devices such as microwave ovens and mobile unit identification (RF-ID) systems (licensed premises radio stations and unlicensed specified low-power radio stations) used in factory production lines. Before using this unit, check that there are no radio stations for mobile unit identification or specified low-power radio station premises nearby. In the event that this unit should interfere electromagnetically with the premises of a radio station used for mobile unit recognition, cease use immediately and stop generating the electromagnetic field. Contact your local dealer or the nearest address provided in the Support and Service Guide supplied with the projector if this unit interferes electromagnetically with a special low-power radio station used for mobile unit identification or causes similar problems.

Wireless Telegraphy Act Regulations

The following acts are prohibited by the Wireless Telegraphy Act.

- Modifying and disassembling (including the antenna)
- Removing the label of conformance
- IEEE 802.11a (5 GHz band) external use

International Travel Precautions

Wireless devices are designed to conform to the channel and frequency limits of the country they are intended to be used in. This unit is based on the specifications of the country of sale. If this unit is used outside the country of sale, check with a local dealer for more information.



Notes on Security when Using Wireless LAN

(Important information on customer rights (maintaining privacy))

The advantage of using a wireless LAN over a LAN cable is that, because information is exchanged using radio signals, you can easily connect to the network if you are within range of the radio signals. A disadvantage of this is that within a certain range, the electromagnetic signals can pass through barriers such as walls, so that if security countermeasures are not implemented in some way, problems such as the following may occur.

- Communicated data can be intercepted
 A third party may be able to receive wireless transmissions without authorization, and they could obtain personal information from these transmissions such as IDs, passwords, or credit card numbers, or they could intercept the contents of personal e-mail messages.
- Unauthorized access to the network

 A third party could access an individual or intra-company network
 without permission and carry out any of the following activities.
 - Retrieve personal data or other secret information (information leakage)
 - Pose as another user and send inappropriate data (impersonation)
 - Overwrite the contents of intercepted data and resend it (falsification)
 - Introduce a computer virus which could cause data loss or system crashes (damage)

Initially, the possibility that such problems could occur through settings concerning the security of the wireless LAN product and by using the product are decreased, because the wireless LAN card and the access point have security measures to deal with these problems. We recommend that you use this product after making security settings using your own judgment and assuming full responsibility, and with your full understanding of problems that may occur if you do not make any security settings.

See the documentation supplied with the projector for information on security settings.

Installing this Unit

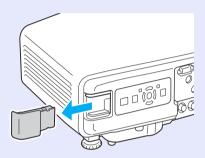
Installing

Install this unit into the projector.

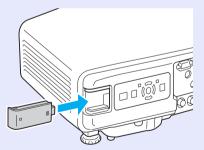
Procedure

1

Remove the cover for the projector's wireless LAN unit installation section.

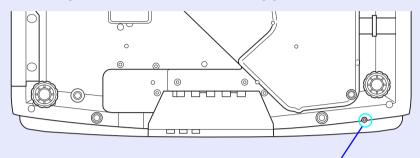


2 Install this unit.





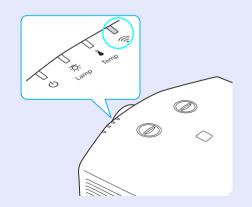
To avoid losing this unit and so on, make sure you fix it in place with the screw supplied.

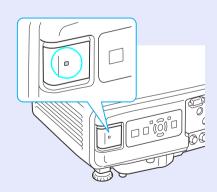


Screw hole for the Screw to fix the wireless LAN unit

Reading the Wireless LAN Unit Access Lamp

There are two wireless LAN unit access lamps, one on top of the projector the other on this unit.







: Flashing ■: Lit □: Off

		C
Status	The Projector's Indicator	This Unit's Indicator
This unit is not installed in the projector		
This unit is installed in the projector but not yet connected to the network	Green	Green
This unit is installed in the projector and connected to the network		Green
This unit is installed in the projector, connected to the network, and communicating	Green	Green (Flashing quickly)

Steps for Connecting in "Quick Connection Mode"



When this unit is installed in the projector, you can project computer images by wirelessly connecting the projector with a computer over a network.

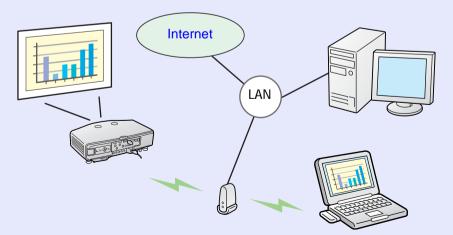
Type of Network Connection

You can use the following two methods to connect a computer and the projector over a network by using EMP NS Connection found on the EPSON Projector Software for Meeting & Presentation CD-ROM supplied with the projector.

