

PN-ZB03W

WIRELESS BOARD OPERATION GUIDE

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About this manual

- The screens and procedures are examples. The contents or details may vary depending on the screen configuration and OS version, etc. Windows 7 is used as an example in this manual.
- · This manual does not contain basic operating instructions for Windows and Mac OS.

Trademarks

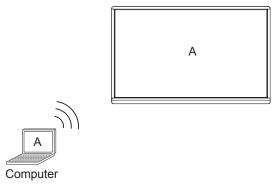
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Introduction

Please update to the latest version of the firmware. Use the Information Display Downloader on the CD-ROM to download the firmware, and run the update with "Admin" – "Firmware Upgrade" – "Firmware Upgrade". (See page 31.)

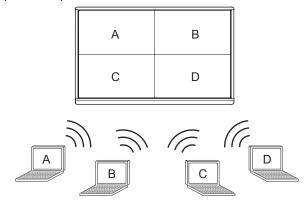
■ Wireless

- On the monitor fitted with wireless board you can display a screen of a computer that is connected to the same network as the wireless board.
- · You can display the screen by wireless LAN.



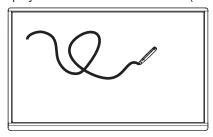
■ Simultaneous display

• You can display the screens of up to 4 computers at once.



■ Direct Drawing (touch-applicable models only)

- You can use the monitor as a white board. (See page 34.)
- Using a touch pen, you can write on the displayed screen in Wireless mode. (See page 25.)



■ Conference control mode

· A conference admin can be designated to manage which computer screens are displayed. (See page 22.)

■ WebSlides

• The screen that is displayed in Wireless mode appears in the web browser of the computer that is connected to the wireless board. (See page 23.)

Caution

• To keep the performance of the wireless board stable, put the monitor in the Power off (Standby mode) state once a day.

TIPS

- · You can connect up to 10 devices to the wireless board.
- The wireless LAN communication range is about 10 m.

In the following cases, the communication speed may slow down or communication may not be possible.

- An obstacle is present
- Interference occurs with another wireless device using the same frequency
- Electromagnetic interference occurs due to the magnetic field or static electricity of a microwave oven or other device
- When the transmission speed is slow, appears.
- The monitor may reboot due to external load noise, static electricity, or other factors. This will break the wireless connection between the wireless board and computer, so in this event, you will need to reestablish the connection.
- The computer screen information is sent to the wireless board and displayed on the monitor.
 For this reason, there may be a delay in the display or it may not be possible to display the screen correctly.
 Correct operation may not be possible from some applications.

Preparations

Connect the wireless board to your computer.

After connecting, configure wireless board settings if needed to connect to an existing network. For details, consult your network administrator.

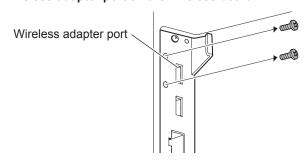
Caution

• Due to legal restrictions, the wireless board cannot be connected to a public wireless LAN access point.

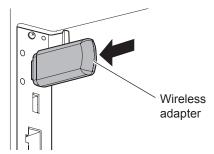
■ Connecting the wireless adapter

To connect your computer by wireless, install the wireless adapter (supplied) on the wireless board.

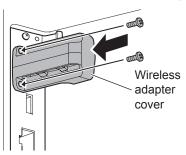
1. Remove the screw next to the wireless adapter port on the wireless board.



2. Insert the wireless adapter (supplied) into the wireless adapter port.

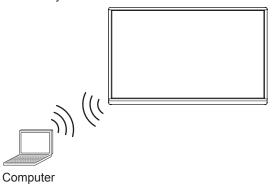


3. Attach the wireless adapter cover (supplied), and fasten with the screw you removed in step 1.



■ Connecting only the wireless board and the computer

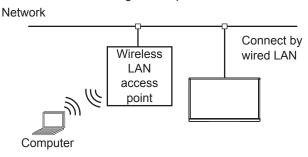
Directly connect the wireless board and the computer by wireless LAN. When connecting for the first time, connect directly as well.



■ Connecting the wireless board to an existing network by wired LAN

If an access point already exists:

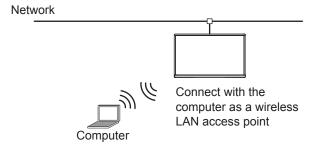
Connect the wireless board to the existing network by wired LAN. Connect the computer to the wireless board from an existing access point.



• Set the wireless board appropriately for the existing network.

If there is no access point:

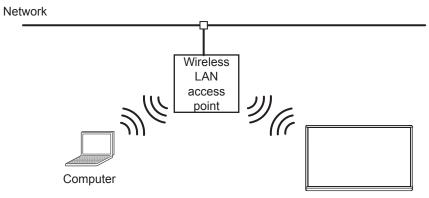
Connect the wireless board to the existing network by wired LAN. Connect the computer to the access point of the wireless board.



