

Wireless Presentation Box

Z-1

User's Manual (Projection Method)



Index

1. Introduction	1
1-1. Introduction	2
About the Notation	2
Disclaimers.....	2
Trademarks	2
1-2. Safety Instructions	3
1-3. Product Information and Customer Services	7
Product Information.....	7
Customer Support Center	7
2. Applications to Use Z-1	9
2-1. Types of Application.....	10
2-2. AMC Meeting	12
2-2-1. AMC Meeting Screen	12
2-2-2. AMC Meeting Optional Setting.....	17
2-3. AMC Meeting Plus.....	21
2-3-1. AMC Meeting Plus Screen.....	21
Login Screen.....	22
Chairperson Screen	24
2-4. AMC Meeting Display Extension.....	26
2-4-1. Downloading AMC Meeting Display Extension.....	26
2-4-2. Installing AMC Meeting Display Extension.....	27
2-4-3. Uninstalling AMC Meeting Display Extension	29
3. Projecting Screen Using AMC Meeting	31
3-1. Projecting Windows PC Screen.....	32
3-2. Starting AMC Meeting	33
3-3. Projection to Connected Display	35
3-3-1. Projecting Windows PC Screen	35
3-3-2. Switching Screens to Project	36

3-3-3. Mouse Pointer Trace Function	37
3-3-4. Stopping Projection	37
3-3-5. Exiting AMC Meeting	38
4. Projecting Screen Using AMC Meeting Plus	39
4-1. Before You Begin.....	40
4-1-1. Preparing Chairperson's PC.....	41
4-1-2. Preparing Presenters' Windows PC	42
4-2. Projection to Connected Display (Chairperson Mode).....	43
4-2-1. Chairperson to Choose and Show Presenters' Screen.....	43
4-2-2. Stopping Projection	46
4-2-3. Exiting AMC Meeting Plus.....	47
5. Projecting Screen Using Google Cast.....	49
5-1. Mirroring Android Device Screen	50
5-1-1. Projecting Android Device Screen	51
5-1-2. Stopping Cast	51
5-2. Mirroring Chromebook Screen.....	52
5-2-1. Projecting Chromebook Screen.....	53
5-2-2. Stopping Cast	54
6. Mirroring Screen with AirPlay	55
6-1. Mirroring Mac/iOS Device Screen	56
6-1-1. Mirroring iOS Device Screen	57
Projecting iOS Device Screen.....	57
Stopping Mirroring.....	57
6-1-2. Mirroring Mac Screen	58
Projection Using AirPlay	58
Stopping AirPlay	58
7. Using Tool Bar	59
7-1. Overview	60
7-1-1. Tool Bar.....	60

7-1-2. Before Using Toolbar	61
7-1-3. Showing/Closing Toolbar	62
Showing Toolbar	62
Closing Toolbar.....	62
7-2. Using Drawing Function	63
7-2-1. Using Pen Tool	63
7-2-2. Deleting Drawings	63
7-3. Changing Projection Mode.....	64
7-4. Multi-Presenter Mode Operation Function.....	65
7-4-1. Starting Multi-Presenter Mode Operation Function	65
Starting Multi-Presenter Mode Operation Function	65
Pointer Operation on Split-Screen	65
7-4-2. Changing/Switching Display Position	66
7-4-3. Showing Full Screen Display	67
7-4-4. Changing Primary Session	67
7-4-5. Disconnecting Session	68
7-5. Address Book	69
7-5-1. Address Book Screen	69
Address Selection Screen	69
Outgoing Call History Screen.....	70
Incoming Call History Screen	70
Manual Input Screen.....	71
7-6. Setup.....	72
7-6-1. Setting Mode Screen	72
7-6-2. Setting Update in Setting Mode Screen	73
7-7. Using Touch Panel Display	75
8. Error Message	77
8-1. Error Message	78

(Blank page)

1. Introduction

Thank you for purchasing the Wireless Presentation Box "Z-1".
This manual provides information on how to configure and use Z-1.
Please read the **1-2. Safety Instructions** carefully before using Z-1.

1-1. Introduction

About the Notation

This manual uses the following symbols to indicate specific information for operating Z-1. Be sure to carefully review before using Z-1.



TIP : This symbol indicates important information that needs to be observed when operating Z-1. Make sure to read this information for safe and proper use.



Note : This symbol indicates information that is useful when using Z-1. If you experience difficulties operating Z-1, please refer to this information first.

Disclaimers

- The unauthorized transfer or copying of the content of this manual, in whole or in part, without prior written consent is expressly prohibited by law.
- The content of this manual is subject to change without notice.
- This manual was prepared to accurately match the content of each OS, but the actual information shown on the computer monitor may differ from the content of this manual due to future OS version upgrades, modifications, and other changes.
- Although every effort was made to prepare this manual with the utmost accuracy, Silex Technology will not be held liable for any damages as a result of errors, setting examples, or other content.

Trademarks

- Microsoft and Windows are registered trademarks of Microsoft Corporation in the United States and/or other countries.
- Mac, macOS, AirPlay are registered trademarks of Apple Inc. in the United States and/or other countries.
- iOS is a trademark or registered trademark of Cisco in the United States and other countries.
- Google, Google logo, Google Chrome, Google Cast, Google Home, Android, Chrome OS, Chromebook are trademarks or registered trademarks of Google LLC.
- Wi-Fi is a registered trademark of Wi-Fi Alliance.
- WPA and WPA2 are trademarks or registered trademarks of Wi-Fi Alliance.
- Other company names and product names contained in this manual are trademarks or registered trademarks of their respective companies.

1-2. Safety Instructions

This page provides the safety instructions for safe use of Z-1.

To ensure safe and proper use, please read the following information carefully before using Z-1.

<Indication of the warning>

	Warning	"Warning" indicates the existence of a hazard that could result in death or serious injury if the safety instruction is not observed.
	Caution	"Caution" indicates the existence of a hazard that could result in serious injury or material damage if the safety instruction is not observed.

<Meaning of the symbols>

	This symbol indicates the warning and caution. (Example:  "Danger of the electric shock")
	This symbol indicates the prohibited actions. (Example:  "Disassembly is prohibited")
	This symbol indicates the actions users are required to observe. (Example:  "Remove the AC plug from an outlet")

<Installation>

 Warning	
	<ul style="list-style-type: none">• Do not place anything on top of the product. Also, do not place the product on top of the other product. Failure to do so may cause fire, electrical shock, malfunction or performance degradation.• Do not cover up the product with a cloth such as blanket or table cloth. The heat remains inside and it may cause fire or malfunction.

 Caution	
	<ul style="list-style-type: none">• Do not use or store the product under the following conditions. It may cause malfunction.<ul style="list-style-type: none">- Locations subject to vibration or shock- Shaky, uneven or tilted surfaces- Locations exposed to direct sunlight- Humid or dusty places- Wet places (kitchen, bathroom, etc.)- Near a heater or stove- Locations subject to extreme changes in temperature- Near strong electromagnetic sources (magnet, radio, wireless device, etc.)• When installing the product to a high position, make sure that the product is firmly fixed so it does not drop for weight of the cables.

<Safe handling>

 Warning	
	<ul style="list-style-type: none">• Do not move the product when the AC adaptor is connected to it. The cable of AC adaptor may be damaged, and which may result in fire or electric shock.• For use of the devices connected to the product, please follow all warnings, cautions and notices given by that manufacturer and carefully use them in a proper manner. Failure to follow these instructions may cause fire, electrical shock or malfunction.• If a ground wire is supplied with your device to use with, connect it to the ground terminal in order to prevent an electrical shock. Do not connect the ground wire to gas pipe, water pipe, lighting rod or telephone ground wire. It may cause malfunction.

 Caution	
	<ul style="list-style-type: none">• The product may become hot when it is in use. Be careful of the heat when moving or removing the product.

<Handling of malfunctioned units>

 Warning	
	<ul style="list-style-type: none"> In the following cases, turn off the connected devices and unplug the AC plug of the product from a power outlet. Failure to follow these instructions may cause fire or an electrical shock. <ul style="list-style-type: none"> When the product emits a strange smell, smoke or sound or becomes too hot to touch. When foreign objects (metal, liquid, etc.) gets into the product. When the product is dropped or the case is broken or cracked.

<Ventilation>

 Warning	
	<ul style="list-style-type: none"> Do not cover up the vents on the product. The temperature inside may rise and cause fire or malfunction.

<Disassembly / Modification>

 Warning	
	<ul style="list-style-type: none"> Do not disassemble or modify the product. It may cause fire, electrical shock or malfunction. Do not disassemble or modify the AC adaptor that comes with the product. It may cause fire, electrical shock or malfunction.

<Power supply>

 Warning	
	<ul style="list-style-type: none"> Use the correct power voltage. Improper voltage may cause fire or an electrical shock.

 Caution	
	<ul style="list-style-type: none"> Always use the AC adaptor supplied with the product. Other AC adaptors may cause malfunction. When the product will not be used for a long period of time, unplug the power cables of the product and other devices.

<Use of AC adaptor and AC cord>

 Warning	
	<ul style="list-style-type: none">• Do not place any objects on top of AC adaptor, and do not cover it up with anything. Also, do not use the AC adaptor on top of the heat/moisture retaining materials (carpet, sponge, cardboard, styrofoam, etc.). The accumulated heat may result in fire or malfunction.• Do not roll up or wrap the AC cord. It may cause fire or an electrical shock.• Do not plug or unplug the AC adaptor or any other cables with wet hands. It may cause an electrical shock or malfunction.• Keep the cords and cables away from children. It may cause an electrical shock or serious injury.

 Caution	
	<ul style="list-style-type: none">• Do not place anything on top of the cables, and do not bend, twist and stretch the cables by force.• Do not use the cables or AC cords at a place where someone may trip over them. It may cause serious injury.• Do not pull on the cord to disconnect the plug from the power supply. The code may be broken, which could result in fire or an electrical shock.• Verify all codes or cables are plugged correctly before using the product.• When removing the product, disconnect the AC plugs of both the product and the other device you are using with.

1-3. Product Information and Customer Services

Product Information

The services below are available from the Silex Technology's website. For details, please visit the Silex Technology's website.

Silex Technology's website
(URL) <https://www.silextechnology.com/>

- Latest firmware download
- Latest software download
- Latest manual download
- Support information (FAQ)

Customer Support Center

Customer Support is available for any problems that you may encounter. If you cannot find the relevant problem in this manual or on our website, or if the corrective procedure does not resolve the problem, please contact our Customer Support Center.

Contact Information	
USA	support@silexamerica.com
Europe	support@silexeurope.com



Note

- Refer to the Silex Technology's website (<https://www.silextechnology.com/>) for the latest FAQ and product information.

(Blank page)

2. Applications to Use Z-1

2-1. Types of Application



- See the Silex Technology's website for the latest OS support.

When using AMC Meeting / AMC Meeting Plus on Windows device :



Note

- In this document, Windows 10 is used as an example. The display may vary if you are using other operating systems.

AMC Meeting

This is a Windows utility to project the Windows PC screen on a display connected to Z-1. AMC Meeting can be used without installation.

[Supported OS]

- Windows 8.1 or later



- This utility works as a desktop application.
- Windows RT is not supported.
- Windows 10 S mode is not supported.

AMC Meeting Plus

This is a meeting facilitation utility for Windows. A projection order can be sent from AMC Meeting Plus to AMC Meeting that is running on the participants' PC. Once the projection order is received on the participant's PC, AMC Meeting starts the projection and shows the PC screen to the connected display. AMC Meeting Plus runs on the Web page of Z-1.

[Recommended Web browser]

- Microsoft Edge
- Google Chrome



- Up to 50 people can participate the meeting that is started using AMC Meeting Plus.

AMC Meeting Display Extension

AMC Meeting Display Extension is a display driver to use for extension of the displayed screen on AMC Meeting. Download this driver from the Silex Technology's homepage and install it to the Windows PC at which AMC Meeting is used. (For how to download, refer to **2-4-1. Downloading AMC Meeting Display Extension.**)

[Supported OS]

- Windows 10 later

When using the standard function of Android / Chrome OS device :

Google Cast

The standard function of Android / Chrome OS enables display sharing and audio transmission. Google Cast can be used only when Z-1 is operating in the Single presenter projection mode.

[Supported OS]

- Android 6 or later
- Chrome OS 90 or later



- Some devices require Google Home to be installed.

When using the standard function of iOS / macOS device :

AirPlay

The standard function of iOS / macOS enables display sharing and audio transmission.

AirPlay can be used only when Z-1 is operating in the Single presenter projection mode.

[Supported OS]

- iOS 11 or later
- macOS 10.12 or later

2-2. AMC Meeting

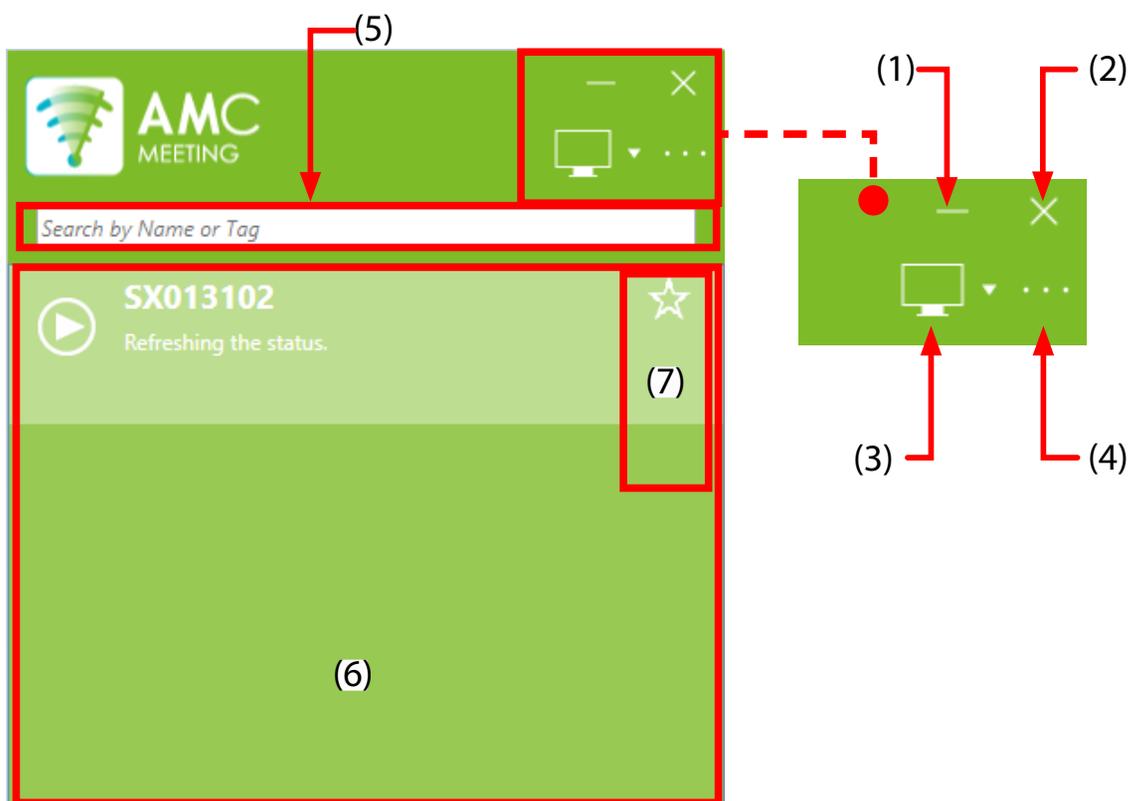
AMC Meeting is a Windows utility to project the Windows PC screen on a display connected to Z-1. This chapter explains how to use AMC Meeting to send the screens.



- See **3-2. Starting AMC Meeting** for how to start AMC Meeting.

Note

2-2-1. AMC Meeting Screen



(1) Minimize button

Minimizes the main screen.

(2) Close button

Terminates AMC Meeting.

(3) Display selection button

Switches the display to project when multiple displays are connected to Windows PC.

(4) Menu

Shows the option setting and the version information.

(5) Device search

Searches for devices by the device name and group name.

(6) List of Z-1 units

This list shows the display name, operating status and projection control button.

The following icons and buttons are displayed.

