

Legal Notices

FCC (Federal Communications Commission)

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules, and the limits for an ISM equipment, pursuant to Part 18 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate, radio frequency energy and, if not installed and used in accordance with the Operator's Manual, may cause harmful interference to radio communications.

Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Use of shielded cables are required to comply with Class A limits in Subpart B of Part 15 of the FCC Rules.

Do not make any changes or modifications to the equipment unless otherwise specified in the manual. If you make such changes or modifications, you could be required to stop operation of the equipment.

If your equipment malfunctions, please contact your local authorized Canon dealer from whom you purchased the equipment (if under warranty), or with whom you have a servicing contract. If you are not sure who to contact, and have both purchased and are using the equipment in the U.S.A., please refer to the "SUPPORT" page on Canon U.S.A.'s Web site (<http://www.usa.canon.com>).

This transmitter must not be co-located or operated in conjunction with any other antenna or transmitter.

This device complies with Part 15 of FCC Rules and RSS-Gen of IC Rules. 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 this device.

This equipment complies with FCC/IC radiation exposure limits set forth for uncontrolled equipment and meets the FCC radio frequency (RF) Exposure Guidelines in Supplement C to OET65 and RSS-102 of the IC radio frequency (RF) Exposure rules. This equipment should be installed and operated with at least 20cm and more between the radiator and person's body (excluding extremities: hands, wrists, feet and ankles).



Wireless LAN Board NB-W1

User's Guide

Please read this guide before operating this product.
After you finish reading this guide, store it in a safe place for future reference.

Users in the European Union and other European countries

WEEE Directive



European Union (and EEA) only.

This symbol indicates that this product is not to be disposed of with your household waste, according to the WEEE Directive (2002/96/EC) and your national law. This product should be handed over to a designated collection point, e.g., on an authorized one-for-one basis when you buy a new similar product or to an authorized collection site for recycling waste electrical and electronic equipment (EEE). Improper handling of this type of waste could have a possible negative impact on the environment and human health due to potentially hazardous substances that are generally associated with EEE. At the same time, your cooperation in the correct disposal of this product will contribute to the effective usage of natural resources. For more information about where you can drop off your waste equipment for recycling, please contact your local city office, waste authority, approved WEEE scheme or your household waste disposal service. For more information regarding return and recycling of WEEE products, please visit www.canon-europe.com/environment.

(EEA: Norway, Iceland and Liechtenstein)

European Radio Approval Information (for products fitted with Euapproved radio devices)

This Product is a printer; low power, Radio LAN type devices (radio frequency (RF) wireless communication devices), operating in the 2.4 GHz band, may be embedded in your printer system which is intended for office use. This section is only applicable if these devices are present. Refer to the system label to verify the presence of wireless devices.

Wireless devices that may be in your system are only qualified for use in the European Union or associated areas if a CE mark with a Notified Body Registration Number and the Alert Symbol is on the system label.

The power output of the wireless device or devices that may be embedded in you printer is well below the RF exposure limits as set by the European Commission through the R&TTE directive.

Regulatory Compliance Statements

Low power, Radio LAN type devices (radio frequency (RF) wireless communication devices), operating in the 2.4 GHzGHz Band, may be embedded in your printer system. The following section is a general overview of considerations while operating a wireless device.

The equipment complies with the RF Exposure Requirement 1999/519/EC, Council Recommendation of 12 July 1999 on the limitation of exposure of the general public to electromagnetic fields (0 Hz to 300 GHz).

Preface

Thank you for purchasing a Canon product.

The Wireless LAN Board NB-W1 is a product that enables you to wirelessly connect your Canon MFP (Color imageRUNNER/imageRUNNER/imagePRESS series) to a network.

This document describes the procedure for connecting a machine that includes the Wireless LAN Board NB-W1 to a network.

Please read this manual thoroughly before operating the product to familiarize yourself with its capabilities, and to make the most of its many functions. After reading this manual, store it in a safe place for future reference.

How To Use This Manual

Symbols Used in This Manual

The following symbols are used in this manual to explain procedures, restrictions, handling precautions, and instructions that should be observed for safety.

**CAUTION**

Indicates a caution concerning operations that may lead to injury to persons, or damage to property if not performed correctly. To use the machine safely, always pay attention to these cautions.

**IMPORTANT**



Indicates operational requirements and restrictions. Be sure to read these items carefully to operate the product correctly, and avoid damage to the product.

**NOTE**

Indicates a clarification of an operation, or contains additional explanations for a procedure. Reading these notes is highly recommended.


Keys and Buttons Used in This Manual

The following symbols and key/button names are a few examples of how keys and buttons to be clicked or pressed are expressed in this manual:

- Control Panel Keys: Key Icon (Key Name)
Examples:  (Start)
 (Stop)
- Touch Panel Display Keys: [Key Name]
Examples: [Cancel]
[Done]
- Buttons on Computer Operation Screens: [Button Name]
Examples: [OK]
[Add]

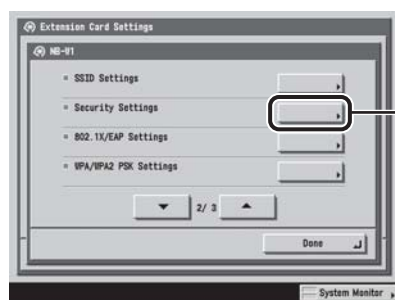
Displays Used in This Manual

Screen shots of the touch panel display used in this manual have been taken from the imageRUNNER 5075.

