

# Installation Instructions



Model No. UE-608040



#### Installation Manual Included (for qualified service personnel)

- To assemble this unit, please refer to the Installation Manual on pages 17 through 29.
- Before operating this unit, please read these instructions completely and keep them carefully for future reference.
- This unit is designed for installation by a qualified servicing dealer. Installation performed by non-authorized individuals could cause safety-related problems with the operation of this equipment.

#### For U.S.A. only:

• To locate the closest authorized dealer in your area, please call 1-800-449-8989.

# Introduction

Thank you for purchasing the Panasonic Electronic Board.

### **Feature Highlights**

The UE-608040 is a Wireless Kit for use with the elite Panaboard. By attaching it to the elite Panaboard, you can connect the elite Panaboard to a computer wirelessly.

#### Supports the IEEE802.11b/g Wireless LAN Standard

The Wireless Kit complies with the IEEE802.11b/g standard, and the WEP 64/128 bit encryption standard.

#### Easy Setup

The software "Device Server Setup" contained on the included CD-ROM is an easy-to-use setup wizard. You can install the software and setup the Device Server easily. Since you can also perform wireless settings using a USB memory device, creating a wireless environment is very straightforward.

### About the documentations

The Wireless Kit has 2 manuals:

Installation Instructions (this document)	Explains the preparations required before using the Wireless Kit.
Operating Instructions (electronic documentation)	<ul> <li>Explains the settings and operation of the Wireless Kit.</li> <li>This manual is available on the included CD-ROM. For details regarding viewing the manual, see "Viewing the Electronic Manual" (Page 15).</li> </ul>

### **Regarding this Manual's Composition**

This manual is designed as follows to provide safe and correct usage.

Operating Instructions (from Page 5)	Safety precautions, handling, and after service, etc. is explained.
Installation Manual (for qualified service personnel) (from Page 17)	Explains the installation process and related safety precautions for the Wireless Kit.

### **Notices Used in This Manual**

Important information in this manual is indicated by the following notices:

Notice	Denotes important information related to operation that must be obeyed. Please read these.
Note	Denotes reference or additional information that may be useful.

#### Abbreviations

Windows<sup>®</sup> refers to the Microsoft<sup>®</sup> Windows<sup>®</sup> operating system. Windows<sup>®</sup> 2000 refers to the Microsoft<sup>®</sup> Windows<sup>®</sup> 2000 operating system. Windows<sup>®</sup> XP refers to the Microsoft<sup>®</sup> Windows<sup>®</sup> XP operating system. Windows Vista<sup>®</sup> refers to the Microsoft<sup>®</sup> Windows<sup>®</sup> 7 operating system.

### Trademarks

- Microsoft, Windows, Windows Vista and Internet Explorer are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.
- IBM is a trademark of International Business Machines Corporation in the United States, other countries, or both.
- Intel and Pentium are trademarks of Intel Corporation in the U.S. and other countries.
- All other trademarks identified herein are the property of their respective owners.

Computer         IBM <sup>®</sup> PC/AT compatible with a CD-ROM drive	
CPU	Intel <sup>®</sup> Pentium <sup>®</sup> 4 processor or later
Operating System	Windows 2000 SP4 / Windows XP SP2 or later / Windows Vista / Windows 7 (Windows XP 64-bit edition is not supported.)
Interface	USB 2.0
Wireless Network Interface	802.11g AdHoc mode
Memory (RAM)	<ul> <li>256 MB or greater (Windows 2000 SP4)</li> <li>512 MB or greater (Windows XP SP2 or later)</li> <li>512 MB or greater (Windows Vista)</li> <li>1 GB or greater (Windows 7)</li> </ul>
Hard Disk	Hard disk with at least 400 MB of free space (not including the space required for saving files)
Web Browser	Internet Explorer® 6.0 or later

#### **System Requirements**

#### Note

- The above requirements do not fulfill the minimum requirements for all operating systems.
- Computers or wireless adaptors that do not support AdHoc mode cannot be used.

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# **Before You Start**

# For Your Safety

To prevent severe injury and loss of life, read this section carefully before using the unit to ensure proper and safe operation of your unit.

• This section explains the graphic symbols used in this manual.



### For Users

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### Power



Stop operation immediately if the unit emits smoke, excessive heat, abnormal smell or unusual noise. These conditions can cause fire or electric shock. Immediately turn off the elite Panaboard, and unplug the power cord of the elite Panaboard. Contact your dealer for service.

### Installation and Relocation



Have the unit installed, removed and disposed of only by qualified service personnel.

### **Operating Safeguards**



Do not alter the unit or modify any parts. Alteration or modification can cause fire or electric shock.

### **Wireless Network**



Do not use near medical equipment. (Do not bring into a surgery room, intensive care unit, critical care unit, etc.) Electromagnetic waves generated by this device can affect equipment, and can cause equipment to malfunction.



Do not use near automatic doors, smoke detectors and other automatically controlled equipment.

Electromagnetic waves generated by this device can affect equipment, and can cause equipment to malfunction.



Use at least 22 cm (9 in.) away from pacemakers.

Electromagnetic waves generated by this device can affect the operation of pacemakers.

# 

### Installation and Relocation



Do not place the unit in a hot humid or dusty environment. Prolonged exposure to these adverse conditions may cause fire or electric shock.

