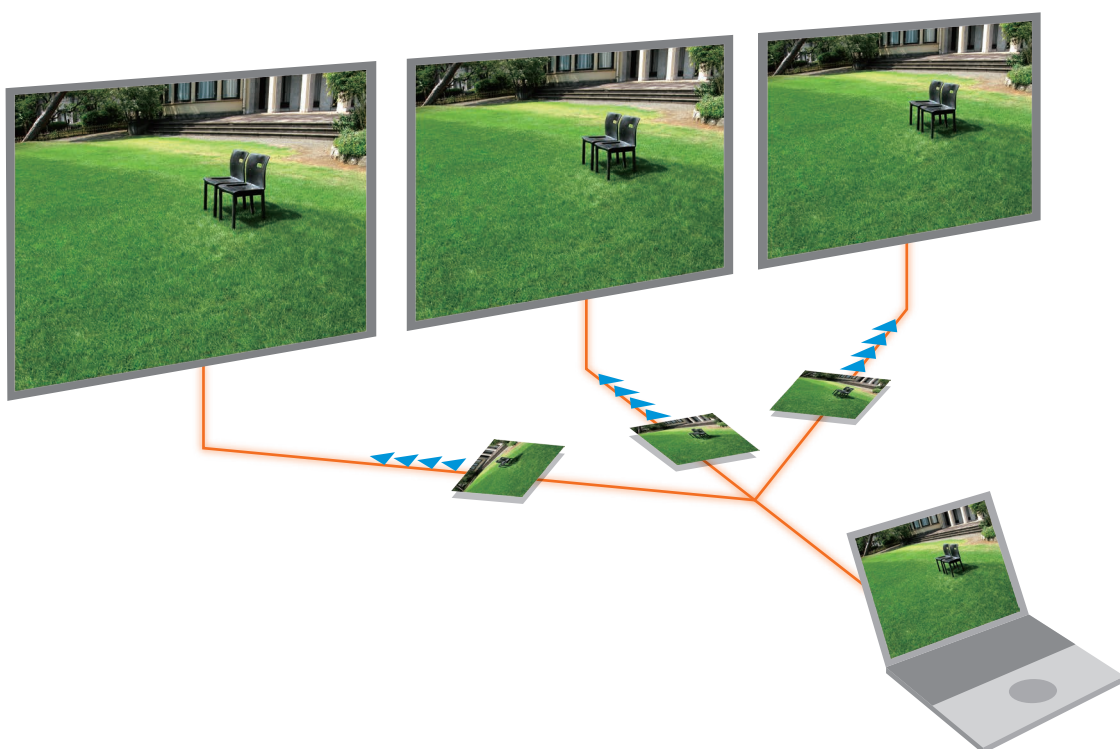# Panasonic®

Operating Instructions
Screen Transfer 3.0

Windows

Thank you for purchasing this Panasonic product.

■ Before using this software, please read the instructions carefully.

Contents

Precautions and Disclaimers

■ Request Regarding Security

When using this software, security breaches of the type described below are conceivable.
- Leakage of your private information via the software
- Illegal operation of the software by a malicious third-party
- Harm to or cessation of operation of the software by a malicious third-party

Take steps to ensure that the devices and computer used are secured and protected.
- Make sure the password is as hard to guess as possible.
- Change the password periodically.
- Panasonic Projector & Display Corporation and its affiliated companies never directly ask customers for their password. Do not give out your password even if directly asked by a third-party representing themselves as Panasonic Projector & Display Corporation.
- Always use on a network that has safety protection such as a firewall implemented.
- Set the password for the computer you are using in order to set limits on user accessibility.

■ Security when using the wireless LAN product

The advantage of a wireless LAN is that information can be exchanged between a computer or other such equipment and a wireless access point using radio waves, instead of using a LAN cable, as long as you are within range for radio transmissions.
On the other hand, because the radio waves can travel through obstacles (such as walls) and are available everywhere within a given range, problems of the type listed below may occur if security settings are insufficient.
- Transmitted data may be intercepted.
  A malicious third-part may intentionally intercept radio waves and monitor the following transmitted data.
  - Personal information such as your ID, password, or credit card number
  - Content of an Email
- Illegally accessed
  A malicious third party may access your personal or corporate network without authorization and engage in the following types of behavior.
  - Retrieve personal and/or secret information (information leak)
  - Spread false information by impersonating a particular person (spoofing)
  - Overwrite intercepted communications and issue false data (tampering)
  - Spread harmful software such as a computer virus and crash your data and/or system (system crash)

Since most wireless LAN adaptors or access points are equipped with security features to take care of these problems, you can reduce the possibility of these problems occurring when using this product by making the appropriate security settings for the wireless LAN device.
Some wireless LAN devices may not be set for security immediately after purchase. To decrease the possibility of occurrence of security problem, be sure to make all security-related settings according to the instructions given in the Operating Instructions supplied with them before using any wireless LAN device.
Depending on the specifications of the wireless LAN, a malicious third party may be able to break security settings by special means.
Panasonic Projector & Display Corporation asks customers to thoroughly understand the risk of using this product without making security settings, and recommends that the customers make security settings at their own discretion and responsibility.

■ Notations in this manual
- The illustrations and display examples used in this manual may differ from the actual product.
- In this document and software, "device" refers to a Panasonic LCD display.
- Please note that Panasonic Projector & Display Corporation cannot be held liable for damages arising from data corruption or loss as a result of using a device.

■ Operating conditions
There are the following conditions for operating this software.
- The computer satisfies the necessary environment and system requirements (page 7) and the devices are supported by this software.
- The computer and devices are connected via a LAN.
- Delivery is performed to only devices within the same network.

■ Supported models
For the models supported by this software (Screen Transfer), refer to the software explanation on the following website.
https://docs.connect.panasonic.com/prodisplays/download/software
This software does not support projectors.

Note
- Operation is not guaranteed when connected with an unsupported model.
- To use this software, you need to enable the Screen Transfer function on the supported model. For details, refer to the operating instructions of your device.

Using the Software

Using this software allows you to display your computer screen on one or multiple devices connected via a LAN.
You can also register multiple devices in conference rooms and classrooms as groups to display your screen.
This software has the following features.
● A device and computer can be connected by simply specifying an IP address.
● High-resolution images can be displayed.