Icons and Buttons

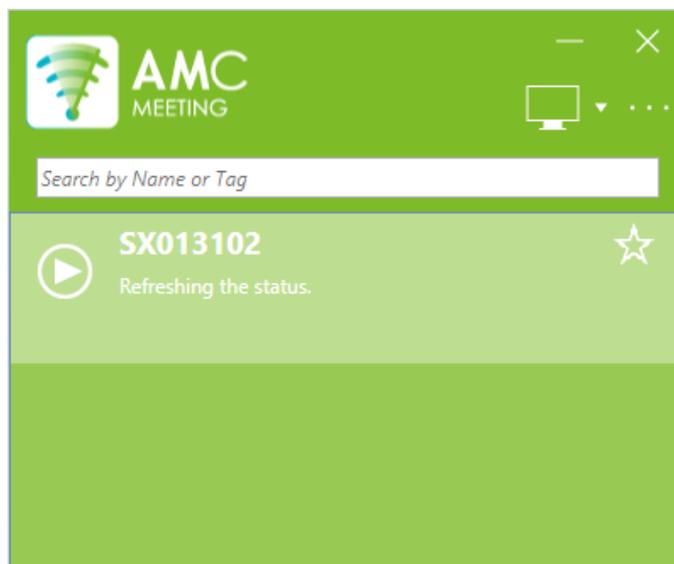
Icon	Status	Description	Button
	Refreshing the status	Communicating with Z-1	None
	Ready to project	The PC's screen can be projected.	Project
	Ready to project (with PIN authentication)	The PC's screen can be projected if the authentication PIN code is entered.	Project
	In use by other user	The other user is projecting the screen. It is possible to interrupt it.	Project
	In use by other user (with PIN authentication)	The other user is projecting the screen. It is possible to interrupt it if the authentication PIN code is entered.	Project
	In use by other user (Not allowed to interrupt)	The other user is projecting the screen. There is the setting not allowing any users to interrupt it.	None
	Ready to attend the meeting	A meeting is held using AMC Meeting Plus. Click Join to attend the meeting.	Join
	Attending the meeting	The user is attending the meeting held by the chairperson (under management by the chairperson). Click Leave to leave the meeting.	Leave
	Projection in progress	The user is projecting the screen (including when the chairperson is having the user project the screen).	Stop

(7) Add to favorite

The Z-1 units and meeting rooms, that you frequently use, can be registered to the favorite.

Once registered, they are always displayed on the main window when AMC Meeting is started.

List of Z-1 units



The display name, operating status and favorited items are displayed. They are shown in the order of the following priority.

Display priority	Conditions
1	Devices being handling projection or attending the meeting
2	Favorited devices
3	Other devices

Start/Stop Projection

The projection of the PC's screen can be started or stopped by clicking the buttons on a list.

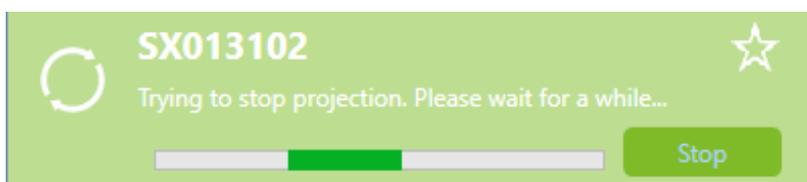
To start the projection, select Z-1 from a list and click **Projection**.



The status message says "**Projection in progress**".



To stop the projection, click **Stop**.



When the projection is stopped, the status message says "**Projection ready**".

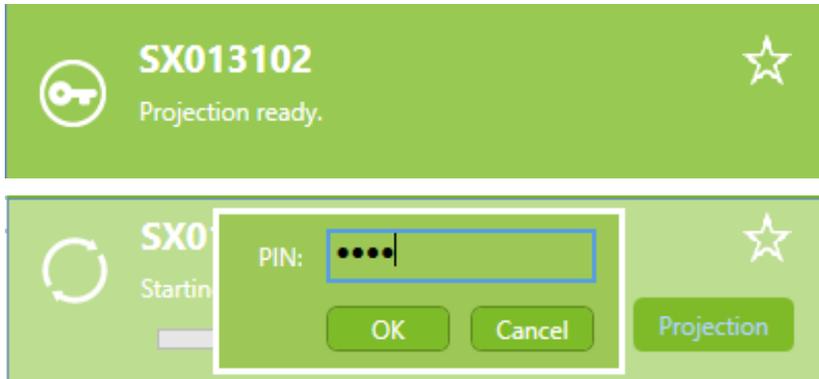


- It is not possible to project the PC's screen to multiple Z-1 units at once. If the current projection is still going and you start another projection to another device, the current one will stop to start another projection.

Authentication PIN Code

If the PIN code authentication is enabled on Z-1 and such Z-1 is selected on AMC Meeting, the PIN code input screen appears.

When PIN code authentication is enabled:

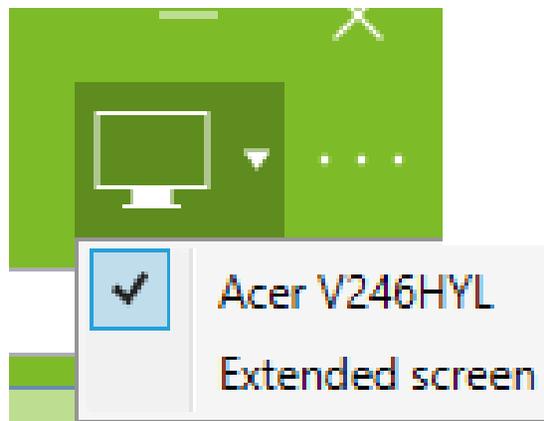


Note

- The PIN code authentication can be enabled at **Display Configuration** of the Z-1's Web page.
- The entered PIN code will be valid until AMC Meeting is closed. When Z-1 is connected next time, the PIN code entry will not be required.

Display Selection Button

When multiple displays are used for your PC, the displays can be switched using the display selection button.

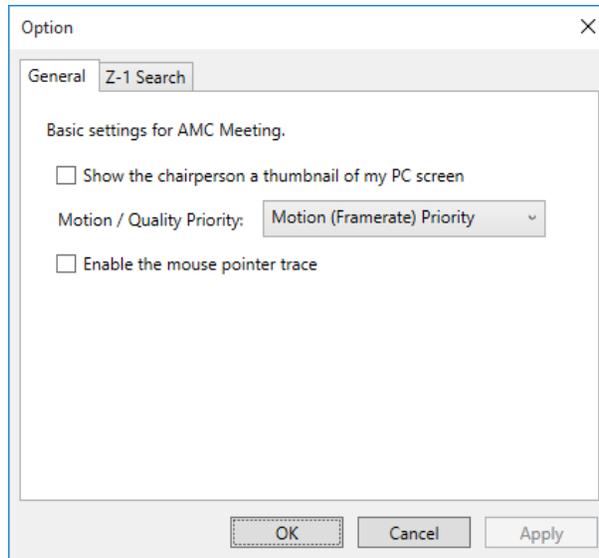


Note

- AMC Meeting saves the information of the last selected display. When the projection is started next time, it will be done using the last selected display.
- If the last selected display is disconnected from Windows PC, the first display will be used.
- If AMC Meeting Display Extension is installed, **Extended screen** is displayed in the menu. If the extended screen is selected, the extended screen will be enabled during the projection.

2-2-2. AMC Meeting Optional Setting

General Window



General tab

Updates the settings for AMC Meeting's basic operation.

Show the chairperson a thumbnail of my PC screen

If this checkbox is ticked, AMC Meeting will send a thumbnail of the desktop to AMC Meeting Plus when it is in the chairperson mode. By default, this box is not checked.

Motion / Quality Priority

Motion (Framerate) Priority or **Picture Quality Priority** can be selected.

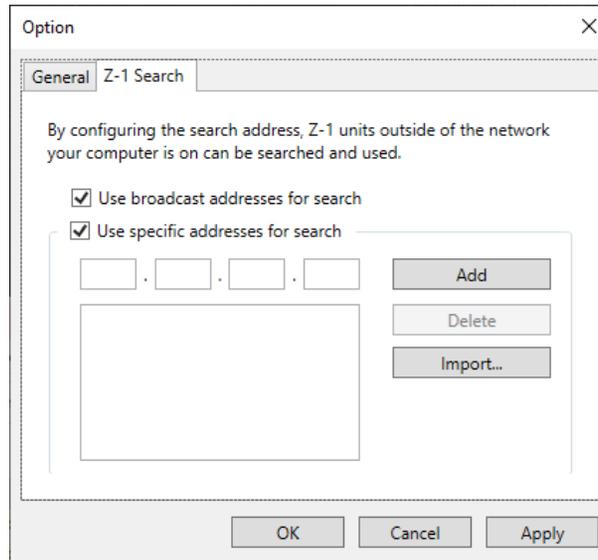
By default, **Motion (Framerate) Priority** is selected.

Enable the mouse pointer trace

If this checkbox is ticked, the mouse pointer trace function is enabled.

By default, this box is not checked.

Z-1 Search Window

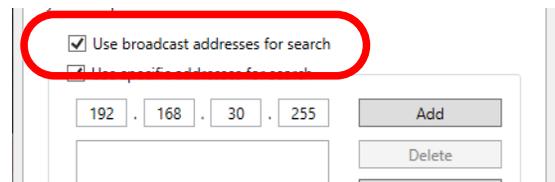


Z-1 Search tab

To discover Z-1 units outside of the network your Windows PC is on, follow the procedure below. Up to 32 addresses can be registered.

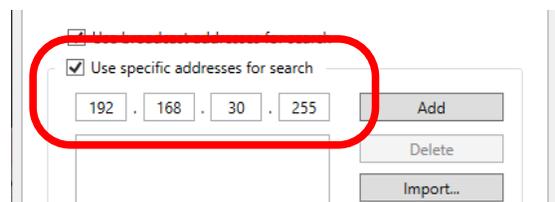
How to use broadcast address for search

Tick **Use broadcast addresses for search**. (By default, this box is ticked.)

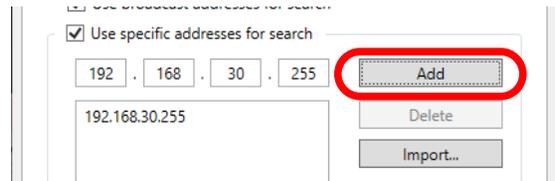


How to use specific address for search

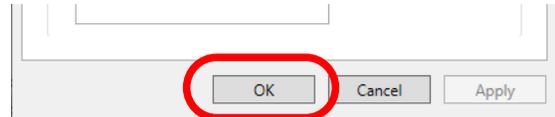
1. Tick **Use specific addresses for search**, and enter a search address in the input box.



2. Click **Add**. The search address will be added to the list.

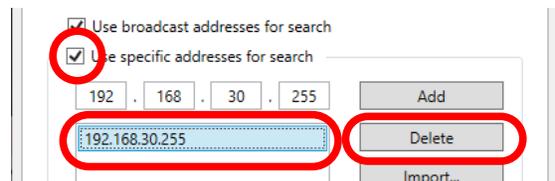


3. Click **OK**.

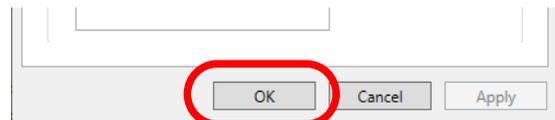


How to delete search addresses

1. Tick **Use specific addresses for search**, select the address to remove from the list, and click **Delete**.

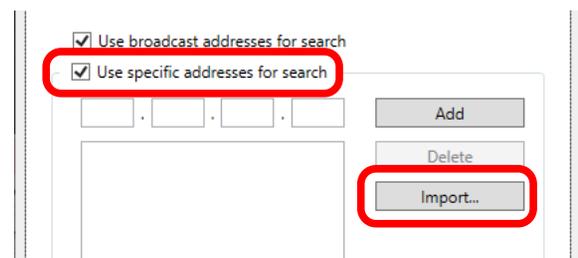


2. Click **OK**.

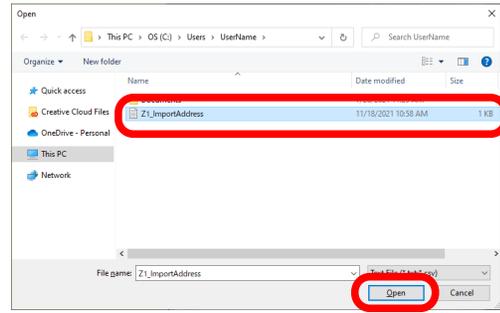


How to import search addresses

1. Tick **Use specific addresses for search** and click **Import**.



- In the file selection dialog, select the import file and click **Open**.

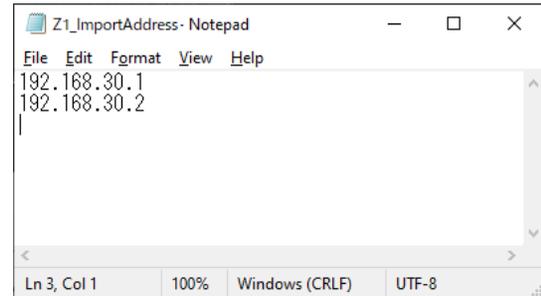


Note

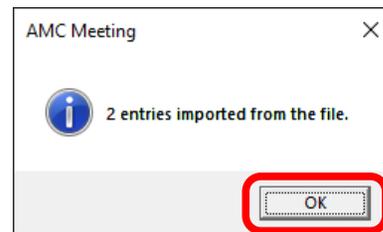
- The import file is a text file that contains the IP address information (one address per line).

Example)

192.168.30.1
192.168.30.2



- The import result confirmation is displayed. Click **OK**.

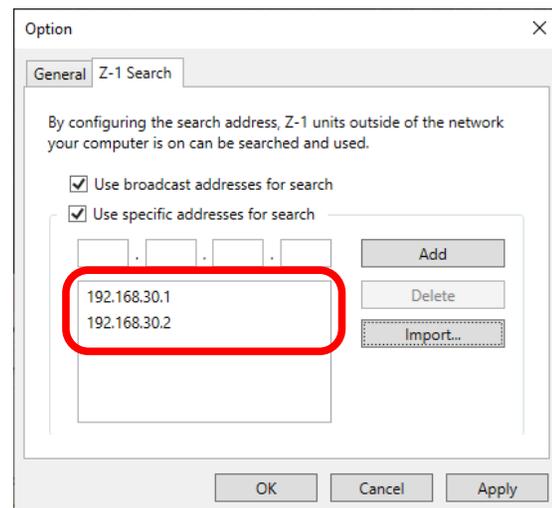


Note

- If the import file includes the duplicated IP address, the following message will be displayed and import of that information will be skipped.



- The imported IP addresses are displayed.



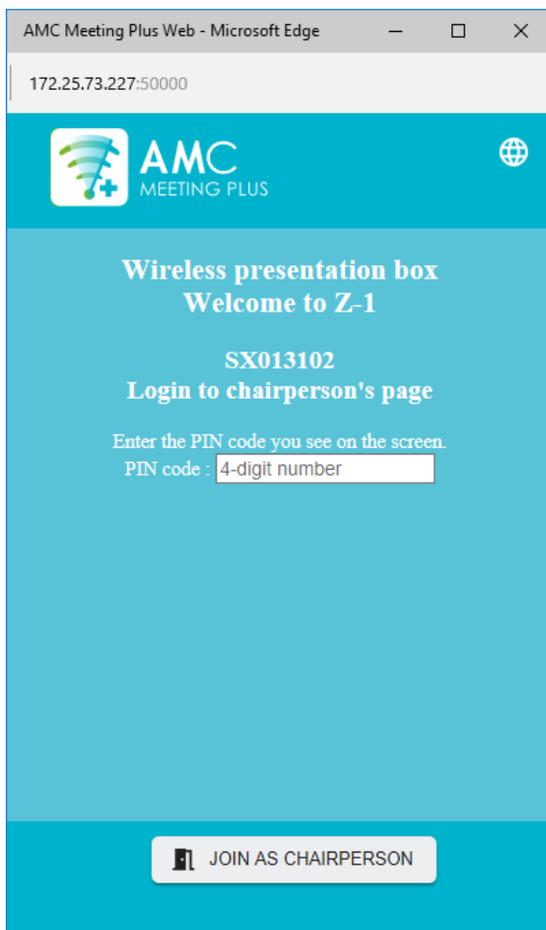
2-3. AMC Meeting Plus

AMC Meeting Plus is a meeting facilitation utility for Windows. The chairperson sends a projection order to the participant's PC, and the PC screen of the participant will be shown on the display connected to Z-1.

