

Panasonic®

Operating Instructions With Installation Manual (for qualified service personnel) Electronic Board

Model No. **UB-2815C**
UB-2315C



The unit in this picture is UB-2815C.

- To assemble this unit, please refer to the Installation manual on page 39 through 47.
- 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.

Thank you for purchasing the Panasonic Electronic Board.

For optimum performance and safety, please read these instructions carefully.

Accessories

	Q'ty		Q'ty
• Markers (Black, Red, Blue)	1 each	• Software CD-ROM	1
• Eraser	1	• Operating Instructions	1
• Power cord	1	• Warranty card* ¹	1
• Magnets	2		

*¹ For U.S.A. models only.

Note

- UB-2815C is a wide-size model.
UB-2315C is a standard-size model.
- These operating instructions are based on the UB-2815C.

Things you should keep a record of

Attach your sales receipt here

For your future reference

Date of purchase: _____ Serial number: _____

Dealer's name and address: _____ Tel: _____

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.

Federal Communications Commission Requirements (For United States only)

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. 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 instruction 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.

FCC Warning: To assure continued FCC compliance, the user must use only the provided power supply cord. Also, any unauthorized changes or modifications to this equipment would void the user's authority to operate this device.

- Microsoft and Windows are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.
- IBM and AT are trademarks of International Business Machines Corporation in the United States, other countries, or both.
- Pentium is a trademark or registered trademark of Intel Corporation or its subsidiaries in the United States and other countries.
- Adobe, Acrobat, Acrobat Reader and Reader are either registered trademarks or trademarks of Adobe Systems Incorporated in the United States and/or other countries.
- SD Logo is a trademark.
- This software is based in part of the work of the Independent JPEG Group.
- This software is based on the "libtiff" which has the following copyrights:
Copyright (C) 1988–1997 Sam Leffler
Copyright (C) 1991–1997 Silicon Graphics, Inc.
- All trademarks referred to in this manual are property of their respective companies.

The information given in this Operating Instructions is subject to change without notice.

Features

The UB-2815C / 2315C is an electronic board equipped with a color scanner, allowing posters, graphs, charts etc., to be attached with magnets and copied as data or printed onto paper. It is possible to output scanned documents or hand-written text/diagrams as follows:

■ Storing on a USB Flash Memory Device

Allows scanned documents or hand-written text/diagrams to be stored onto a USB flash memory device.*1

*1 Not all USB flash memory devices are compatible with this unit.

■ Storing on an SD Memory Card

Allows scanned documents or hand-written text/diagrams to be stored onto an SD memory card.*2

*2 Not all SD memory cards are compatible with this unit.

■ Printing with an External Printer

Allows scanned documents or hand-written text/diagrams to be printed on an external printer via USB cable.

■ Computer Interfacing

“Panasonic Document Management System (hereafter referred to as Panasonic-DMS)” is a TWAIN driver compatible software which allows you to scan documents or hand-written text/diagrams and store them directly onto a computer. Panasonic-DMS also has several features including one of which, that allows you to manage and organize scanned images efficiently and with ease.

For more information on Panasonic-DMS, refer to the Document Management System Operating Instructions included in the CD-ROM.

Note

- For information regarding available USB flash memory devices, SD memory cards, and printers, refer to the following site:
http://panasonic.co.jp/pcc/products/en/eboard/ub-2815c_info.htm

Table of Contents

Page

Before You Start

For Your Safety	6
Precautions	10
Part Names and Functions	12
• Control Panel	13

Using

Scanning	14
• Storing images on a USB flash memory device	15
• Storing images on an SD memory card	16
• Printing with an external printer	17
Moving the Electronic Board	17
Rotating the Whiteboard	18
Setting the Unit	19
• Setting for scanning time display	19
• File format set-up	19
• Setting for Full Size Scanning (UB-2815C only)	20
• Setting the current time	20
• Testing the Printer	21
Computer Interfacing	22
• System Requirements	22
• Contents of CD-ROM	22
• Installing Drivers / Panaboard Software	23
• Installing the Panasonic-DMS Software	25
• Removing Drivers / Panaboard Software	26
• Removing the Panasonic-DMS Software	26
• Scanning with the Panasonic-DMS	27
• Panaboard Operation Panel	28

Help

Daily Care and Maintenance	29
• Cleaning the Whiteboard and the Unit	29
• Caring for the Eraser	29
• Cleaning the White Balance Area	30
• Cleaning the Scanner	30
• Replacing the Battery for the unit clock	31
Troubleshooting	32
• Error Codes	34
Specifications	36
• Separately Available Items	38

Installation

Installation Manual	39
--------------------------------------	-----------

Before You Start

Using

Help

Installation

For Your Safety

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.

CLASS 1 LED PRODUCT

The following graphic symbols are used in this Operating Instructions manual.

	WARNING	Denotes a potential hazard that could result in serious injury or death.
	CAUTION	Denotes hazards that could result in minor injury or damage to the unit.
  		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.

WARNING

Power and Ground Connection

 The power source voltage of this unit is listed on the nameplate. Only plug the unit into an AC outlet with the proper voltage. If you use a cord with an unspecified current rating, the unit or plug may emit smoke or become hot to the touch.

 When you operate this product, the power outlet should be near the product and easily accessible.

 To ensure safe operation the power cord supplied must be inserted into a standard three-prong AC outlet which is effectively grounded (earthed) through the normal wiring.

 The fact that the equipment operates satisfactorily does not imply that the power point is grounded (earthed) and that the installation is completely safe. For your safety, if in any doubt about the effective grounding (earthing) of the power point, consult a qualified electrician.

 If the plug cannot be inserted into the AC outlet, contact a licensed electrician to replace the AC outlet with a properly grounded (earthed) one.

 Do not defeat the grounding (earthing) plug (ex. do not use a conversion plug).

 Plug the power cord firmly into an AC outlet. Otherwise, it can cause fire or electric shock.

 Do not pull, bend, rest objects on, or chafe the power cord and plug. Damage to the power cord or plug can cause fire or electric shock.

 Do not attempt to repair the power cord or plug. If the power cord or plug is damaged or frayed, contact an authorized service representative for a replacement.

 Ensure that the plug connection is free of dust. In a damp environment, a contaminated connector can draw a significant amount of current that can generate heat and eventually cause fire if left unattended over an extended period of time.

 Never touch the plug with wet hands. Danger of electric shock exists.



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



When disconnecting the unit, grasp the plug instead of the cord. Pulling on a cord forcibly can damage it and cause fire or electric shock.



The unit should be used only with the power cord that is supplied by the manufacturer.

Installation and Relocation



To prevent fire or shock hazard, do not expose this unit to rain or any type of moisture.

Operating Safeguards



If metal fragments or water gets into the unit, turn the unit off and unplug the unit immediately. Contact your dealer for service. Operating the contaminated unit can cause fire or electric shock.



Never open or remove unit covers that are screwed with screws unless specifically instructed in the "Operating Instructions". A high-voltage component can cause electric shock.



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



CHOKING HAZARD

Keep the marker's cap, battery, SD memory card or USB flash memory device out of reach of children to prevent choking.

Battery



Use only the specified type of battery. Using the incorrect type of battery can result in overheating/burning or leakage of battery acid.



Make sure that the battery is installed with the correct polarity as indicated on the battery holder. Incorrectly installed batteries may burst or leak, resulting in injuries.



Batteries that seem worn down or damaged should not be used. Using worn down or damaged batteries may result in leaking.



Do not charge, short, heat, break or throw in a fire, as it may result in the battery leaking, generating heat, or bursting.



When disposing of the battery, cover the battery contacts with insulation (ex. tape). Direct contact with other batteries may result in leaking, fire, or explosion.



Do not solder the battery, as it may result in the battery leaking, generating heat, or bursting.

For Your Safety

CAUTION

Power

 When the unit is not used over an extended period of time, switch it Off and unplug it. If an unused unit is left connected to a power source for a long period, degraded insulation may cause electric shock, current leakage or fire.

Installation and Relocation

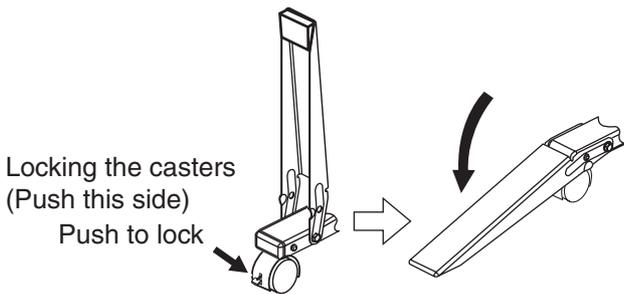
 Do not position the unit in a location where it is unstable.

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

 When moving the unit, be sure to unplug the power cord from the AC outlet. If the unit is moved with the power cord attached, it can cause damage to the cord which could result in fire or electric shock.

 Do not install the unit except by a qualified service personnel.

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



 Move this unit with two persons. Otherwise, this unit may fall down and cause injury.

 Make sure that the scanner is properly supported when moving this unit. Otherwise, the scanner may move/swing and cause injuries.

Operating Safeguards

 If the unit is fallen down or damaged, turn the unit off and unplug the power cord. Otherwise, it may cause fire or electric shock.

 Do not put drinks, other liquids or heavy items on the tray or whiteboard. Accidental spillage of liquid into the unit may cause severe damage. If this occurs, turn the unit off, unplug the power cord and contact your dealer for service.

 Do not lean against the whiteboard or on the tray.

 Rotate the whiteboard carefully and slowly. Otherwise, a finger can get caught or the whiteboard may strike the person resulting in injury.

 When rotating or fastening the whiteboard, be careful not to get your fingers caught between the whiteboard and the stoppers as this may result in injury.

 After rotating the whiteboard, make sure that it is correctly fastened with the board stoppers. Otherwise, the whiteboard may turn unexpectedly, resulting in injury.

 Do not touch the scanner while it is moving, as this may result in injury.

 Do not stare directly into the light emitted from the scanner, as it may be harmful to the eyes.

Battery

 When the unit is not used over an extended period of time, take the batteries out of the unit. Otherwise, the batteries may leak. Do not use the leaked batteries.

Safety Information (For United Kingdom only)

This appliance is supplied with a moulded three pin mains plug for your safety and convenience. A 5 amp. fuse is fitted in this plug. Should the fuse need to be replaced please ensure that the replacement fuse has a rating of 5 amps. and that it is approved by ASTA or BSI to BS1362. Check for the ASTA mark  or the BSI mark  on the body of the fuse. If the plug contains a removable fuse cover you must ensure that it is refitted when the fuse is replaced. If you lose the fuse cover the plug must not be used until a replacement cover is obtained. A replacement fuse cover can be purchased from your local Panasonic Dealer.

If the fitted moulded plug is unsuitable for the socket outlet in your home then the fuse should be removed and the plug cut off and disposed of safely. There is a danger of severe electrical shock if the cut off plug is inserted into any 13 amp. socket. If a new plug is to be fitted please observe the wiring code as shown below. If in any doubt please consult a qualified electrician.

WARNING: This appliance must be earthed.

IMPORTANT: The wires in this mains lead are coloured in accordance with the following code.

Green-and-Yellow:	Earth
Blue:	Neutral
Brown:	Live

As the colours of the wire in the mains lead of this appliance may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows.

The wire which is coloured Green-and-Yellow must be connected to the terminal in the plug which is marked with the letter E or by the Earth symbol  or coloured Green or Green-and-Yellow.

The wire which is coloured Blue must be connected to the terminal in the plug which is marked with the letter N or coloured Black.

The wire which is coloured Brown must be connected to the terminal in the plug which is marked with the letter L or coloured Red.

How to replace the fuse:



Open the fuse compartment with a screwdriver and replace the fuse.