Displaying your computer screen on one device
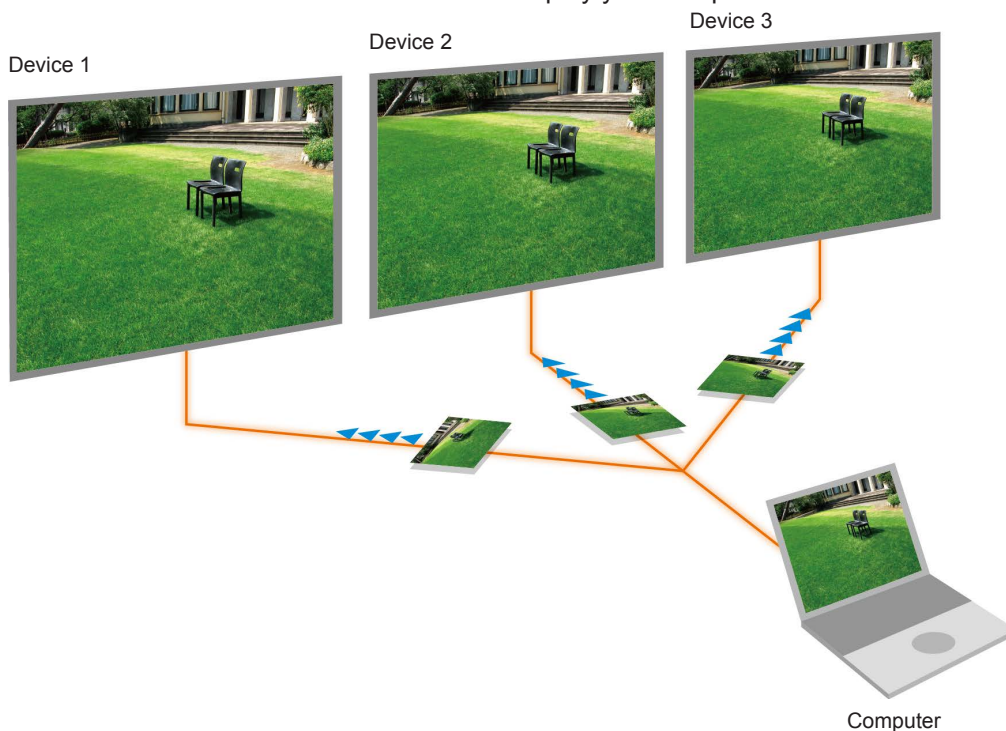
☞page 13
Specify one device with its IP address and then display your computer screen on it.
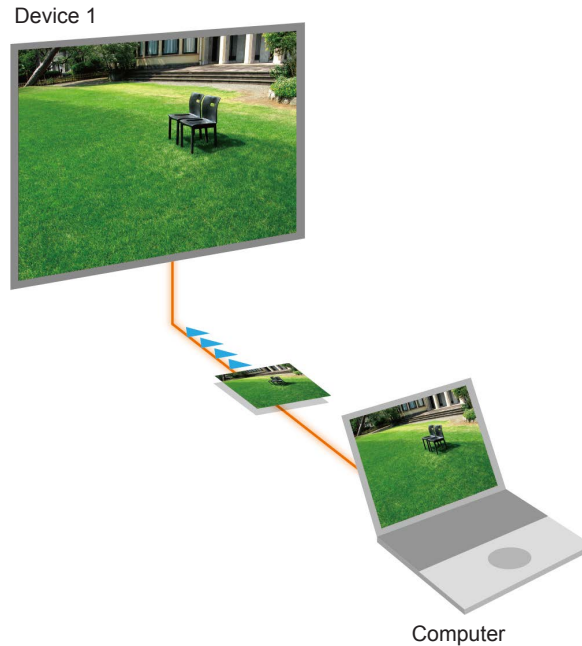
Device 1

Computer

Displaying your computer screen on multiple devices

☞page 16
Specify multiple devices with their IP addresses and then display your computer screen on them.

Device 3

Device 2

Device 1

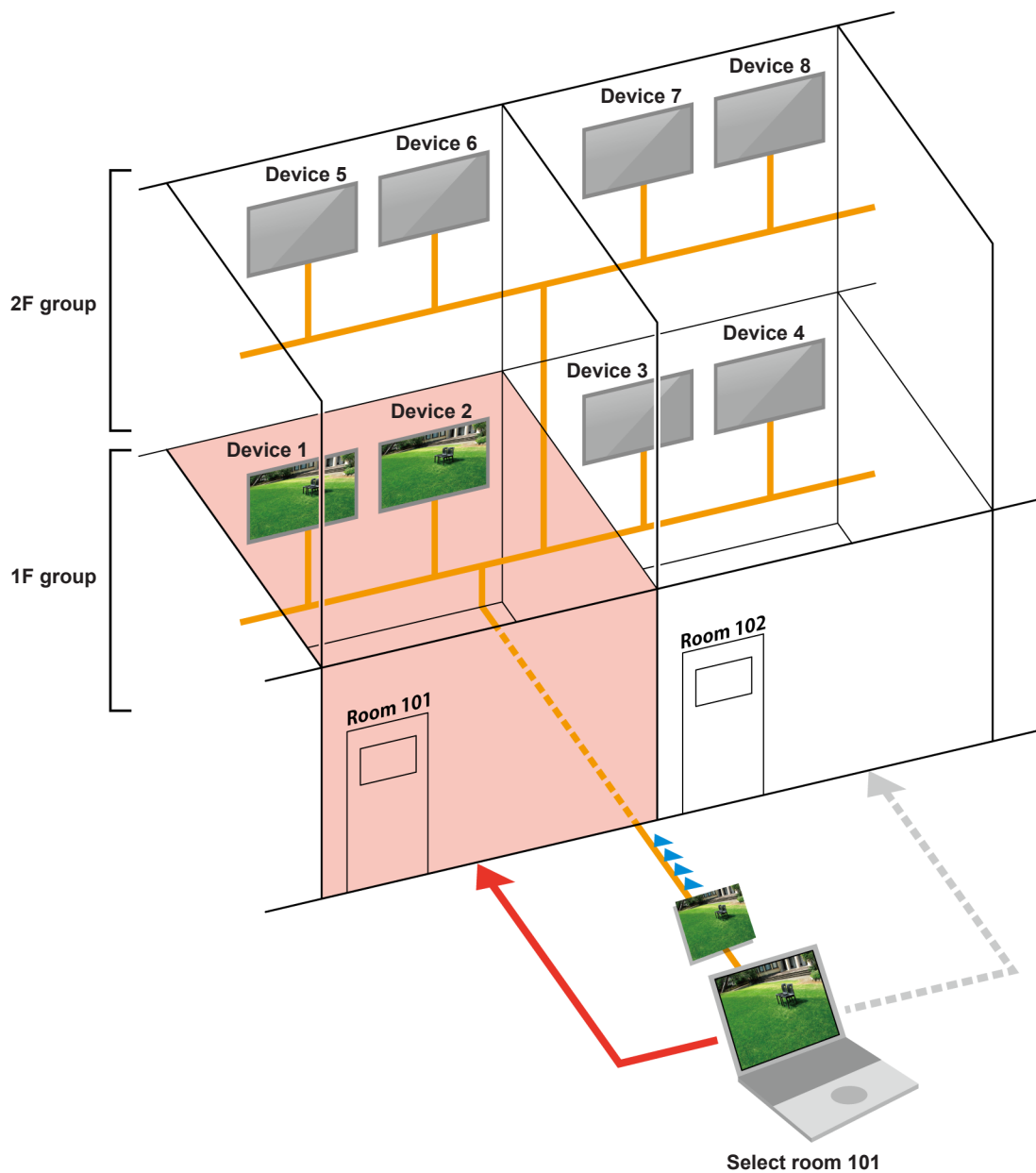Computer

5

Registering multiple devices as groups and displaying by selecting the connection destination