# **Important Information**

### **Usage Cautions**

#### Where NOT to Use the Wireless Kit

Do not use the Wireless Kit near other wireless devices.

The following equipment may use radio waves in the same band as the Wireless Kit. When the Wireless Kit is used near these devices, radio wave interference may make communication impossible, or the communication speed may become slower.

- Microwave ovens etc.
- Industrial, chemical and medical equipment, etc.
- In-plant radio stations for identifying moving objects such as those used in factory manufacturing lines, etc.
- Designated low-power radio stations

When the Wireless Kit is used near devices that emit radio waves at a frequency between 2,000 to 2,700 MHz, sound from elite Panaboard might be interrupted.

- If possible, avoid the use of cellular phones, TV sets or radios near the Wireless Kit. Cellular phones, TV sets, radios and similar devices use different radio bands from the Wireless Kit, so there is no effect on wireless communication or the transmission and reception of these devices. However, radio waves from the Wireless Kit may produce audio or video noise.
- Wireless communication radio waves cannot penetrate steel reinforcements, metal, concrete, etc. Communication is possible through walls and floors made from materials such as wood and glass (except glass containing wire mesh), but not through walls and floors made from steel reinforcements, metal, concrete, etc.
- Avoid using the Wireless Kit in locations prone to static electricity.

If you use the Wireless Kit where a lot of static energy is generated, such as a on a carpet, communications may be affected. In that case, you must remove the static energy or source of the noise, and reconnect the wireless LAN. In some cases the wireless LAN may be disconnected completely, and in this case you must turn off the elite Panaboard and then turn it back on again.

• Using the Wireless Kit outside the country It is forbidden to take the Wireless Kit outside the country or region where you purchased it, so use it only in that country or region. Also, note that different countries and regions have restrictions on the channels and frequencies at which you can use the wireless LAN.

#### Devices Connected to the USB Port of the elite Panaboard

- · We do not guarantee the use of such devices and their features.
- High-powered devices such as scanners, CD/CD–R drives etc., may not work with the elite Panaboard. For details, please consult your dealer.
- When connecting the elite Panaboard to a computer wirelessly via the Wireless Kit, communication speed will be slower than when connected via USB cable. This may affect the operation of the elite Panaboard and/or other USB peripherals.

#### Warning about Saving Data

When the system storage device or any of its optional storage device is adversely effected by operational errors, static electricity, electrical noise, vibration, dust or when the power has been cut off due to malfunction, repair or inadvertently, the memory contents may be lost or changed. Before operating the system, make a point of reading the precautionary notes in the Operating Instructions and the help information, and observe them during operation.

#### Please observe carefully the following precaution:

• Make absolutely sure that all important data is saved by back-up or the original is saved.

The manufacturer hereby declares that it cannot be held accountable for any loss or change in any data stored on floppy disks, hard disks, optical disks, or other memory devices.

#### **Personal Information**

• The confidentiality of user information such as audio, video, images, Internet contents etc. is the responsibility of the user. Restrict access to user and user group information so that unauthorized third parties cannot view, change, delete, or copy it.

### **Security Warnings**

# Take appropriate safety measures when using the Wireless Kit in order to avoid the following possible incidents:

- The leakage of your personal registered information.
- Malicious operation by an untrusted third party.
- Users being locked out or otherwise prevented from using the Wireless Kit by an untrusted third party.

# The network administrator should provide a secure network environment. (For details, refer to "Changing the administrator's password" in the Operating Instructions.)

- · Select a complex administrator password for Web access that cannot be easily guessed.
- Change the administrator password for Web access regularly.
- The Panasonic Corporation or its affiliates would never ask you for your password. Do not reveal your password to third parties.
- Use a secure network with a firewall installed.
- Change the administrator password for Web access in order to regulate access.
- When communicating sensitive material, send it via a USB connection rather than wirelessly. Radio waves in a wireless network may be intercepted by a third party.

#### Security Warnings for Wireless LAN Products

Wireless LANs have the advantage of being able to reach any wireless access points within a certain range using radio waves, as opposed to using a cable.

However, since radio waves can pass through obstacles such as walls, if security precautions are insufficient, the following situations could occur:

#### Theft of transmitted data If a malicious third party intercepts radio transmissions, there is a possibility that the following types of information will be stolen:

- IDs, passwords, credit card numbers and other personal information
- The contents of e-mail messages

#### **Unauthorized access to the network** If a malicious third party gains unauthorized access to a personal or company network, there is a possibility that the following will occur:

- Theft of personal or confidential information (information leak)
- Impersonation of an employee, etc., resulting in information being inappropriately leaked (impersonation)
- Transmissions being intercepted and then the contents changed (falsification)
- Viruses or other malicious software being installed, resulting in damage to data or the system (destruction)

Settings for securing communication are usually built in to wireless LAN adaptors and access points (hereafter referred to as wireless devices). Therefore, if you configure the relevant security settings, you can minimize the risk of security problems.

Newly-purchased wireless devices may not have the security settings enabled by default. In order to minimize the threat of unauthorized access, make sure to read the instruction manuals and, if necessary, configure the security settings for each wireless device before using them.

Please note that even if all security settings are configured, there is a slight chance that they can be breached.