Precautions

Precautions

Installation	<ul style="list-style-type: none"> Do not install the unit where it may be exposed to direct sunlight, near heating equipment, or near air-conditioning vents as this may cause discoloration of the whiteboard. Do not install the unit in strong sunlight or strong lighting. Proper copying may become impossible. Do not install the unit in locations where the temperature may change suddenly as this may disable the unit's ability to make copies.
Whiteboard	<ul style="list-style-type: none"> Make thick and dark lines inside the scannable area. Note that any writing inside the shaded area (on right) cannot be scanned. Do not allow writing to remain on the whiteboard for an extended period of time as it will become harder to erase. Do not erase with an overly dirty eraser (see page 29). Periodically wipe the whiteboard gently with a water-dampened cloth that has been thoroughly wrung. (See page 29.) Use magnets that are less than 7 mm ($\frac{9}{32}$") in height when attaching documents to the whiteboard. Otherwise, the magnet may interfere when scanning the document. When scanning, the shadow of a magnet may appear on images, blocking text or certain parts of a document/diagram. <div data-bbox="1011 559 1458 778" style="text-align: center;"> <p>Approx. 20 mm ($\frac{25}{32}$")</p> </div>
Markers and Eraser	<ul style="list-style-type: none"> Use only the included or designated markers and eraser. (See page 38.) Use of accessories other than those included or designated (such as oil-based markers) may damage the whiteboard or result in hard-to-erase markings. Store markers horizontally as vertical storage may stop the ink from coming out.
Scanner	<ul style="list-style-type: none"> Do not place hands on the top rail of this unit, as it may result in problems when scanning. Do not place objects other than markers or erasers on the tray, as it may result in problems when scanning. Keep both sides of the white balance area clear of objects or blemishes, if not, images will not be scanned properly.
Power Switch	<ul style="list-style-type: none"> When turn the power switch on after turning off, wait 2 seconds or more.
Power Cord	<ul style="list-style-type: none"> When moving the unit, disconnect the power cord on both ends and coil it for transportation to prevent it from being damaged if stepped on or if it catches on something.
USB	<ul style="list-style-type: none"> Do not connect a USB flash memory device to "USB Connector-A for Printer". Do not connect an external printer to "USB Connector-A for USB Flash Memory Device". The use of a USB hub is not recommended. We cannot guarantee that the unit will work properly. Use a shielded USB cable that is certified as logo by USB-IF. Do not connect two or more Panasonic electronic boards to a computer. It may cause the computer operation to become unstable.

<p>Battery</p>	<p>If battery is used improperly, battery may leak, causing corrosion to the unit, or it may burst. To prevent this, always follow the precautions given below.</p> <ul style="list-style-type: none"> • Always insert battery with its polarity properly oriented. • If the battery has run out, remove it immediately and dispose of it according to local regulations. Leaving drained battery may result in leakage. • Do not disassemble battery or place it in a fire. • Do not short battery. <div style="border: 1px solid black; border-radius: 10px; padding: 10px; margin: 10px 0;"> <p>For U.S.A</p> <p>This product contains a CR Coin Cell Lithium Battery which contains Perchlorate Material - special handling may apply. See www.dtsc.ca.gov/hazardouswaste/perchlorate</p> </div> <div style="border: 1px solid black; border-radius: 10px; padding: 10px; margin: 10px 0;"> <p>For Brasil</p> <div style="display: flex; align-items: center;">  <p>Após o uso as pilhas / baterias contidas neste produto poderão ser dispostas em lixo doméstico.</p> </div> </div> <div style="border: 1px solid black; border-radius: 10px; padding: 10px; margin: 10px 0;"> <p>For Netherlands</p> <div style="display: flex; align-items: center;">  <p>Niet weggooien, maar inleveren als KCA.</p> </div> <p>Bij dit produkt zijn batterijen geleverd. Wanneer deze leeg zijn, moet u ze niet weggooien maar inleveren als KCA.</p> </div> <div style="border: 1px solid black; border-radius: 10px; padding: 10px; margin: 10px 0;"> <p>For Taiwan (台灣)</p> <div style="display: flex; align-items: center;">  <p>廢電池請回收</p> </div> </div>
<p>CD-ROM</p>	<p>To prevent damage to the CD-ROMs:</p> <ul style="list-style-type: none"> • 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 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.

Please take the following precautions regarding the deletion of classified data, when discarding the memory device (i.e., USB flash memory device or SD memory card) or giving the memory device to another person.

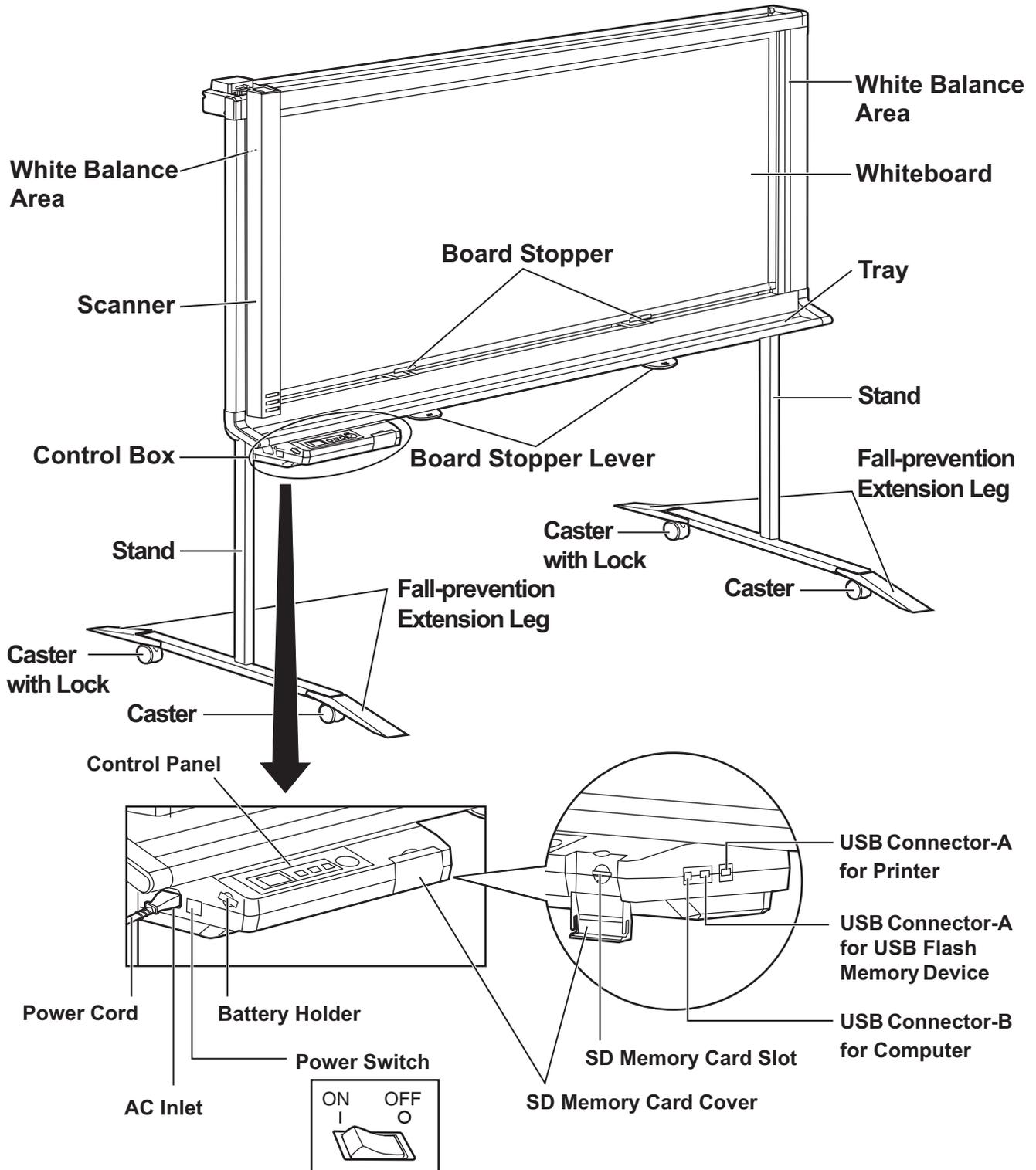
Using basic operations such as “format” or “delete” on a computer may not completely erase the data from the memory device.

To guarantee that the data you wish to erase will no longer exist, we recommend that you physically destroy the memory device or use a file deleting software to erase the data.

The data that is stored on a memory device is the sole responsibility of you, the customer.

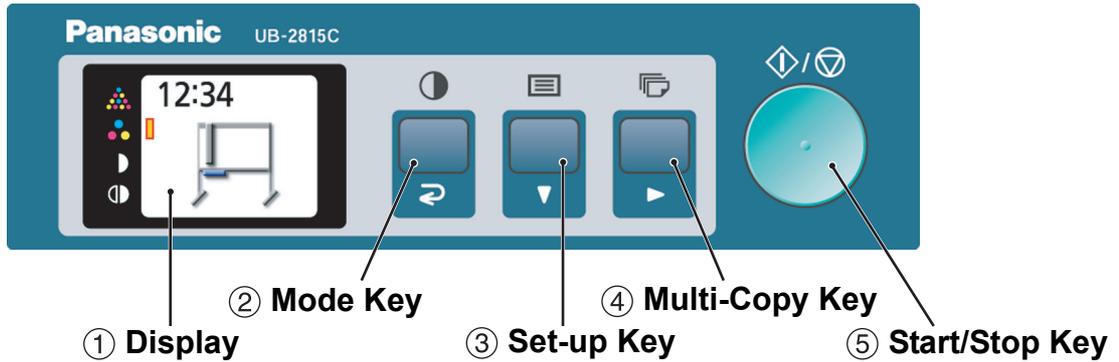
Part Names and Functions

Part Names and Functions



* This is a diagram of the UB-2815C.
 UB-2315C is equipped with one board stopper and one board stopper lever.

Control Panel



Name	Description
 <p>① Display</p>	<p>When in standby mode, the display shows the current status of the unit as follows:</p> <ul style="list-style-type: none"> • The time is shown on the top left corner of the display. • The scanning mode is shown on the icons on the left side of the display. • The destination for scanned images is show in the center of the display.
 <p>② Mode Key</p>	<p>Press repeatedly to select the scanning mode. The selected mode will be indicated next to the icons on the left side of the display.</p> <ul style="list-style-type: none">  Color-Fine: For scanning in high-resolution color. Recommended for scanning color documents.  Color-Standard: For scanning in normal-resolution color. Recommended for scanning handwritten text/diagrams written with a color marker.  B/W-Dark: For scanning black and white images to be darker than normal density.  B/W-Normal: For scanning black and white images with normal density. <p>Preview mode: Returns to the previous screen. Set-up mode: Returns to standby mode.</p>
 <p>③ Set-up Key</p>	<p>Press to change the basic settings of this unit. (See page 19.)</p> <p>Preview mode, Set-up mode: Goes to the next item below.</p>
 <p>④ Multi-Copy Key</p>	<p>Press repeatedly to select the desired number of copies when printing with an external printer.</p> <p>Preview mode, Set-up mode: Goes to the next item to the right.</p>
 <p>⑤ Start/Stop Key</p>	<p>Press to start or stop scanning.</p>

Scanning

It is possible to output scanned images to a USB flash memory device, SD memory card, or external printer. If multiple output devices are connected to this unit at the same time, the output destination will be selected in the following priority:

1. USB flash memory device
2. SD memory card
3. External Printer.

The current destination is shown on the display.

For information on scanning images using a computer, refer to “Computer Interfacing” on page 22.

Note

- When there is no appropriate output destination connected to the unit, an electronic board icon is shown on the display. In this case, the unit will not start scanning even if you press the Start/Stop key.



- When the output destination is a USB flash memory device or an SD memory card, the following file formats can be selected (refer to “File format set-up” on page 19).

Color: PDF/JPEG format

B/W: PDF/TIFF format

- Images output to a USB flash memory device or an SD memory card are saved as follows:

[Folder]

For UB-2815C: “UB-2815C”

For UB-2315C: “UB-2315C”

[File name]

MMDDHHxx.pdf (in the case of PDF file)

Sequential number (00-99)

Hour

Day

Month

[File Extension]

PDF file: “MMDDHHxx.pdf”

JPEG file: “MMDDHHxx.jpg”

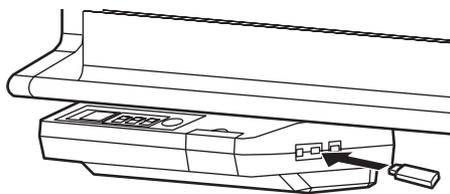
TIFF file: “MMDDHHxx.tif”

- For information regarding available USB flash memory devices, SD memory cards, and printers, refer to the following site:

http://panasonic.co.jp/pcc/products/en/eboard/ub-2815c_info.htm

Storing images on a USB flash memory device

- 1 Set the power switch to on (I).
 - The scanner will move to the home position and stop.
- 2 Connect the USB flash memory device to “USB Connector-A for USB Flash Memory Device”.



- When the USB flash memory device is connected, a USB flash memory icon will blink on the display. Once the unit recognizes the device, the icon will stop blinking. The display below is an example of the unit in standby mode.



Note

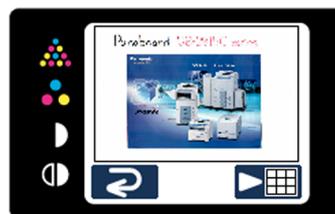
- You cannot use a USB flash memory device that is equipped with certain features such as a security feature.
- The time it takes for the unit to recognize a USB flash memory device depends on the file system of the device. Devices formatted using FAT (FAT16) will be recognized by the unit faster.

- 3 Press the Mode Key (I) to select the scanning mode.