☞ page 28

Preregister multiple devices as groups and then display your computer screen by selecting the group to which you wish to connect.

The groups can be arranged in a hierarchy.

Select room 101

Note

● To use this method, register groups and devices in advance (page 19).

Checking Your Computer

Necessary environment for computers to be connected

- First, check your computer to see whether or not it has a LAN function.
- Before connecting the device to the computer, be sure to check the following settings.

Check 1 **LAN cable (when connecting via wired LAN)**
- Is the cable properly connected?
- The specifications for cables vary depending on the system configurations. Confirm the device settings and the cable specifications.

Check 2 **LAN adapter settings**
- Is your LAN adapter properly recognized?
- Is your LAN adapter switched on?
- Install the LAN adapter driver beforehand.
  For details on how to install the driver, refer to the instructions accompanying the LAN adapter.

Check 3 **Computer settings**
- When using a laptop computer, be sure to connect the AC adapter. There is a risk of the performance deteriorating depending on the power settings of the computer.
- Check the settings of security (firewall) software. When such software is installed, it may prevent connecting with a device.
- Check that a network bridge is not set. If set, it may prevent a connection.
  ☞ "Frequently Asked Questions" (page 43)
- Check that blocking by the firewall function has been disabled or stopped. A connection may not be possible if this software is not registered to the firewall.
  ☞ "Frequently Asked Questions" (page 43)

System requirements

To use this software, the computer must satisfy the following requirements.

|	
OS:	Windows 11 Home Windows 11 Pro Windows 10 Home 64 bit (version 1803 or later) Windows 10 Pro 64 bit (version 1803 or later) The Japanese and English versions of the above operating systems are supported. Operation is not guaranteed if Windows 10 / Windows 11 is not pre-installed.
CPU:	3rd Generation Intel® Core™ i7/i5/i3 or later processor with integrated graphics (Recommended: 7th generation Intel® Core™ i7/i5 or later processor with integrated graphics)
Memory:	1024 MB or more (Recommended: 8 GB or more)
Hard disk:	At least 100 MB free space (Extra free space is required to save the device information.)

LAN environment:	When connecting via wired LAN:
	    LAN port: 100BASE-TX/1000BASE-T
	When connecting via wireless LAN:
	    Compliance standard: IEEE802.11b/g/a/n

Desktop area:	1024 pixels × 768 pixels or more 2048 pixels × 1536 pixels or less

Note

- Note that operation is not guaranteed when used with system environments other than the above or on homemade computers.
- Use the latest computer video driver (graphics driver) provided by the computer manufacturer or Intel Corporation.
- If your device is a flat panel display that supports 4K images, up to 1920x1080 is supported for the resolution of projected images.
- To use a wireless LAN, you will need a flat panel display and wireless access point compatible with the wireless LAN delivery function. For details, refer to the software explanation on the website.
  https://docs.connect.panasonic.com/prodisplays/download/software
  Connect the wireless access point and flat panel display via wired LAN.

Operation is not guaranteed for all computers that meet the above conditions.

Computer network settings

The IP address, subnet mask, and other network settings can be specified with the following procedure. Confirm the settings with the network administrator beforehand.

1 Click [⊞] (Start) or press the Windows key to display the Start menu.

2 Click [⚙] (Settings) to display the <Windows Settings> screen.

3 Select [Network & Internet] → [Ethernet] ([Wi-Fi] when using a wireless LAN) → [Change adapter options] of Related settings to display the <Network Connections> screen.

4 Right-click [Ethernet] ([Wi-Fi] when using a wireless LAN) and then select [Properties].

5 Click the [Networking] tab.

6 Select [Internet Protocol Version 4 (TCP/IPv4] of [This connection uses the following items] and click [Properties].

7 Set the network of the computer to match the settings of the device.
Click [Use the following IP address], and enter the values in the [IP address], [Subnet mask], and [Default gateway] boxes.
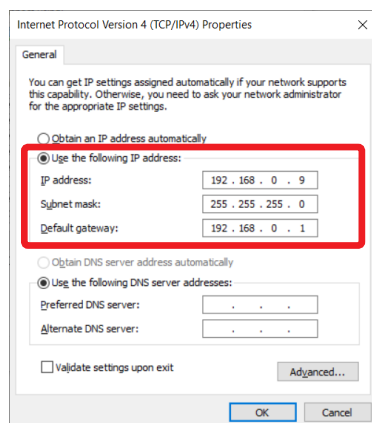
Match each of the values to your network environment. For details, check with the network administrator.

9

Installing/Uninstalling the Software

Installing the software

Note
- Install the software using an account with administrator privileges.
- The illustrations and screens used in this document may differ from actual appearances.
- For the models supported by this software, refer to the software explanation on the following website.
  https://docs.connect.panasonic.com/prodisplays/download/software
- If you install this software on a computer using an old version, the <Settings> screen (page 35) and other settings will be carried over.

1 **Download the installer of this software from the Web browser control screen of the device.**
For details on the Web browser control function, refer to the operating instructions of your device.
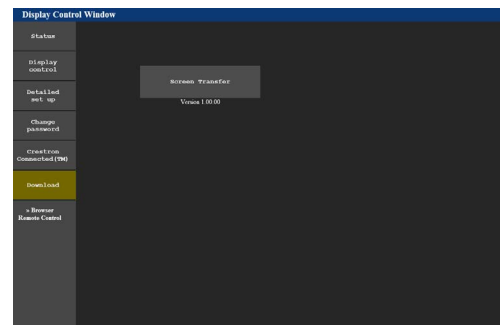
2 **Start the installer and perform the installation according to the on-screen instructions.**
Two software packages will be installed: this software and the "STReceiver" package.
When installation is complete, a shortcut icon for each is created on the desktop.