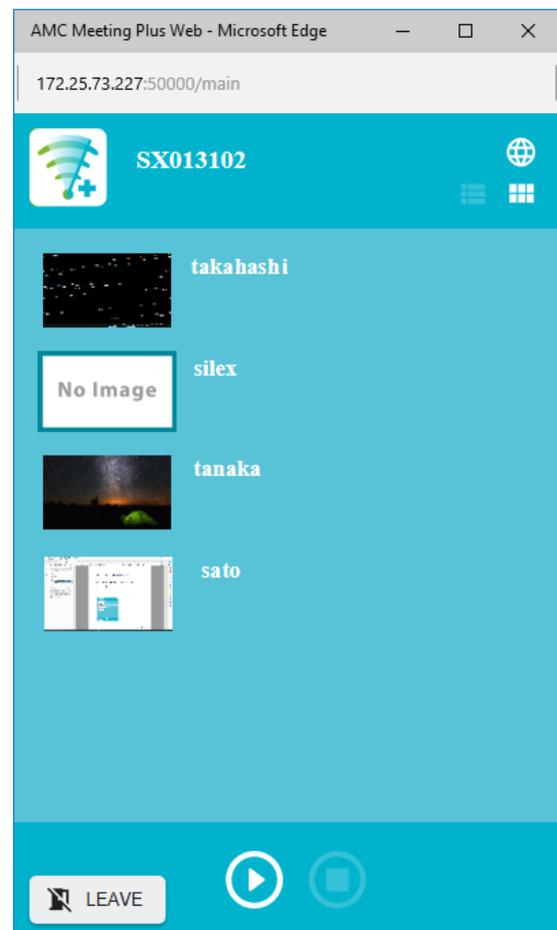
2-3-1. AMC Meeting Plus Screen

AMC Meeting Plus has the login screen and chairperson screen.

Login screen



Chairperson screen



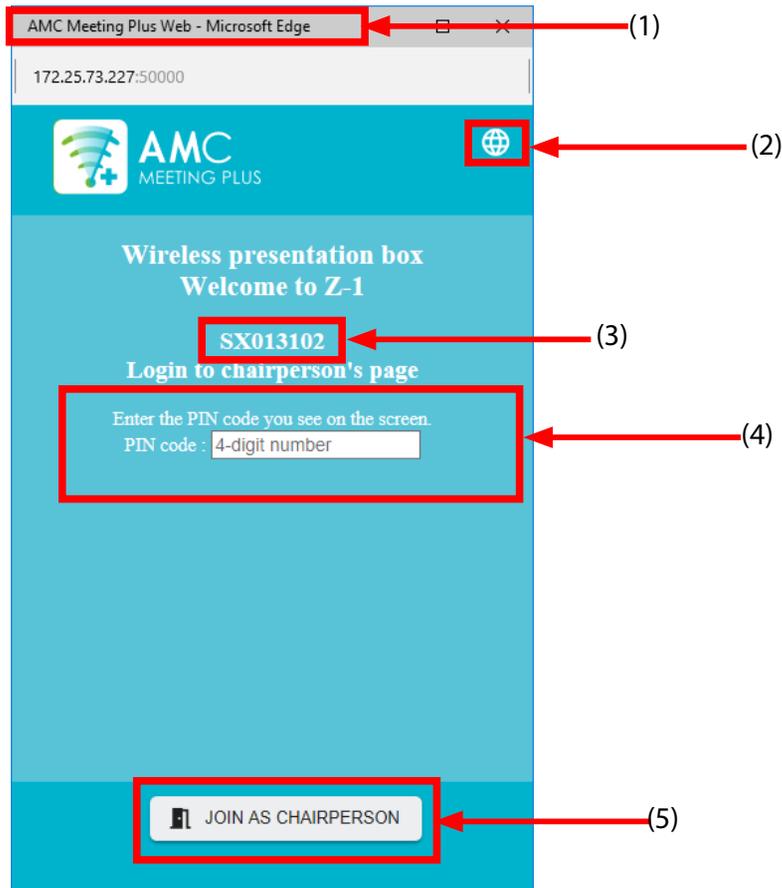
Login Screen

The login screen appears when AMC Meeting Plus is started. Only one user, who has logged into AMC Meeting Plus, can become a chairperson to switch a presenter during the meeting.



- See **4-1-1. Preparing Chairperson's PC** for how to start AMC Meeting Plus.

Note



Note

- The name of Z-1 (display name) can be changed at **Basic Settings** or **Z-1 Settings** of the Z-1's Web page. See "Z-1 User's Manual (Configuration Method)" for more details.
- When the PIN code authentication is disabled, the PIN code entry field is not displayed. See "Z-1 User's Manual (Configuration Method)" for more details.

(1) Icon and page title

Shows the AMC Meeting Plus logo and page name.

(2) Language selection

The language can be switched between English and Japanese.

(3) Display name

Shows the name of the display to connect.

(4) Authentication PIN code

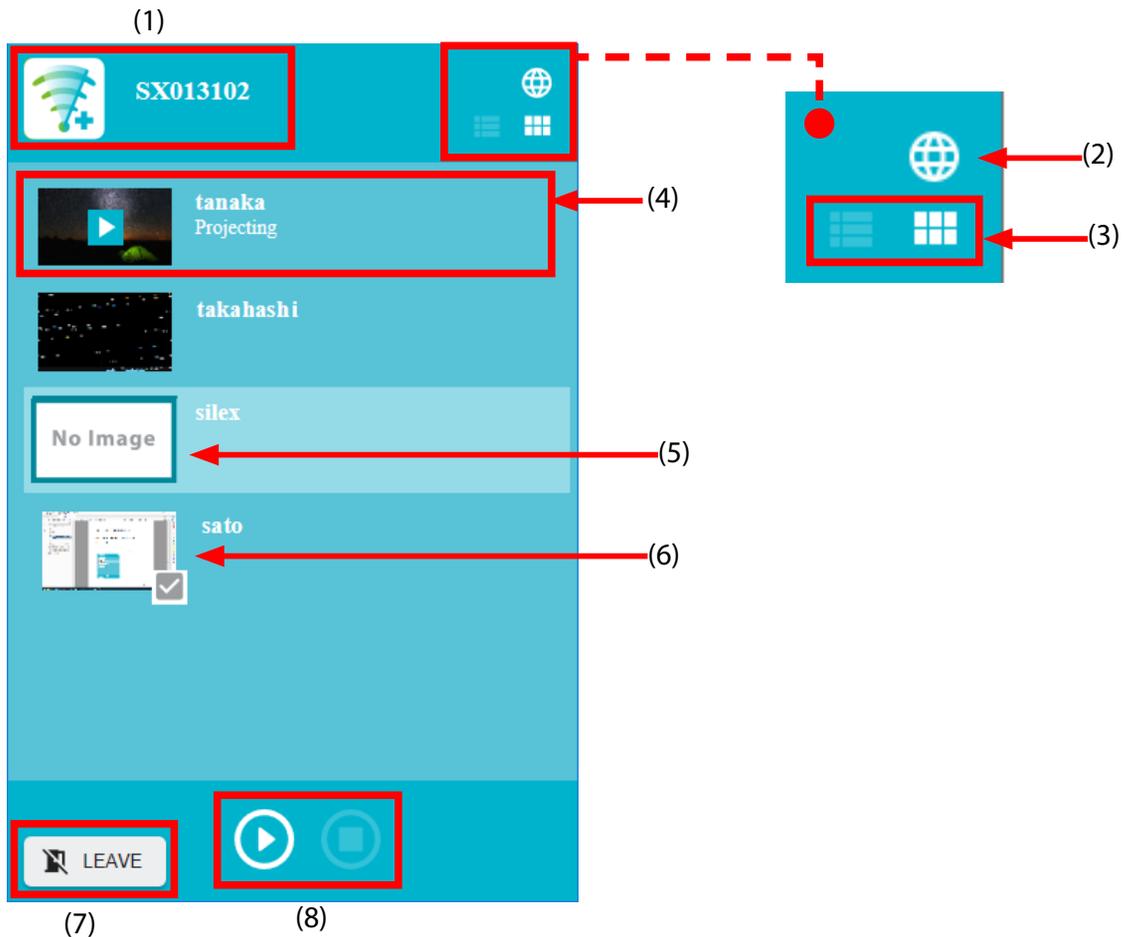
Enter 4-digit number.

(5) Chairperson start button

The user can join the meeting as a chairperson by entering the PIN code and clicking **JOIN AS CHAIRPERSON**.

Chairperson Screen

As the chairperson starts the meeting, the status message says “**Ready to join the meeting**” on AMC Meeting. If **Join** is clicked then, the chairperson screen shows a full name of the participant set to Windows PC. When the full name is not set, it shows the Windows user name instead. The chairperson can start/stop the projection of PC screens of any participants.



(1) Display name

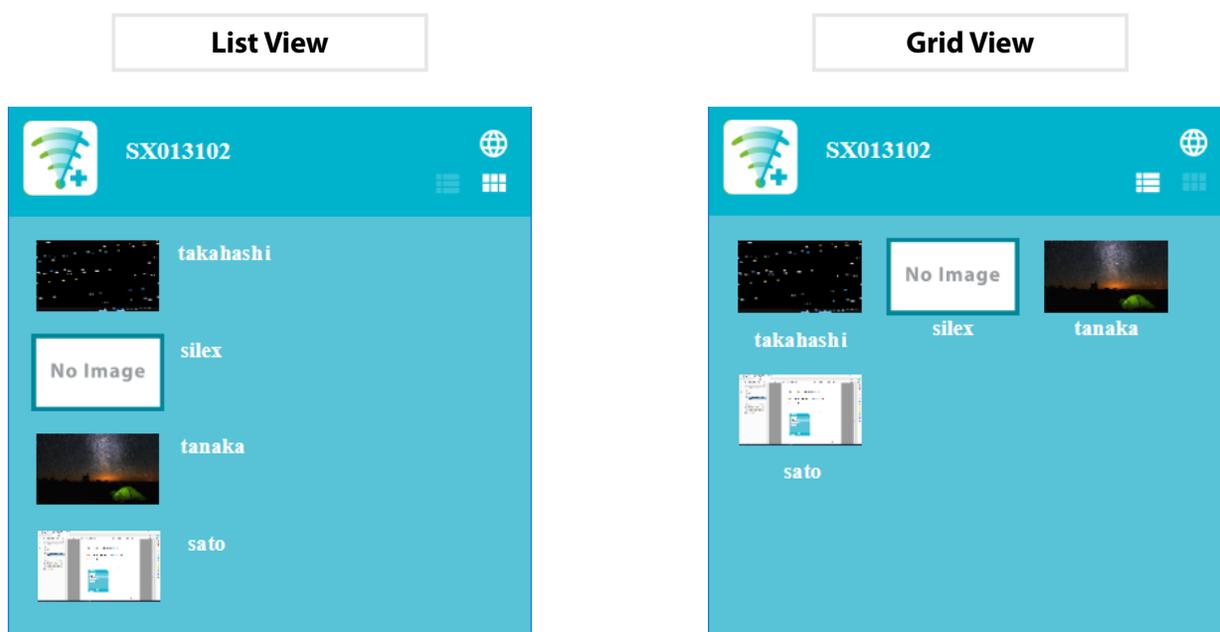
Shows the display name of Z-1 you have connected.

(2) Language change button

The language can be switched between English and Japanese.

(3) View change for participant list

The view can be switched between a list view and grid view.



(4) Projection status (a play icon appears)

When the projection is in progress, the play icon is displayed in a center of the thumbnail.

(5) Thumbnail

"**No Image**" is shown if the participant's setting does not allow the PC screen to be shown as the thumbnail.

(6) Selection status

The check icon is shown on thumbnails of the selected users.

(7) Leave button

Finishes the meeting.

(8) Projection start/stop buttons

Starts/Stops the projection of Windows PC screen of the selected user onto the display connected to Z-1.

2-4. AMC Meeting Display Extension

AMC Meeting Display Extension is a display driver to allow the extended screen by installing it to the PC on which AMC Meeting is used. Download this driver from Silex Technology's homepage.

2-4-1. Downloading AMC Meeting Display Extension

AMC Meeting Display Extension can be downloaded from Silex Technology's website.

1. Access our website below.

URL: <https://www.silextechnology.com/>

2. Go to the support page and select the product model.
3. Download AMC Meeting Display Extension and unzip the file.

AMC Meeting Display Extension has been downloaded on your PC.

2-4-2. Installing AMC Meeting Display Extension

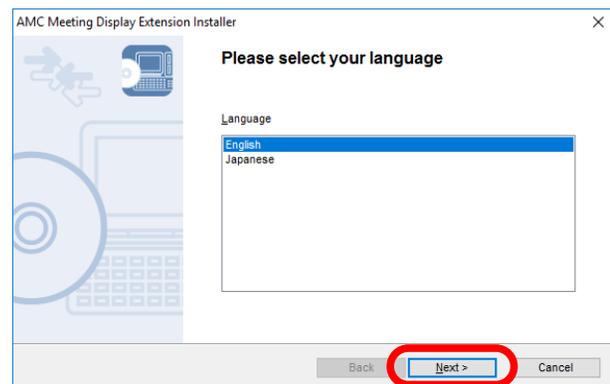
1. Double-click **Setup.exe** in the unzipped folder of AMC Meeting Display Extension to start the installer.



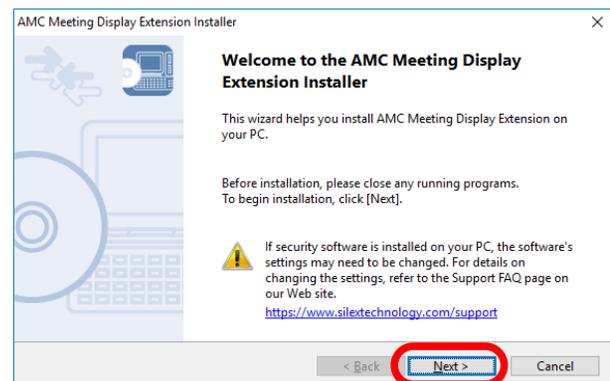
TIP

- The user account control screen may appear. When it appears, click **Yes** or **Continue**.

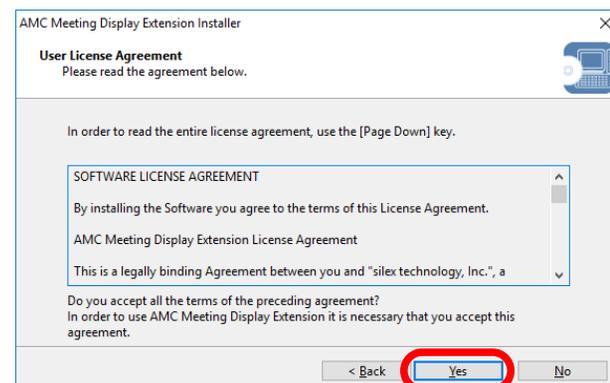
2. Select your language and click **Next**.



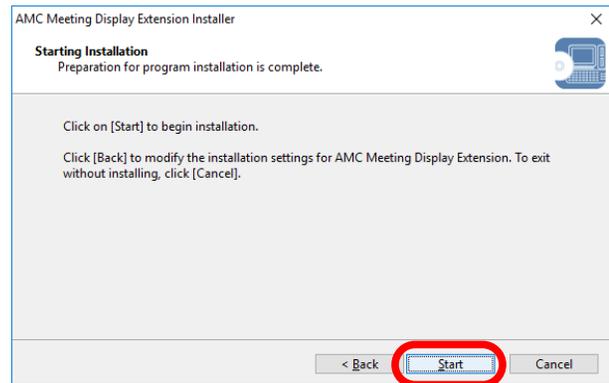
3. The installation wizard for AMC Meeting Display Extension starts. Click **Next**.



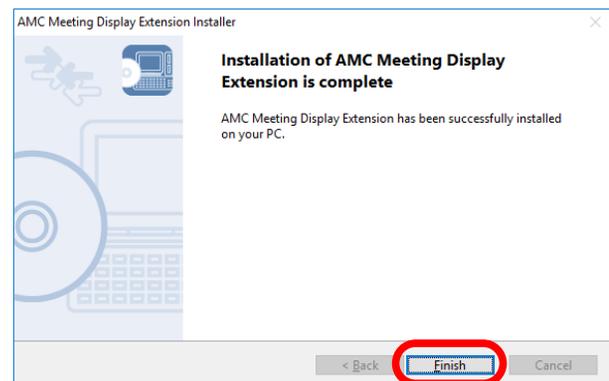
4. Read the software license agreement notice. Click **Yes** if you agree.



5. Click **Start** to start the installation.



6. Click **Finish**.



2-4-3. Uninstalling AMC Meeting Display Extension

Go to **Control Panel** and choose **Uninstall** to uninstall AMC Meeting Display Extension.



- For uninstallation, administrator privilege is required.