- 4 Press the Start/Stop Key.
 - The unit starts scanning.
 - The scanning status is shown on the display.



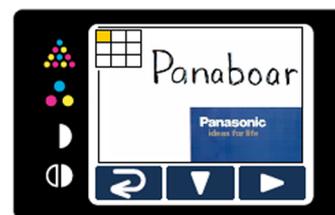
- When scanning has finished, a preview of the scanned image is shown on the display.



Note

- Do not remove the USB flash memory device until the preview is shown on the display.

- 5 Press the Multi-Copy Key (▶) to zoom in on the image.



- It is possible to view specific areas of the image.
- The current view area is shown on the top left side of the display. Press the Set-up Key (▼) to move down. Press the Multi-Copy Key (▶) to move left.
- Press the Mode Key (↻) to return to the preview.

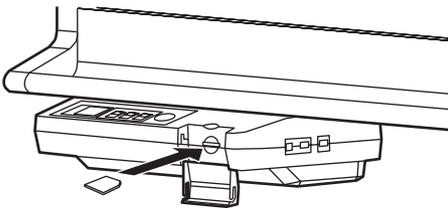
- 6 Press the Mode Key (↻) again to return to standby mode.

- Only remove the USB flash memory device once you have returned to standby mode.
- For information on saving files on a USB flash memory device, refer to page 14.

Scanning

Storing images on an SD memory card

- 1 Set the power switch to on (I).
 - The scanner will move to the home position and stop.
- 2 Open the SD memory card cover and insert the SD memory card into the SD memory card slot until it is locked. Then close the SD memory card cover.



- The SD memory card icon is shown on the display. The display below is an example of the unit in standby mode.



Note

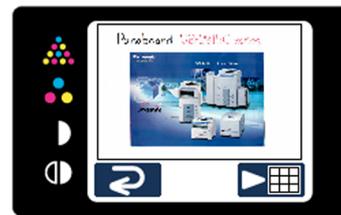
- If an SD memory card has been formatted (ex. by the general formatting software of a computer), it oftentimes cannot be recognized by this unit. To use the SD memory card with this unit, it must be reformatted to comply with SD memory card specifications using the appropriate formatting software. You can also download the formatting software for the SD memory card from the following site:
http://panasonic.co.jp/pavc/global/cs/sd/download/sd_formatter.html

- 3 Press the Mode Key (I) to select the scanning mode.

- 4 Press the Start/Stop Key.
 - The unit starts scanning.
 - The scanning status is shown on the display.



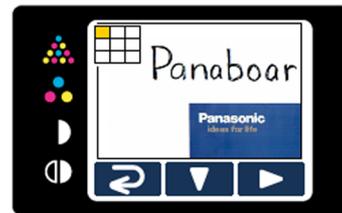
- When scanning has finished, a preview of the scanned image is shown on the display.



Note

- Do not remove the SD memory card until the preview is shown on the display.

- 5 Press the Multi-Copy Key (▶) to zoom in on the image.



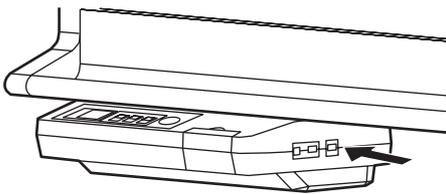
- It is possible to view specific areas of the image.
- The current view area is shown on the top left side of the display. Press the Set-up Key (▼) to move down. Press the Multi-Copy Key (▶) to move left.
- Press the Mode Key (↻) to return to the preview.

- 6 Press the Mode Key (↻) again to return to standby mode.

- Only remove the SD memory card once you have returned to standby mode.
- To remove the SD memory card, open the SD memory card cover and unlock the SD memory card by pressing it once. Once it is unlocked you may remove it.
- For information on saving files on an SD memory card, refer to page 14.

Printing with an external printer

- 1 Set the power switch to on (I).
 - The scanner will move to the home position and stop.
- 2 Turn the external printer on and load the paper.
- 3 Connect the external printer to “USB Connector-A for Printer” with a USB cable.



- The printer icon is shown on the display. The display below is an example of the unit in standby mode.



- 4 Press the Mode Key (M) to select the scanning mode.
- 5 Press the Multi-Copy Key (C) repeatedly to select the number of copies (1 to 9) to be printed.
- 6 Press the Start/Stop Key (S).
 - The unit starts scanning and the image is printed.
 - The copying status is shown on the display.
 - After printing is finished, the unit will return to standby mode.

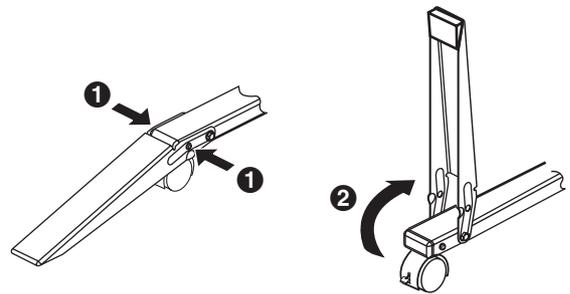


Note

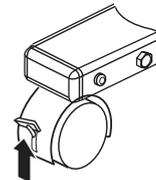
- Only remove the USB cable once you have returned to standby mode.

Moving the Electronic Board

- 1 Disconnect the power cord on both ends and coil it.
 - Make sure if there are any other devices connected to the unit. If so, disconnect them.
- 2 Release the lock (1) and fold back the fall-prevention extension legs (2) as follows:

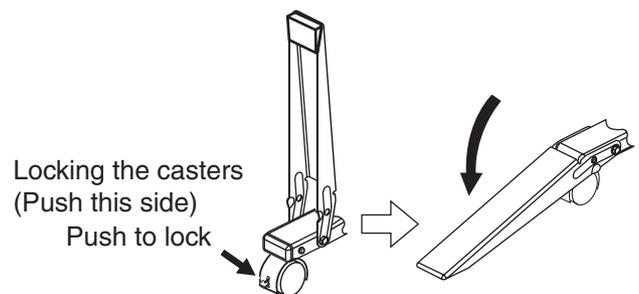


- 3 Release the caster locks and move the unit.



Releasing the lock

- 4 Lock the casters and set the fall-prevention extension legs.



- 5 Plug-in the power cord on both ends.

Rotating the Whiteboard

Rotating the Whiteboard

The whiteboard can be used on both sides.

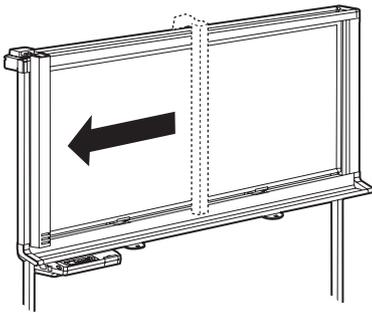
Caution

- Rotate the whiteboard carefully and slowly. Otherwise, a finger can get caught or the whiteboard may strike the person resulting in injury.
- When rotating or fastening the whiteboard, be careful not to get your fingers caught between the whiteboard and the stoppers as this may result in injury.
- After rotating the whiteboard, make sure that it is correctly fastened with the board stoppers. Otherwise, the whiteboard may turn unexpectedly, resulting in injury.

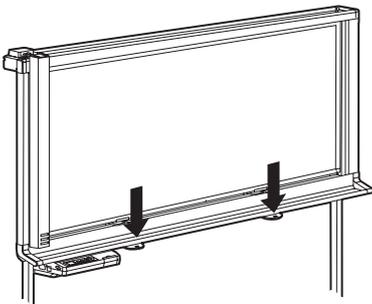
Note

- Be careful not to strike people or objects when rotating the whiteboard.
- The UB-2315C is equipped with one board stopper and one board stopper lever.

1 Move the scanner to the left side.

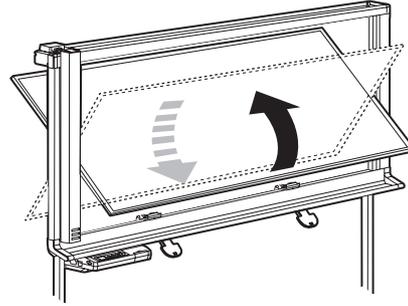


2 Unlock the whiteboard by pushing the board stopper levers down.



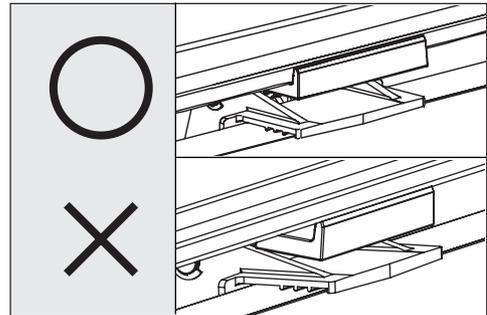
- Once the board stoppers are unlocked, it is possible to rotate the whiteboard.

3 Rotate the whiteboard slowly.



4 Push the board stopper levers up to lock the whiteboard.

- The Board Stopper moves up and it is possible to fix in place the whiteboard.
- Make sure that the whiteboard is locked correctly, as follows:

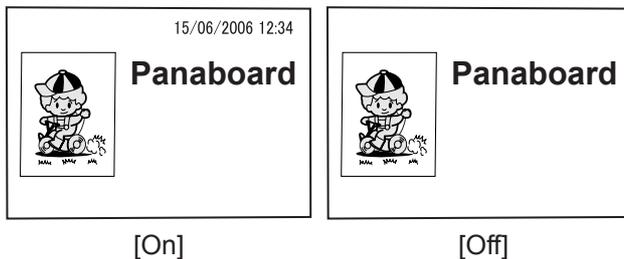


Setting the Unit

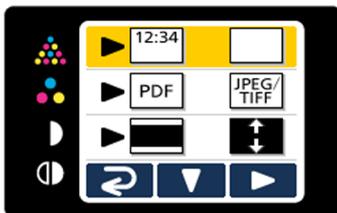
The following settings can be made using the control panel.

Setting for scanning time display

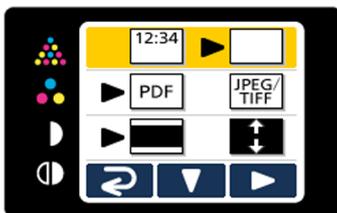
It is possible to select whether the time that an image is scanned is displayed on the image.



- 1 Press the Set-up Key .
 - The set-up screen is displayed.



- 2 Press the Multi-Copy Key () repeatedly to select  (On) or  (Off).
 - When the scanning time display is set to "off", the following screen is displayed.

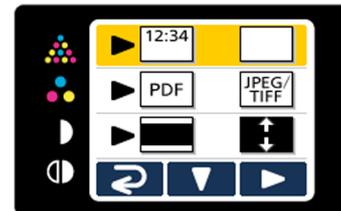


- 3 Press the Mode Key () to return to standby mode.

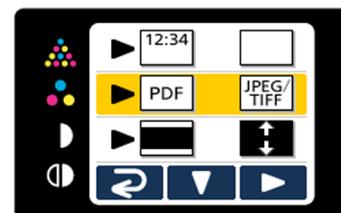
File format set-up

It is possible to select the file format for outputting images to a USB flash memory device or SD memory card.

- 1 Press the Set-up Key .
 - The set-up screen is displayed.



- 2 Press the Set-up Key () again.
 - File format set-up is selected.



- 3 Press the Multi-Copy Key () repeatedly to select  (PDF) or  (JPEG/TIFF).
 - When PDF is selected, all images are saved as PDF files.
 - When JPEG/TIFF is selected, images scanned in color are saved as JPEG files and images scanned in black and white are saved as TIFF files.
- 4 Press the Mode Key () to return to standby mode.

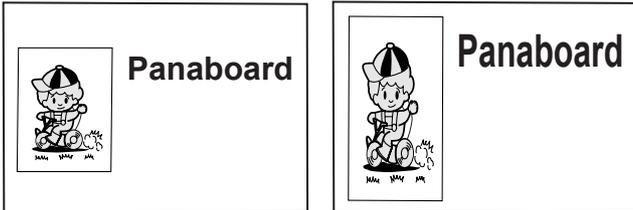
Note

- When JPEG/TIFF is selected, images will be rotated 90 degrees and saved. Use a graphic software to rotate the image back to the position it was displayed on the whiteboard.

Setting the Unit

Setting for Full Size Scanning (UB-2815C only)

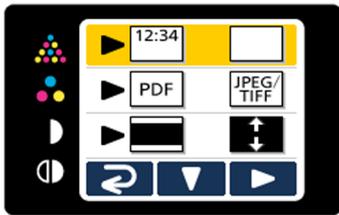
When images are scanned in full size mode, they are stretched and enlarged in order to utilize the entire space of a page.