"Advanced Connection Mode"

"Advanced Connection Mode" is an infrastructure connection, and connects to an existing network system via a network cable.

When this unit is installed in the projector, you can connect to a network via a wireless LAN access point. If the wireless LAN access point is WPS (Wi-Fi Protected Setup) compatible, you can easily connect the projector to the access point and make security settings. See the documentation supplied with the projector for more details.

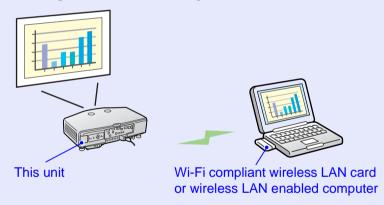


When connecting in "Advanced Connection Mode" you can use the network in the following ways.

- From a conference room, you can open and project a file stored on a computer or file server in another room.
- You can use the Internet.
- You can monitor and control projectors on a network from the computer.

"Quick Connection Mode"

"Quick Connection Mode" is a mode for executing wireless LAN only.
"Quick Connection Mode" temporarily assigns the projector's SSID to a computer creating an ad hoc connection, and after disconnecting restores the computer's network settings.



"Quick Connection Mode" has the following advantages.

- You can easily connect a computer to the projector and project images from the computer without making network settings.
- This lets you connect easily without a connector cable, and you can connect even if the projector and the computer are at remote locations.

This guide explains how to connect to a computer in "Quick Connection Mode" and project computer images.

Steps before Connecting in "Quick Connection Mode"

In the following illustration, you only need to perform the light blue sections the first time you connect.

Install EMP NS Connection on the computer to be connected



Put the computer into wireless LAN connection status



Start EMP NS Connection on the computer and connect with the projector

Preparing the Computer

To use "Quick Connection Mode" to connect the projector and the computer, you need to make the following settings on the computer.

- Install EMP NS Connection
- You can find EMP NS Connection on the EPSON Projector Software for Meeting & Presentation CD-ROM supplied with the projector. If it is already installed, you do not need to install it again. See the documentation supplied with the projector for the installation method.
- Put it into wireless LAN connection status

Put the computer into wireless LAN connection status

For Windows

Make settings for the computer by using the utility software supplied with the wireless LAN card. For more information on the utility software, see the User's Guide supplied with your wireless LAN card.

For Macintosh

Set the network port and communication status. For more details on setting the communication status, see the User's Guides for your computer or the AirPort card.

Procedure



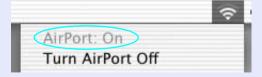
Select "System Preferences" - "Network" from the Apple menu.

The Network Configuration screen is displayed.





- Close the screen.
- Click the communication icon at the top right of the computer's screen, and check that the following is displayed.



AirPort: On

You can connect with a Wireless LAN.

Connecting in "Quick Connection Mode" and Projecting

Operating the Projector

Before connecting, put the projector into connection standby status.

Procedure

- Press the [0] button on the remote control to turn on the projector.
- Press the [EasyMP] button on the remote control. The EasyMP standby screen is displayed.



Operating the Computer

In the following explanations, unless otherwise noted, Windows screens are used. You see the same screens even when using Macintosh.

Procedure



Start EMP NS Connection.

For Windows

Select "Start" - "Programs" (or "All Programs") - "EPSON Projector" - "EMP NS Connection".

For Macintosh

Double-click the "Applications" folder of the hard drive volume in which EMP NS Connection is installed, and then double-click the EMP NS Connection icon.



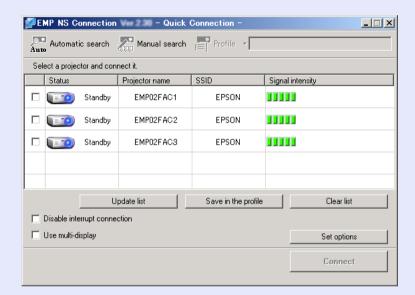
Select "Quick Connection Mode" and then click "OK".

The projector search results are displayed. To always connect using "Quick Connection Mode", select "Set the selected Connection Mode as the default mode for future connections".





Select the projector you want to connect to, and then click "Connect".



If the SSID configuration matches, you can connect up to four projectors at the same time. If the projector you want to connect to is not displayed in the search results, click the "Automatic search" button. The search takes about 30 seconds.



When Projector Keyword is set to "On" from the projector, the keyword entry screen is displayed. Enter the keyword displayed on the EasyMP standby screen, and then click "OK".