Please contact an authorized service center if you have any questions regarding wireless LAN security settings.

Before using the Wireless Kit, make sure that you fully understand the risks involved, and perform the necessary security checks.

Panasonic System Networks Co., Ltd. will not be responsible in the event that security problems arise due to the failure to configure security settings or due to problems inherent in the wireless LAN specifications.

### Warnings for the Administrator

- It is recommended that the administrator takes the following precautions when installing, creating the network environment, operating security features, exchanging, or disposing of the Wireless Kit.
  - Ensure that all engineers are authorized service personnel and request that they show ID.
  - Do not share user information (administrator password for Web access etc.) via telephone or e-mail without confirming the identity of the recipient.
  - Change the password from the default password and protect it from unauthorized parties. (The administrator password for Web access is confidential data that is necessary for preventing security breaches.)

- Do not leave a computer unattended while you are logged in using the administrator password for Web access.
- Heed the following when setting the User name, administrator password for Web access, and WEP (encryption) key, in order to prevent unauthorized access by a third party.
  - **1.** Passwords should use the maximum number of alphanumeric characters allowed.
  - 2. Use a combination of different types of characters (numbers, letters etc.).
  - **3.** Change the administrator password for Web access and WEP (encryption) key regularly. When setting/changing the administrator password for Web access or WEP (encryption) key, ensure that only the administrator can see the screen in order to prevent data leakage.
- Before sending the Wireless Kit for repair or disposing of it, return the settings to factory default and ensure that data cannot be retrieved from it. (For details, refer to "Returning Settings to the Factory Default" (Page 29).)

#### <u>Note</u>

- When sending for repair, keep a backup of all necessary settings so that you can use the Wireless Kit as previously, after repair. Be careful when setting the Wireless Kit, because incorrect settings could lead to data leakage and affect performance.
- Set an administrator password for Web access (7 characters or fewer) and limit access to the security settings for users other than the administrator. (In the Wireless Kit's security settings, an administrator password for Web access set by an administrator is necessary. The default value is "pboard" (6 characters). You can set this password to any value.)
- Do not leave the included CD-ROM lying around. (Leaving the CD-ROM out is a security risk. Thoroughly establish operating rules, and handle the CD-ROM appropriately.)
- Properly configure the Wireless Kit's settings. (Improperly configuring the Wireless Kit (e.g., not setting the WEP (encryption) key) can result in information leaks, or the Wireless Kit interfering with other devices.)
- Appropriately manage computers that have the WEP (encryption) key set and the computer used to set up the Wireless Kit.
- Do not forget the administrator password for Web access (if you changed it from the default value) or the WEP (encryption) key.
   (If you forget the administrator password for Web access or the WEP (encryption) key, you will have to reset the Wireless Kit's settings to their factory default values and set up the Wireless Kit again.
   (Refer to "Returning Settings to the Factory Default (Page 29)".))
- Carefully consider your selection for administrator. (We recommend that the administrator fully comprehend the information written in this manual and thoroughly implement the above points.)

# **Included Accessories**

Check that all of the following items are included with your Wireless Kit. In the event that an item is missing, please contact your dealer.

Part Name	Illustration	Q'ty	Remarks
CD-ROM	$\bigcirc$	1	<ul><li>Device Server Setup CD</li><li>Operating Instructions</li><li>Setup and Connection Software</li></ul>
Installation Instructions		1	Installation Instructions <ul> <li>This document</li> </ul>

### About Using the CD-ROM

To prevent damage to the CD-ROM:

- Do not touch or write on the surface of the disc.
- Do not leave the disc out of the protective case.
- Do not leave the disc in the direct sunlight or near heat sources.
- Do not place heavy objects on the disc case or drop the case.
- To clean the disc, hold the disc by its edges and wipe it from the center to the edges with a dry, soft cloth.

# Names and Uses of the Parts



1	Link LED (green)	Blinking	Blinking The LAN settings (WEP (encryption) key, SSID etc.) of the Wireless Kit do not match for the wireless network.		
		Off	Operating		
2	Status LED (orange)	Lit	Sending and receiving data		
3	Wireless LED (green)	Blinking Operating			
4	Wireless LAN Antenna	An antenna for wireless communication.			
5	Reset Button	You can return the settings to factory default by pressing this reset button. For details, refer to "Returning Settings to the Factory Default" (Page 29).			
6	Network Port	For use by service personnel. Do not use this port.			
7	USB Port	Connect the elite Panaboard to the Wireless Kit using a USB cable. Do not connect devices other than an elite Panaboard.			
8	Power Port	Connect the power cable from the elite Panaboard. The Wireless Kit receives power from the elite Panaboard. Do not connect another external power source.			
9	MAC Address	The MAC address (Ethernet address) of the Wireless Kit.			

# **Advance Preparations**

### **Wireless LAN Settings Information**

When a Wireless Kit is to be installed, consult with your network administrator to prepare the following:

#### Wireless Kit

- IP address and subnet mask
- SSID
- Communication channel
- WEP (encryption) key

#### Computer

- A wireless network adaptor. In cases where a wireless network adaptor is not installed, one should be installed and set up in advance.
- IP address and subnet mask<sup>\*1</sup>
- <sup>\*1</sup> For communication over the wireless network between the computer and the device server (the Wireless Kit).