- Set the wireless board appropriately for the existing network.
- Set the wireless board to access point mode.
- * The wireless LAN access point function of the wireless board cannot be used when the monitor power is off.

■ Connecting the wireless board to an existing network by wireless LAN

Connect the wireless board and computer to an access point of the existing network by wireless LAN.



Connect to the wireless LAN access point

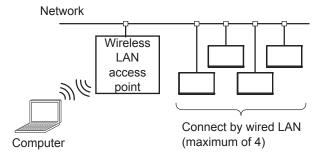
- · Set the wireless board appropriately for the existing network access point.
- Set the wireless board to client mode. (See page 30.)

■ Using an existing network access point to display the screen of 1 computer on multiple monitors

You can display a screen on up to 4 monitors.

Connect the wireless board to the existing network by wired LAN.

Connect the computer to the wireless board from an existing access point.



• Set the wireless board appropriately for the existing network.

LCD monitor operation

■ Wireless settings

You can change the settings below in "COMMUNICATION SETTING" of the SETUP menu. Depending on the monitor, some menu items may not appear.

WIRELESS SETTING

WIRELESS FUNCTION.....Set whether or not the wireless board's wireless LAN is used.

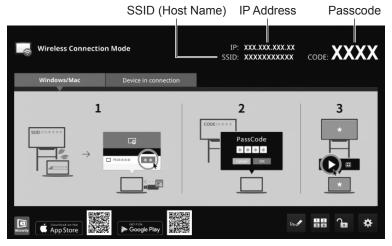
Even when this is set to OFF, the LAN terminal of the wireless board can be used.

* When the setting is changed, the monitor restarts.

CONNECT AUTO INPUT SELECT... Set whether or not the input mode automatically changes to OPTION when a video signal is input via the wireless board.

■ Change the monitor to OPTION mode

To use the wireless board, change the input mode to OPTION. The home screen of Wireless mode appears.



* Some icons do not appear on models that are not touch-applicable. (See page 15.)

TIPS

- · When the power is in the off state, the wireless LAN access point function of the wireless board cannot be used.
- Even if LOGO SCREEN is set to OFF in the OTHERS menu, the "MirrorOp" logo is displayed when the OPTION input mode changes.
- The following functions cannot be set in the Wireless Board.
 HDMI AUTO VIEW, HOT PLUG CONTROL
- · When you first display the home screen after installing the wireless board, the wireless board may restart.

Connect the computer to the wireless board

Directly connect the computer to the wireless board.

When using a different method, connection is necessary as well to change the settings from the factory default settings. In addition, read your computer's manual.

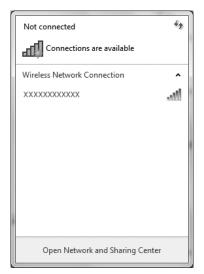
TIPS

• The factory default setting for the wireless board's wireless LAN is 2.4 GHz.

■ Windows

- 1. Click ill on the taskbar.
- 2. Select the wireless board from the wireless network list.

The SSID of the wireless board is shown in the home screen of Wireless mode.



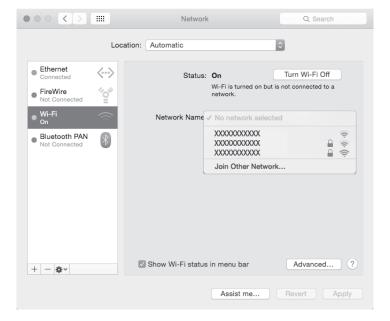
Caution

• The factory default setting for wireless LAN security is not enabled. For security, set "Encryption" (encryption method) and a "Key". (See page 11.)

■ Mac OS

- 1. Click "System Preferences" from the Apple menu ().
- 2. Click "Network".
- 3. Click "Wi-Fi" and select the wireless board from the wireless network list.

The SSID of the wireless board is shown in the home screen of Wireless mode.



Caution

• The factory default setting for wireless LAN security is not enabled. For security, set "Encryption" (encryption method) and a "Key". (See page 11.)

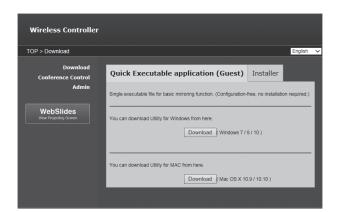
■ Security and key settings

For wireless LAN security, set "Encryption" (encryption method) and a "Key".

TIPS

- A security warning may appear in some web browsers. Follow the instructions in the web browser and continue the procedure.
- 1. Start the computer's web browser.
- 2. Enter the IP address shown on the home screen of Wireless mode in the address bar of the web browser.

 The settings screen appears.



- 3. Click "Admin".
- 4. Enter the password and click "Login".

The default password is "admin".

- 5. Click "WLAN Setup".
- 6. Set "Encryption" and a "Key".
- 7. Click "Apply".
- 8. Click "OK".

Restart the wireless board.

Connect the computer to the wireless board. (See pages 9 or 10.)

For the security key, specify the key that you set in the above.