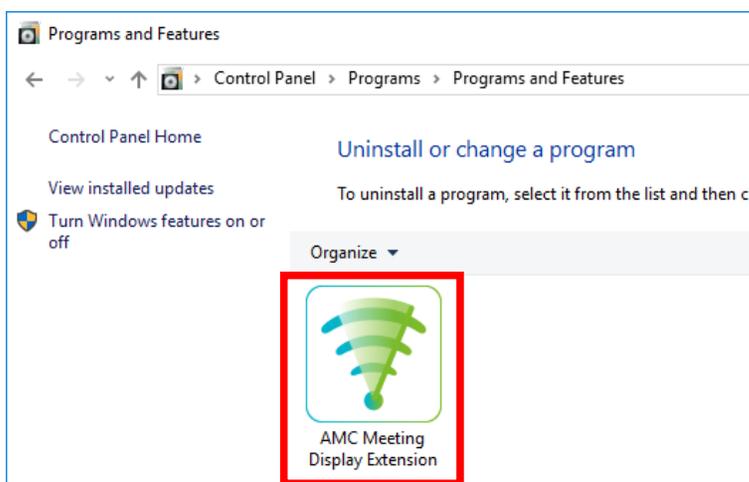


Note

- In the following explanation, Windows 10 is used as an example. If you are using an operating system other than Windows 10, follow the appropriate procedure for that operating system.

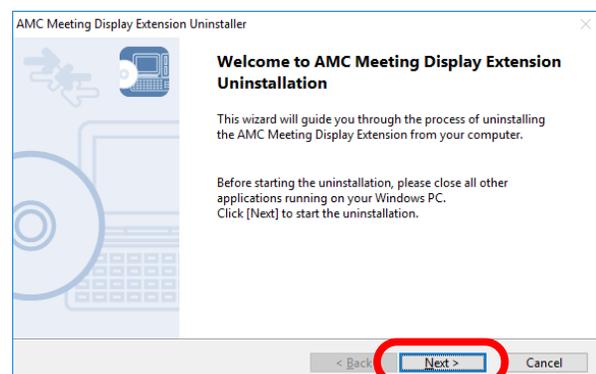
1. Open **Control Panel** and click **Uninstall a Program** or **Programs and Features**.

2. Select **AMC Meeting Display Extension** from the list and click **Uninstall**.

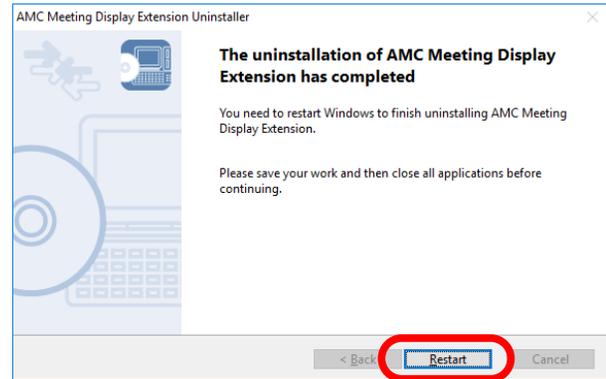


- The user account control screen may appear. When it appears, click **Yes** or **Continue**.

3. The uninstaller runs. Click **Next** to start the uninstallation.



4. When the uninstallation completion window appears, Click **Restart** to restart the PC.



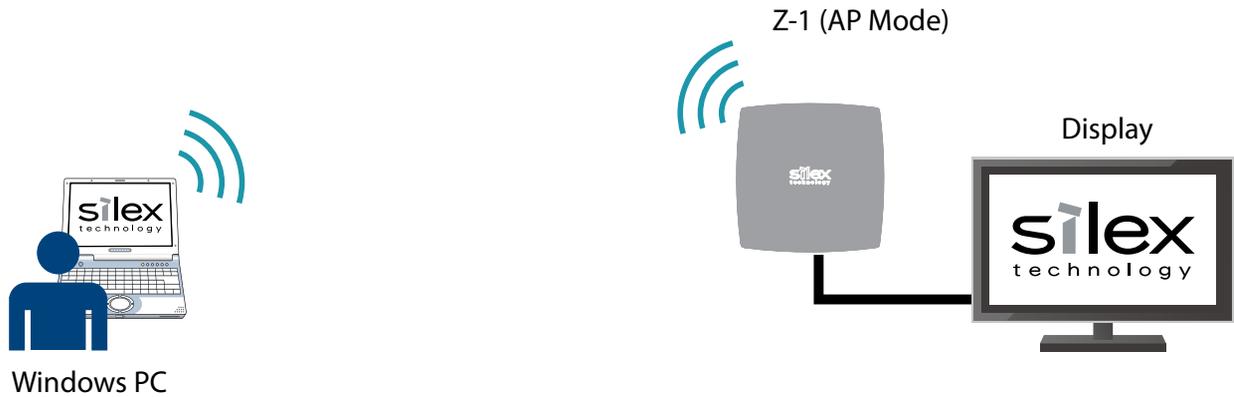
AMC Meeting Display Extension has been removed from the PC.

3. Projecting Screen Using AMC Meeting

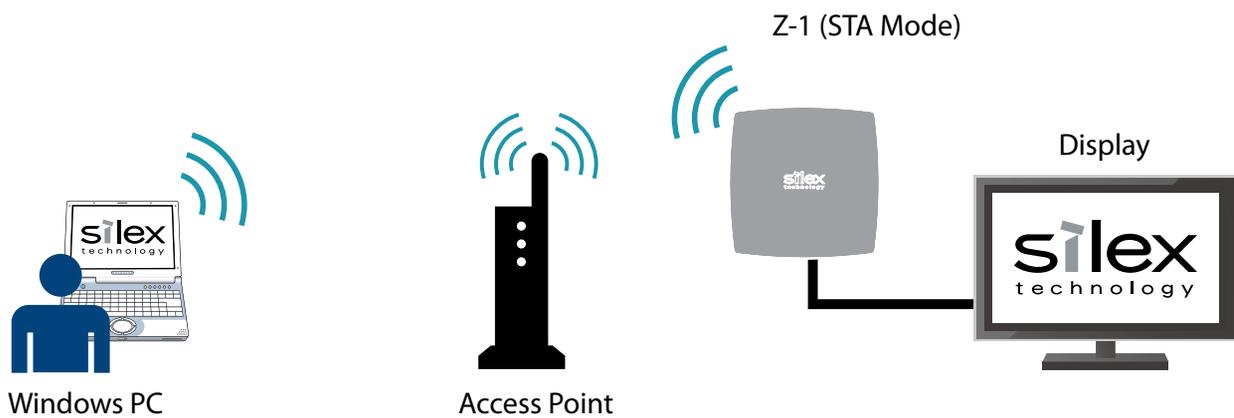
3-1. Projecting Windows PC Screen

This chapter describes how to project the Windows PC screen to the connected display using AMC Meeting.

Projection by using Z-1 in Access Point mode (AP mode)



Projection by connecting another Access Point in the same network



3-2. Starting AMC Meeting

AMC Meeting can be found in the network share folder of Z-1. Or also, it can be downloaded from the Web page of Z-1. Start AMC Meeting by one of the following methods.

How to start AMC Meeting from a share file:

1. Start the Explorer on your Windows PC.
2. Enter the IP address or host name of Z-1 to the address bar of the Explorer as follows.

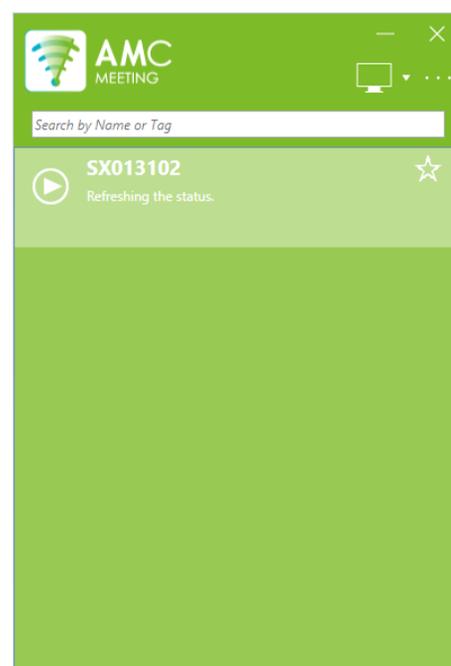
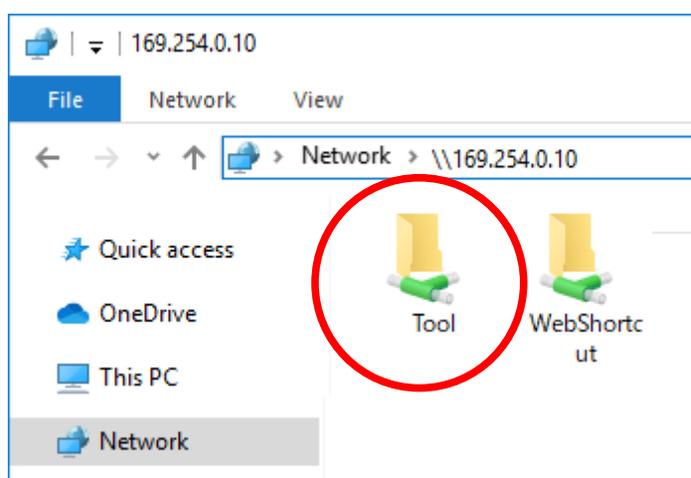
When using IP address:

When the IP address of Z-1 is "169.254.0.10", enter it as **\\169.254.0.10**.

When using host name:

When the host name of Z-1 is "SX0130F7", enter it as **\\SX0130F7**.

3. Open the **Tool** folder and run the AMC Meeting's execution file (**Projection.exe**). AMC Meeting will start and show the main screen.

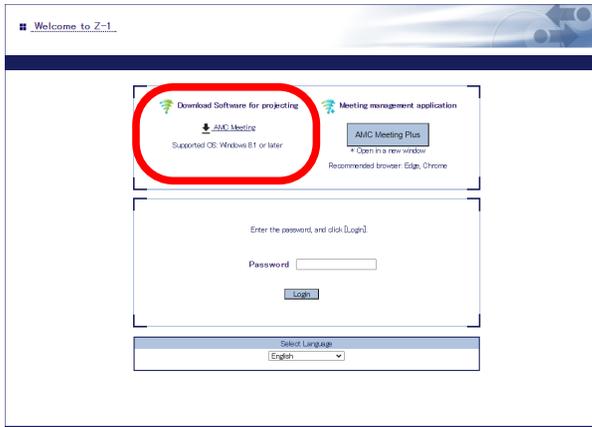


TIP

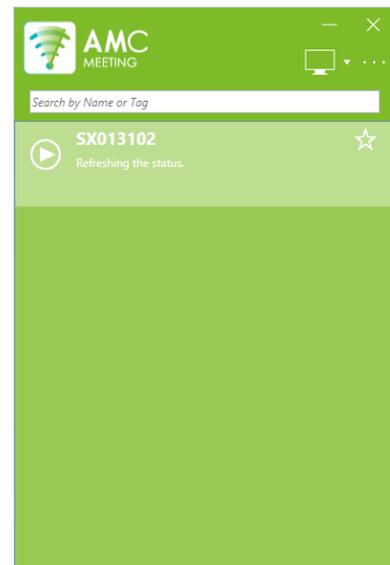
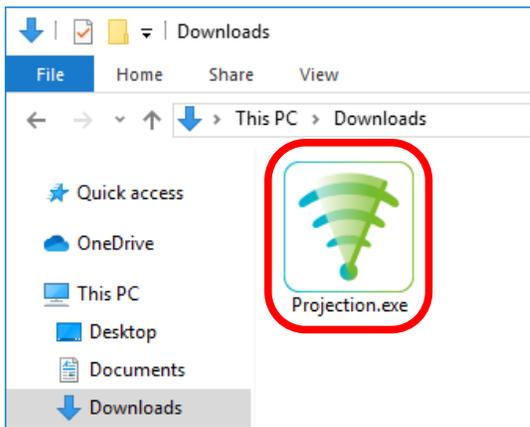
- Accessing a share folder may be prohibited by the Windows setting or security software. In that case, download AMC Meeting from the Web page of Z-1.

How to start AMC Meeting by downloading it from the Z-1's Web page:

1. Enter the IP address of Z-1 to the address bar of the Web browser, and press the Enter key. The login page of Z-1 appears if the initial configuration has been completed. Click **AMC Meeting** on top of the page to download it.



2. Open the folder to which you have downloaded AMC Meeting. Execute **Projection.exe** to start AMC Meeting. The main screen appears.



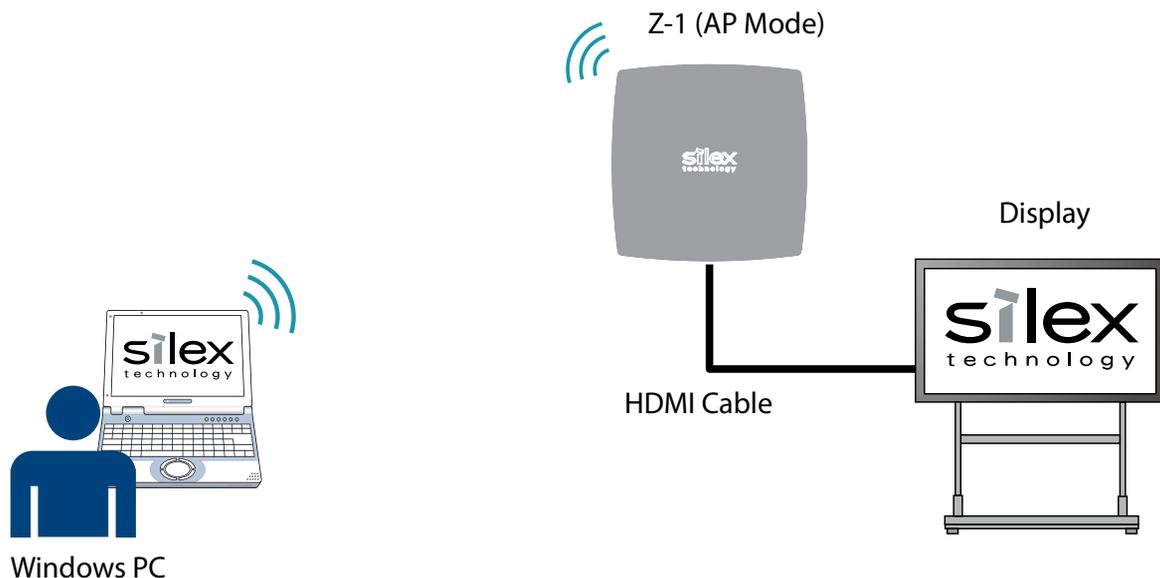
Note

- Create a shortcut of **Projection.exe** on the desktop to quickly run AMC Meeting next time.

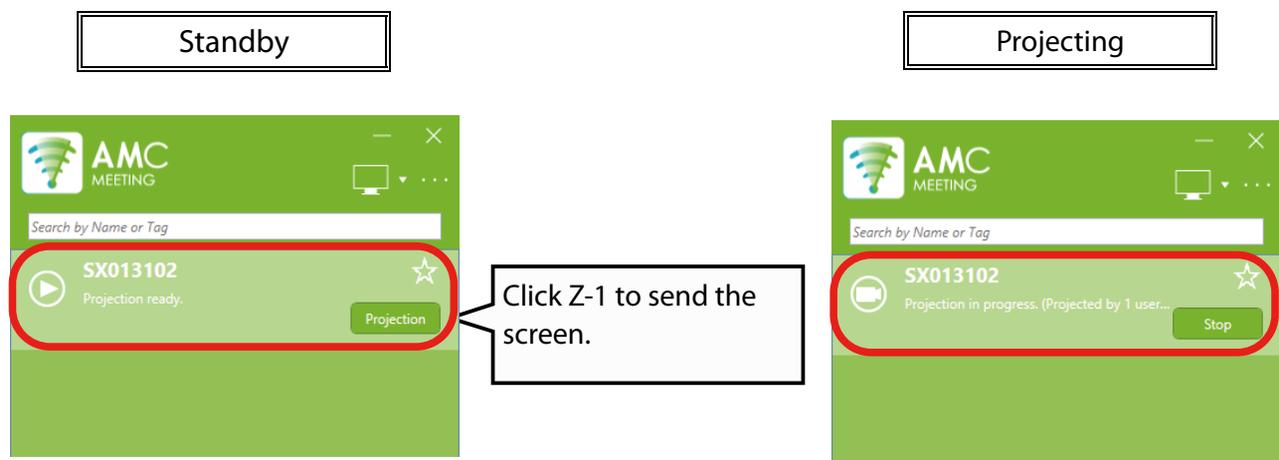
3-3. Projection to Connected Display

3-3-1. Projecting Windows PC Screen

Project the Windows PC screen to the display connected to Z-1.



Select Z-1 to use for projection from a list and click **Projection**. The status message will change to "**Projection is progress**".