#### <u>Note</u>

- The values for the SSID, Communication Channel, and WEP (encryption) key are to be used for the Wireless Kit.
- Set a suitable IP address and subnet mask after consulting with your network administrator. If you are unsure of what values to use, refer to the examples below (settings using a private address).
- If you will be using multiple Wireless Kits and/or computers, set different IP addresses for each device.

#### 1. Generic allowable settings using a private address

#### – 192.168.AAA.BBB

192.168	Fixed
ΑΑΑ	A value from 1–254, and must be the same for the Wireless Kit and the computer.
BBB	A value from 1–254, and must be different for the Wireless Kit and the computer.

Subnet mask 255.255.255.0

2. Setting Example

#### Wireless Kit

- IP address: 192.168.100.10
- Subnet mask: 255.255.255.0

#### Computer

- IP address: 192.168.100.1
- Subnet mask: 255.255.255.0

Item Description		Example	Factory Default Setting
Wireless Mode	Fixed as "AdHoc"	_	AdHoc
SSID	The SSID setting appropriate for your network environment. (1–32 characters) If you are using multiple Wireless Kits, assign different, easily distinguishable SSIDs to each one.	propriate for ment. (1–32 ple Wireless easily s to each	
Channel • US: Select from 1 to 11. • EU: Select from 1 to 13.		11	11
NetworkSelect [Open].Authentication		Open	Open
Use WEP For security purposes, select [ON].		ON	OFF
Key Size	<ul> <li>To provide encrypted, secure data communications, choose one of the following:</li> <li>[128bits (ASCII string)]</li> <li>[128bits (16 hexadecimal)]</li> </ul>	128bits (16 hexadecimal)	64bits (ASCII string)
WEP Key	<ul> <li>Sets the encryption key for communication data.</li> <li>128bits (ASCII string) 13 alphanumeric characters</li> <li>128bits (16 hexadecimal) 26 hexadecimal digits (0–9, A–F)</li> </ul>	DCCBC32020C47F69988B2 46C1E	00000000000 00000000000 00

#### <u>Note</u>

• You can use the following charts when planning the setting of the Wireless Kit.

- Chart 1: Wireless Network Settings Table for the Device Server (Page 35)

- Chart 2: Wireless Network Settings Table for Computers (Page 36)

# **Viewing the Electronic Manual**

The manual "Operating Instructions" explains the settings and operation of the Wireless Kit.

#### <u>Note</u>

- The manual "Operating Instructions" is displayed in your Web browser.
- 1. Set the included CD-ROM (Device Server Setup CD) into your CD-ROM drive.
  - The below menu appears:

🖑 Device Server Setup CD Ver 1.0.1	
	Contents
Device Server Setup	
Application Installations	
Manual	
Important notice concerning security	$\searrow$
	Language Quit

#### <u>Note</u>

- If the menu screen does not appear automatically, open your CD-ROM drive from [My Computer] and run [Autorun.exe].
- 2. Click [Manual].

# **After Installation**

### **Make Computer Settings**

Each computer to be used needs to be configured for the wireless network, and must have the Panaboard Link connection software installed. Refer to the electronic manual "Operating Instructions" to complete the following steps.

#### Note

- Proceed only after completing the Wireless Kit's "Wireless LAN Settings" (Page 28).
- If multiple computers are to be used, settings need to be made for each computer.

#### The setup process

•	Set your computer's wireless network settings to DHCP, and connect to the device server (the Wireless Kit) using link less! (The connection process usually takes about 1 minute)
•	While still connected by link-local, use the Device Server Setup CD to change the device
	server's (the Wireless Kit's) internal settings (SSID, IP address, etc.).
	$\downarrow$
Se	et the computer's IP address
•	Change the computer's wireless network settings from DHCP to the same IP address group as the device server.
	(Because the device server already has an IP address set, you must assign a related IP address to the computer, or else you will not be able to establish a connection.)
	$\downarrow$
Cc	onnect the computer to the Wireless Kit
•	Use the computer's wireless network connection status screen to establish a wireless connection with the Wireless Kit. (A connection can be quickly established by clicking the Connect button.)
	$\downarrow$
Ins	stall Panaboard Link
•	After installing and launching Panaboard Link, configured and connected device servers are listed in the program.

You can now use the Wireless Kit.

#### Notice

# Installation Manual (for qualified service personnel)

- Request installation of the Wireless Kit from your dealer.
- Before constructing or installing the Wireless Kit, please read "Installation Manual (for qualified service personnel)" carefully.

**Especially, please read "For Your Safety" carefully and install the Wireless Kit safely.** Panasonic System Networks Co., Ltd. cannot be held responsible for accidents or damage to property resulting from incorrect installation.

# For Your Safety

To prevent severe injury and loss of life, read this section carefully before using the unit to ensure proper and safe operation of your unit.

The following graphic symbols are used in this Installation Manual.



Denotes a potential hazard that could result in serious injury or death.



Denotes hazards that could result in minor injury or damage to the unit.

$$\oslash$$

These symbols are used to alert operators to a specific operating procedure that must not be performed.

These symbols are used to alert operators to a specific operating procedure that must be emphasized in order to operate the unit safely.