MirrorOp for SHARP preparations

To display the computer screen on the monitor by wireless LAN, connection software (MirrorOp for SHARP) is required. The connection software is in the wireless token.

First read the software license agreement.

To use the connection software, you must agree to the software license agreement. For the software license agreement, refer to the file below in the wireless token.

\Installer\EULA-EN.txt

There are 2 methods for using the connection software:

- · Use the connection software in the wireless token
- Install the connection software on the computer to be used from the wireless token For example.
- · On computers that are not used frequently, you can use the connection software in the wireless token
- · On frequently used computers, you can install the connection software

TIPS

- To use multi-touch on touch-applicable models, use the connection software you installed.
- If you want to use a token for multiple computers at the same time, you can enable starting of the connection software from a commercially available USB flash drive. (See page 32.)

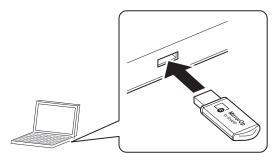
■ Connecting the wireless token

No preparations are needed. Start the connection software from the wireless token. (See page 13.)

■ Installing the connection software from the wireless token (Windows)

Caution

- · This can only be done by a user with administrator authority.
- 1. Connect the wireless token to the computer.



2. Double-click the setup program in the wireless token.

\Installer\Windows installer\SHMirrorOp_Win_inst.msi

- 3. Follow the on-screen instructions.
 - When the "User Account Control" screen appears, click "Yes" (or "Allow").
 - · When a security warning screen (The publisher could not be verified.) appears, click "Allow".

This completes the connection software installation procedure.

Next, start the connection software.

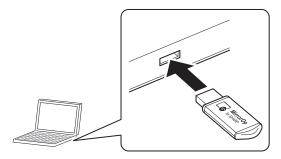
TIPS

• The connection software can also be downloaded from the wireless board to the computer. (See page 28.)

■ Installing the connection software from the wireless token (Mac OS)

Caution

- To install, an administrator name (user name) and password are required.
- 1. Connect the wireless token to the computer.



2. Double-click the installation file in the wireless token.

\Installer\Mac installer\SHMirrorOp_Mac.dmg

3. Drag the "SHMirrorOp_Mac.app" icon to the "Applications" folder.

Follow the on-screen instructions.

- If a screen prompting you to enter the name and password appears, enter the name and password of the administrator and click "Install Software" (or "OK").
- If the "When this software finishes installing, you must restart your computer. Are you sure you want to install the software now?" screen appears, click "Continue Installation".

This completes the connection software installation procedure.

Next, start the connection software.

TIPS

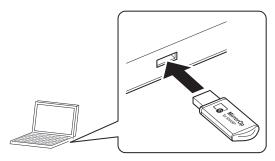
- The connection software can also be downloaded from the wireless board to the computer. (See page 28.)
- In some cases it may be necessary to install Sound Flower.pkg or Extend desktop.pkg.

Start MirrorOp for SHARP

Start the connection software (MirrorOp for SHARP) on the computer, and connect to the wireless board.

■ Starting from the wireless token

1. Connect the wireless token to the computer.



2. Windows: Double-click "SHMirrorOp_Win.exe" in the Autoplay screen.

If the Autoplay screen does not appear, open the wireless token and double-click "SHMirrorOp Win.exe".

Mac: Open the wireless token and double-click "SHMirrorOp_Mac.app".

The connection software starts.



3. Click "=", select the wireless board to be connected, and click "CONNECT".

The host name of the wireless board is shown in the home screen of Wireless mode.

4. Enter the passcode and click "OK".

The passcode is shown in the home screen of Wireless mode.

The computer connects to the wireless board.

■ Starting from the installed/downloaded software

1. Double-click "MirrorOp for SHARP".

The connection software starts.



2. Click "=", select the wireless board to be connected, and click "CONNECT".

The host name of the wireless board is shown in the home screen of Wireless mode.

3. Enter the passcode and click "OK".

The passcode is shown in the home screen of Wireless mode.

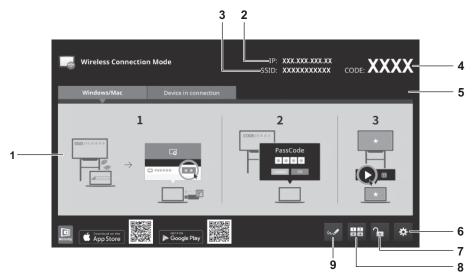
The computer connects to the wireless board.

TIPS

• The passcode changes for security.
You can change the settings to make the passcode permanent, or connect without entering the passcode. (See page 28.)

Wireless mode screen

In the home screen that appears on the monitor in Wireless mode, you can select computers to be connected and set various functions.



- 1. Shows how to connect to the wireless board.
- 2. Shows the IP address of the wireless board.
- 3. Shows the SSID (Host Name) of the wireless board.
- 4. Shows the passcode.

The following items only appear on touch-applicable models.