The keys or buttons which you should click or press are marked with a , as shown below.

When multiple buttons or keys can be clicked or pressed, they will be highlighted and mentioned in the order in which they should be clicked or pressed.

- 1 Press [Security Settings] on the Expansion Card Settings screen.**



Press this key for operation.

Before You Start

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CHAPTER

This chapter describes what you need to know before you start using the product, including the system requirements, and the procedure for setting a primary network.

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Confirming the Network

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Before You Start

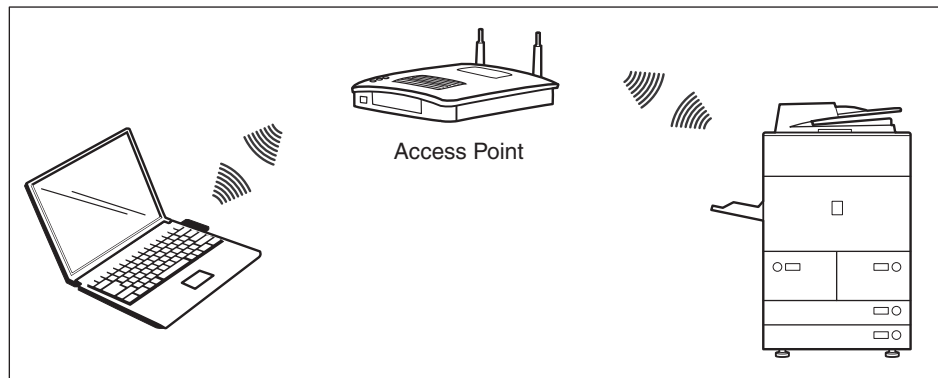
The NB-W1 can be used in either of the following network environments that have an access point.



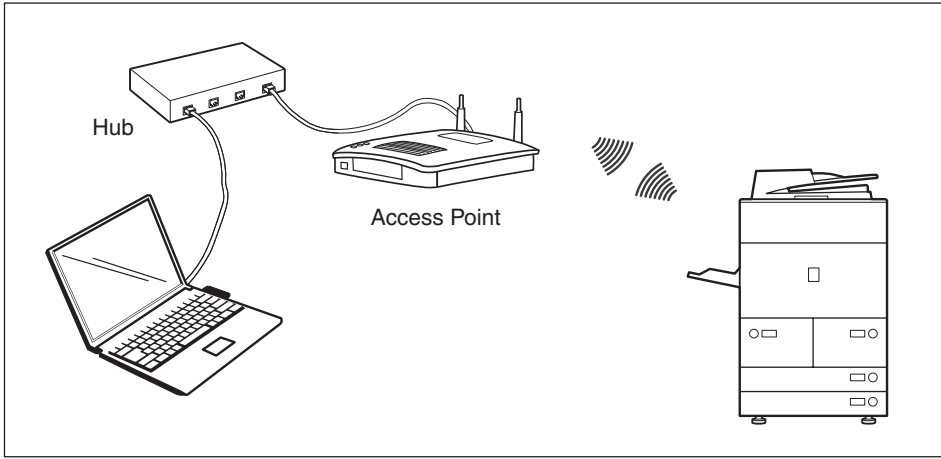
NOTE

The NB-W1 normally communicates with the Infrastructure Mode, which works via an access point. Only when a firmware update has been performed unsuccessfully, does the NB-W1 communicate using the Adhoc Mode, which is its emergency startup mode. For information on the Adhoc Mode, see "Emergency Startup Mode (Adhoc Mode)," on p. 4-13.

■ Environment where a computer, access point, and the NB-W1 communicate wirelessly



■ Environment where a computer and access point are connected with a LAN cable and the access point and the NB-W1 communicate wirelessly



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Before You Start

System Requirements

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Before You Start

This section describes the system requirements of the NB-W1, including the types of access points and authentication servers it supports.



IMPORTANT

For information on the wireless LAN devices that can communicate with the NB-W1, see the Canon Web site (<http://www.usa.canon.com/> for the U.S.A., <http://www.canon-europe.com/> for the UK, or <http://www.canon.com/> for other countries/regions).



NOTE

- For information on the system requirements for printing and sending faxes, and the network environments the machine can use, see the *Network Guide* (PDF manual) included with the machine.
- An authentication server is required when the authentication mode is set to '802.1X/EAP'.