Screen Transfer   STReceiver
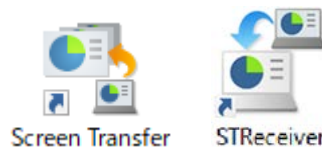
3 **When the completion screen appears after installation is completed, click the [Finish] button.**

Uninstalling the software

Enter "Apps & features" in the search box on the taskbar and the select the displayed [Apps & features]. Select [Screen Transfer] displayed in the list and then click [Uninstall].

Preparation

Checking the device

Device power

Turn on the device.

Note

● Check that the device is supported by this software. For the models supported by this software, refer to the software explanation on the following website.
https://docs.connect.panasonic.com/prodisplays/download/software
● Check that the Screen Transfer function is enabled on the device. For details, refer to the operating instructions of your device.

Checking the network status

Display the network status of the device and check the IP address.
For how to check the IP address, refer to the operating instructions of your device.
Check that the computer and device are connected within the same network.

Note

● Set [NETWORK SETUP] → [NETWORK CONTROL] to "ON" from the "INITIAL SETTING" menu on the device.

Starting the Application

To start the software that has been installed:

Double-click ![Screen Transfer icon] **on the desktop.**

The software can also be started up by selecting [▦ Start] → [📁 Panasonic] → [Screen Transfer].

The launcher and group/device selection screen appear. There are the following two methods to select devices.

● Specifying the IP address of a device
  This allows you to display your computer screen immediately even if the device has not been preregistered. You can also specify the IP addresses of multiple devices. When the software is started up the next time, you will need to specify the IP address again.
  ☞ "Displaying by Specifying the IP Address of a Device" (page 13)

● Selecting from registered groups and devices
  If you preregister groups and devices, you can select from a list of groups/devices. This method is suitable for delivering content to the same devices repeatedly.
  ☞ "Registering groups and devices" (page 19)
  ☞ "Displaying by Selecting Registered Groups and Devices" (page 28)
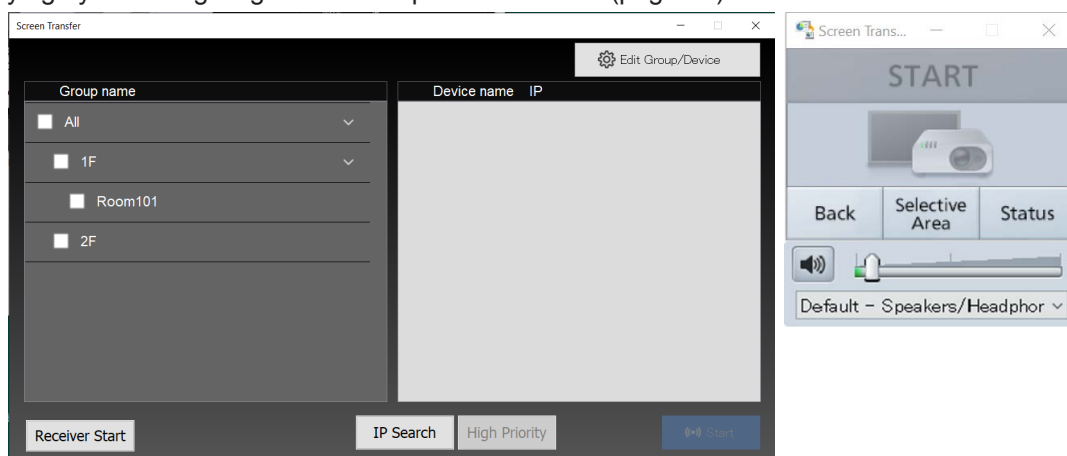
Displaying by Specifying the IP Address of a Device

Display your computer screen by specifying the IP address of a device without preregistering a device or group. To specify the IP address of a device, there is a method to display on one device and a method to display on multiple devices.
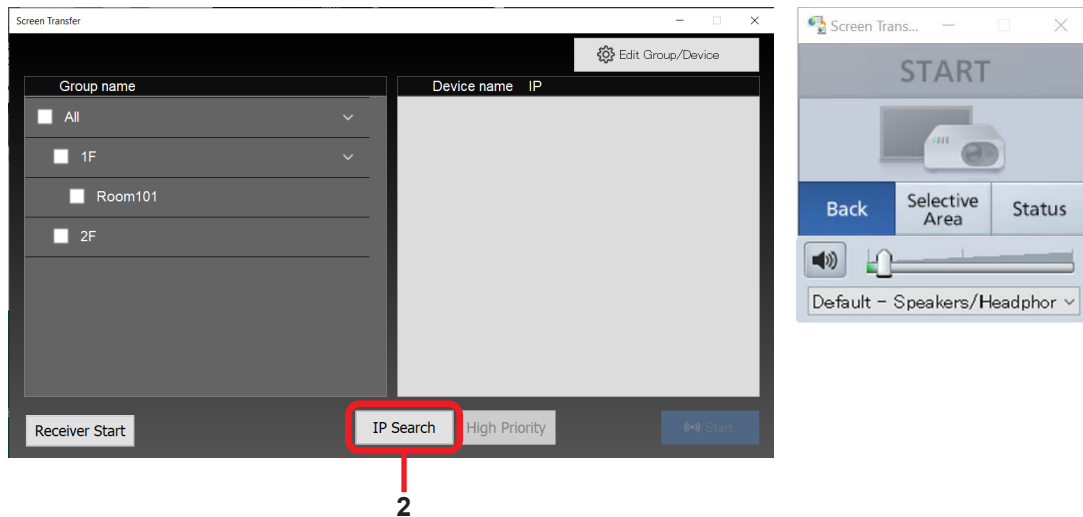
Displaying on one device

Note
- You need to turn on the device and switch the input to "Screen Transfer" in advance.
- Specify the device to display with its IP address. Turn on the device and check its IP address in advance (page 11).
- If the PIN code is turned on in the settings on the device, also enter the PIN code when connecting. For details on the PIN code, refer to the operating instructions of your device.
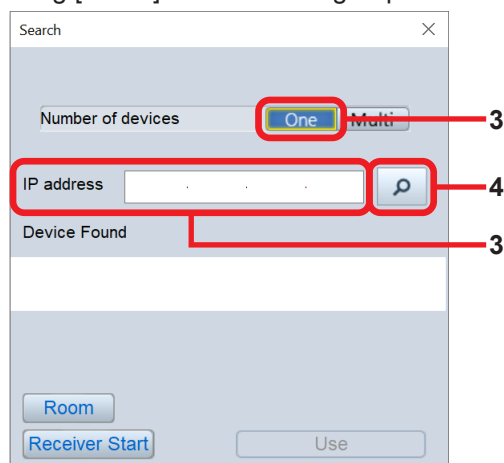
1 **Start the software** **to display the launcher and group/device selection screen.**