- 5. Show a list of the connected computers.
- 6. You can change the language used in the wireless board screen.
 You can enable starting of the connection software from a commercially available USB flash drive. (See page 32.)
- 7. Specify whether or not a screen is displayed on the monitor by computer operation. The selection changes each time you touch this.
 - Prohibit screen display by operation from another computer
 - : Allow screen display by operation from another computer
- 8. You can display the screens of up to 4 computers at once.
- 9. Displays the whiteboard (Direct Drawing) screen. *
 - * This icon will be added when the wireless board firmware is updated. (See page 31.)

Displaying the computer screen

Operation from the monitor (touch-applicable models only)

■ Displaying the screen

Select the computer to be displayed from the computers that are currently connected to the wireless board.

1. Touch "Device in connection" in the home screen of Wireless mode.

A list of the currently connected computers appears.

2. Touch the computer to be displayed.

The screen of the computer is displayed on the monitor.



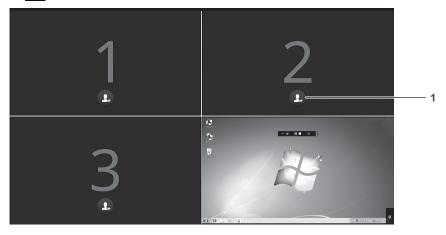
Toolbar (See page 25.)

■ Displaying multiple screens at once

You can display the screens of up to 4 computers at once.

The monitor screen is divided into 4 partitions, and you can select the computer that appears in each partition.

1. Touch "Split Screen" $(\frac{12}{34})$ in the home screen of Wireless mode.



1. Add User

The computers that are currently connected appear. Select the computers to be displayed.

Operation from the connection software

Operate from the connection software on the computer whose screen is displayed.

TIPS

- Screen display by operation from the computer must be allowed. ()
- On touch-applicable models, you can also operate by touching the screen on the monitor.

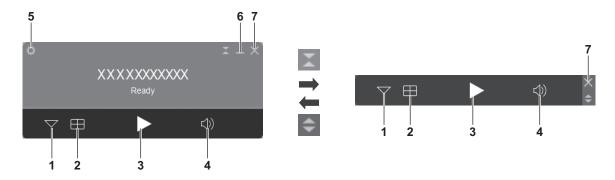
1. Click "Play" () in the connection software.

The screen of the computer is displayed on the monitor.



Toolbar (See page 25.)

* Only appears when touchapplicable model is used.



1.

Wireless boards found from the computer appear. (See page 19.)

- 2. Split Screen
 - Set 4-screen display.
- 3. Play

The screen of the computer is displayed on the monitor.

During screen display, "Stop" (☐) and "Pause" (☐) appear.

Mute

Mute the audio of the currently connected device.

Click when the audio is muted to unmute.

5. Menu

Preferences : Configure settings for the connection software. (See page 20.) Capture & Save screen : Save the screen as an image file (JPEG). (See page 21.)

Disconnect : Break the connection with the wireless board.

About : Display the version and license information of the connection software.

Quit : Exit the connection software.

6. Minimize

Minimize the operation screen.

7. Close

Exit the connection software. (See page 27.)

■ Stopping the display

You can stop display of the computer screen on the monitor.

1. Click "Stop" ().
Return to Wireless mode screen.

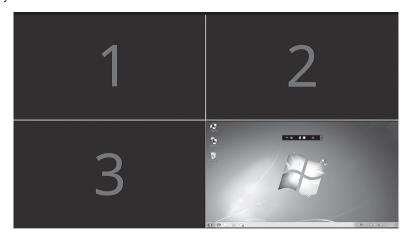
■ Pausing the display

You can pause the display of the computer screen on the monitor. When paused, the screen will not change even if an action is performed on the computer.

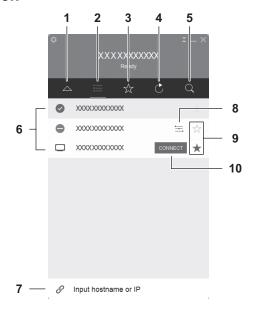
- 1. Click "Pause" (∭).
- 2. To resume the display, click "Play" ().

■ 4-screen display

- 1. Click "Split Screen" ().
- 2. Select the display location.
 - : Full-screen display / -: Upper left display / -: Upper right display / -: Lower left display / -: Lower right display



■ Connection software screen



Return to the operation screen.

2. Wireless board list

The wireless boards (host name) found by the computer are displayed.

Wireless boards (host name) that have been saved as favorites are displayed.

4. Refresh

Refresh the list.

5. Search

Search for a specified wireless board in the list.

The list of wireless boards or favorites are displayed.

: Currently connected wireless board

: Break the connection with the wireless board.

(Appears when you hover over the connected wireless board with the mouse cursor.)

=: Unconnected wireless board

7. Host name / IP address input

You can directly enter the host name or IP address of the desired wireless board to connect the computer to that wireless board.

8. Settings

Start the web browser and configure wireless board settings. (See page 28.)

(Appears when you hover over the connected wireless board with the mouse cursor.)