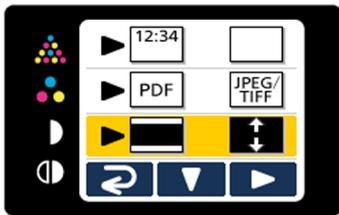
[Regular size]

[Full size]

- 1 Press the Set-up Key .
 - The set-up screen is displayed.



- 2 Press the Set-up Key (▼) twice.
 - Image size set-up is selected.

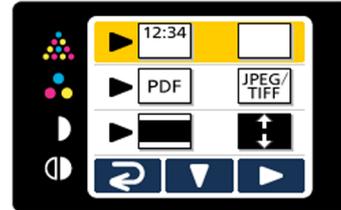


- 3 Press the Multi-Copy Key (▶) repeatedly to select (Regular) or (Full size).
- 4 Press the Mode Key (↶) to return to standby mode.

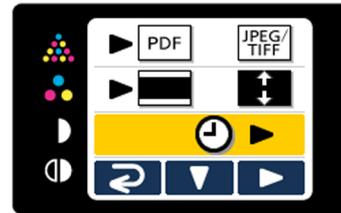
Setting the current time

It is possible to set the current time for the unit clock.

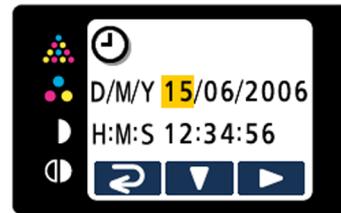
- 1 Press the Set-up Key .
 - The set-up screen is displayed.



- 2 For UB-2815C, press the Set-up Key (▼) 3 times. For UB-2315C, press the Set-up Key (▼) twice.
 - Time set-up is selected.



- 3 Press the Multi-Copy Key (▶).
 - The time set-up screen is displayed. Select the desired setting you wish to change by pressing the Multi-Copy Key (▶) repeatedly. The value of each setting can be changed by pressing the Set-up Key (▼).



- By pressing the Start/Stop Key repeatedly, it is possible to change the date format as follows:

“D/M/Y” → “M/D/Y” → “Y/M/D”

*D:Day / M:Month / Y:Year

- It is possible to change the time format using a computer. (See page 22.)

- 4 Press the Mode Key (↶) to set the time and return to standby mode.

Testing the Printer

By performing the Test Print feature, it is possible to clean the printer head from this unit when scanned images are not printed correctly (ex. certain areas appear blank).

Once the printer head is cleaned, the following pattern will be printed.

If the pattern is printed as shown below, the problem has been fixed. If the pattern is not printed as shown below, refer to the manual of the printer for details.

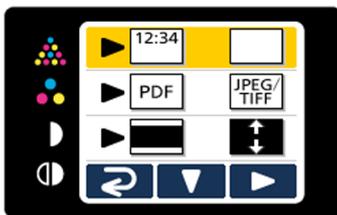


Note

- This item is only be displayed when an external printer is connected to the unit.

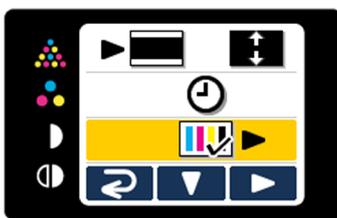
1 Press the Set-up Key ().

- The set-up screen is displayed.



2 For UB-2815C, press the Set-up Key () 4 times.
For UB-2315C, press the Set-up Key () 3 times.

- The Test Print feature is selected.



3 Press the Multi-Copy Key ().

- The printer head is cleaned and the pattern shown above is printed.

4 Press the Mode Key () to return to standby mode.

Computer Interfacing

Drivers and software must be installed in your computer to use the computer interfacing function.

System Requirements

Computer	IBM® PC/AT® or compatible machine with a CD-ROM drive
CPU	Pentium® II or higher processor
Interface	USB 2.0* ¹ or USB 1.1
OS	Windows 2000* ² / Windows XP* ³
Memory	128 MB or more (Windows 2000) 256 MB or more (Windows XP)
HDD	At least 100 MB free space (except saving space for data files)

*¹ This unit does not function with Hi-Speed USB 2.0. Even if using a computer equipped with Hi-Speed USB 2.0, this unit functions with Full Speed USB 2.0. (This unit will not run at the rated speed of Hi-Speed USB 2.0.)

*² Microsoft® Windows® 2000 operating system (hereafter Windows 2000)

*³ Microsoft® Windows® XP operating system (hereafter Windows XP)

Contents of CD-ROM

The provided CD-ROM includes the following.

- USB driver
- TWAIN driver
- Panasonic-DMS software
Panasonic Document Management System (Panasonic-DMS) uses the TWAIN driver to scan images drawn on the screen. The Panasonic-DMS has a capability of managing documents (image files).
- Panasonic-DMS manual
- Panaboard operating instructions

Note

- The “menu” window contains links to “SD memory card format software” and “Adobe Reader”. (See page 23.)

Notes when connecting the unit to a computer

- First install the USB and TWAIN driver to your computer, then connect the unit to the computer (refer to “Installing Drivers / Panaboard Software”).
- If you connect the unit to a USB hub, it is not guaranteed to work.
- Do not connect two or more Panasonic electronic boards to a computer. It may cause the computer operation to become unstable.
- Use a shielded USB cable that is certified as logo by USB-IF.

Installing Drivers / Panaboard Software

The USB and TWAIN driver and Panaboard Software are installed in your computer by following procedures.

Note

- Do not yet connect a USB cable to the unit.

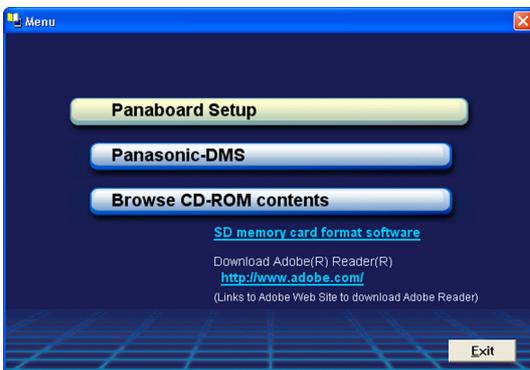
- 1 Power on your computer and start Windows*¹.
 - Log on as an administrator for Windows 2000 or Windows XP.

*¹ Microsoft® Windows® operating system (hereafter Windows)

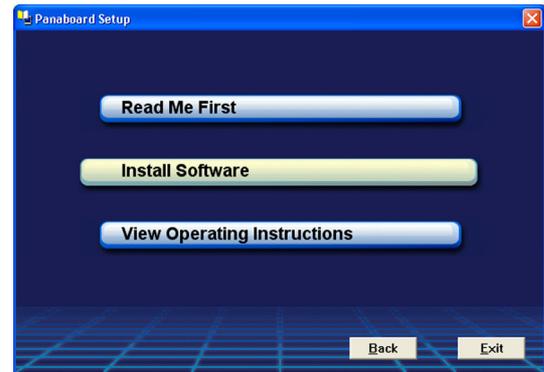
- 2 Insert the CD-ROM into the CD-ROM drive. The Setup window appears automatically.
 - Depending on the operating system or the settings that you are using, the Setup window may not appear automatically. In such a case, execute "Menu.exe" in the CD-ROM from "My Computer".

- 3 When "Welcome" window appears, click [Next].

- 4 Click [Panaboard Setup].
 - To install Panasonic-DMS, click [Panasonic-DMS] (see page 25).
 - To read the operating instructions in the provided CD-ROM, the Adobe Reader or Acrobat Reader must be installed in your computer. It can be downloaded from the Adobe's Web site if Internet is available.

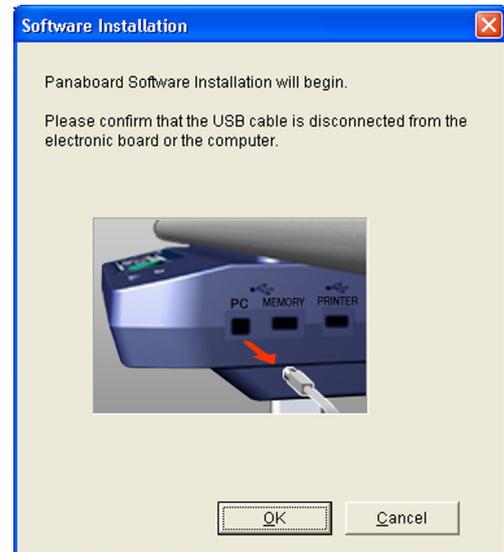


- 5 Click [Install Software].



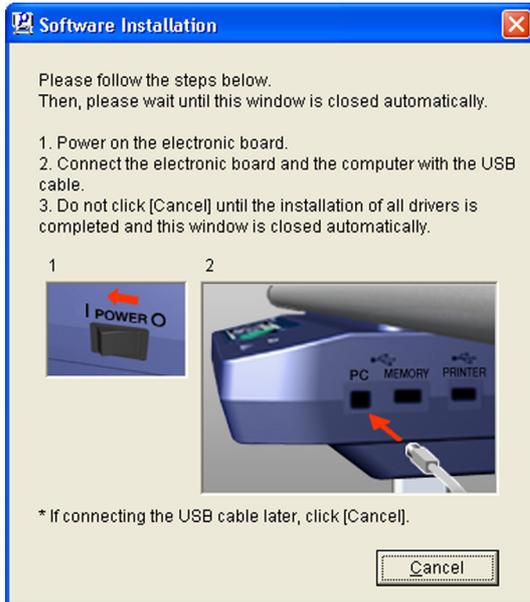
- 6 Read "END-USER LICENSE AGREEMENT" carefully and click [Yes].

- 7 When the following window appears, check that the unit is not connected to your computer and click [OK].
 - If the USB cable is connected to the unit, remove it and click [OK].



Computer Interfacing

- 8** When the following window appears after files are copied, power the unit on, and connect the USB cable to your computer.

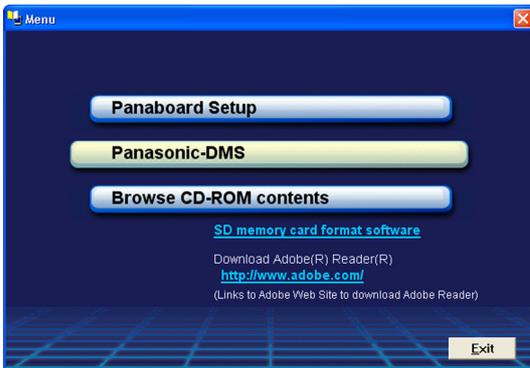


- 9** Follow the on-screen instructions if the wizard windows appear.
- If the wizard window is displayed to connect to the Windows Update in Windows XP SP2, select **[No]**.
 - If the warning window is displayed in Windows 2000 / Windows XP, select **[Yes]** or **[Continue Anyway]** to continue the installation.

- 10** When the installation is completed, click **[OK]**.

Installing the Panasonic-DMS Software

- 1 Power on your computer and start Windows.
 - Log on as an administrator for Windows 2000 or Windows XP.
- 2 Insert the CD-ROM into the CD-ROM drive. The Setup window appears automatically.
 - Depending on the operating system or the settings that you are using, the Setup window may not appear automatically. In such a case, double-click "Menu.exe" in the CD-ROM from "My Computer".
- 3 When "Welcome" window appears, click **[Next]**.
- 4 Click **[Panasonic-DMS]**.
 - To install the USB and TWAIN driver and Panasonic Software, click **[Panaboard Setup]** (see page 23).
 - To read the operating instructions in the provided CD-ROM, the Adobe Reader or Acrobat Reader must be installed in your computer. It can be downloaded from the Adobe's Web site if Internet is available.



- 5 Click **[Install Panasonic-DMS Software]**.



- 6 When wizard window appears, click **[Next]**.
- 7 Read "LIMITED USE LICENSE AGREEMENT" carefully, choose "I accept the terms of the license agreement.", and click **[Next]**.
- 8 Follow the on-screen instructions when messages appear.
- 9 When the setup process is completed, restart Windows.
 - About Panasonic-DMS, refer to the Document Management System operating instructions in the CD-ROM.

Removing Drivers / Panaboard Software

If you need to remove the USB and TWAIN driver and Panaboard Software, perform the following steps.

- 1** Power on your computer and start Windows.
 - Log on as an administrator for Windows 2000 or Windows XP.
- 2** Click **[Start]**, and then click **Control Panel** in **Settings**.
 - For Windows XP, click **[Start]**, and then click **Control Panel**.
- 3** Double-click **Add / Remove Programs** icon (Windows XP: **Add or Remove Programs**) in the **Control Panel**.
- 4** Select **Panaboard UB-2 Software** in the **Add / Remove Programs** list, and click **[Change / Remove]**.
- 5** Follows the instructions on the screen.
- 6** After uninstalling, restart your computer.

Removing the Panasonic- DMS Software

If you need to remove Panasonic-DMS, perform the following steps.