### Notice



### Installation and Relocation



Have the unit installed, removed and disposed of only by qualified service personnel.



Be sure to disconnect the power cord from the elite Panabaord while installing the unit. Otherwise, it may cause electric shock or injury.



Be sure to use the specified parts for the installation. Otherwise, it may cause fire, electric shock or injury.



Notes in the operating instructions should be observed.



Do not alter the unit and install. Installing an altered unit can cause fire, electric shock or injury.



Safety check must be done by qualified service personnel after installing this option.

# 

### Installation and Relocation



After installing or moving the electronic board, lock the casters and set the fall-prevention extension legs.

Locking the casters (Push this side) Push to lock





Be sure to put on a glove to avoid electric shock or injury.





Do not use near medical equipment. (Do not bring into a surgery room, intensive care unit, critical care unit, etc.) Electromagnetic waves generated by this device can affect equipment, and can cause equipment to malfunction.



Do not use near automatic doors, smoke detectors and other automatically controlled equipment.

Electromagnetic waves generated by this device can affect equipment, and can cause equipment to malfunction.



Use at least 22 cm (9 in.) away from pacemakers.

Electromagnetic waves generated by this device can affect the operation of pacemakers.

# **Included Accessories**

Confirm that the following items are included with the Wireless Kit.

The accessories used with the UB-T781 series" are different from those used with the UB-T880.

<sup>\*1</sup> The models in the UB-T781 series are the UB-T781, UB-T781W, and UB-T761.

				Model	
No.	Part Name	Illustration	Q'ty	UB-T781 series	UB-T880
1	Device Server		1	~	~
2	<b>Safety Cord</b> For installing onto the elite Panaboard		1	~	~
3	Power Cable (1.4 m [4 ft. 7 ¼ in.]) For connecting to the elite Panaboard	E S	1	V	V
4	USB Cord Tie For bundling the USB cable		1	~	~
5	<b>Cord Keeper</b> For securing the power cable and USB cable		3	~	~
6	Hook Fastener For securing the bundled USB cable		1	✓	1

#### **Included Accessories**

				Мо	del
No.	Part Name	Illustration	Q'ty	UB-T781 series	UB-T880
Ø		Culling and the second s	2	$\checkmark$	_
8	Sorow	(M3 × 14)	3		✓
9	For installing onto the elite Panaboard		2	_	✓
0		(M4 x12)	1		✓
1	<b>Mounting Bracket</b> For installing onto the elite Panaboard		2	_	✓
®	<ul> <li>CD-ROM</li> <li>Device Server Setup CD</li> <li>Operating Instructions</li> <li>Setup and Connection Software</li> </ul>	$\bigcirc$	1	✓	✓
13	Installation Instructions Installation Instructions • This document		1	✓	✓

### **About Using the CD-ROM**

To prevent damage to the CD-ROM:

- Do not touch or write on the surface of the disc.
- Do not leave the disc out of the protective case.
- Do not leave the disc in the direct sunlight or near heat sources.
- Do not place heavy objects on the disc case or drop the case.
- To clean the disc, hold the disc by its edges and wipe it from the center to the edges with a dry, soft cloth.

# Installation

### **Installation Location**

- Do not install in a location exposed to direct sunlight, or cooling or heating appliances. (Exposure could lead to warping, discoloration, damage or malfunction.)
- Install the Wireless Kit in a cool, dry location with a stable ambient temperature.
  - Operating temperatures: +15 °C to +35 °C (+59 °F to +95 °F)
  - Operating humidity: 30 % to 80 % Relative Humidity (without frost conditions)

#### <u>Note</u>

• Please read "Before You Start" (Pages 5–6).

# Installation Procedure (UB-T781 series)

1. Remove the 2 screws on the top left and 1 screw from the back of the elite Panaboard.



#### Note

• You only need 1 of the 2 screws from the top-left area; you can dispose of the unnecessary screw.

2. Attach the device server, and secure it using the included screws (M3  $\times$  14).



#### <u>Note</u>

- Make sure the tabs on the device server unit fit into the slots on the back of the elite Panaboard.
- 3. Attach the safety cord to the device server using the screws removed in step 1.



#### <u>Note</u>

- Use the screw ① (removed from the top-left area of the elite Panaboard in step 1) to fasten the safety cord.
- Use the screw ② (removed from the back of the elite Panaboard in step 1) to attach and secure the safety cord.

4. Connect the USB cable (included with the elite Panaboard) to the device server's USB port, and connect the power cable to the power port.



#### Note

- Connect the end of the power cable with the core attached to the device server.
- 5. Bundle the USB cable (included with the elite Panaboard) using the USB cord tie.

#### Note

• Bundle the cable in the position and manner shown in the below illustration.



6. Attach the cord keepers ① (three locations marked) to the elite Panaboard.



- 7. Insert the USB cable and power cable into the cord keepers.
- 8. Loosen the screw found on the left side of the elite Panaboard, rotate the DC+5V protective cap 180 degrees, and loosely re-tighten the screw.



9. Connect the USB cable and power cable to the elite Panaboard.



10. As shown in the illustration in step 9, determine where you will fasten the USB cable bundled by the USB cord tie, and then attach the hook fastener to the back of the elite Panaboard, and fasten the bundled USB cable.