☞ "Starting the Application" (page 12)

2

2 **Click [IP Search] in the group/device selection screen.**

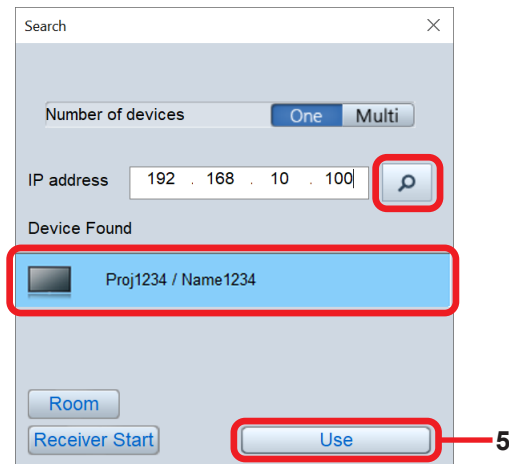The <Search> screen appears. Clicking [Room] returns to the group/device selection screen.

3 **Click [One] and enter the IP address of the device.**

13

4 **Click** 🔍 **.**

When the device is found, the device name is displayed in the lower part of the screen.

Search	✕
Number of devices	One Multi
IP address	192 . 168 . 10 . 100 🔍
Device Found	
🔲 Proj1234 / Name1234	
Room	
Receiver Start	Use ——5

5 **Click [Use].**

If the PIN code is turned on in the settings on the device, the <Enter PIN code> screen appears.

Enter PIN code (Proj1234 / Name1234)   ✕

🔒   A PIN code has been set for the device.
Enter the PIN code.

When connecting to multiple devices, enter the PIN
code of one of the devices.

Show PIN code   OK   Cancel
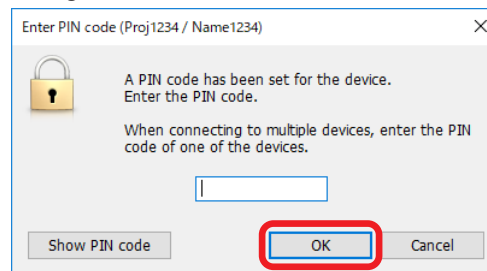
Enter the PIN code displayed in the standby screen of the device and then click [OK].
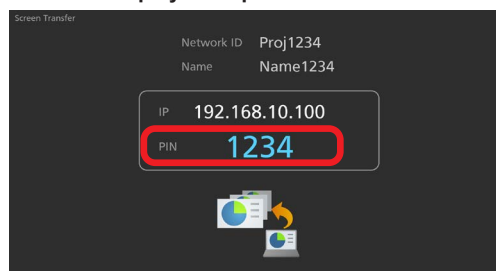
PIN code display example

Screen Transfer

Network ID   Proj1234
Name   Name1234

IP   192.168.10.100
PIN 1234

Note

● If the display of your computer supports 4K resolution, change the resolution to 2048 × 1536 pixels or less before using this software.
● If connecting failed, the software retries to connect every approximately 10 seconds.
● If another user is performing screen sharing, the PIN code will not be displayed on the device. When that happens, click [Show PIN code] to display the PIN code on the other user's shared screen.
● Selecting the [Start screen sharing when a device is selected] check box in the <Settings> screen (page 35) allows you to start display upon selection. When this setting is enabled, [Use] changes to [Start screen sharing].

Displaying by Specifying the IP Address of a Device

When the device becomes able to display images, launcher operation is enabled.
☞ "Launcher" (page 31)
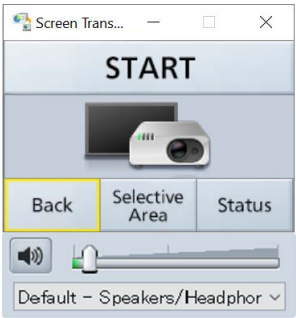
Displaying on multiple devices

Note

- Up to 64 devices can be used.
- You need to turn on the devices and switch the input to "Screen Transfer" in advance.
- Specify the devices to display with their IP addresses. Turn on the devices and check their IP addresses in advance (page 11).
- If the PIN code is turned on in the settings on the devices, also enter the PIN code when connecting. For details on the PIN code, refer to the operating instructions of your devices.

1 **Start the software** **to display the launcher and group/device selection screen.**
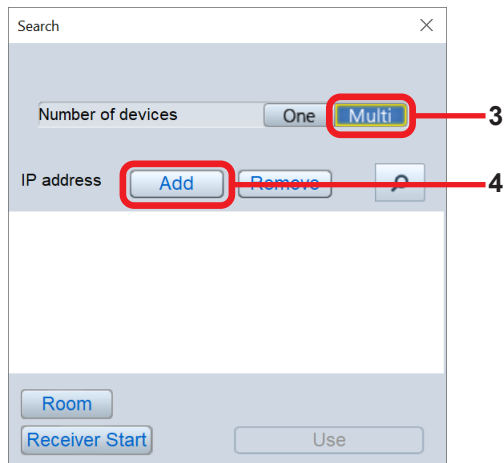
☞ "Starting the Application" (page 12)
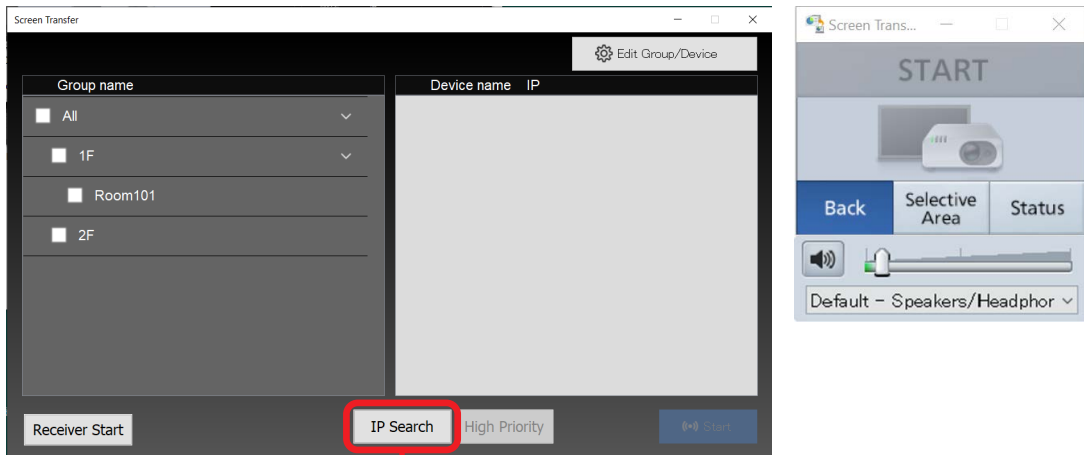
2 **Click [IP Search] in the group/device selection screen.**

The <Search> screen appears. Clicking [Room] returns to the group/device selection screen.