- 1** Power on your computer and start Windows.
 - Log on as an administrator for Windows 2000 or Windows XP.
- 2** Click **[Start]**, move the pointer to **Programs–Panasonic–Panasonic Document Management System–Uninstall**. (For Windows XP, **All Programs** instead of **Programs**.)
- 3** Click **[OK]**.
- 4** After uninstalling, restart your computer.

Scanning with the Panasonic-DMS

By using Panasonic-DMS, it is possible to scan handwritten text/diagrams or attached documents.

- 1** Click **[Start]** and select **Programs–Panasonic–Panasonic Document Management System–Document Manager**. (For Windows XP, **All Programs** is displayed instead of **Programs**.)
- 2** Click the **File** menu, then click **Select Source....**
- 3** Select **Panaboard UB-2 Series** and click **[Select]**.
- 4** Click the **File** menu, then click **Acquire Image...**, or click the (scanner) icon on the Toolbar.
 - The Panaboard Operation Panel appears.

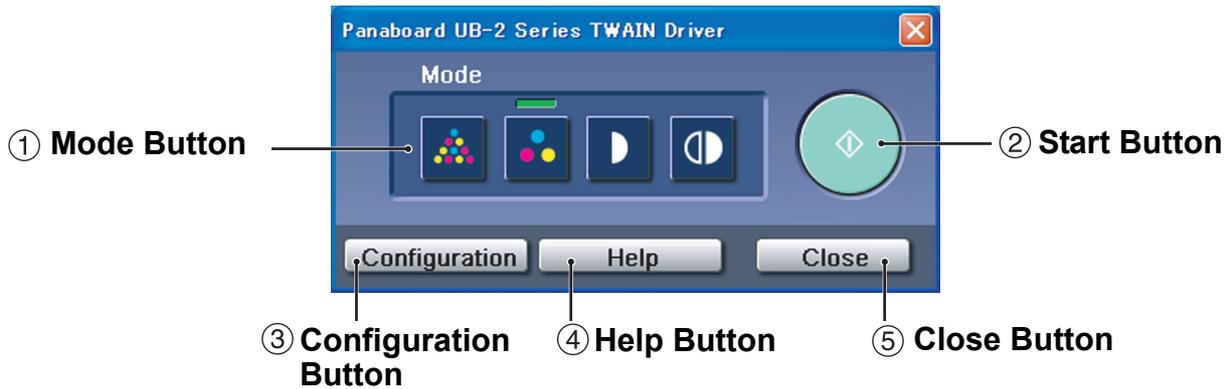


Note

- If the Panaboard Operation Panel does not appear, check the USB cable connection or the status of the unit.

- 5** Click the Start button.
 - Scanning begins and the scanned image will be displayed on the screen of the computer.
 - The dialog box for scanning is displayed. Click **[Stop Scanning]** to stop scanning.
- 6** Click **[Close]** on the Panaboard Operation Panel to end the session.
 - For more information on Panasonic-DMS, refer to the Document Management System Operating Instructions included in the CD-ROM.

Panaboard Operation Panel



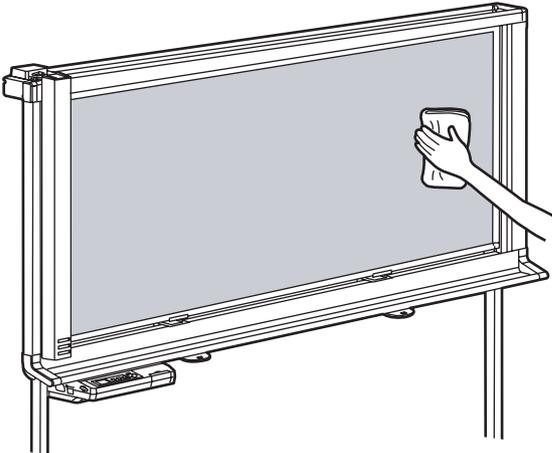
Name	Description
 <p>① Mode Button</p>	<p>Click to select the scanning mode.</p> <ul style="list-style-type: none">  Color-Fine: For scanning in high-resolution color. Recommended for scanning color documents.  Color-Standard: For scanning in normal-resolution color. Recommended for scanning handwritten text/diagrams written with a color marker.  B/W-Dark: For scanning black and white images to be darker than normal density.  B/W-Normal: For scanning black and white images with normal density.
 <p>② Start Button</p>	<p>Click to start scanning.</p>
 <p>③ Configuration Button</p>	<p>Click to set the following items:</p> <ul style="list-style-type: none"> • Embed time stamp in image: It is possible to select whether the time that an image is scanned is displayed on the image or not. If checked, the time is displayed on the image. • Scan/Copy in full-size: (UB-2815C only) If checked, images will be saved in full size mode. • Date and Time: Set the year, month, day, time for the unit clock. • Date order: The order in which the date is displayed can be selected from the following: Y/M/D, M/D/Y, D/M/Y * Y:Year / M:Month / D:Day • Time format: 12 hour or 24 hour can be selected. 
 <p>④ Help Button</p>	<p>Click to display help information.</p>
 <p>⑤ Close Button</p>	<p>Click to close the Panaboard Operational Panel.</p>

Daily Care and Maintenance

Always turn off the power switch and unplug the power plug when cleaning outside and inside the unit.

Cleaning the Whiteboard and the Unit

Gently wipe the whiteboard and unit with a water-dampened cloth that has been thoroughly wrung.

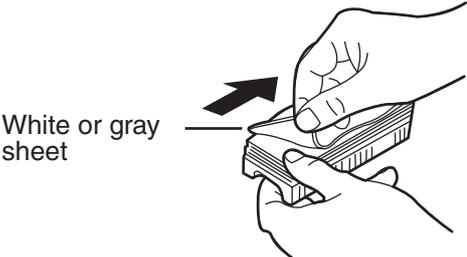


Note

- If you accidentally write on the whiteboard with an oil-based marker, wipe with a small amount of ethyl alcohol.
- Do not use thinner, benzine or cleaners containing abrasives or surfactants, as this may result in discoloration or difficulty of erasing.

Caring for the Eraser

When the erasing surface of the eraser becomes dirty, hold down the sheet under the top sheet with your finger and peel off the dirty sheet (white or gray sheet) by pulling in the direction of the arrow.



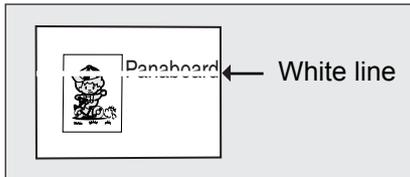
Note

- Be sure to peel off only one sheet; white or gray sheet of the eraser.
- When the eraser becomes thin, make sure that the corners of the eraser do not strike the whiteboard during erasing as this may damage the whiteboard.

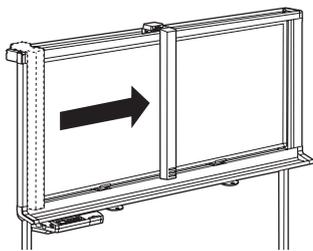
Daily Care and Maintenance

Cleaning the White Balance Area

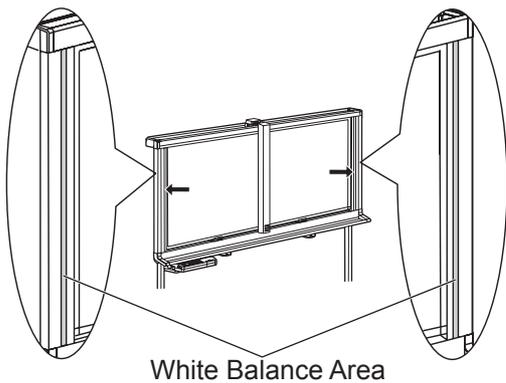
If white lines appear or the image is completely blank, clean the white balance area.



- 1 Move the scanner to the center of the white-board.



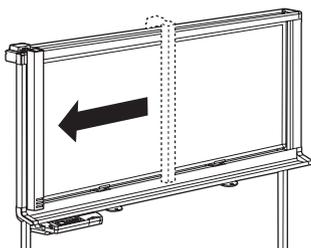
- 2 Gently wipe both sides of the white balance area with a water-dampened cloth that has been thoroughly wrung.



Note

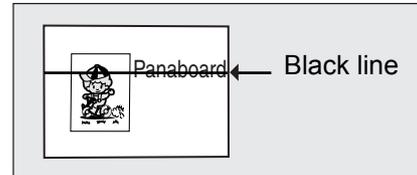
- Do not use thinner, benzene, or cleaners containing abrasives as this may result in discoloration.

- 3 Move the scanner to the home position.

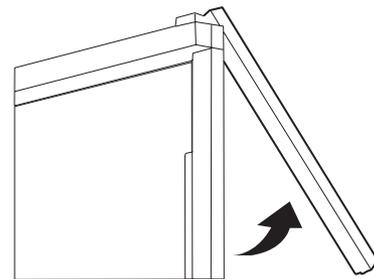


Cleaning the Scanner

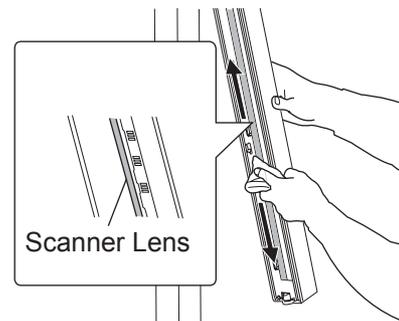
If black lines appear or the image is very dark, clean the scanner lens.



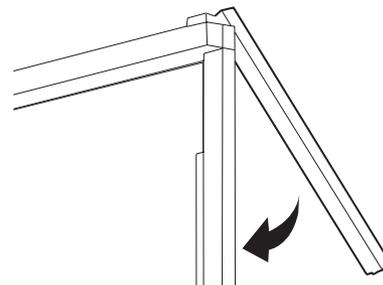
- 1 Lift the scanner.



- 2 Gently wipe the scanner lens with a water-dampened cloth that has been thoroughly wrung or a cotton swab.



- 3 Move the scanner to the home position.



Note

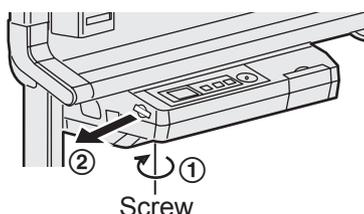
- Gently place the scanner back down. Dropping the scanner may result in injury or damage the unit.

Replacing the Battery for the unit clock

When the clock battery has been drained, the time set-up screen is displayed each time the unit's power is turned on.

Replace the battery as follows and set the current time (see page 20).

- 1 Loosen the screw attached to the lower side of the Control Panel ①, then remove the battery holder ②.

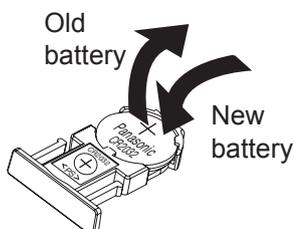


Caution

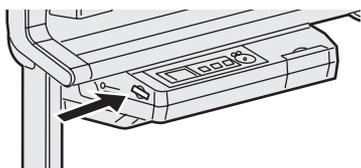
- Do not loosen any other screws.

- 2 Remove the old battery and install the new one with the positive (“+”) terminal upward.

- Always use “CR2032” batteries and be sure that the battery is inserted as indicated on the battery holder.



- 3 Set the battery holder with the battery side upward and retighten the screw in step 1.



- 4 Turn the power on and set the current time. (See page 20.)

For U.S.A

This product contains a CR Coin Cell Lithium Battery which contains Perchlorate Material - special handling may apply.

See www.dtsc.ca.gov/hazardouswaste/perchlorate

For Brasil



Após o uso as pilhas / baterias contidas neste produto poderão ser dispostas em lixo doméstico.

For Netherlands



Bij dit produkt zijn batterijen geleverd. Wanneer deze leeg zijn, moet u ze niet weggooien maar inleveren als KCA.

For Taiwan (台灣)



廢電池請回收

Troubleshooting

Troubleshooting

To identify error message that are displayed on the control panel, refer to “Error Codes” on page 34. The following table lists solutions to problems that you may have concerning this unit as well as tips in avoiding these problems in the future.

If problems still persist, call your dealer.