#### <u>Note</u>

• If you are installing the elite Panaboard on a wall, you do not need to attach the hook fastener. You can put the cable between the elite Panaboard and the wall.

### **Installation Procedure (UB-T880)**

1. Use the included screws (M3 x 6, 2 pieces) to fasten the device server to the mounting brackets.



#### Note

- Fit the tabs on the device server in the square holes on the mounting brackets, and then fasten the screws.
- 2. Attach the device server to the elite Panaboard, and secure it using the included screws (M4 x 12, 2 pieces).



 Use an included screw ① (M3 x 10, 1 piece) to attach the safety cord to the device server, and then use an included screw ② (M3 x 6, 1 piece) to attach the safety cord to the mounting bracket.



4. Connect the USB cable (included with the elite Panaboard) to the device server's USB port, and connect the power cable to the power port.



#### <u>Note</u>

• Connect the end of the power cable with the core attached to the device server.

5. Bundle the USB cable (included with the elite Panaboard) using the USB cord tie.

•

Bundle the cable in the position and manner shown in the illustration below.



6. Attach the cord keepers ① (three locations marked) to the elite Panaboard.



7. Loosen the screw found on the left side of the elite Panaboard, slide up the DC+5V protective cover, and loosely re-tighten the screw.



8. Connect the USB cable and power cable to the elite Panaboard.

As shown in the illustration, run the USB cable and power cable through their respective grooves on the back cover of the elite Panaboard.



- 9. Insert the USB cable and power cable into the cord keepers.
- 10. As shown in the illustration in step 8, determine where you will fasten the USB cable bundled by the USB cord tie, and then attach the hook fastener to the back of the elite Panaboard, and fasten the bundled USB cable.

#### <u>Note</u>

• If you are installing the elite Panaboard on a wall, you do not need to attach the hook fastener. You can put the cable between the elite Panaboard and the wall.

# Confirming the Operation of the Wireless Kit

Follow the steps below to confirm that the Wireless Kit is operating properly after installation.

	Action	Checkpoints			
	Action	Operation	Measure		
1	Turn on the power switch of the elite Panaboard.	<ul> <li>The Wireless LED is blinking (about once per second).</li> <li>The Link LED is dark.</li> </ul>	(Normal operation)		
		The Wireless LED blinks every 0.2 seconds.	The device server's internal wireless module is not being recognized. The device server must be replaced.		
		The Wireless LED is dark.	Reset the Wireless Kit's settings to its factory defaults. (See "Returning Settings to the Factory Default" (Page 29).)		
		<ul> <li>None of the LEDs light up, or blink.</li> </ul>	Check the power cable of the Wireless Kit, and the power switch and power cord of the elite Panaboard. (See: • Step 4 of "Installation Procedure (UB-T781 series)" (Page 22) • Step 4 of "Installation Procedure (UB-T880)" (Page 24))		

# **Wireless LAN Settings**

Use the following steps to confirm the operation and settings of the Wireless Kit.

- 1. Set the included CD-ROM (Device Server Setup CD) into your CD-ROM drive.
  - The below menu appears:



#### <u>Note</u>

- If the menu screen does not appear automatically, open your CD-ROM drive from [My Computer] and run [Autorun.exe].
- 2. Click [Manual].
- 3. Following the instructions in the manual "Operating Instructions", set up the Wireless Kit and the Computer, and confirm their operation.

#### <u>Note</u>

- Apply the settings prepared in "Wireless LAN Settings Information" (Page 13). (Use the included charts.)
- Confirm that the Panaboard Link connection software can be used to establish a connection and break a connection to the elite Panaboard's USB device.
- 4. Confirming the Wireless Kit's Settings Information.
  - Confirm the Wireless Kit's SSID, Communication Channel, and IP address. (Use the included charts.) Provide the confirmed Settings Information to the User (Administrator).

This completes the operations confirmation for the Wireless Kit. Provide this manual (Installation Instructions) and the included CD-ROM to the user (administrator).

# Returning Settings to the Factory Default

Follow the procedure below to return all of the Wireless Kit's settings to the factory default. Use this procedure when reconfiguring the settings when, for instance, the Wireless Kit had been used in a different network environment.

- 1. Set the power switch of the elite Panaboard that you connected to the Wireless Kit to "O" (Off).
  - For UB-T880, push the power switch. The power LED will turn off.
- 2. While pressing the reset button (①) on the back of the Wireless Kit, turn the elite Panaboard's power switch to "|" (on).
  - For UB-T880, push the power switch. The power LED will light green.
  - Keep the reset button pressed down to start the process of returning settings to the factory default.



Once the status LED (orange) turns on, settings are complete.

#### **Notice**

- When performing a factory setting reset, do not turn off the power to the elite Panaboard connected to the Wireless Kit.
- Once you have reset the settings to their factory defaults, for security purposes change the WEP (encryption) key setting and the administrator password for Web access again.