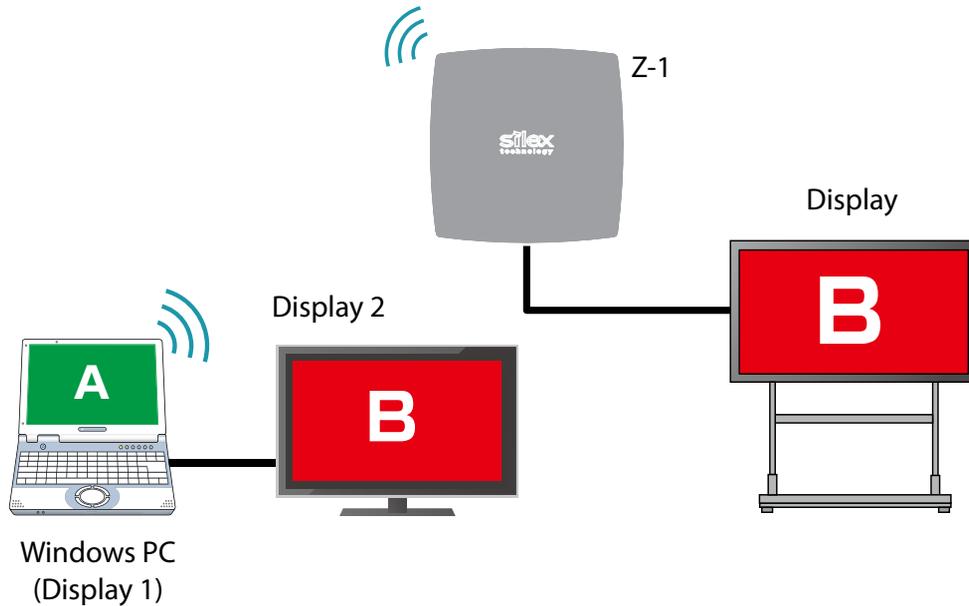
- When another Windows PC starts sending its screen, the screen will replace Z-1's current screen.



- If the "**Projection.exe**" file is copied to a local disk, a version compatibility check will run to confirm the compatibility with the product firmware.

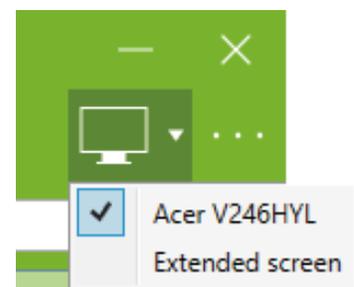
3-3-2. Switching Screens to Project

When multiple displays are connected to Windows PC, the display selection button can be used to switch the screens to be projected using Z-1.



Display selection button

The display to project from can be switched.



Note

- AMC Meeting saves the information of last selected display. When the projection is started next time, it will be done with the last selected display. If the last selected display is disconnected from Windows PC, the first display will be projected.

3-3-3. Mouse Pointer Trace Function

Since the movement of the mouse pointer is delayed on the screen when projecting from Windows, Z-1 shows an additional mouse pointer over the actual mouse pointer while the mouse is moved. (Two mouse pointers are displayed but it is not an error.) When you stop moving the mouse, it disappears. The additional mouse pointer has a shape of an arrow, and the size may differ from the mouse pointer size setting of Windows.

This function is enabled when **Enable the mouse pointer trace** is checked at the option setting screen.



TIP

- This function is supported only for a single screen display in single presenter mode or multi presenter mode.
- When a USB mouse is connected to Z-1, this function does not work since a priority is given to the drawing function and multi-presenter mode operation.



Note

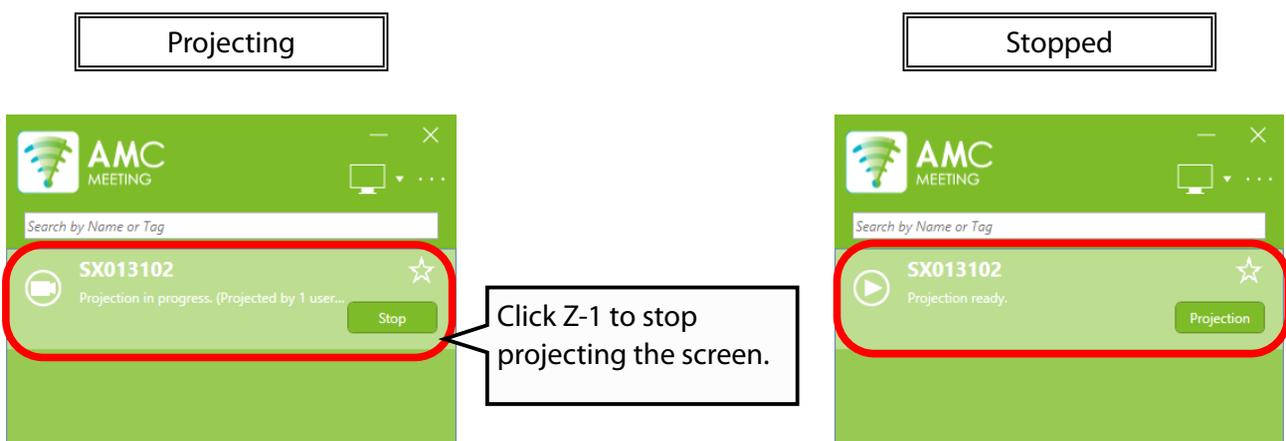
- For how to enable the mouse pointer trace function, refer to **2-2-2. AMC Meeting Optional Setting**.

3-3-4. Stopping Projection

This section describes how to stop projecting the screen.

Select Z-1 from a list and click **Stop**.

The projection stops and the status message changes to **“Projection ready”**.



3-3-5. Exiting AMC Meeting

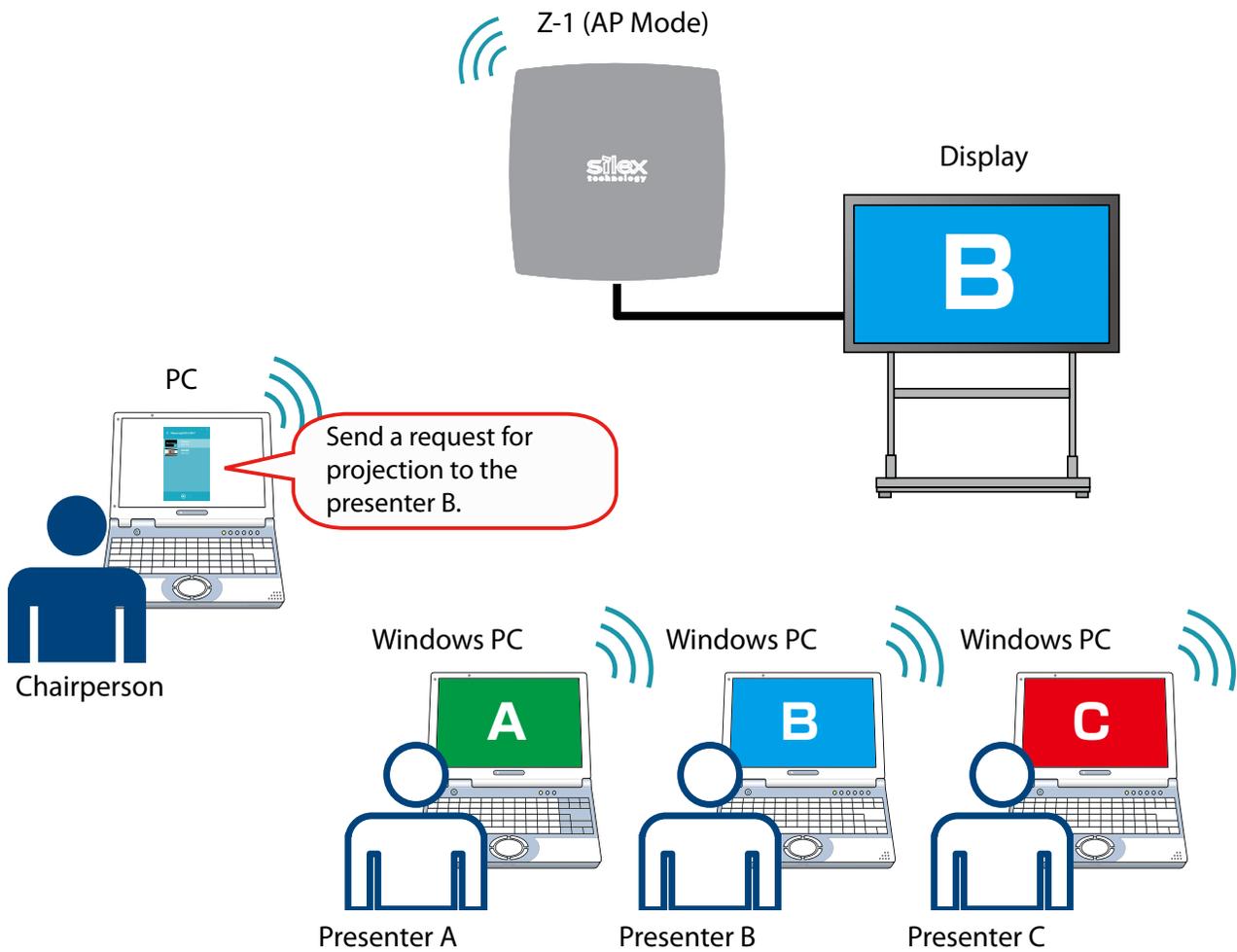
Click the close button of AMC Meeting.



4. Projecting Screen Using AMC Meeting Plus

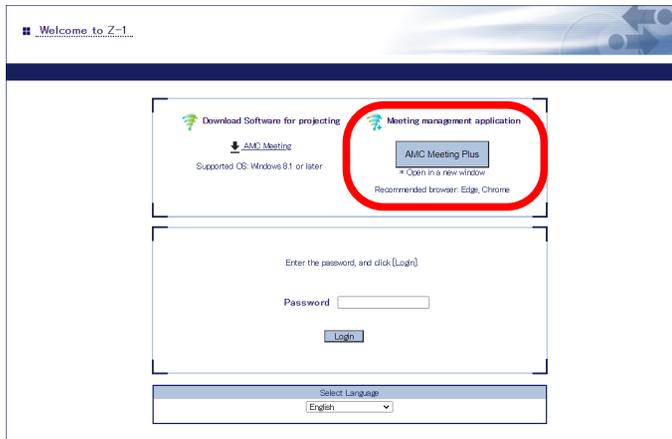
4-1. Before You Begin

Prepare Windows PCs for the chairperson and presenters. The chairperson can choose the presenter whose PC screen is projected to the display connected to Z-1.



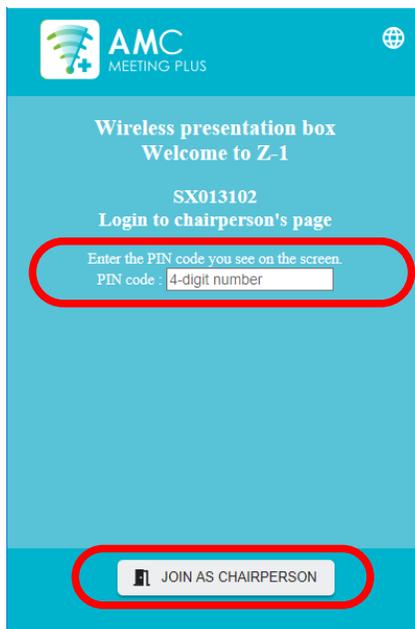
4-1-1. Preparing Chairperson's PC

1. From the PC of chairperson, access the Web page of Z-1 and click **AMC Meeting Plus**.



- For how to access the Web page of Z-1, see **3-1-5. Z-1's Web Page - How to Access the Web Page** of Z-1 User's Manual (Configuration Method).
- Note**
- The display of the Z-1's Web page may differ depending on your environment and Web browser.

2. As the login screen of AMC Meeting Plus appears, enter the PIN code (4-digit number) and click **JOIN AS CHAIRPERSON**.





- The authentication PIN code can be set at **Display Configuration** of the Z-1's Web page.

Note

3. Change the projection mode as follows.

For full-screen display:

Select **Single Presenter** to turn on the single presenter mode.

For split-screen display:

Select **Multi Presenter** to turn on the multi presenter mode.



- See **7-3. Changing Projection Modes**.

Note

4-1-2. Preparing Presenters' Windows PC

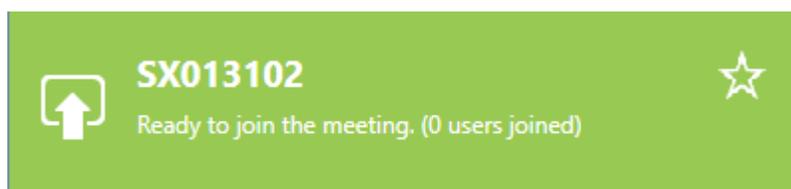
Start AMC Meeting on Windows PC of the presenter.

Select and connect Z-1 when the status message says "**Ready to join the meeting**".



- See **3-2. Starting AMC Meeting** for how to start AMC Meeting.
- As the chairperson has logged into AMC Meeting Plus, the status message says "**Ready to join the meeting**" on AMC Meeting of the presenter's PC.

Note



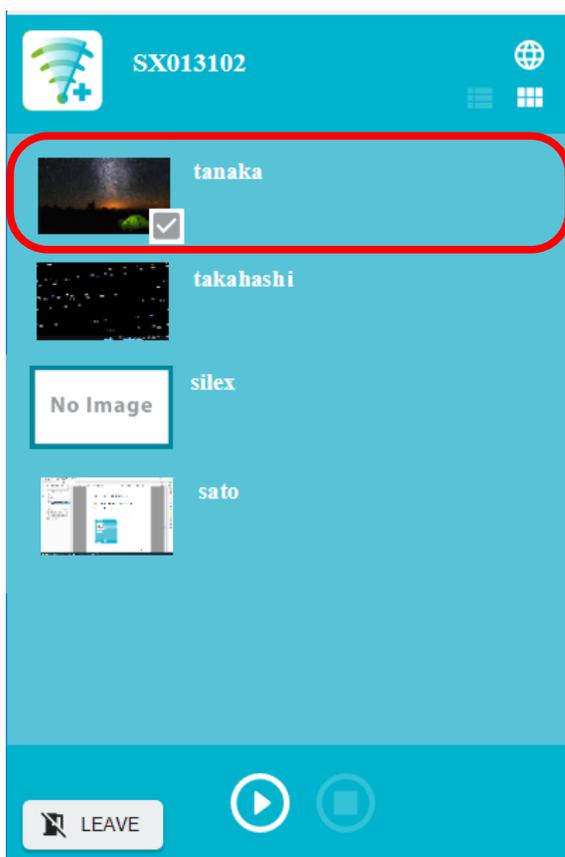
4-2. Projection to Connected Display (Chairperson Mode)

The Windows PC screen of the presenter, who is chosen by the chairperson, can be projected to the display connected to Z-1.

4-2-1. Chairperson to Choose and Show Presenters' Screen

1. As the login is completed on AMC Meeting Plus, the user list appears.
Click the user (presenter) you want to project from the list.
The number of users that can be selected will depend on the projection mode of Z-1.

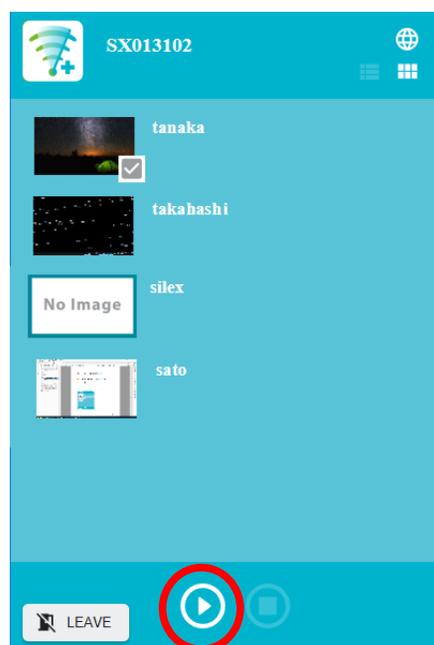
Only one user can be selected when the projection mode is **Single Presenter**.



Up to 4 users can be selected when the projection mode is **Multi Presenter**.



2. After the user is selected, the projection start button appears on bottom of the screen. Click the start button to start the projection of the selected user.





Note

- After **JOIN AS CHAIRPERSON** is clicked, the projection start/stop process runs and the dialog (modal dialog) appears. As long as the dialog is shown, it is unable to control the screen.

Sample screens:

<p>Getting user information</p> <p>Please wait for a while.</p>	<p>Broadcast control in process</p> <p>Please wait for a while.</p>	<p>Loading</p> <p>Please wait for a while.</p>
--	--	---

When it is impossible to join the meeting as chairperson, the following screens appear. The following screens are automatically refreshed for every 1 sec.