9. ☆/★

To add a wireless board to the favorites list, click $\frac{1}{2}$. (Appears as $\frac{1}{2}$)

To delete a wireless board from the favorites list, click \bigstar . (Appears as \bigstar)

10.CONNECT

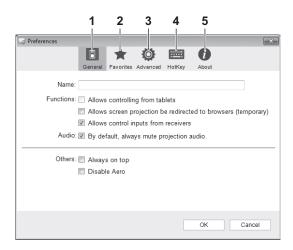
Connect the computer to the wireless board.

(Appears when you hover with the mouse cursor.)

■ Preferences

Configure connection software settings.

- 1. Click "Menu" () in the connection software.
- 2. Click "Preferences".



1. General

Name	Set the computer name used for connection to the wireless board. Characters other than half-width alphanumeric characters may not display correctly.
Allows controlling from tablets	Select this to display the computer in the list screen of MirrorOp Receiver by Awind, Inc.
Allows screen projection be redirected to browsers (temporary)	Select to display the screen on another computer using the WebSlides function. Enable saving the screen as an image file even in the 4-screen display.
Allows control inputs from receivers (touch- applicable models only)	Select to enable operation of the computer displayed by wireless by touching the monitor.
By default, always mute projection audio.	Select to automatically mute the audio when displaying a computer screen on the monitor.
Always on top	Select to always move the connection software to the front.
Disable Aero	Select to disable Windows Aero.

2. Favorites

Default List	Set the default display for the connection software wireless board list.
Import	Retrieve a wireless board that has been saved.
Export	Save a wireless board that has been added to the favorites.

3. Advanced

Mode	Set whether the desktop is duplicated or extended when displaying a computer screen on the monitor.
Quality	Set the image quality of the computer screen displayed on the monitor. When "Best" is set, more time may be required for processing.
Resolution Setting	Set the resolution of the computer screen displayed on the monitor. Always ask: Confirm the resolution each time a screen is displayed. Always change: Automatically change the resolution. Never ask: Display at the resolution of the computer desktop.
Aspect Ratio	Set whether the aspect ratio is adjusted to the screen or remains unchanged when a computer screen displayed on the monitor.
Encode Format	Set the data format used to send screen data. Normally "Automatic" should be used. "JPEG" is a high quality format, but increases the load on the network. "H.264" reduces the data size and lightens the load on the network.

4. HotKey

You can assign connection software actions to keyboard keys.

5. About

Display the version and license information of the connection software.

■ Saving the displayed screen as an image file

Save the currently displayed screen as an image file (JPEG).

An image file can only be saved from the computer that is displayed. Perform these steps from the computer that is being displayed.

- 1. Click "Menu" () in the connection software.
- 2. Click "Capture & Save screen".
- 3. Specify a file name and save location, and click "Save".

TIPS

• In the 4-screen display, only the screens will be saved of the computers for which "Allows screen projection be redirected to browsers (temporary)" is selected in Preferences of the connection software.

Controlling the computer whose screen is displayed (Conference control mode)

When multiple computers are connected to the wireless board, the computer whose screen is displayed and the display position can be controlled from one of the computers (Conference admin).

Perform these steps from the conference admin's computer.

- 1. Start the computer's web browser.
- 2. Enter the IP address shown on the home screen of Wireless mode in the address bar of the web browser.

The settings screen appears. You can also access the settings screen by clicking the settings button in the connection software. (See page 19.)

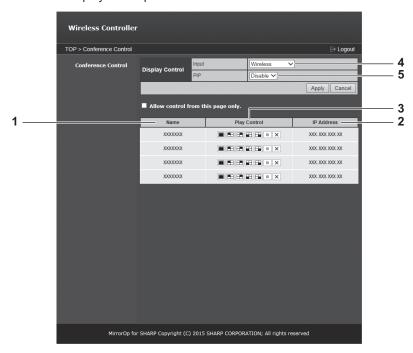
3. Click "Conference Control".

Enter the password and click "Login".

The default password is "moderator".

4. Select the "Allow control from this page only." checkbox.

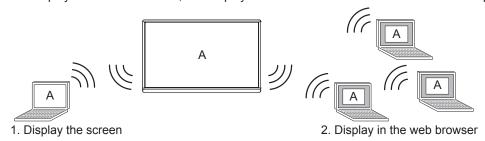
You will only be able to control the display of computers whose checkboxes are selected.



- 1. Computers connected to the wireless board are shown.
- 2. The IP addresses of the computers connected to the wireless board are shown.
- 3. Control display of each computer.
 - : Full screen display
 - Display in upper left screen of four-screen display
 - ⊞: Display in upper right screen of four-screen display
 - ■: Display in lower left screen of four-screen display
 - E : Display in lower right screen of four-screen display
 - : Stop display
 - x: Break connection
- 4. Change the input mode of the monitor.
- 5. Change the PIP mode of the monitor.
- 5. When you are ready to exit, remove the checkmark from "Allow control from this page only.", and click "Logout".

Displaying the image in a web browser (WebSlides)

You can share a screen displayed in Wireless mode, and display the screen in the web browser on other computer.