# **Specifications**

# **Hardware Specifications**

Operating Environment Conditions	Temperature: +15 °C to +35 °C (+59 °F to +95 °F) Humidity: 30 % to 80 % RH (except in frost conditions)				
Storage Environment Conditions	Temperature: -10 °C to +50 °C (-4 °F to +104 °F) Humidity: 20 % to 90 % RH (except in frost conditions)				
CPU	32 bit RISC CPU				
Memory	RAM: 8 MB Flash ROM: 2 MB				
		Frequency	2.4 GHz		
		Transmission System	DS-SS		
	IEEE802.11b	Transmission Speed	1 Mbit/s, 2 Mbit/s, 5.5 Mbit/s, 11 Mbit/s Automatic detection		
Wireless Network		Channels	The number of available channels differs for each region. US: 1–11 ch EU: 1–13 ch		
Interface		Frequency	2.4 GHz		
		Transmission System	OFDM		
	IEEE802.11g	Transmission Speed	6 Mbit/s, 12 Mbit/s, 18 Mbit/s, 36 Mbit/s, 48 Mbit/s, 54 Mbit/s Automatic detection		
		Channel	The number of available channels differs for each region. US: 1–11 ch EU: 1–13 ch		
Device Interface	USB 2.0 Hi-Speed	(Type A): 1 port			
	Reset Button: 1				
Other	LED Lamps: 3	On product front face	Wireless (green) Status (orange) Link (green)		

# **Software Specifications**

	TCP/IP
Compatible Protocols	FTP, HTTP, TELNET, DHCP, BOOTP, TCP, UDP, ARP, IP, ICMP, JCP (proprietary protocol), SXUPTP (proprietary protocol)
Compatible OS	Windows 2000 SP4 / Windows XP SP2 or later / Windows Vista / Windows 7 (Windows XP 64-bit edition is not supported.)
Number of possible connections <sup>1</sup>	15 (4 connections through the elite Panaboard)

<sup>\*1</sup> Regarding the number of connections

This is the number of USB devices that can connect to the Wireless Kit. However, a multiple function device will occupy a connection for each function. For example, a combination printer/scanner/storage device will occupy 3 connections.

#### <u>Note</u>

- About Connecting to USB Hubs Connection performance cannot be fully guaranteed when a USB hub is used between the elite Panaboard's 2 USB ports and USB devices.
- About USB Devices Full performance cannot be guaranteed for accessories connected to the elite Panaboard's 2 USB ports.

# **Settings Overview**

This is a list of the settings that can be made using a Web browser.

#### <u>Note</u>

• For how to make settings, see "Setting detailed settings via your web browser" in the Operating Instructions.

### **Network Settings**

Setting	Description	Factory Default Setting
DHCP/BOOTP	Enable or disable the use of the DHCP/BOOTP protocols. When initializing the Wireless Kit, DHCP/ BOOTP protocols search DHCP/BOOTP servers to acquire an IP address. To set the IP address of the Wireless Kit using DHCP/BOOTP servers, they must be properly configured and running within the subnetwork. The Wireless Kit automatically detects DHCP or BOOTP servers, and will use an IP address given from the first response received.	ENABLE
IP Address	Set the Wireless Kit's IP address. The value is represented by four 3-digit numbers ranging in value from 0-254, in the format "xxx.xxx.xxx.xxx".	0.0.0.0
Subnet Mask	Set the Wireless Kit's subnet mask. The value is represented by four 3-digit numbers ranging in value from 0-254, in the format "xxx.xxx.xxx.xxx". If it set to "0.0.0.0", this setting is disabled, and a subnet mask will be automatically acquired according to the IP address used.	0.0.0.0
Default Gateway	Does not need to be set.	0.0.0.0
LAN Interface	Does not need to be set.	AUTO

### **Security Settings**

Setting	Description	Factory Default Setting
IP Filter Operating Mode	<ul> <li>Select the IP filter modes from [ALLOW] and [DENY].</li> <li>[ALLOW]: Data will be received only from IP addresses in the set ranges.</li> <li>[DENY]: Data will not be received from IP addresses in the set ranges.</li> </ul>	DENY

Setting	Description	Factory Default Setting
Filter #0 – #3	Set an IP filter range. Up to 4 sets of IP ranges can be specified. If filtering is not required, set the range as "0.0.0.0" to "0.0.0.0".	0.0.0.0

### **Wireless Settings**

Setting	Description	Factory Default Settings
Wireless Mode	The Wireless Kit's wireless mode, fixed as "AdHoc".	AdHoc
SSID	Set the Wireless Kit's SSID. The SSID can be up to 32 alphanumeric characters in length. SSID is used as an ID for structured wireless network separation. If the SSID differs between two devices, they cannot communicate even if they are in the same area and using the same channel.	Panaboard
Channel	<ul> <li>Set the Wireless Kit's communication channel. The communication channel is used in AdHoc mode, and can be set within the following ranges:</li> <li>US: 1–11 ch</li> <li>EU: 1–13 ch</li> <li>Users must be on the same communication channel to communicate wirelessly.</li> <li>All devices using the same SSID will use the SSID's set channel, and override other channel settings.</li> </ul>	11
Network Authentication	<ul> <li>Network authentication can be set to [Open] or [Shared].</li> <li>[Open] (open system): Authentication is not performed, and full access is granted.</li> <li>[Shared] (shared key): A WEP (encryption) key is set, and only those devices using the same WEP key are given access.</li> </ul>	Open
WEP	Set the Wireless Kit's use of WEP [ON] or [OFF].	OFF
Key Size	Select the length of the WEP (encryption) key from [64bits] or [128bits].	64bits
Key Format	Select the key format of the WEP (encryption) key from [Hexadecimal] or [Alphanumeric Character].	Hexadecimal
WEP Key	Set the Wireless Kit's WEP (encryption) key.	00000000000000000 00000000

### Administrator Password Setting

Setting	Description	Factory Default Setting
New Password	Set the Wireless Kit's administrator password for Web access. The password can be up to 7 ASCII characters in length. This password is used for user authentication when changing settings via a Web browser.	pboard

# Appendix

			Ch	eck	
NO.	IP address	Subnet mask	Result	Date	Notes
Ex.	192.168.100.1	255.255.255.0	☑ OK □ Fail	2009/3/31	Example entry
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					

• The default gateway does not need to be set.