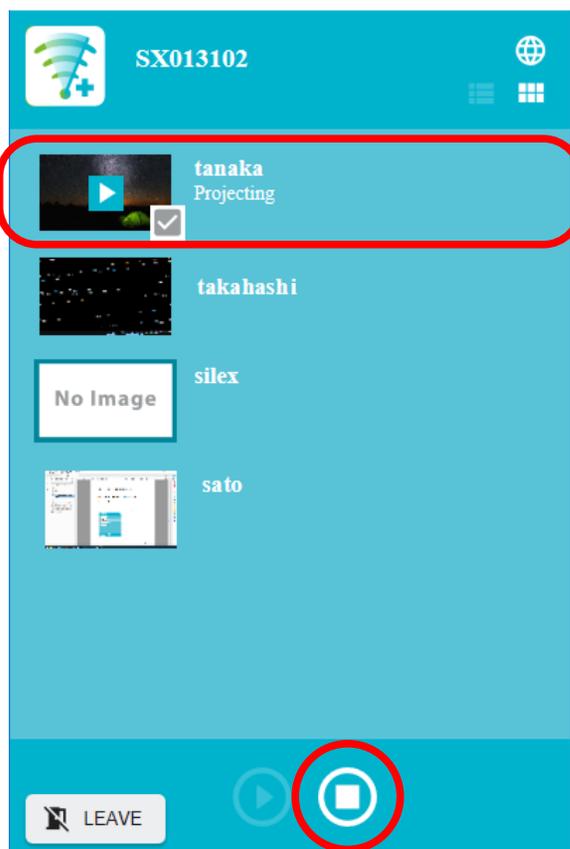
Sample screens:

<p>Communication error</p> <p>Please wait for a while.</p>	<p>The other user is holding a right of chairperson.</p>
---	---

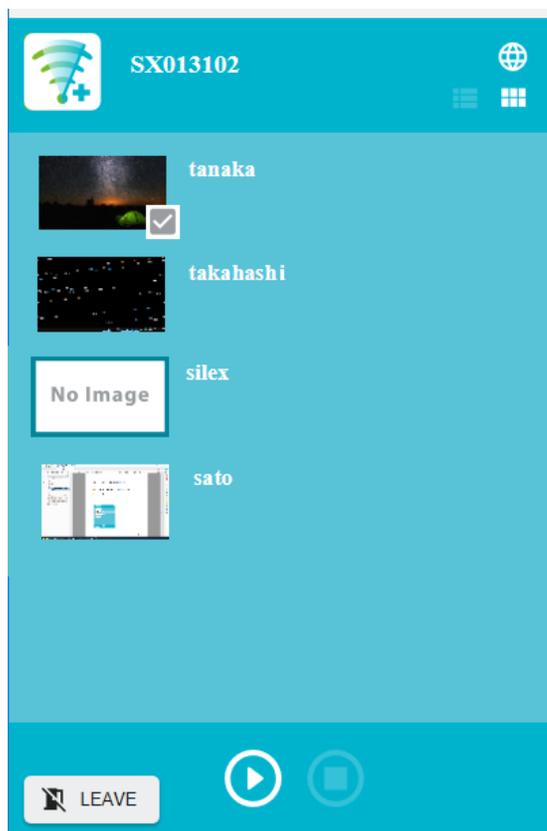
4-2-2. Stopping Projection

This section shows how to stop projecting the display.

1. Select a user to stop projection from the list of users, and then click the stop button at the bottom. The user's AMC Meeting will stop projecting the screen.



- The projection to the display connected to Z-1 will stop.



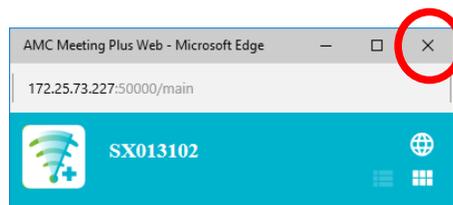
4-2-3. Exiting AMC Meeting Plus

To finish the meeting as chairperson, click **LEAVE**. The login screen will be displayed again.
To finish AMC Meeting Plus, click the close button in the login screen.

Leave button



Close button



- If the close button is clicked without clicking **LEAVE**, AMC Meeting Plus will not be finished.

TIP

(Blank page)

5. Projecting Screen Using Google Cast

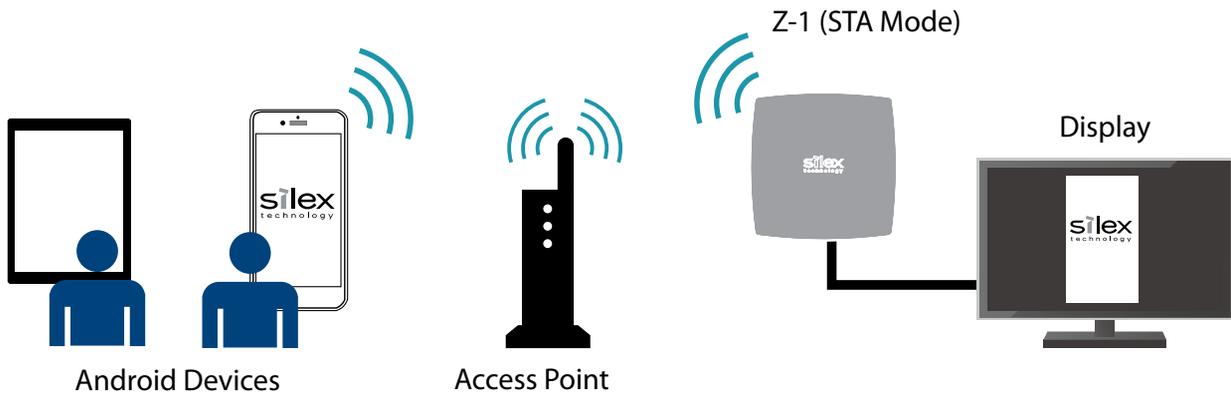
5-1. Mirroring Android Device Screen

This chapter describes how to project the screen of Android devices to the connected display using Google Cast.

Projection by using Z-1 in Access Point mode (AP mode)



Projection by connecting another Access Point in the same network



5-1-1. Projecting Android Device Screen

This chapter describes how to project the screen of Android devices to the connected display.



TIP

- Make sure that Z-1's date and time information is correct. To do so, enable the NTP client setting of Z-1 and provide the address of NTP server to connect. When Z-1 connects to a network on which the Internet connection is available, Z-1's clock will automatically get the correct time.
- Some Android devices have different icons or user interfaces from this manual. For more information, see the instruction manual that comes with the Android device.
- As Google Cast does not support a PIN code process on its protocol, Z-1 can be connected without entering the authentication PIN code.

1. Connect the Android device to Z-1 in the same network.
2. Tap **Settings** to reach the setting screen.
3. Scroll down the screen and tap **Display**.
4. Scroll down the screen and tap **Cast**. The discovered Z-1 units are displayed in the device list.
5. Tap Z-1 to project the Android device's screen to.

5-1-2. Stopping Cast

Open **Cast** and tap **Stop Casting** or **Disconnect** to stop projection.

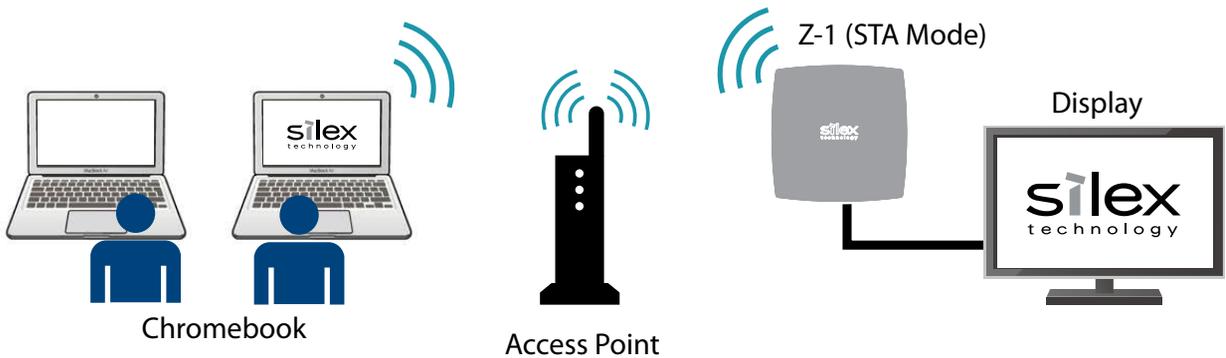
5-2. Mirroring Chromebook Screen

This chapter describes how to project the screen of Chromebook to the connected display using Google Cast.

Projection by using Z-1 in Access Point mode (AP mode)



Projection by connecting another Access Point in the same network



5-2-1. Projecting Chromebook Screen

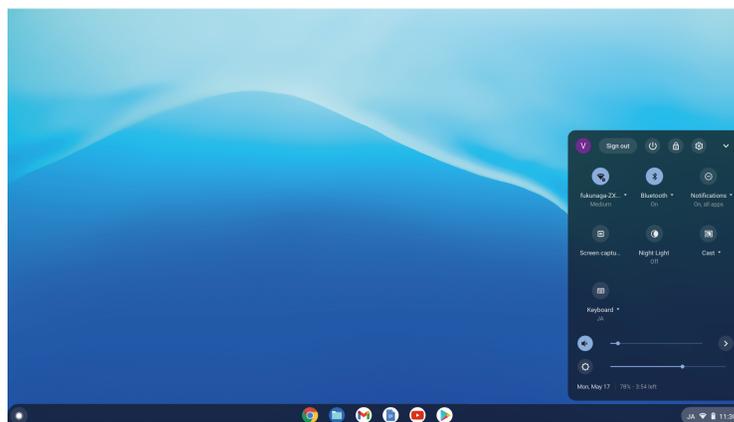
This chapter describes how to project the screen of Chromebook to the connected display.



TIP

- Make sure that Z-1's date and time information is correct. To do so, enable the NTP client setting of Z-1 and provide the address of NTP server to connect. When Z-1 connects to a network on which the Internet connection is available, Z-1' clock will automatically get the correct time.
- Some Chromebook devices have different icons or user interfaces from this manual. For more information, see the instruction manual that comes with the Chromebook device.
- As Google Cast does not support a PIN code process on its protocol, Z-1 can be connected without entering the authentication PIN code.

1. Connect the Chromebook device to Z-1 in the same network.
2. Click the bottom right corner of the desktop where you see the clock.



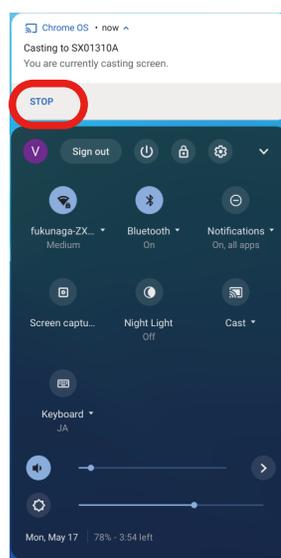
3. Click **Cast** to display Z-1 in the list.



4. Select Z-1 to start the projection.

5-2-2. Stopping Cast

Click the bottom right corner of the desktop where you see the clock, and click **STOP** to stop casting.

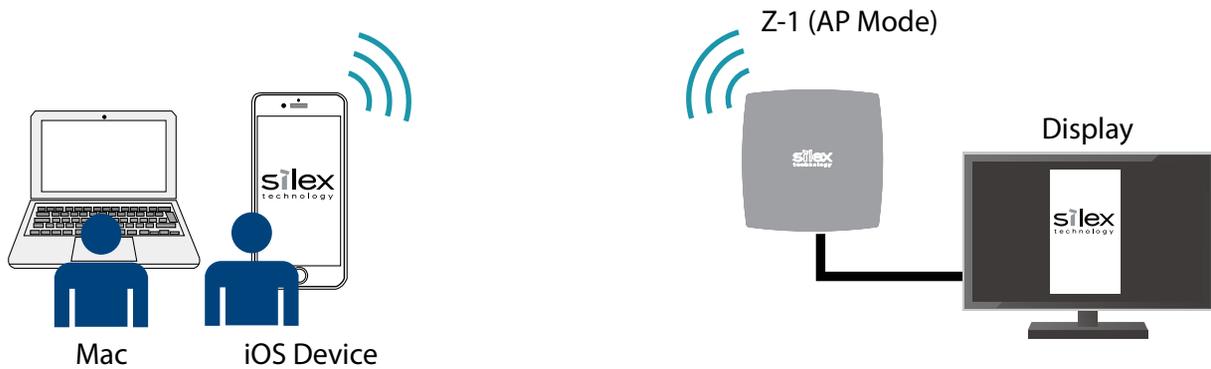


6. Mirroring Screen with AirPlay

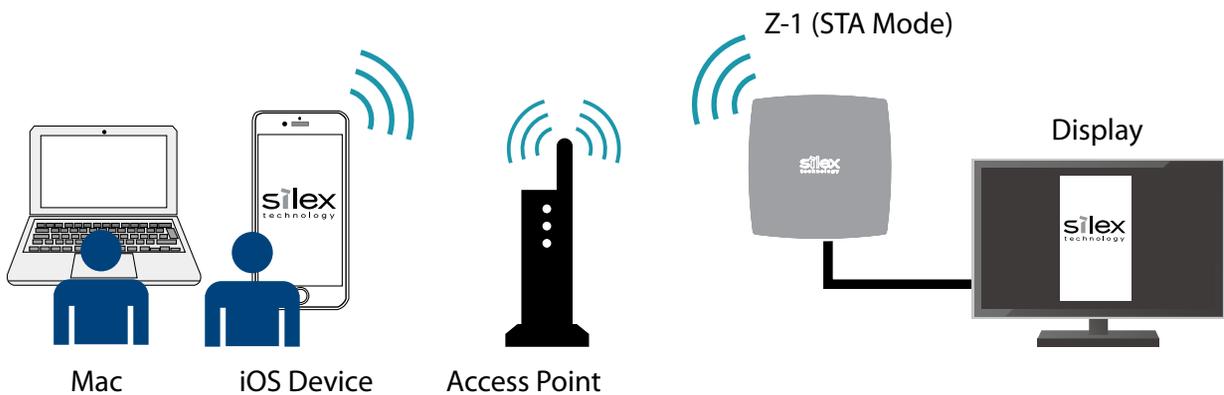
6-1. Mirroring Mac/iOS Device Screen

This chapter describes how to project the screen of Mac / iOS device to the connected display using the **AirPlay / Screen Mirroring** feature.

Projection by using Z-1 in Access Point mode (AP mode)



Projection by connecting another Access Point in the same network



6-1-1. Mirroring iOS Device Screen

Projecting iOS Device Screen

This section explains how to project the screen of iOS device to the connected display.

1. Connect the iOS device to Z-1 in the same network.
2. Open **Control Center** and tap **Screen Mirroring**.
The setting window appears for screen mirroring and the discovered Z-1 units are displayed in a list.



Note

- If Z-1 is not shown on the list, check the iOS device and Z-1 are connected to the same network.



3. Tap Z-1 on the list. The iOS device screen will be shown on the display connected to Z-1.



Note

- If the PIN code authentication screen appears, enter the PIN code (4 digit number).

Stopping Mirroring

Open **Control Center**, tap **Screen Mirroring**, and then tap **Stop Mirroring**.

6-1-2. Mirroring Mac Screen

Projection Using AirPlay

This section describes how to project the Mac's screen to the connected display.

1. Connect Mac to Z-1 in the same network.
2. Click  in the menu bar at the top of the screen, and select Z-1.



Note

- If you don't see , go through the following steps.
 1. Go to Apple menu > **System Preferences**, and open **Displays**.
 2. Select **Show mirroring options in the menu bar when available**.
- If the PIN code authentication screen appears, enter the PIN code (4 digit number).