■ Access Point

Hardware		Cisco Aironet 1200 series hardware based on Cisco IOS Software Release 12.2 (11) JA or later, and Proxim ORiNOCO AP-600 series with firmware version 2.4.5 or later
Standard		IEEE802.11b, IEEE802.11g
Frequency Band		2.4 GHz band (ISM (Industrial Scientific Medical) band)
Encryption and Authentication Method	WEP (Wired Equivalent Privacy)	Supports 64-bit and 128-bit WEP.
	WPA (Wi-Fi Protected Access)/WPA2-PSK (Pre-Shared Key)	Complies with WPA and 802.11i (WPA2) standards.
	802.1X/EAP (Extensible Authentication Protocol) + WEP	Supports 802.1X authentication and Dynamic WEP. Requires a RADIUS server.
	WPA/WPA2+802.1X/EAP	Complies with WPA and 802.11i (WPA2) standards, and supports 802.1X authentication. Requires a RADIUS server. Includes WPA/WPA2 Enterprise.

■ Authentication Server

- RADIUS server
 - Microsoft IAS (Internet Authentication Server) based on Microsoft Windows Server 2003
 - Cisco Secure ACS (Access Control Server) Version 3.1 or later



NOTE

- The RADIUS server supports EAP-TLS (Extensible Authentication Protocol-Transport Level Security), PEAP (Protected EAP), or EAP-TTLS (EAP-Tunneled TLS) authentication.
- Authentication with a RADIUS server requires a server certificate, and a root CA (Certificate Authority) certificate. When using EAP-TLS authentication, a client certificate, and client private key are also required.

■ Certificate Authority

- Microsoft Windows Server 2003 CA

Parts and Their Functions

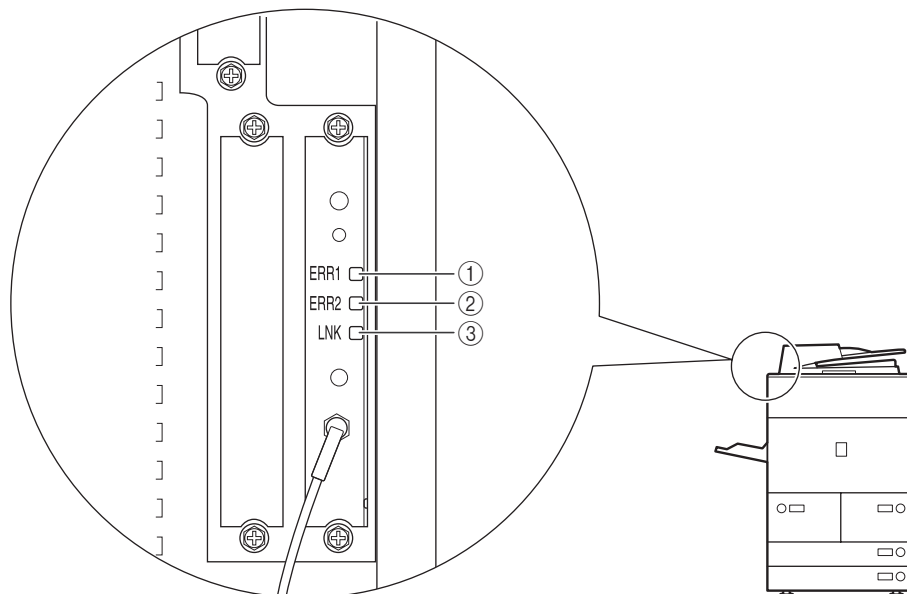
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Before You Start

This section describes the various parts and their functions.

LED Indicators

If problems occur when communicating with the NB-W1, check the LED indicators on the side of the machine. For details on errors, see Chapter 3, "Troubleshooting."



① **ERR1 Indicator (Yellow)**

Flashes when a problem occurs with security settings or an error occurs during authentication.

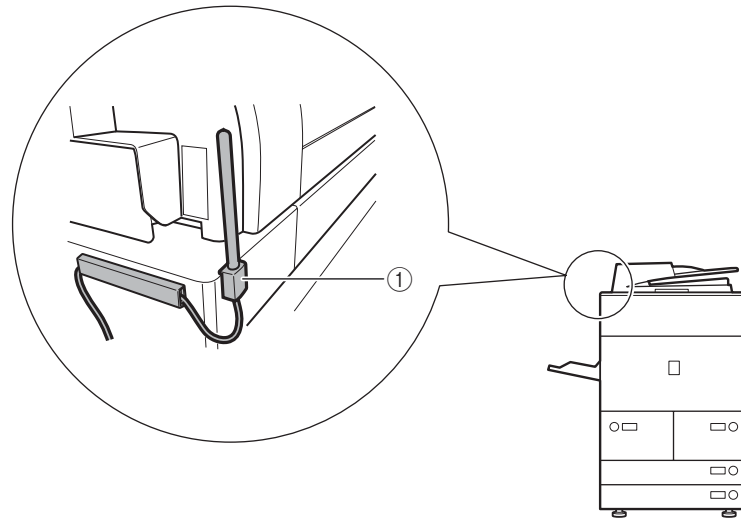
② **ERR2 Indicator (Orange)**

Flashes when a problem occurs with the NB-W1 hardware.

③ **LNK Indicator (Green)**

Lights up when the NB-W1 is correctly connected to the network.

NB-W1 External Antenna



- ① Make sure to use the external antenna included with this product. When experiencing difficulty communicating, adjust the position of this antenna.

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Before You Start