TIPS

- "Allows screen projection be redirected to browsers (temporary)" must be selected in advance in the connection software settings of the computer whose screen is displayed (1. above). (See page 20.)
- A security warning may appear in some web browsers.

 Follow the instructions in the web browser and continue the procedure.

■ Viewing the screen from a web browser

Perform these steps on the computer whose screen you want to display (2. above).

- 1. Start the computer's web browser.
- 2. Enter the IP address shown on the home screen of Wireless mode in the address bar of the web browser.

 The settings screen appears.
- 3. Click "WebSlides".

The screen displayed on the monitor is displayed.

■ WebSlides screen



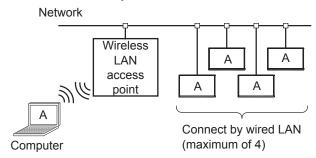
- 1. Shows the screen that is displayed on the monitor.
- 2. Return to the settings screen.
- 3. Pause display of the screen. Even if the monitor display changes, the browser display will not change.
- 4. Save the currently displayed screen as an image file (JPEG).
- 5. Display at the screen size displayed on the monitor.
- 6. Fit the displayed screen to the size of the web browser window.
- 7. Refresh the screen display.
- 8. Set the next display refresh interval.

TIPS

- In the 4-screen display, only the screens will be saved of the computers for which "Allows screen projection be redirected to browsers (temporary)" is selected in Preferences of the connection software.
- By setting "Auto Refresh Interval" in "WebSlides Setup" of "Admin", you can continuously refresh the WebSlides screen. (See page 31.)

Displaying a computer screen on multiple monitors

You can display a computer screen on multiple wireless boards on the same network. (Maximum of 4) We recommend that the wireless boards be connected by wired LAN.



Perform these steps from the wireless board list in the connection software. (See page 19.)

- **1. Select the wireless board to be connected, and click "CONNECT".**Do this for each wireless board that you want to connect.
- 2. Click "Play" ().

Actions when a screen is displayed (touch-applicable models only)

Using a touch pen, you can write in the screen.

TIPS

• The touch operation mode varies depending on the connection software starting method and OS.

Starting method	OS	Touch Operation Mode
Start after installing	Windows 8.1 / 10	Multi-Touch Mode
	Windows 7 / Mac OS	Mouse Mode
Start from wireless token	Windows 7 / 8.1 / 10	Mouse Mode
Application downloaded from wireless board	Mac OS	

- · Incorrect operation may sometimes occur even when operating the computer by touching the monitor.
- The function buttons on the touch pen cannot be used. Multiple touch pens cannot be used at the same time.

Drawing on the screen with a pen (Direct Drawing)

1. Touch "Toolbar" («).





Display the toolbar.



1. Pen

Draw a line on the screen.

Touch while "Pen" is selected to change the thickness or color.

Activate mouse mode. You can operate the displayed computer by touch operation.

3. Eraser

Touch on handwritten data to erase the data.

Touch while "Eraser" is selected to change the size of the eraser.

4. Erase all

Erase all handwritten data.

5. Save

Save the currently displayed screen as an image file (JPEG).

Touch to prevent the screen display from being changed from other computers. Touch again to unlock.

7. Home

Return to the home screen of Wireless mode.

Caution

- When the power is turned off, handwritten data is lost. Always save any handwritten data you need before turning off the power.
- Handwritten data will be lost if the display changes, such as when you display another computer or change to split screen display.

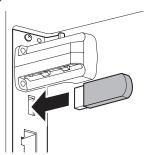
You can lock the screen to prevent the display from changing.

Saving the screen as an image file

You can save the screen and handwritten data displayed on the monitor as an image file (JPEG).

You can save the image to the computer being displayed or to a commercially available USB flash drive connected to the wireless board.

1. When saving the image to a USB flash drive, connect the USB flash drive to the wireless board.



2. Touch "Save" () on the toolbar.

When saving to a computer: Specify the save location and file name.

When saving to a USB flash drive: The file is saved with the file name "B0000001.jpg" in the "Annotation" folder of the USB flash drive.

(The number in the file name is successively incremented up to 9999999, after which it returns to 0000001.)

Caution

• Set the correct date and time in the monitor.

The monitor date and time is used for the file time stamp. Files will not be given a time stamp if the monitor does not have a date and time setting.

Exiting

■ Exiting the connection software

1. Click "Close" (X).

The connection software closes.

Settings

Configure wireless board settings.

TIPS

- A security warning may appear in some web browsers.
 Follow the instructions in the web browser and continue the procedure.
- 1. Start the computer's web browser.
- 2. Enter the IP address shown on the home screen of Wireless mode in the address bar of the web browser.

 The settings screen appears. You can also access the settings screen by clicking the settings button in the connection software. (See page 19.)

■ Download

Quick Executable application (Guest)	Download the connection software in an executable state. Installation is not necessary.
Installer	Download the installer for the connection software. After downloading the installer to your computer, install the software.
Download Device Profile	Download the profile for connection of the wireless board. If you are using the installed connection software, double-click the profile to connect the computer to the wireless board from which the profile is downloaded.