3 **Click [Multi].**

4 **Click [Add] to display the <Add IP address> screen.**

5 **Enter an IP address to search for and then click [Add].**

Repeat the same procedure to add all of the IP addresses of the devices you wish to display.

6 **Click** [🔍] **.**

When the devices are found, the device names are displayed on the right of the IP addresses.

Note

● To remove an added device from the search targets, select the IP address and click [Remove].

7 **Click [Use].**

If the PIN code is turned on in the settings on any device, the <Enter PIN code> screen appears. This screen will be displayed if the PIN code is turned on for even one device. If PIN codes are displayed on multiple devices, a connection will be established to all of the devices if you enter any one of them.

Enter the PIN code displayed on a device and then click [OK].

PIN code display example

Note

● If the display of your computer supports 4K resolution, change the resolution to 2048 × 1536 pixels or less before using this software.
● If connecting failed, the software retries to connect every approximately 10 seconds.
● If another user is performing screen sharing, the PIN code will not be displayed on the device. When that happens, click [Show PIN code] to display the PIN code on the other user's shared screen.
● Selecting the [Start screen sharing when a device is selected] check box in the <Settings> screen (page 35) allows you to start display upon connection. When this setting is enabled, [Use] changes to [Start screen sharing].

When the device becomes able to display images, launcher operation is enabled.
☞ "Launcher" (page 31)
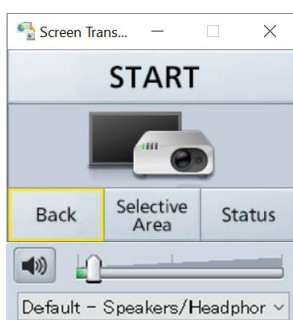
Registering groups and devices

When devices are installed in, for example, multiple rooms, registering devices in a group for each room enables connecting with your computer without entering IP addresses.

The groups can be arranged in a hierarchy.

When you use this software by entering IP addresses to connect with devices (page 13), the settings in this explanation are not necessary.

To register the groups and devices, there is the method to register in the <Edit Group/Device> screen of this software and the method to register by creating a device management data file.
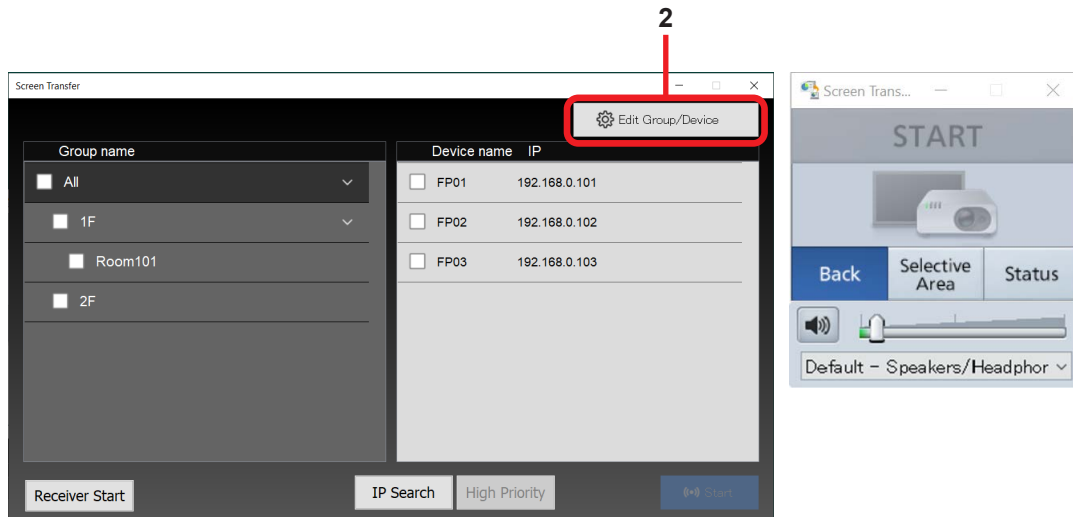
Receivers can also be registered in the same way as devices.

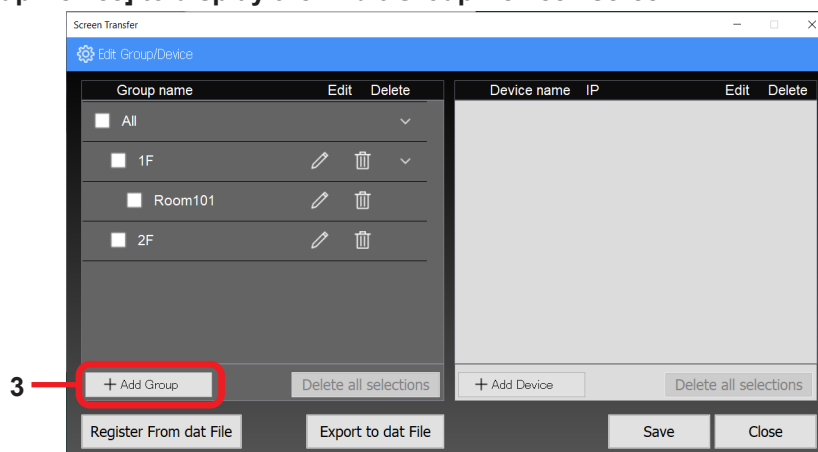## Registering in the <Edit Group/Device> screen

Registration procedure

Register groups and devices from the <Edit Group/Device> screen of this software.