Issue	Solution and Care	See Page
The power switch is on but the display is off.	Confirm that the power plug is securely plugged in. (If the display still does not light, turn the power off and back on.)	–
It is difficult to erase text/diagrams written on the whiteboard.	<ul style="list-style-type: none"> • Wipe the whiteboard with a water dampened-cloth that has been thoroughly wrung. • Write letters and lines slowly. Letters and lines written fast cannot be erased as easily. • Erase text/diagrams after the ink has dried completely. • Do not use cleaners that contain a surface active agent. 	29
The USB flash memory device, SD memory card, or printer is not recognized.	<p>The USB flash memory device, SD memory card, or printer is not supported by this unit.</p> <p>→ For information regarding available USB flash memory devices, SD memory cards, and printers, refer to the following site: http://panasonic.co.jp/pcc/products/en/eboard/ub-2815c_info.htm</p> <p>The USB flash memory device or printer is connected via a USB hub.</p> <p>→ Do not connect via a USB hub.</p>	–
It takes a long time for the unit to recognize the USB flash memory device.	<p>The USB flash memory device is formatted using FAT32 file format.</p> <p>→ Format it using FAT (FAT16) file format.</p> <p>Note: All data on the USB flash memory device is lost when the USB flash memory device is formatted.</p>	–
When images are saved, they are rotated 90 degrees.	<p>Images saved as JPEG/TIFF are rotated 90 degrees.</p> <p>→ Use graphic software to rotate the image back to the position it was displayed on the whiteboard.</p>	–
Some text or certain parts of a diagram cannot be scanned.	<p>The letter is written outside the scannable area.</p> <p>→ Write the letters inside the scannable area.</p>	10
The scanned image is blank, thin or blurred.	<p>The writing on the whiteboard is too thin or light.</p> <p>→ Make thicker, darker lines or use a new marker.</p>	–
Black or white lines appear on the scanned image, or the scanned image is dark or blank.	<p>A magnet is attached to the white balance area.</p> <p>→ Remove the magnet from the white balance area.</p>	–
	<p>The white balance area is dirty.</p> <p>→ Clean the white balance area.</p>	30
	<p>The lens of the scanner is dirty.</p> <p>→ Clean the lens of the scanner.</p>	30
	<p>The unit is in strong sunlight or strong lighting.</p> <p>→ Change the location of the unit or block the light.</p>	–

Issue	Solution and Care	See Page
Printed images are thin or blank.	Perform the Test Print feature. If the problem still occurs: <ul style="list-style-type: none"> • The ink of the print cartridge is empty. → Change the print cartridge with a new one referring to the manual of the printer. • The nozzle of the print cartridge is dirty. → Clean the nozzle according to the manual of the printer. 	21
When the scanned image is printed, colors are shifted or blurred.	Adjust the alignment of the printer according to the manual of the printer.	–
When the unit's power is turned on, the time set-up screen is displayed.	The battery is drained. → Change the battery, then set time.	31
The computer does not recognize this unit.	Confirm that the USB cable is properly connected on both sides or put the unit into standby mode.	–
	This unit is connected via a USB hub. → Do not connect via a USB hub.	22
The USB driver does not work properly.	This unit has not been registered in [Control Panel] - [Scanner and Cameras]. → Uninstall the software (refer to “Removing Drivers / Panaboard Software” on page 26) and install the software again (refer to “Installing Drivers / Panaboard Software” on page 23.)	26 23

Troubleshooting

Error Codes

The following table describes the meaning of each error code which may appear on the display.

Error Code	Cause	Remedy	See Page
 U307035	Write-protection is set on the USB flash memory device.	Cancel the write-protection.	–
 U306035	Write-protection is set on the SD memory card.	Cancel the write-protection.	–
U307014 U307160 U407035	The following folders for storing images on the USB flash memory device are set to “read only”: for UB-2815C: “UB-2815C” for UB-2315C: “UB-2315C”	Change folder property to writable using a computer.	14
U306014 U306160 U406035	The following folders for storing images on the SD memory card are set to “read only”: for UB-2815C: “UB-2815C” for UB-2315C: “UB-2315C”	Change folder property to writable using a computer.	14
 U307010	There is no available space in the USB flash memory device.	Increase the available space using a computer.	–
 U306010	There is no available space in the SD memory card.	Increase the available space using a computer.	–
U307001 U307002 U307161	Unsupported USB flash memory device is connected.	<ul style="list-style-type: none"> You cannot use a USB flash memory device that is equipped with certain features such as a security feature. The time it takes for the unit to recognize a USB flash memory device depends on the file system of the device. Devices formatted using FAT (FAT16) will be recognized by the unit faster. 	37
U306001 U306002	Unsupported SD memory card is connected.	<ul style="list-style-type: none"> If an SD memory card has been formatted (ex. by the general formatting software of a computer), it oftentimes cannot be recognized by this unit. To use the SD memory card with this unit, it must be reformatted to comply with SD memory card specifications using the appropriate formatting software. You can also download the formatting software for the SD memory card from the following site: http://panasonic.co.jp/pavc/global/cs/sd/download/sd_formatter.html 	38

Error Code	Cause	Remedy	See Page
 U308002	There is no paper in the printer.	Add paper to the printer. Depending on the printer, it may be necessary to press the error cancellation button (ex. OK) on the printer after fixing the printer error. Refer to the manual of the printer for details.	–
U308003 U308004	There is a printer error.	Fix the printer error according to the printer manual.	–
U308001	Unsupported printer is connected.	Connect compatible printer.	37
U103021 ~ U103025 U403021 ~ U403025	White balance area is abnormal.	<ul style="list-style-type: none"> • Clean the White Balance Area. • If the unit is in strong sunlight or strong lighting, change the location of the unit or block the light. 	30
 U407010	The available space in the USB flash memory device became full while scanning.	Increase the available space using a computer, then scan again.	–
 U406010	The available space in the SD memory card became full while scanning.	Increase the available space using a computer, then scan again.	–
U307144	USB flash memory device writing error occurred.	Check whether the USB flash memory device is written normally using a computer.	–
U306144	SD memory card writing error occurred.	Check whether the SD memory card is written normally using a computer.	–
U407209	USB flash memory device was removed while scanning.	Connect the USB flash memory device, then scan again.	–
U406209	SD memory card was removed while scanning.	Connect the SD memory card, then scan again.	–
U408001	The USB cable connecting the printer and the unit was removed while copying.	Connect the USB cable for printer securely, then copy required number of sheets again.	–
U403011 U403012	Scanner does not move normally.	Check Scanner attachment.	–
U407208 U406208	The maximum value allowed for a sequential number (99) of the file name has been reached.	Transfer the image files in the following folder on the USB flash memory device or SD memory card to another location. for UB-2815C: “UB-2815C” for UB-2315C: “UB-2315C”	14

If other indications appear, call your dealer.

Specifications

Specifications

	Model No.	UB-2815C	UB-2315C	
General	Power supply	Refer to the name plate backside of the Control Box		
	Power consumption	Refer to the name plate backside of the Control Box		
	External dimensions (Height × Width × Depth)	1,858 mm × 2,014 mm × 1,207 mm (6' 1 ⁵ / ₃₂ " × 6' 7 ⁵ / ₁₆ " × 3' 11 ¹⁷ / ₃₂ ")	1,858 mm × 1,534 mm × 1,207 mm (6' 1 ⁵ / ₃₂ " × 5' 13 ¹³ / ₃₂ " × 3' 11 ¹⁷ / ₃₂ ")	
	Mass	39 kg (86 lbs.)	33 kg (73 lbs.)	
	Ambient operating conditions	Temperature: 10–30°C (50–86°F) Humidity: 30–80% RH		
	Ambient storage conditions	Temperature: -20–60°C (-4–140°F) Humidity: 15–80% RH		
	Display	1.8" Color LCD		
	Battery for Clock	Lithium Coin Battery (CR2032) × 1		
	PC interface	Full Speed USB 2.0 * *This unit does not function with Hi-Speed USB 2.0.		
	Input Block	Panel surfaces	2 steel whiteboard surfaces	
Panel dimensions (Height × Width)		869 mm × 1,781 mm (2' 10 ³ / ₁₆ " × 5' 10 ³ / ₃₂ ") [1,981 mm (78") diagonal]	869 mm × 1,300 mm (2' 10 ³ / ₁₆ " × 4' 3 ⁵ / ₃₂ ") [1,563 mm (62") diagonal]	
Scanning area (Height × Width)		797 mm × 1,720 mm (2' 7 ³ / ₈ " × 5' 7 ¹¹ / ₁₆ ")	797 mm × 1,240 mm (2' 7 ³ / ₈ " × 4' 13 ¹³ / ₁₆ ")	
Scanning system		Scanner movement scanning system using contact image sensors		
Writing implements		Dry erase felt-tipped markers (black, red and blue)		
Magnet thickness		7 mm (1/4") or less		
Scanning modes		Color-Fine / Color-Standard / B/W-Normal / B/W-Dark		
Scanning size		Standard-size / Full-size	– (Standard-size only)	

	Model No.	UB-2815C	UB-2315C
	Scanning resolution (Height x Width)	[Standard-size, A4] Color-Fine: 1.8 x 1.8 dot/mm (45 x 45 dpi) Color-Standard: 1.8 x 0.9 dot/mm (45 x 22 dpi) B/W: 1.8 x 1.8 dot/mm (45 x 45 dpi) [Standard-size, Letter] Color-Fine: 1.6 x 1.6 dot/mm (42 x 42 dpi) Color-Standard: 1.6 x 0.8 dot/mm (42 x 21 dpi) B/W: 1.6 x 1.6 dot/mm (42 x 42 dpi) [Full-size, A4] Color-Fine: 2.5 x 1.8 dot/mm (63 x 45 dpi) Color-Standard: 2.5 x 0.9 dot/mm (63 x 22 dpi) B/W: 2.5 x 1.8 dot/mm (63 x 45 dpi) [Full-size, Letter] Color-Fine: 2.6 x 1.6 dot/mm (65 x 42 dpi) Color-Standard: 2.6 x 0.8 dot/mm (65 x 21 dpi) B/W: 2.6 x 1.6 dot/mm (65 x 42 dpi)	[A4] Color-Fine: 2.4 x 2.4 dot/mm (62 x 62 dpi) Color-Standard: 2.4 x 1.2 dot/mm (62 x 31 dpi) B/W: 2.4 x 2.4 dot/mm (62 x 62 dpi) [Letter] Color-Fine: 2.3 x 2.3 dot/mm (58 x 58 dpi) Color-Standard: 2.3 x 1.1 dot/mm (58 x 29 dpi) B/W: 2.3 x 2.3 dot/mm (58 x 58 dpi)
	Scanning Time	Color-Fine: 48 s Color-Standard: 26 s B/W: 18 s	
Printer Output Block	Interface	Full Speed USB 2.0	
	Recommended Printer	Refer to the Internet home page*1	
	Support Printer Language	PCL 3 GUI	
	Paper size	A4/Letter*2	
	Print Resolution	300 dpi	
	Continuous Printing	1 to 9 sheets	
USB Flash Memory Device Output Block	Interface	Full Speed USB 2.0	
	Support Format	FAT (FAT16) format (Maximum capacity: 2 GB)	
	Recommended USB flash memory device	Refer to the Internet home page*1	
	Store File Format	Color scanning: PDF/JPEG B/W scanning: PDF/TIFF	

Specifications

	Model No.	UB-2815C	UB-2315C
SD Memory Card Output Block	SD specification	Version 1.10 * SD I/O standard is not supported.	
	Support Format	FAT16 format* ³ (Maximum capacity: 2 GB)	
	Recommended SD memory card	Refer to the Internet home page* ¹	
	Store File Format	Color scanning: PDF/JPEG B/W scanning: PDF/TIFF	

*¹ For information regarding available USB flash memory devices, SD memory cards, and printers, refer to the following site:

http://panasonic.co.jp/pcc/products/en/eboard/ub-2815c_info.htm

*² Letter size is for U.S.A. and Canada models.

*³ If an SD memory card has been formatted (ex. by the general formatting software of a computer), it oftentimes cannot be recognized by this unit.

To use the SD memory card with this unit, it must be reformatted to comply with SD memory card specifications using the appropriate formatting software.

You can also download the formatting software for the SD memory card from the following site:

http://panasonic.co.jp/pavc/global/cs/sd/download/sd_formatter.html

Separately Available Items

Separately Available Items	Markers:	KX-B031 (set of 10 black markers), KX-B032 (set of 10 red markers), KX-B033 (set of 10 blue markers)
	Erasers:	KX-B042 (set of 6 erasers)
	Marker and eraser set:	KX-B035 (contains one black, one red, and one blue markers and one eraser)

Installation Manual

(for qualified service personnel)

Table of Contents

	page
For Your Safety	40
Assembling the unit	41
●Accessories for assembling	41
●Assembly	42
Electronic Board Operations Check	46
Repacking	47

Before installing this set, please read this manual completely.

CLASS 1 LED PRODUCT

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.

 WARNING	Denotes a potential hazard that could result in serious injury or death.
 CAUTION	Denotes hazards that could result in minor injury or damage to the unit.
	This symbol is 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.