3. The Mac screen is shown on the display connected to Z-1.

Stopping AirPlay

1. Click  in the menu bar at the top of the screen, and select Z-1.
2. Choose **Turn AirPlay Off**.

7. Using Tool Bar

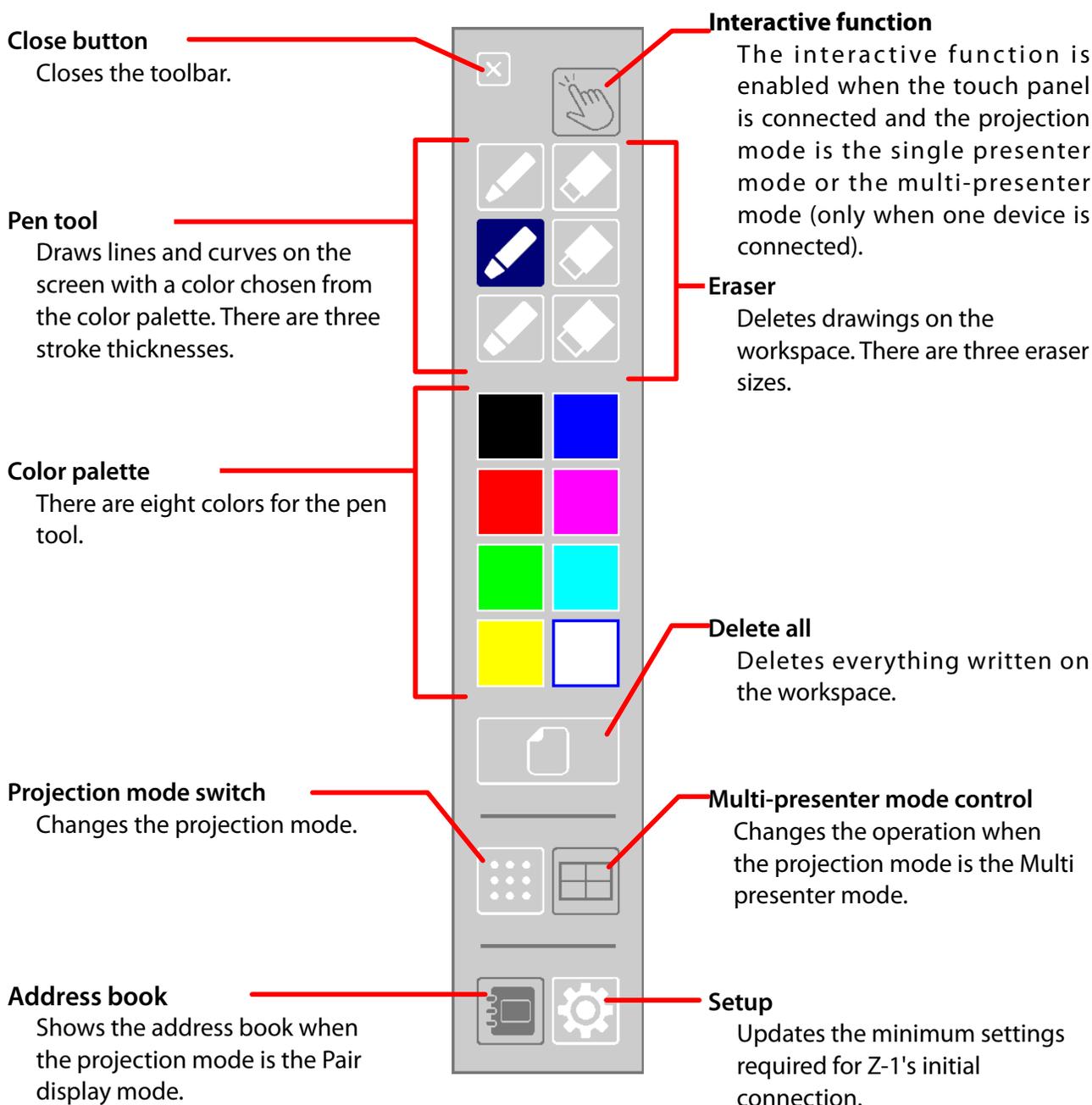
7-1. Overview

The toolbar can be displayed by connecting a USB mouse to Z-1 and clicking the icon at the bottom right of the display.



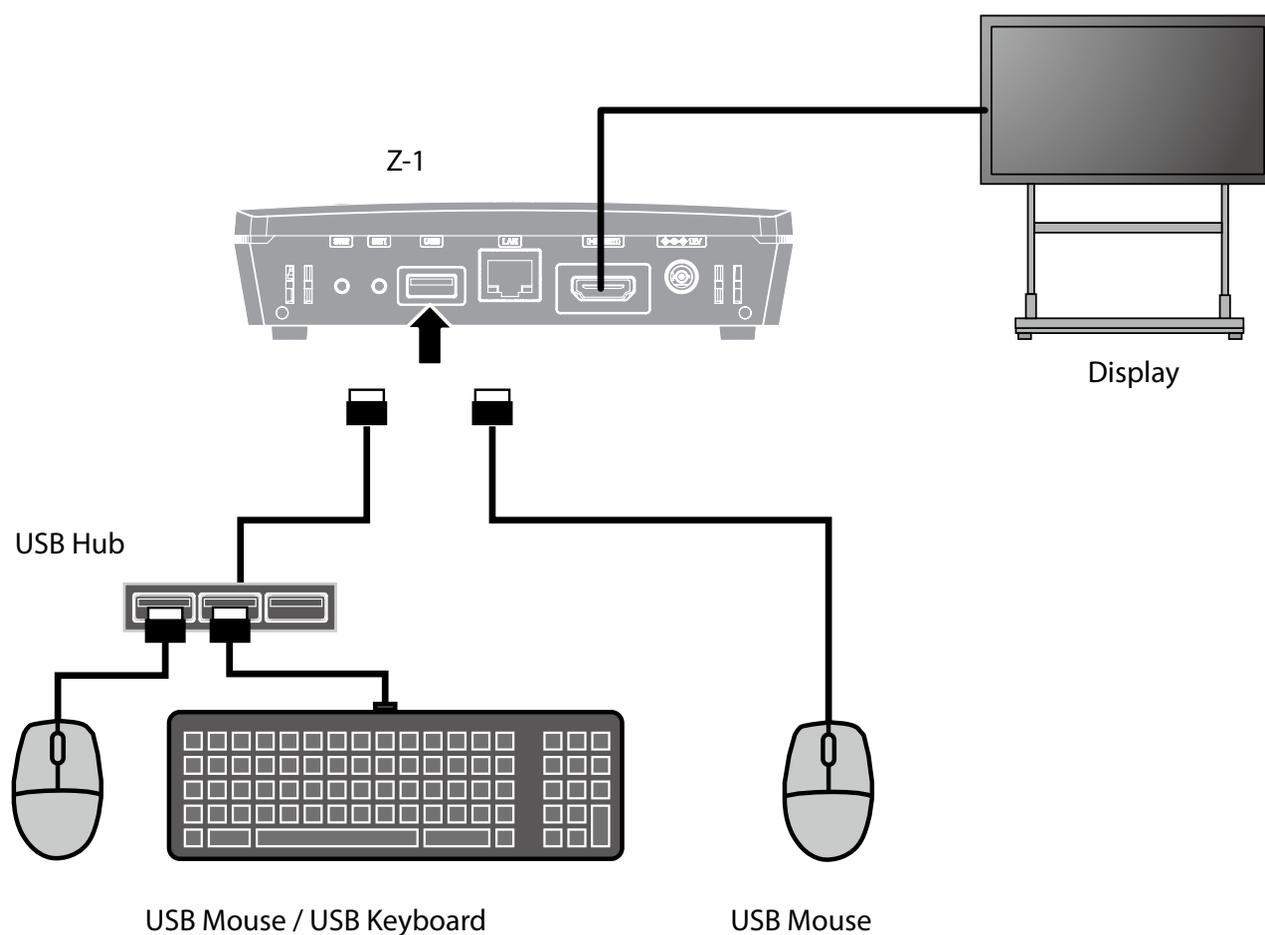
- When the device server function is enabled at **Access control** of Z-1's Web page, the toolbar cannot be used.
- A touch panel can be used instead of a USB mouse to control the toolbar. For details, refer to **7-7. Using Touch Panel Display**.

7-1-1. Tool Bar



7-1-2. Before Using Toolbar

Connect a USB mouse to Z-1's USB port to access the toolbar functions. In order to use the setup function or to enter the IP address/host name manually using the address book function, connect a USB Hub to Z-1 and connect a USB mouse and a USB keyboard to the Hub.

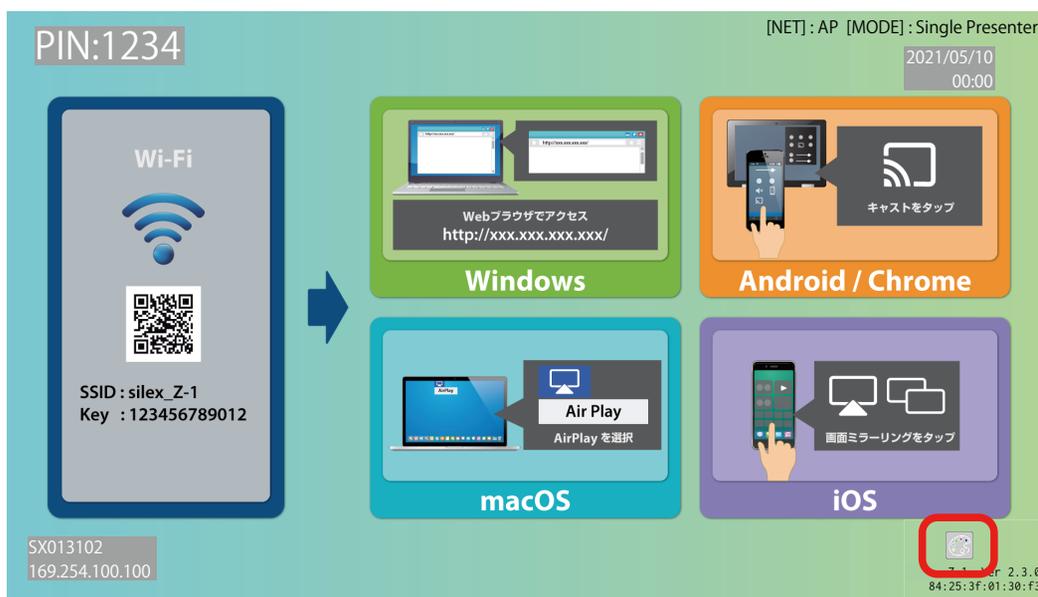


- A touch panel can be used instead of a USB mouse to control the toolbar. For details, refer to **7-7. Using Touch Panel Display**.

7-1-3. Showing/Closing Toolbar

Showing Toolbar

Click the icon at the bottom right of the display using a USB mouse to display the toolbar.



Note

- The icon will differ depending on the touch mode status.
 - When the interactive function is enabled:

 - When the drawing function is enabled:

- The position of the icon can be changed by drag & drop.
Each time Z-1 is started, the position is reset to the bottom right.

Closing Toolbar

There are two ways to close the toolbar.

- Click the close button on the toolbar.



Note

- To close the toolbar, the following functions need to be terminated:
 - Projection mode switch
 - Address book
 - Multi presenter mode
 - Setup

7-2. Using Drawing Function

7-2-1. Using Pen Tool

1. Choose a stroke thickness from the pen tool and a color from the color palette.
2. Drag the mouse by holding the left mouse button, and a line will appear along with the mouse pointer.

**Note**

- If Z-1 is started after a USB mouse is connected, the pen tool function is activated.
- The pen tool function is enabled as long as the USB mouse is connected to Z-1. To disable the pen tool, disconnect the USB mouse from Z-1.

7-2-2. Deleting Drawings

Pen drawings can be deleted.

How to delete partly:

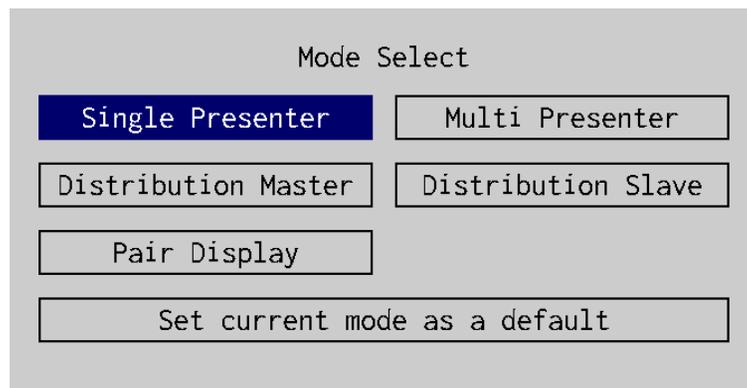
1. Select the eraser icon from the toolbar.
2. Move the USB mouse pointer to the drawings you want to delete. Move the pointer by holding the left mouse button, and the drawings will be deleted along with the mouse pointer.

How to delete all:

Click the Delete All icon on the toolbar. All drawings on the screen will be deleted.

7-3. Changing Projection Mode

1. Click the projection mode switch icon on the toolbar.
2. The projection-mode change menu appears. Click the projection mode with the USB mouse. The menu will close and a message will appear to change the projection mode.



Single Presenter

Turns on the single presenter mode.

Multi Presenter

Turns on the multi-presenter mode.

Distribution Master

Turns on the distribution master mode.

Distribution Slave

Turns on the distribution slave mode.

Pair Display

Turns on the pair display mode.

Set current mode as a default

The mode currently in use will be set to the default mode after restart.
After the setting is changed, the menu will close.



- When the mode is changed, the connecting sessions will be disconnected.
- Z-1 shows an OSD message and does not accept the control during the mode change.



Note

- The current projection mode is shown in bold.

7-4. Multi-Presenter Mode Operation Function

The multi-presenter mode operation function can be used only when the projection mode is the Multi-presenter mode. The following operations are available.

- Change the display position of sessions
- Disconnect the sessions
- Show the full screen display
- Switch the primary session

7-4-1. Starting Multi-Presenter Mode Operation Function

Starting Multi-Presenter Mode Operation Function

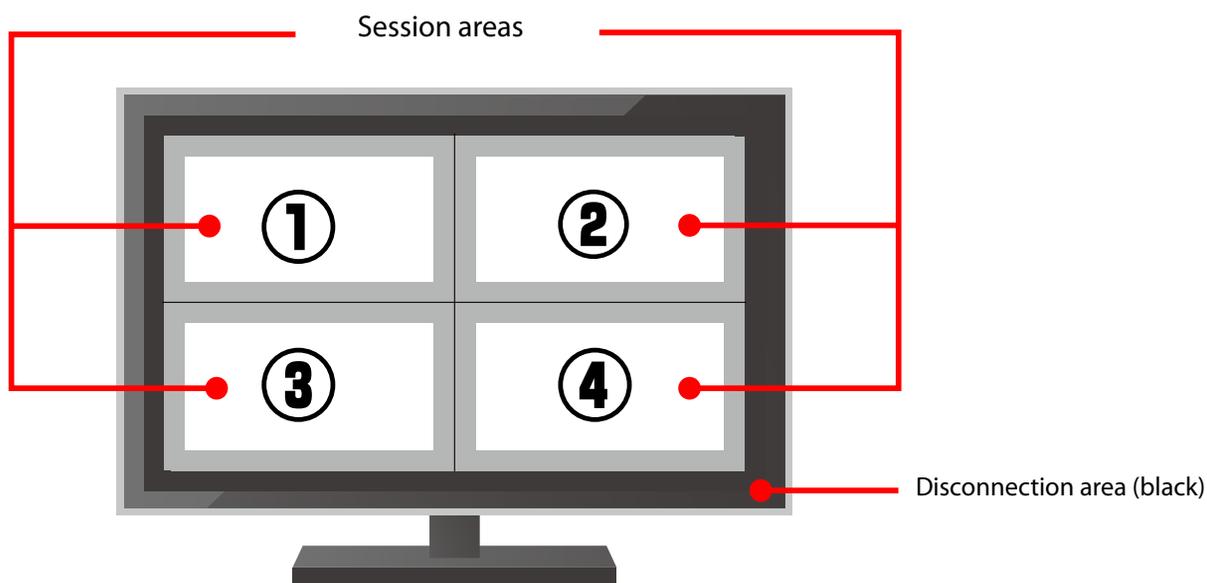
When the multi-presenter mode operation icon is clicked, the mouse pointer appears on the screen.



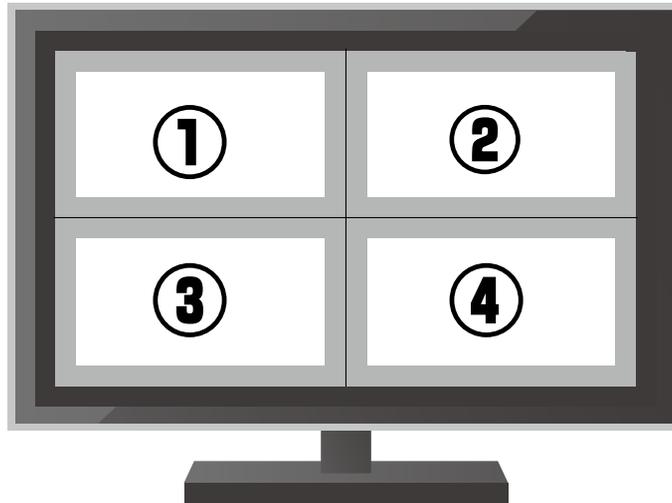
Note

- To exit the multi-presenter mode operation function, click the icon at the bottom right of the screen.