■ Conference Control

The password entry screen appears.

Enter the password for Conference Control and click "Login". (The default password is "moderator".)

Display	Input	You can change the input mode of the monitor. After changing the mode, click "Apply".
Control	PIP	You can change the PIP mode of the monitor. After changing the mode, click "Apply".
Allow control from this page		Use in conference control mode. (See page 22.)
only.		

■ Admin

The password entry screen appears.

Enter the password for Admin and click "Login". (The default password is "admin".)

After changing the setting, click "Apply".

System Status		The system state is displayed. You can check the MAC address.
Device Setup	Device Setup	Code Set the passcode used to connect to the wireless board. Disable: Connect to the wireless board without entering a passcode. Random: The passcode changes. Use the following code: Fix to the numeric value entered for the passcode.
	Pairing settings *	Apply Controller WLAN settings Use the wireless board's wireless LAN settings for SSID, encryption, and the key. Apply the following WLAN settings Select this to enter the SSID, encryption, and key manually.

^{*} This setting will be added when the wireless board firmware is updated. (See page 31.)

Network Setup	Host Name and Domain Name	Host Name Set the host name of the wireless board. To use the same name as the SSID, select the "Same as WLAN Network name" checkbox.
		This checkbox should normally be selected. If not selected, the wireless board will only operate properly in the DNS environment that corresponds to the set host name. Domain Name
		Set the domain name of the wireless board.
	IP Setup	Obtain an IP address automatically
		If the network has a DHCP server, set the IP address, subnet mask, default gateway, and DNS Server automatically.
		Use the following IP address
		Set the IP address, subnet mask, default gateway, and DNS Server manually.
	DHCP Server	Auto
	Setup	Use the DHCP server function of the wireless board. Start IP / End IP:
		Specify the range of IP addresses assigned to clients by the wireless board's DHCP server.
		Subnet Mask / Default Gateway / DNS Server:
		Specify the addresses that the wireless board's DHCP server sets in the client.
		<u>Disable</u>
		Do not use the DHCP server function of the wireless board.
	GateKeeper	You can limit access to the wired LAN from computers connected to the wireless board by wireless LAN.
		All Pass: Allow all access to the wired LAN.
		All Blocked: Block all access to the wired LAN.
		Internet Only: Only allow access by web browser.

Wireless LAN	Set whether the wireless LAN function is used.
Mode	Access Point: Use the wireless board as an access point.
	Station: Use the wireless board as a client.
	AP and Station: Use the wireless board as both an access point and a client.
Access Point	Set this when the "Mode" is "Access Point" or "AP and Station".
	SSID
	Set the SSID of the wireless board.
	SSID Broadcast
	Set whether SSID broadcast is used.
	<u>Band</u>
	Set the frequency bands used for wireless LAN.
	* 2.4 GHz and 5 GHz cannot be used simultaneously.
	* When 5 GHz is selected, 2.4 GHz devices will not be able to connect.
	802.11mode
	Change the communication frequency bands and the communication speed.
	<u>Channel</u>
	Set the channels that are used for wireless LAN.
	<u>Encryption</u>
	Set the encryption method for wireless LAN encryption.
	Set a key that is appropriate for the wireless I AN appropriate postbod
	Set a key that is appropriate for the wireless LAN encryption method. Channel Bandwidth
	Set the channel bandwidth.
Station	Set this when the "Mode" is "Station" or "AP and Station".
	Connect to Existing AP
	Enter the SSID of the wireless LAN access point.
	<u>Encryption</u>
	Set the encryption method for wireless LAN access point.
	<u>Key</u>
	Set the encryption key that is appropriate for the wireless LAN access point.
	Mode

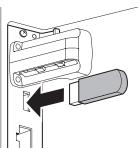
SNMP Setup	SNMP V3	Enable / Disable
		Set whether SNMP is enabled or disabled.
		<u>Username</u>
		Set the user name for SNMP.
		Auth Password (MD5) / Priv Password (DES)
		Set each password.
		Trap Destination
		Set the trap destination.
OSD Setup	Display	Device Information / User-List (touch-applicable models only) / Connect info
	Option	Set whether each type of information is shown in the screen.
		Font color / Font Size
		Set the color and size of the screen font.
		Screen Saver Settings (touch-applicable models only)
		Set whether a screen saver is used.
		If used, set the time until the screen saver activates.
	Projection	OSD Menu Button (touch-applicable models only)
	Option	Set whether the toolbar is displayed.
WebSlides Setup	Auto Refresh Interval (second)	Set the refresh interval for the screen displayed in the web browser.
	Access	Set the password for display of the screen in a web browser.
	Password	Disable: Do not use a password.
	Control	Use the same password as "Code": Use the same password as the passcode.
		Use the following Code: Use the entered number as the password.
Change Passwords	Conference Control	Change the password for Conference Control.
	Admin	Change the password for Admin.
Reset to Defau	ult	Return the wireless board settings to their factory default state.
Firmware	System	Export: You can save the settings.
Upgrade	Configuration	Import: You can retrieve saved settings.
	Firmware Upgrade	Update the firmware of the wireless board. You can download the latest version of the firmware using the Information Display Downloader on the CD-ROM.
Reboot System	n	Restart the wireless board.