1 **Start the software ![icon] to display the launcher and group/device selection screen.**

☞ "Starting the Application" (page 12)

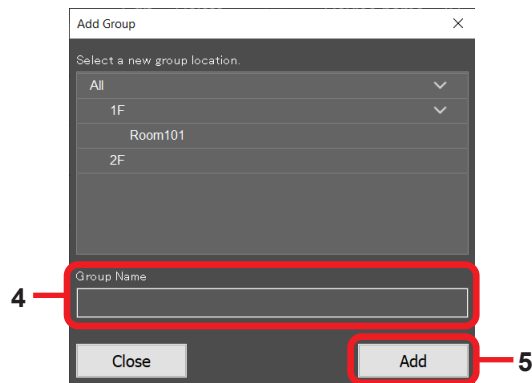**2** **Click [Edit Group/Device] to display the <Edit Group/Device> screen.**

3 **Click [Add Group].**
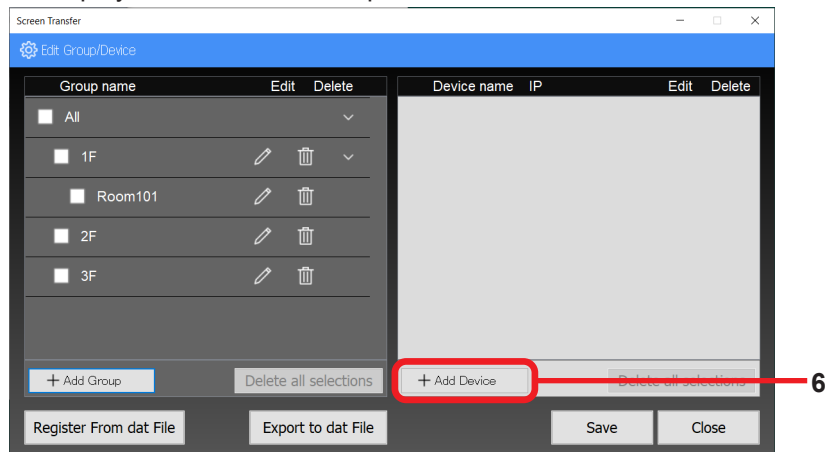The < Add Group> screen appears.

4 **Specify the position to add the group and enter the group name.**
If "All" is selected, the group will be created below "All".
The hierarchical relationship of groups can be changed by dragging and dropping in the <Edit Group/Device> screen.
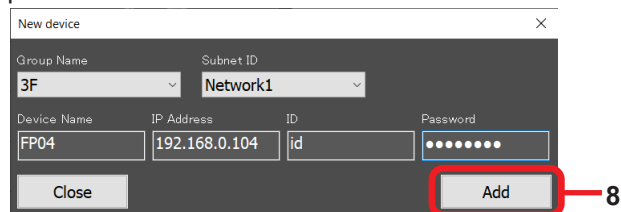
5 **Click [Add].**
The group is added and displayed in the <Edit Group/Device> screen.

6 **Click [Add Device].**
The < New Device> screen appears.

7 **Set the device information.**
- Group Name: Select the name of the group to which the device to be registered will belong.
- Subnet ID: Select the subnet of the device to be registered.
- Device Name: Enter the name of the device. The device will be indicated by the name set here in this software.
- IP Address: Enter the IP address of the device.
- ID: Enter the user name to use for Web browser control of the device.
- Password: Enter the password to use for Web browser control of the device.

8 Click [Add].

The device is added and displayed in the <Edit Group/Device> screen.

Note

- Alphanumeric characters other than commas (,) and slashes (/) can be entered for a group name.
- If the names of groups and devices are too long, the indications displayed when selecting a room may be truncated. We recommend that each one is within about 10 characters.
- One device can be registered to multiple groups.
- Up to five hierarchy levels can be registered for a group.
- Up to 64 devices can be registered in one group.
- Set the password to use for Web browser control of the device and the password for PJLink to the same value.
- If the user ID or password of a device is wrong, [High Priority] (page 29) will become no longer possible.

Editing groups and devices

Edit the information of registered groups and devices in the Edit Group/Device screen.
Click [Edit Group/Device] in the group/device selection screen to display the <Edit Group/Device> screen.

■ Screen configuration of Edit Group/Device screen

Group list   Device list
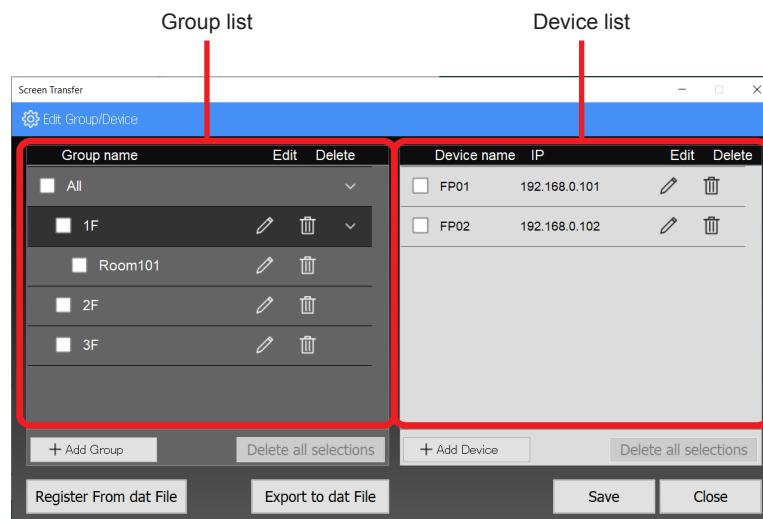
The registered groups are displayed in the group list.

Clicking [<] displays the groups below the selected group.

If you select a group, the devices belonging to the group are displayed in the device list.

Note

- The "All" group cannot be edited or deleted.

21

■ Changing the group hierarchy

The hierarchy can be changed by dragging and dropping groups in the group list.
Selecting a device in the device list and then dragging and dropping it into the list of the selected group allows you to change the group to which the device belongs.

■ Renaming a group

1 Click ✎ of the group you wish to change to display the <Group edit> screen.

2 Rename the group in the <Group edit> screen and then click [Save].

■ Deleting a group

1 Click 🗑 of the group you wish to delete.

2 When the confirmation message appears, click [Delete].

If you wish to delete multiple groups, select the check boxes of the groups you wish to delete and then click [Delete all selections].

Note
● When you delete a group, the devices belonging to the group are also deleted. When you delete a group with groups below it, the groups below it and the devices belonging to the groups below it are also deleted.

■ Editing the device information

1 Click ✎ of the device you wish to edit to display the <Device edit> screen.

2 Set the device information in the <Device edit> screen.
The name of the group to which the device belongs and the device name, IP address, ID, and password can be corrected.

■ Deleting a device

1 Click 🗑 of the device you wish to delete.

2 When the confirmation message appears, click [Delete].

If you wish to delete multiple devices, select the check boxes of the devices you wish to delete and then click [Delete all selections].

■ Importing a device management data file

Devices and groups can be batch registered by importing a device management data file (dat file) in which settings are saved.
Click [Register From dat File] and select a dat file.
☞ "Creating and registering a device management data file" (page 24)

■ Exporting a device management data file

The information of registered and edited groups and devices can be export to a device management data file.
Click [Export to dat File] and select an export destination folder.