Pointer Operation on Split-Screen

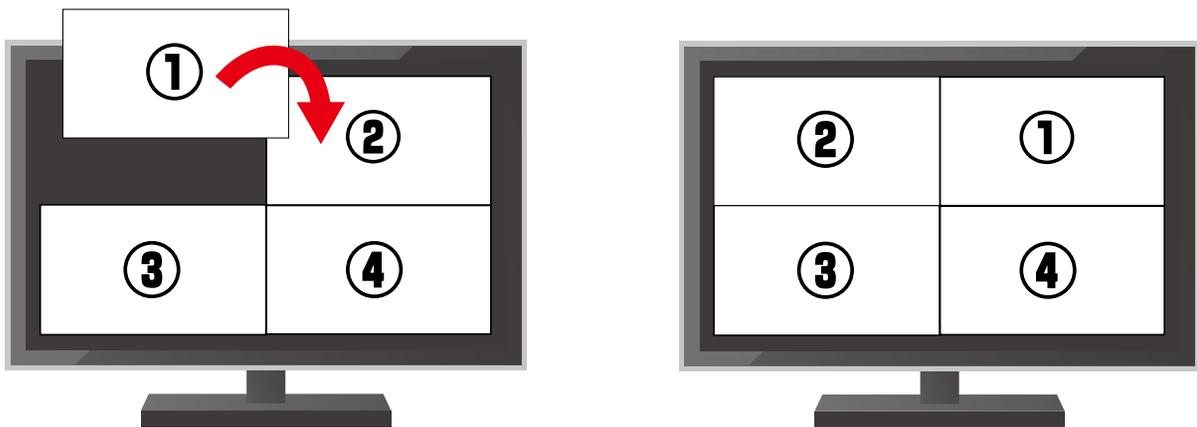


7-4-2. Changing/Switching Display Position



Drag and drop the screen image to change the position.

Example) Drag the screen image (1) and drop it to (2), the positions of (1) and (2) will change.



- If the screen image is dragged and dropped onto the black area, the session will be disconnected.
- If the screen image is dragged and dropped on to the gray area, the screen position will not be changed.

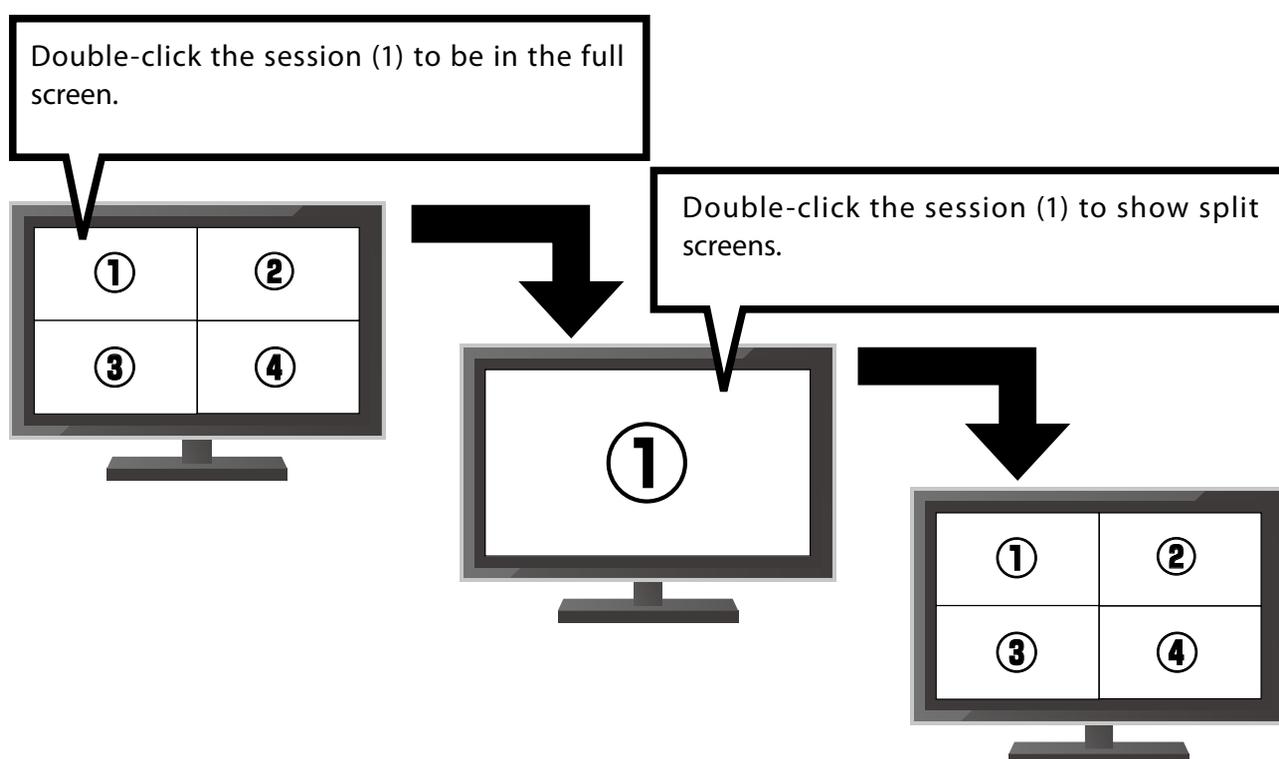
7-4-3. Showing Full Screen Display

Split Screen => Full Screen Display

Double-click one of the session screens in the split screen. The clicked screen will be shown alone (full-screen display).

Full Screen Display => Split Screen

Double-click anywhere on the full-screen display. The screen will be split into the number of sessions. The primary session will be the session that has been in the full screen display.



7-4-4. Changing Primary Session

Select (click) one of the split screens to decide the primary session (for video playing at max. 30fps). In the full screen display, the displayed session always becomes the primary session. Sessions other than the primary session will send still images at 1 sec interval.

7-4-5. Disconnecting Session

Drag the screen image to the edge (top/bottom/left/right) of the display.
When the pointer changes to (X), drop the image. The session will be disconnected.

Outgoing Call History Screen

Z-1 saves outgoing calls (IP address information) when the communication is established. If the most recent IP address has already been in the history, such address information will come to the top of the IP address list. The list can keep up to ten IP addresses. The oldest IP address will be deleted automatically.

Address	Calls	Recvs	Input
192.168.10.10			
192.168.10.20			
192.168.10.40			

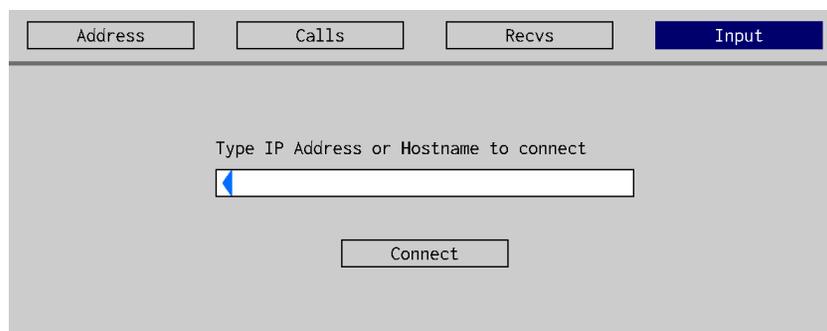
Incoming Call History Screen

Z-1 saves incoming calls (IP address information) when the communication is established. If the most recent IP address has already been in the history, such address information will come to the top of the IP address list. The list can keep up to ten IP addresses. The oldest IP address will be deleted automatically.

Address	Calls	Recvs	Input
192.168.10.10			
192.168.10.20			
192.168.10.40			

Manual Input Screen

The user can manually enter an IP address or a host name of Z-1 to connect. To do so, a USB keyboard needs to be connected to Z-1.



The screenshot shows a software interface with a top navigation bar containing four buttons: "Address", "Calls", "Recvs", and "Input". The "Input" button is highlighted in blue. Below the navigation bar, the main area has a grey background. It contains the text "Type IP Address or Hostname to connect" above a white text input field with a blue cursor. Below the input field is a "Connect" button.

7-6. Setup

In the setup screen, users can update the minimum settings required for Z-1's initial connection. To do so, a USB keyboard needs to be connected to Z-1.

7-6-1. Setting Mode Screen

The screenshot shows the 'Setting Mode Screen' with the following configuration options:

- [Basic Configuration]**
 - Network Mode: Access Point, Station, Wired
- [TCP/IP Configuration]**
 - DHCP Client: Enable, Disable
 - IP Address: 192.168.0.10
 - Netmask: 255.255.255.0
 - Default Gateway: 0.0.0.0
 - DNS Server: 0.0.0.0
- [Wireless Configuration]**
 - SSID: SX01310A
 - Network Auth.: Open, WPA2-PSK
 - Pre-Shared Key: *****
- [NTP Configuration]**
 - NTP Client: Enable, Disable
 - Server: [Empty field]

Buttons at the bottom: Save and Restart, Cancel

Basic Configuration		
Item	Description	Value/Range
Network Mode	Changes the network operation mode.	Access Point Station Wired
TCP/IP Configuration		
Item	Description	Value/Range
DHCP Client	Enables/Disables the DHCP protocol.	Enable Disable
IP Address	Specifies the IP address.	
Netmask	Specifies the subnet mask.	
Default Gateway	Specifies the gateway address.	
DNS Server	Specifies the DNS server address.	
Wireless Configuration (When Network Mode is set to Access Point .)		
Item	Description	Value/Range
SSID	Specifies the SSID of the connecting wireless LAN.	

Network Auth.	Sets the authentication method for communication with wireless devices.	Open WPA2-PSK
Pre-Shared Key	Specifies the pre-shared key to use when the authentication method is WPA2-PSK.	
Wireless Configuration (When Network Mode is set to Station .)		
Item	Description	Value/Range
SSID	Specifies the SSID of the connecting wireless LAN.	
Network Auth.	Sets the authentication method for communication with wireless devices.	Open WPA2-PSK
Pre-Shared Key	Specifies the pre-shared key to use when the authentication method is WPA2-PSK.	
NTP Configuration		
Item	Description	Value/Range
NTP Client	Enables/Disables the NTP protocol.	Enable Disable
Server	Sets the host name or IP address of NTP server.	

Save and Restart button

Saves the updated settings and restarts Z-1.

Cancel button

Discards the updated settings and terminates the setting mode screen.

7-6-2. Setting Update in Setting Mode Screen

1. Click the setup icon on the toolbar.



- If any of the following conditions are met, it is regarded that the initial configuration has already been completed. In this case, the setting cannot be changed since the user authentication screen does not appear.
 - The wireless LAN 1 setting is disabled.
 - VLAN ID is not "1".
 - The network authentication method for "Access Point" or "Station" is not Open or WPA2-PSK.

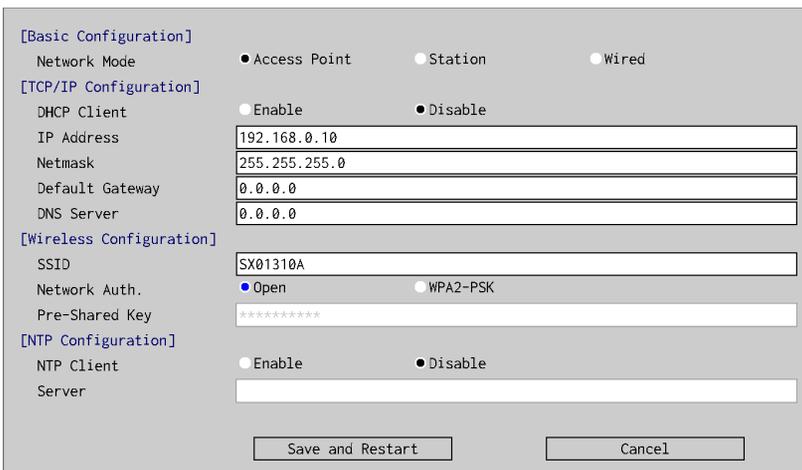
- The user authentication screen appears.
Enter Z-1's administrator password in the input box, and hit the Enter key.



Note

- When the display setting item "Connection information display" is enabled through the Z-1's Web page, the user authentication window shows the version, IP address, host name, and SSID of Z-1 at the bottom. SSID is displayed only when the network mode is Access Point mode.

- The setting mode screen appears.



- By using the cursor keys on the keyboard, move the screen to update and enter the values.
- After updating the settings, move to [Save and Restart], and hit the Enter key.

7-7. Using Touch Panel Display

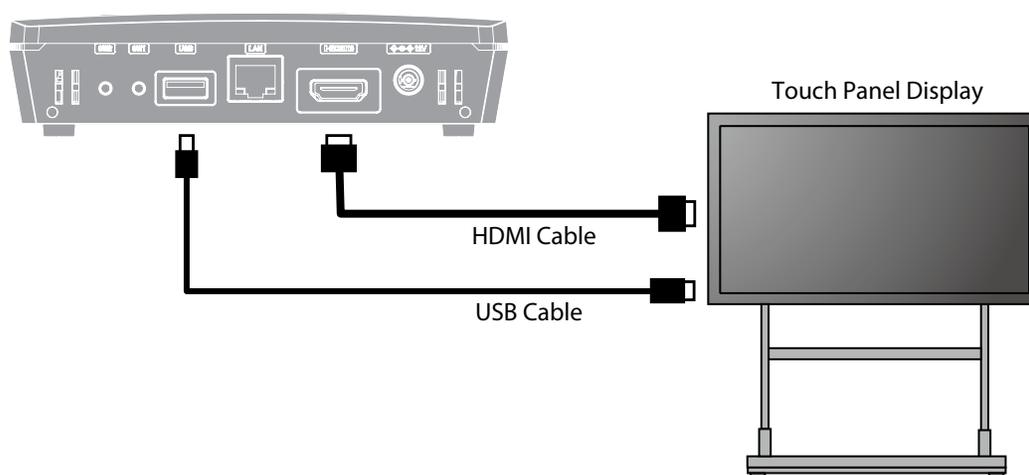
The following explains how to control the PC by touching a panel after projecting it to a touch panel display.



TIP

- This operation is possible when the projection mode of Z-1 is single presenter mode or multi-presenter mode (only when one device is connected).

1. Connect the touch panel display and Z-1 using an HDMI cable and a USB cable.



2. Start projection to a touch panel display.



Note

- For how to start projection using Z-1, refer to **3. Projecting Screen Using AMC Meeting**.

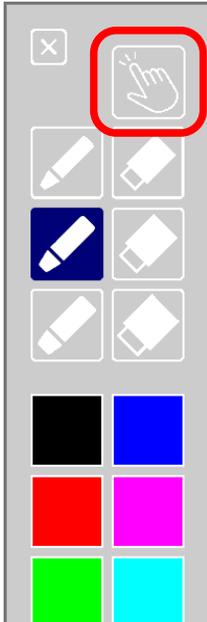
3. Display the toolbar.



Note

- For how to display the toolbar, refer to **7-1-3. Showing/Closing Toolbar - Showing Toolbar**.

4. Click the icon  to enable the interactive function.



- Multiple devices (including a single device with multiple interfaces or devices) are not supported. Also, multi-touch is not working on the touch panel display.
- When the interactive function is enabled, the drawing function is disabled. By selecting the pen tool or deletion tool on the toolbar, the drawing function can be enabled.

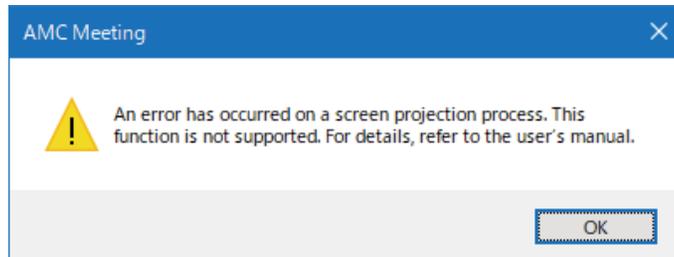


- It is impossible to control any applications using the touch panel display when the applications are running with administrator privileges but AMC Meeting is not. To control the applications using the touch panel display, AMC Meeting needs to be running with administrator privileges.

8. Error Message

8-1. Error Message

If Z-1 fails in projecting of the screen sent by AMC Meeting, the following message will pop up.



Reason of error:

An error occurred in the Windows internal process. When AMC Meeting uses the external GPU (Graphics Processing Unit) to project the screen while it is operating on Windows 10 PC that includes both embedded and external GPUs, an error occurs.

Solution:

Windows 10 allows the user to select GPU per application under the graphic settings. Instead of the external GPU, using the embedded GPU can avoid the error. To access the graphic setting options, take these steps.

1. Click the Settings icon (Gear icon) on the **Start** menu.
2. The Windows settings screen appears. Click **System**.
3. The Display setting screen under System appears. Scroll down the screen and click **Graphic settings**.
4. The Graphic settings screen appears. Select **Desktop App** for **Choose an app to set preference** and click **Browse**.
5. Select **Projection.exe** and click **Add**.
6. Click **Options** for AMC Meeting and change the setting to use the embedded GPU.