When the connection is complete, the computer's screen is projected. The following EMP NS Connection toolbar is displayed on the computer screen. You can use this toolbar to operate the projector and make settings, and to disconnect the network connection.



From here on, see the documentation supplied with the projector for details on using the toolbar and useful functions in EMP NS Connection.

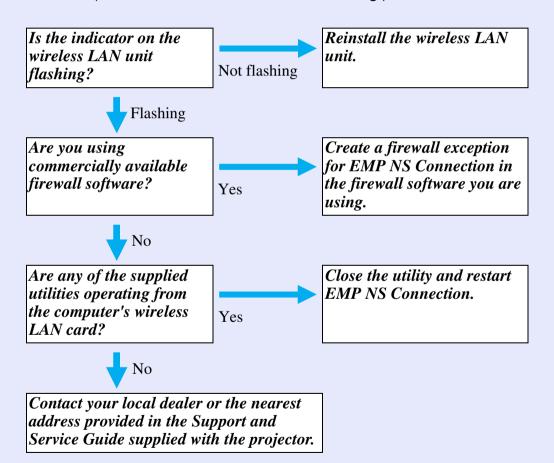


When changing presenters and so on and when continuously connecting from another computer, start EMP NS Connection from the computer you want to connect and execute "Connect". The computer that is currently connected is disconnected, and it is then connected with the computer that is trying to connect now.

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The Target Projector is Not Found

- Action 1. Restart the computer.
- Action 2. Check if the projector network settings are set to "Quick Connection Mode". See the documentation supplied with the projector for more details.
- Action 3. Check the following if actions 1 and 2 do not help. (If it is disconnected, check the following.)



Please note that the projector cannot be found if the wireless LAN method for the projector and the computer's wireless LAN card do not much, as shown in the following examples.

Example) Projector: IEEE 802.11a Computer: IEEE 802.11b/g (a is not compatible)

You can modify the wireless LAN method for the projector from "Network" in the projector's configuration menu. See the documentation supplied with the projector for more details.

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Disconnecting

There are two methods of disconnecting the projector and the computer.

Disconnecting from the Computer



Disconnecting from the Projector

Procedure

- 1 Press the [Esc] button on the remote control.
- Select "Exit", and then press the [Enter] button on the remote control.



This Unit's General Specifications

Conditions for Connecting to Compatible Wireless LAN Cards and Access Points

This unit can be connected to the following products in accordance with IEEE 802.11g, 802.11b, and 802.11a.

- Wireless LAN card
- Computers with a built-in wireless LAN function
- Access points

However, you are unlikely to be able to make an ad hoc connection for wireless LAN equipment used with a computer in IEEE 802.11g. For details on wireless LAN equipment see the specifications.

This Unit's General Specifications

Frequency Range *1	IEEE 802.11b/g: 2.4 GHz band (1 to 11 Ch) IEEE 802.11a: 5.15 to 5.25 GHz (W52) and 5.25 to 5.35 GHz (W53)*2
Modulation	IEEE 802.11b : DS-SS IEEE 802.11a/g : OFDM
Potential Interference Range	Less than 20 m
Propriety of Frequency Change	Can use all bands, and can avoid "licensed" and "unlicensed" bands.

^{*1} You cannot use IEEE 802.11a in the People's Republic of China or the Russian Federation.

^{*2} For W53 band, you can only use connections in Advanced Connection Mode.

DECLARATION of CONFORMITY

According to 47CFR, Part 2 and 15 Class B Personal Computers and Peripherals; and/or CPU Boards and Power Supplies used with Class B Personal Computers

We: Epson America, Inc.
Located at: 3840 Kilroy Airport Way

MS: 3-13

Long Beach, CA 90806

Tel: 562-290-5254

Declare under sole responsibility that the product identified herein, complies with 47CFR Part 2 and 15 of the FCC rules as a Class B digital device. Each product marketed, is identical to the representative unit tested and found to be compliant with the standards. Records maintained continue to reflect the equipment being produced can be expected to be within the variation accepted, due to quantity production and testing on a statistical basis as required by 47CFR 2.909. Operation is subject to the following two conditions:

Trade Name: EPSON

Type of Product: Wireless LAN Unit

Model :ELPAP03

FCC Compliance Statement For United States Users

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 television reception. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to radio and television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one 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.

WARNING

The connection of a non-shielded equipment interface cable to this equipment will invalidate the FCC Certification or Declaration of this device and may cause interference levels which exceed the limits established by the FCC for this equipment. It is the responsibility of the user to obtain and use a shielded equipment interface cable with this device. If this equipment has more than one interface connector, do not leave cables connected to unused interfaces. Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.