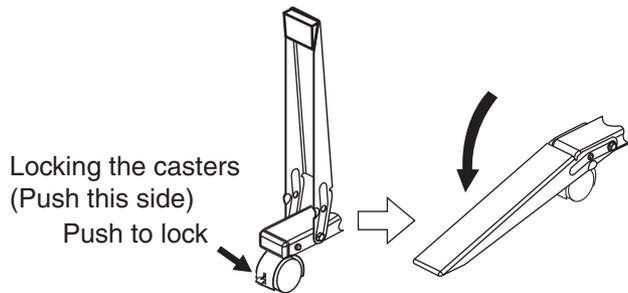
 **WARNING**

-  Safety check must be done by qualified service personnel after installing this unit.
-  Be sure to disconnect the power cord 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 or notes of labels on the cabinet, chassis or parts should be observed.
-  To ensure safe operation the power cord supplied must be inserted into a standard three-prong AC outlet which is effectively grounded (earthed) through the normal wiring.

 The fact that the equipment operates satisfactorily does not imply that the power point is grounded (earthed) and that the installation is completely safe. For your safety, if in any doubt about the effective grounding (earthing) of the power point, consult a qualified electrician.

 **CAUTION**

-  Do not install the unit except by a qualified service personnel.
-  After installing or moving the unit, lock the casters and set the fall-prevention extension legs.

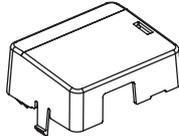


 Be sure to put on a glove to avoid electric shock or injury.

Assembling the unit

■ Accessories for assembling

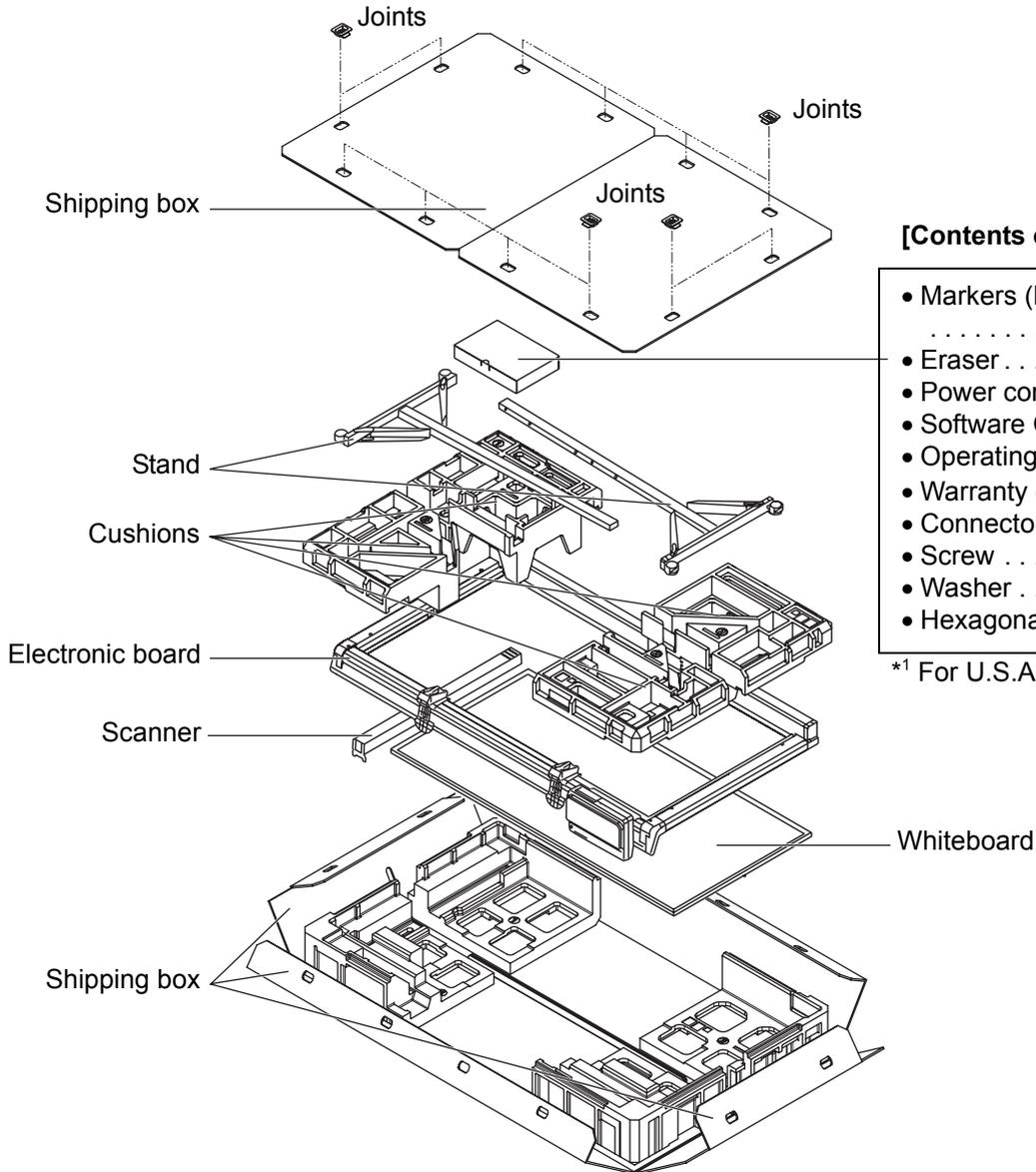
The package includes the parts for setting up the unit shown below. Make sure that all of these parts are included in the package before proceeding.

No.	Part Name	Illustration	Q'ty	Remarks
1	Power cord		1	
2	Connector cover		1	
3	Screw		4	
4	Washer		4	
5	Hexagonal wrench		1	

■ Assembly

1 First, lay the shipping box so that all joints are facing up. Then, remove the joints and the shipping box.

- UB-2815C has twelve joints.
- UB-2315C has ten joints.



[Contents of Accessory box]

- Markers (Black, Red, Blue) 1 each
- Eraser 1
- Power cord 1
- Software CD-ROM 1
- Operating Instructions. . 1
- Warranty card*¹ 1
- Connector cover 1
- Screw 4
- Washer 4
- Hexagonal wrench 1

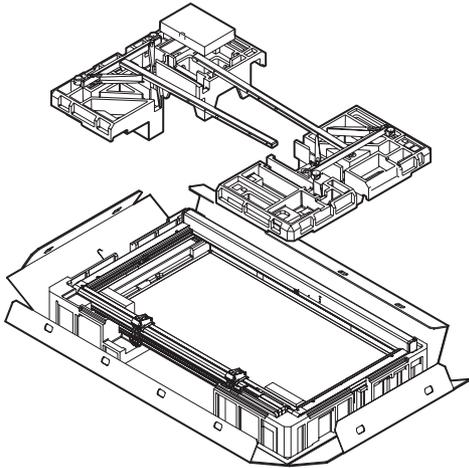
*¹ For U.S.A. models only.

* This is a diagram of the UB-2815C.
 UB-2315C is equipped with one board stopper and one board stopper lever.

Caution

- The shipping box, cushioning material, and other packing material will be necessary for repackaging this unit. Do not throw them away.

2 Remove the accessory box, two stands and four cushions (upper).

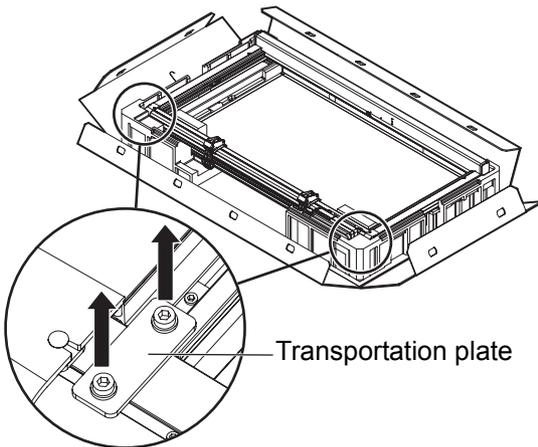


Note

- Be careful not to damage the whiteboard.

3 Remove the two transportation plates.

Remove the two screws using the hexagonal wrench, and remove the transportation plate. In the same way, remove the other side transportation plate.

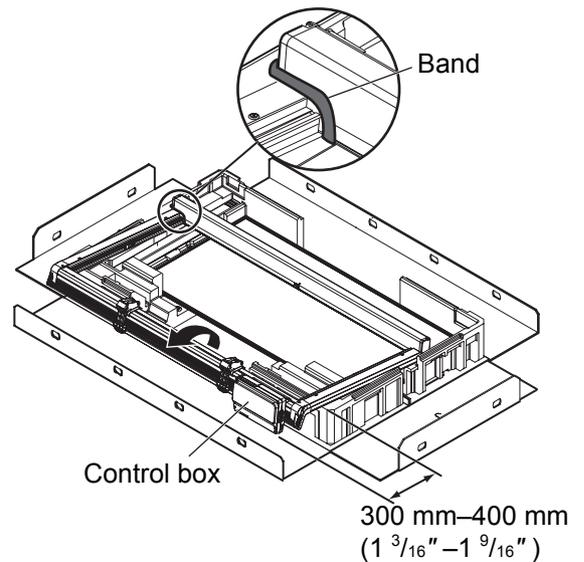


Note

- Can not attach the stands without removing the transportation plates.

4 Put the unit on the cushions (lower).

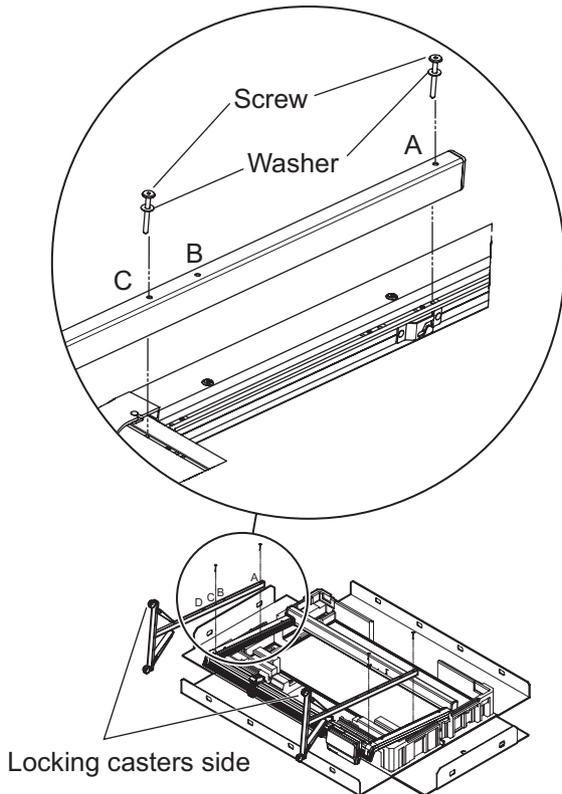
- 1) Lift the bottom (control box side) of the unit frame, and shift it 300 mm ($1\frac{3}{16}$ ") to 400 mm ($1\frac{9}{16}$ ") and place it on the cushion (lower).
- 2) Remove the band holding the slider in.



5 Attach the stands to the unit.

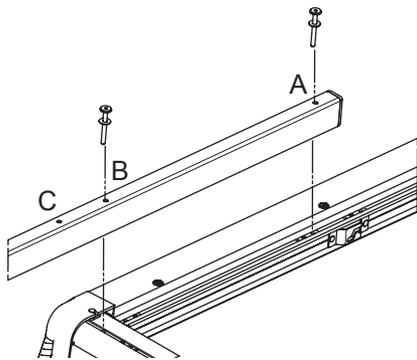
Each stand has four holes (A, B, C, D).

- 1) Attach the stand to the unit with the locking caster up.
- 2) When attaching the unit to the stand at normal height (1,858 mm [6' 1 ⁵/₃₂"]), tighten the two screws with washers using the hexagonal wrench through holes A and C.



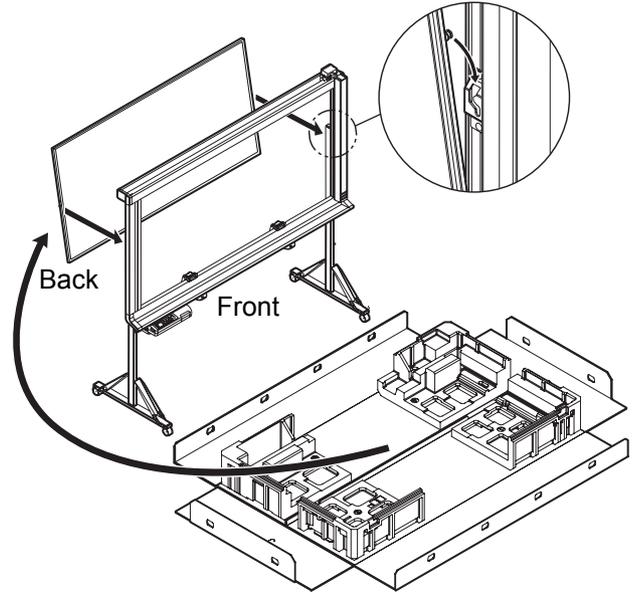
Note

- By tightening the two screws with washers through holes A and B, the unit will be positioned 100 mm (3 ¹⁵/₁₆") higher than normal height (1,958 mm [6' 5 ⁵/₃₂"]).



