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# UB-R04 User's Manual

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## **Introduction**

The UB-R04 is an interface board on which is installed an IEEE 802.11a/b/g/n Radio Frequency (RF) module for Epson TM printers.

This manual provides instructions, including a simple setup for operators of POS printers on which the UB-R04 is installed so that the operators can use the UB-R04 safely and correctly.

## **RF Module**

This equipment contains the following wireless module.

Manufacturer: SMK Corporation

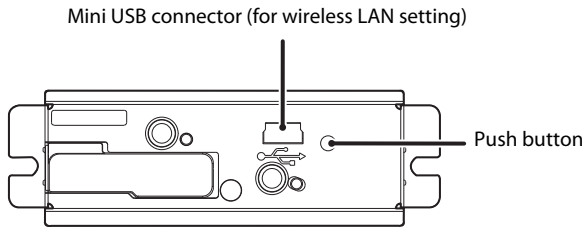
Type of equipment: WLAN complete module

Model number: VRL4149-0601F

## **Features and Functions**

- 64/128-bit WEP, WPA™, WPA2™
- Protocols: TCP, UDP, ICMP, IP, LP/LPR (for APD), TCP socket port (for OPOS)
- OPOS, APD enabled

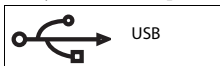
## **Part Names**



## **About the Symbol on Epson Products**

On Epson products, the following symbol is used in order to ensure safety and proper use of the product, and to prevent danger to users and other persons as well as property damage.

The symbol indicates the meanings listed below. Be sure that you completely understand the meaning of the symbol on this product before using it.



## DIP Switches

When using this interface board, the interface of the TM printer must be selected as “parallel” with the appropriate settings. Set the reset signal for pin 31 to “enable,” if you are using a TM printer that has this setting. See the manual for each TM printer for details.

### **Note:**

When using the UB-R04 with the following printers and firmware, be sure that DIP switch 1-8 is set to ON.

- TM-T88V Firmware version 30.21 ESC/POS and earlier
- TM-H6000IV (Standard model) Firmware version 20.04 ESC/POS and earlier
- TM-H6000IV (Validation model) Firmware version 21.04 ESC/POS and earlier
- TM-H2000 Firmware version 1.51 ESC/POS and earlier

## How to Set Up the UB-R04

You can set the UB-R04 with the wireless LAN connection or USB connection by using one of the following methods. For details, see the *UB-R04 Technical Reference Guide*.

	Wireless LAN	USB
Using a Web browser	Supported	Not supported
Using the EpsonNetConfig Ver. 4.1 or later	Supported	Supported

### Preparation

#### **For wireless LAN connection**

##### • **Printing a Status Sheet**

Power on the printer. Wait for about 20 seconds. Then hold down the push button on the interface board for more than 3 seconds. The printer prints the parameters for the UB-R04. You can check all setting values necessary (SSID, Network mode, IP address, Subnet mask, Gateway address) for the network connection.

##### • **Factory Default Settings**

The table below shows the UB-R04 default settings.

Parameters	Settings	SimpleAP settings*
Communication standard	802.11b/g/n	802.11b/g/n
Network mode	Infrastructure mode	-
SSID	EpsonNet	EPSON_Printer
WPA certification	WPA2-Personal	WPA2-Personal
Encryption method	AES	AES
Passphrase	EpsonNet	12345678

\*) SimpleAP is supported if Soft Version is 1.10 or later.

##### • **Connection**

Set the setting of the host PC and AP to match the network setting that you have confirmed with the status sheet.

You can check whether the connection to the printer has been correctly done by inputting the ping command through the command prompt.

Example: Ping 192.168.192.168


### **Note:**

Although the example shows the address 192.168.192.168, use whatever IP address is reported on the status sheet.

Because the default IP addresses for all the wireless printers are the same, you should power on and configure only one printer at a time.

#### **For USB connection**

Connect the USB cable and turn on the printer power.

 **Note:** Connect the USB cable only when setting. USB connection is available only for setting parameters.

## Resetting the UB-R04 to Factory Defaults

1. Turn on the printer power while holding down the push button on the interface board and continue to hold it down. A message that printer initialization has started is printed out after approximately 30 seconds.
2. Continue holding down the push button until the status sheet printing is completed; all internal settings return to their factory defaults (initial settings).

## Setup

### □ Using a Web browser

1. Start Windows Internet Explorer (or your Web browser).
2. Input the IP address of the UB-R04 in the browser address bar and press Enter (Example: <http://192.168.192.168>, or <https://192.168.192.168> [default]).
3. In the Password authentication screen, enter "epson" for [user], and "epson" for [password]. (Defaults)
4. \*The user name is fixed to "epson," but the password is changeable.
5. You can modify the parameters by following the menus. You must click Submit to send the change to the printer.
6. To make the submission effective, you must click Reset on the Web page that is displayed after the submission. If you change the IP address, SSID, etc., you have to change the setting of the host PC and AP to match the printer's setting.

### □ Using the EpsonNetConfig (version 4.1 or later)

The EpsonNetConfig (version 4.1 or later) and the *UB-R04 Technical Reference Guide* are necessary for setup. Obtain them from the appropriate web site below:

For customers from North America, go to the following web site:

<http://www.epson.com/support/>

For customers from other countries, go to the following web site:

<http://download.epson-biz.com/?service=pos>

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## Notes on Using the Printer

Before use the printer, observe the following points.

1. Be sure to attach the connector cover to the TM-T90/TM-L90 to prevent malfunction due to static electricity if you install the UB-R04.
2. Select USB vendor-defined class for the printer that supports both USB vendor-defined class and USB printer class.

When using the printer in environments where kitchen microwaves and other devices that may interfere radio waves are installed, observe the following points.

1. Keep the printer away from the devices that may cause radio wave interference.
2. Use channels that are away from the frequency bands that may cause radio wave interference.
3. Place shields between the printer and the devices that may cause radio wave interference.
4. Select either 2.4 GHz or 5 GHz, whichever is free from radio wave interference.
5. In auto channel setting for the access point, do not select a channel in which the printer may cause radio wave interference.

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## Notes on Using Wireless LAN

1. Examine the radio wave situation in the surrounding area before use.
2. Avoid using the same channel that is used in the neighboring shops where wireless LAN is used.

## Notes on Wireless Connection

Because not all the possible combinations of this product and the wireless LAN devices have been checked for operation, we cannot guarantee this product will operate in combination with all the wireless LAN devices. Especially in the ad hoc mode, this product may not operate normally, depending on the combination of connected devices. Be sure to carry out thorough evaluation of operation before use.

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<http://xxx.xxx.xxx.xxx/licenses.html>  
\* For the underlined part in the above URL, input each printer's IP address.

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