\_\_\_\_\_

\_\_\_\_\_

9		-		Ī		WEP (er	icryption)
2.	2210	IP address	Subnet mask	unannei	IMAC address	Key size	WEP (encryption) key
						□ 64 bit (ASCII string)	1 2 3 4 5 6 7 8 9 10 11 12 13
) L	Panaboard	102 168 100 10	טבב סבב סבב <u>ה</u>	77		□ 64 bit (16 hexadecimal)	D C C B C 3 2 0 2 0 C 4 7
Ľ	Classroom 01	132.100.100.10	0.002.002.002	=	UU.OU.32.3F.EU.IU	□ 128 bit (ASCII string)	F 6 9 9 8 8 B 2 4 6 C 1 E
						Z 128 bit (16 hexadecimal)	14 15 16 17 18 19 20 21 22 23 24 25 26
						□ 64 bit (ASCII string)	1 2 3 4 5 6 7 8 9 10 11 12 13
						□ 64 bit (16 hexadecimal)	
_		•	•			□ 128 bit (ASCII string)	
						□ 128 bit (16 hexadecimal)	14 15 16 17 18 19 20 21 22 23 24 25 26
						□ 64 bit (ASCII string)	1 2 3 4 5 6 7 8 9 10 11 12 13
c						□ 64 bit (16 hexadecimal)	
N		•				□ 128 bit (ASCII string)	
						□ 128 bit (16 hexadecimal)	14 15 16 17 18 19 20 21 22 23 24 25 26
						□ 64 bit (ASCII string)	1 2 3 4 5 6 7 8 9 10 11 12 13
c						64 bit (16 hexadecimal)	
°.		•				□ 128 bit (ASCII string)	
						□ 128 bit (16 hexadecimal)	14 15 16 17 18 19 20 21 22 23 24 25 26
						□ 64 bit (ASCII string)	1 2 3 4 5 6 7 8 9 10 11 12 13
~						□ 64 bit (16 hexadecimal)	
4		•	•			□ 128 bit (ASCII string)	
						□ 128 bit (16 hexadecimal)	14 15 16 17 18 19 20 21 22 23 24 25 26
						64 bit (ASCII string)	1         2         3         4         5         6         7         8         9         10         11         12         13
ц						□ 64 bit (16 hexadecimal)	
2		•	•			□ 128 bit (ASCII string)	
						128 bit (16 hexadecimal)	14 15 16 17 18 19 20 21 22 23 24 25 26

#### **Chart 2: Wireless Network Settings Table for Computers**

The default gateway does not need to be set.

The WEP (Encryption) Key can contain the following number and type of characters.

64 bit (ASCII string): 5 characters
64 bit (16 hexadecimal): 13 digits
128 bit (ASCII string): 13 characters
128 bit (16 hexadecimal): 26 digits

Notes

Notes

Notes

### Information for Users on Collection and Disposal of Old Equipment and used Batteries



These symbols on the products, packaging, and/or accompanying documents mean that used electrical and electronic products and batteries should not be mixed with general household waste. For proper treatment, recovery and recycling of old products and used batteries, please take them to applicable collection points, in accordance with your national legislation and the Directives 2002/96/EC and 2006/66/EC. By disposing of these products and batteries correctly, you will help to save valuable resources and prevent any potential negative effects on human health and the environment which could otherwise arise from inappropriate waste handling.

For more information about collection and recycling of old products and batteries, please contact your local municipality, your waste disposal service or the point of sale where you purchased the items. Penalties may be applicable for incorrect disposal of this waste, in accordance with national legislation.

#### For business users in the European Union



If you wish to discard electrical and electronic equipment, please contact your dealer or supplier for further information.

#### ∕**⊢⊚∖** ⊺

#### Information on Disposal in other Countries outside the European Union

These symbols are only valid in the European Union. If you wish to discard these items, please contact your local authorities or dealer and ask for the correct method of disposal.



#### Note for the battery symbol (bottom two symbol examples):

This symbol might be used in combination with a chemical symbol. In this case it complies with the requirement set by the Directive for the chemical involved.

For users in Turkey

EEE Complies with Directive of Turkey.

Türkiye'deki kullanıcılar için

EEE Yönetmeliğine Uygundur.

AT	BE	BG	CY	CZ	DK				
EE	FI	FR*	DE	GR	HU				
ΙE	IT	LV	LT	LU	MT				
NL	PL	PT	RO	SK	SI				
ES SE GB IS LI NO									
СН									
This V	Vireles	s Kit m	ust no	t be op	perate				

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