Starting from a commercially available USB flash drive

You can enable starting of the connection software from a commercially available USB flash drive.

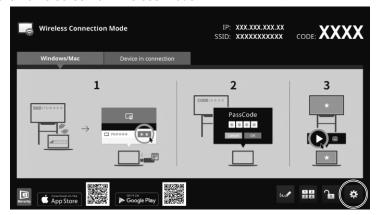
USB flash drives that can be used:

- USB flash drives indicated operation manual with a capacity of 128 MB or more.
- · Use a USB flash drive in which nothing is saved.
- 1. Insert the USB flash drive into the USB port of the wireless board.



Touch-applicable models:

2. Touch "Setup" (🗱) in the home screen of Wireless mode.



3. Touch "Create Token". Creating starts.

4. When the making completed message appears, remove the USB flash drive.

Other than touch-applicable models:

- 2. Press INFORMATION button three times on the remote control unit in OPTION input mode to display the INFORMATION3 screen.
- 3. Press ENTER button to display CREATE TOKEN screen.
- 4. Press or to select the OK, and press ENTER button. Creating starts.
- 5. When the creating completed message appears, remove the USB flash drive.

Caution

- Do not remove the USB flash drive while making is in progress.
 And do not turn off the power of the monitor.
- Always create this on the wireless board.
 Incorrect operation will result if you copy the file from the wireless token to the USB flash drive using your computer.

TIPS

• When the USB flash drive connection software is started, the software will automatically connect to the wireless board on which the wireless token was created. (The software will also connect automatically over wireless LAN.)

Uninstalling the connection software

■ Windows

Caution

- This can only be done by a user with administrator authority.
- 1. Exit all running software applications.
- 2. Select "Control Panel" from the "Start" menu.
- 3. Click "Uninstall a program".
 - If you are using icon view, click "Programs and Features".
- 4. Select "MirrorOp for SHARP" and click "Uninstall".
 - · Follow the on-screen instructions.
 - When the "User Account Control" screen appears, click "Yes" (or "Allow").

This completes the uninstallation.

■ Mac

Caution

- To uninstall, an administrator name (user name) and password are required.
- 1. Exit all running software applications.
- 2. Move "SHMirrorOp_Mac.app" from the "Applications" folder to the recycle bin.

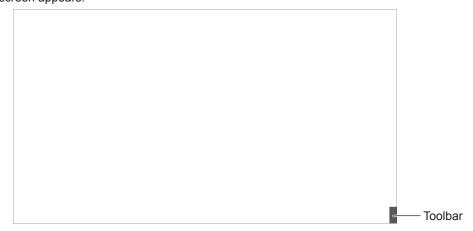
This completes the uninstallation.

Using as a whiteboard (Direct Drawing) (touch-applicable models only)

You can show a white background and use the monitor as a whiteboard.

TIPS

- The function buttons on the touch pen cannot be used. Multiple touch pens cannot be used at the same time.
- 1. Turn on the monitor power.
- 2. Touch the whiteboard button on the home screen of the wireless board. (See page 15.) The whiteboard screen appears.



Touch "Toolbar" («) to display the toolbar.



1. Pen

Draw a line on the screen.

Touch while "Pen" is selected to change the thickness or color.

2. Eraser

Touch on handwritten data to erase the data.

Touch while "Eraser" is selected to change the size of the eraser.

3. Erase all

Erase all handwritten data.

4. Save

Save the currently displayed screen as an image file (JPEG).

5. Open

Display a saved image.

This appears when a USB flash drive is connected.

6. Back

Return to the home screen of wireless mode.

* This icon will be added when the wireless board firmware is updated. (See page 31)

Caution

 When the power is turned off, handwritten data is lost. Always save any handwritten data you need before turning off the power.

■ Saving the screen in whiteboard as an image

The handwritten data in Direct Drawing mode can be saved as an image file (JPEG) in a commercially available USB flash drive connected to the wireless board.

1. Connect the USB flash drive to the wireless board.



2. Touch "Save" () on the toolbar.

The file is saved with the file name "B0000001.jpg" in the "Annotation" folder of the USB flash drive. (The number in the file name is successively incremented up to 9999999, after which it returns to 0000001.)

Caution

Set the correct date and time in the monitor.
 The monitor date and time is used for the file time stamp. Files will not be given a time stamp if the monitor does not have a date and time setting.

■ Displaying a saved image

Caution

- · If data already exists in Direct Drawing mode, the original data will be lost when the new image is displayed.
- 1. Connect the USB flash drive to the wireless board. (See the description above.)
- 2. Touch "Open" () on the toolbar.
- 3. Touch the image to be displayed.

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