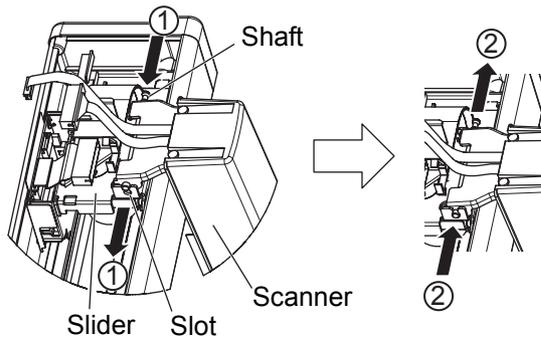
6 Stand the unit up and attach the whiteboard.

- 1) Stand the unit up.
- 2) Attach the whiteboard from behind by inserting the metal spindle of the whiteboard in the slot inside the frame of the unit.

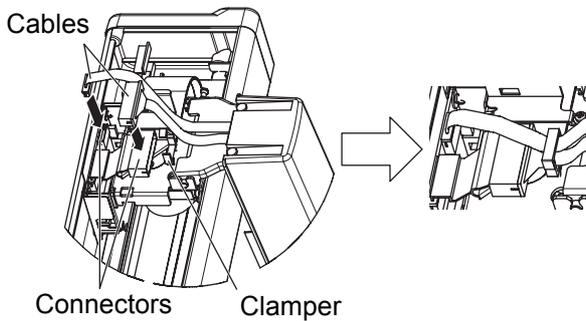


7 Attach the scanner to the unit.

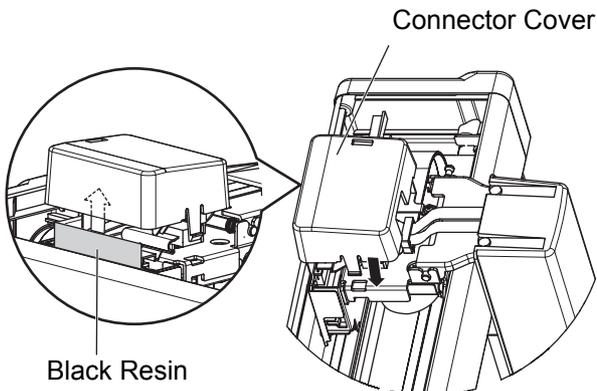
- 1) Take the scanner out.
- 2) Align the shaft of the scanner with the slot of the slider and push the shaft in the direction of the arrow ① shown in the figure allowing the narrow part of the shaft to fit in the slot. Fit the shaft in the slot and return the shaft to the original position ② until it is locked into place.



- 3) Connect both cables to the corresponding connectors. Secure both cables using the clamper.

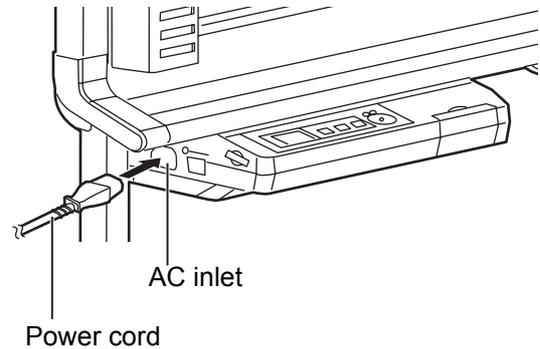


- 4) Attach the connector cover with the black resin inside the cover.



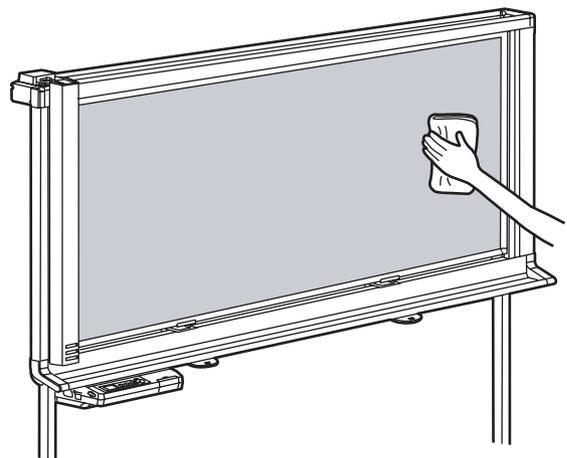
8 Connect the power cord.

Securely fit the supplied power cord in the AC inlet of the control box.

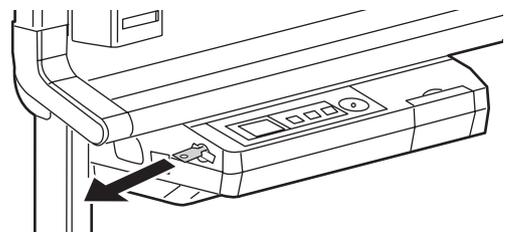


9 Wipe the whiteboard surfaces.

Soak a soft cloth with water, wring well, and wipe the whiteboard surfaces.



10 Remove the battery protection sheet.



11 Check operations.

Refer to “Electronic Board Operations Check” on page 46.

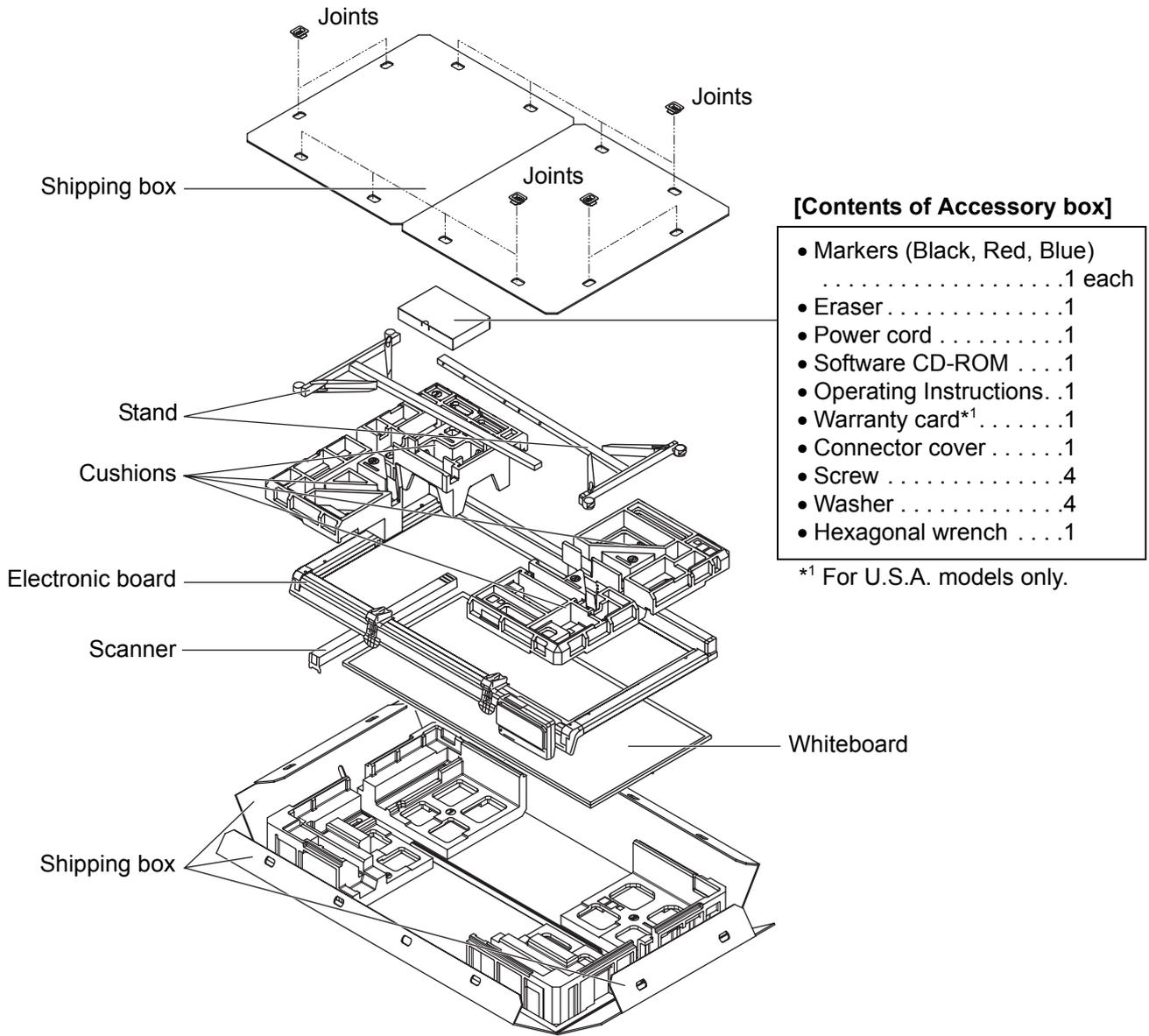
Electronic Board Operations Check

After assembling the unit, perform the procedures presented in the following table to make sure it functions properly.

Step		Points to Check	
		Condition	Solutions
1	Turn the power switch on.	Time set-up message is displayed after initial message is displayed.	(Normal operation)
		(If not)	Check the power cord. (See step 8 on page 45.)
2	Set the time. (Refer to "Setting the current time" on page 20.)	The time can be set.	(Normal operation)
		The time cannot be set.	Contact the store or dealer from which the unit was purchased.
3	Connect a USB flash memory device or SD memory card. (Refer to "Scanning" on page 14.)	The USB flash memory device or SD memory card installed is recognized and is shown on the display.	(Normal operation)
		(If not)	Contact the store or dealer from which the unit was purchased.
4	① Use the accessory marker to draw a large  across the entire scannable area of the whiteboard surface. • For information on the scannable area, refer to "Whiteboard" on page 10. ② Press the Start/Stop key.	The scanner moves smoothly and the scanned image appears on the display.	(Normal operation)
		The scanner does not move smoothly.	Check the connector. (See step 7 on page 45.)
		A strange noise is made.	Check the scanner attachment. (See step 7 on page 45.)
		The scanned image is not displayed.	Contact the store or dealer from which the unit was purchased.
		The entire scannable area is not scanned.	
5	Zoom in on several areas of the scanned image. (See page 15 or 16.)	The image on the display matches the image on the whiteboard.	(Normal operation)
		A black or white horizontal line appears on the scanned image, or the image scanned is dark or blank.	Check the white balance area, scanner lens and strong lighting. (Refer to "Troubleshooting" on page 32.)
6	Rotate the whiteboard. (Refer to "Rotating the Whiteboard" on page 18.)	The whiteboard can be rotated normally.	(Normal operation)
		The whiteboard cannot be rotated.	Check the whiteboard attachment. (See step 6 on page 44.)
7	Turn off the power switch, then turn back on after 3 minutes.	The standby message is displayed after the initial message is displayed.	(Normal operation)
		The time is not correct.	Check the battery. (See page 31.)

Repacking

Perform Assembly Steps 2 through 8 on pages 43 - 45 in reverse to repack the unit and accessories. Use the joints to fasten the shipping box.



* This is a diagram of the UB-2815C.
 UB-2315C is equipped with one board stopper and one board stopper lever.

Information on Disposal for Users of Waste Electrical & Electronic Equipment (private households)



This symbol on the products and/or accompanying documents means that used electrical and electronic products should not be mixed with general household waste.

For proper treatment, recovery and recycling, please take these products to designated collection points, where they will be accepted on a free of charge basis. Alternatively, in some countries you may be able to return your products to your local retailer upon the purchase of an equivalent new product.

Disposing of this product correctly 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. Please

contact your local authority for further details of your nearest designated collection point.

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

This symbol is only valid in the European Union.

If you wish to discard this product, please contact your local authorities or dealer and ask for the correct method of disposal.

Panasonic Digital Document Company,
Unit of Panasonic Corporation of North America
One Panasonic Way, Secaucus, New Jersey 07094

Panasonic Canada Inc.
5770 Ambler Drive, Mississauga, Ontario, L4W 2T3

Panasonic Business Systems U.K.
A Division of Panasonic U.K. Ltd.
Willoughby Road, Bracknell, Berkshire, RG12 8FP

Panasonic Marketing Europe GmbH
Hagenauer Strasse 43
65203 Wiesbaden, Germany

Matsushita Electric Industrial Co., Ltd.
<http://panasonic.net>