■ Ending editing of groups/devices

If you click [Save], the group/device information is saved and editing continues.
If you click [Close], the <Edit Group/Device> screen closes. If the changes are not saved, a message to confirm whether to save them appears.

Creating and registering a device management data file

Entering the information of the groups and devices to register in a file allows you to batch register groups/devices. Use a file in CSV format for registration. Use a text editor or other application to create and edit the CSV file.

Registration procedure

1 Create a file in CSV format.

Create a new CSV file with the "DeviceList.csv" file name. A template "DeviceList.csv" CSV file is installed in the following location. Copy the file to any folder and then edit it.

C:¥Program Files (x86)¥Panasonic¥ScreenTransfer

Enter the devices and groups to register in the CSV file. For the input method of the CSV file, refer to "Input method of CSV file" (page 25).

2 Convert the CSV file.

Convert the CSV file to a device management data file (.dat format). Copy the following "Encryptor.exe" to the same folder as the one in which the CSV file was created.

C:¥Program Files (x86)¥Panasonic¥ScreenTransfer¥ST¥Encryptor.exe

Run "Encryptor.exe" to create a DeviceList.dat file in the same folder.
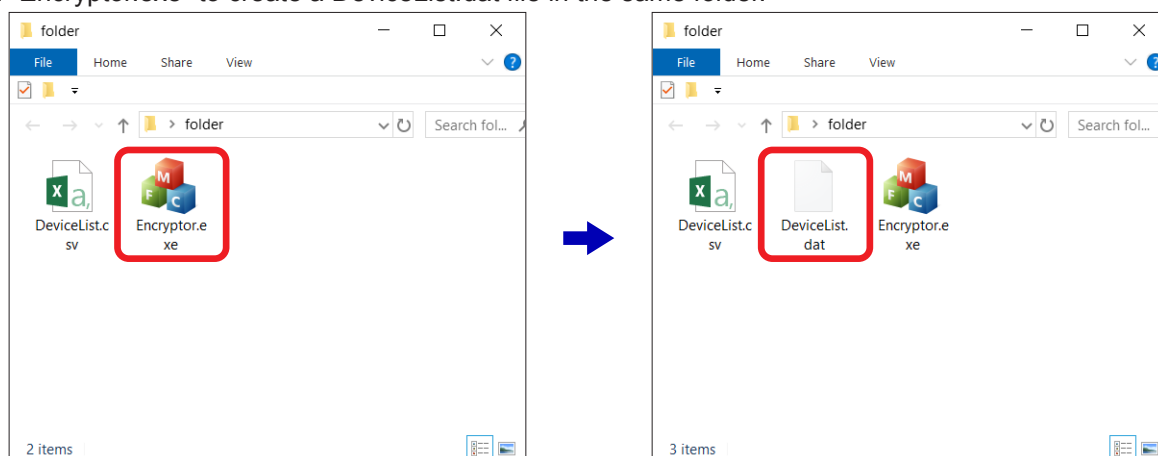
3 Start the software and import the device management data file

① Double-click [Screen Transfer] on the desktop to display the launcher and group/device selection screen.
   ☞ "Starting the Application" (page 12)
② Click [Edit Group/Device] to display the <Edit Group/Device> screen.
③ Click [Register From dat File].
④ Select the created "DeviceList.dat" file.
   The information of the groups/devices in the device management data file is registered.
   The registered information can be edited in the <Edit Group/Device> screen after registration.
   ☞ "Editing groups and devices" (page 21)

Note
- If a registered room or device is not displayed in this software, the information in the device management data file is incorrect. Check the information again and recreate the file (page 25).
- If running "Encryptor.exe" failed, check the following items.
   1. Is the file name "DeviceList.csv"?
   2. Is the CSV file in the same folder as "Encryptor.exe".
   3. Is the information contained in the CSV file correct?
- Be sure to set the name of the CSV file to be created to "DeviceList.csv". However, you can change the name of "DeviceList.dat" created by running "Encryptor.exe".

Input method of CSV file

Enter the information of groups/devices you wish to register in the CSV file.

Input example

This is an input example of a CSV file to register groups and devices as shown in the tree diagram.

: Group

: Device
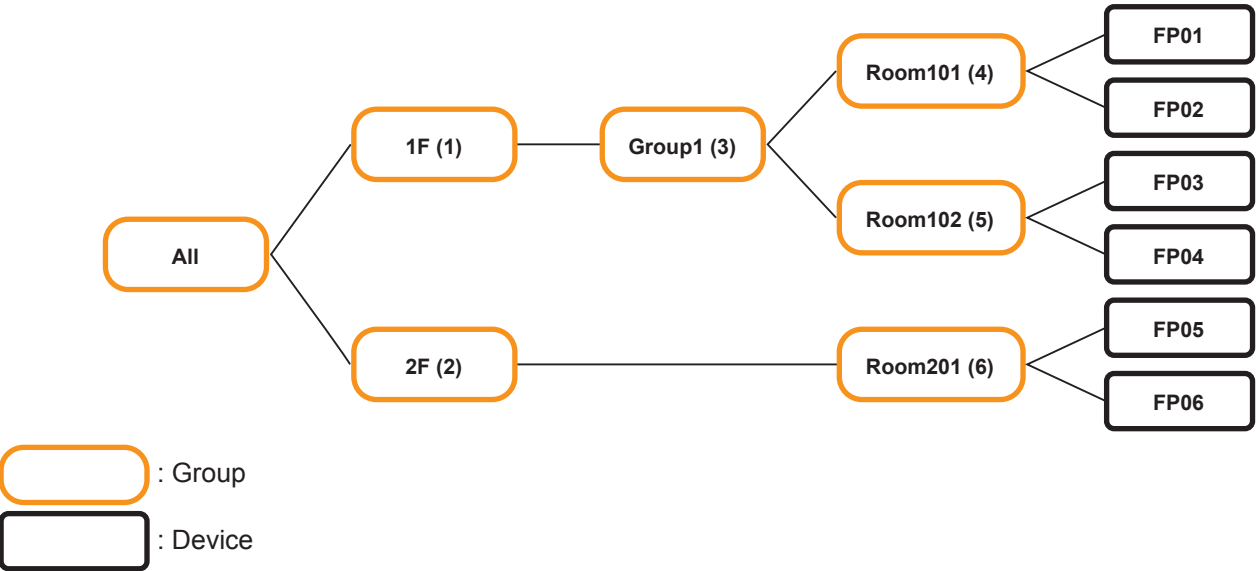
The number in the parenthesis after a group name is the tree ID. The tree ID is a number unique to a group that is assigned to all groups for identifying them.

```
START,2.0
Room101,FP01,192.168.1.101,id,password,model,0,0,4,1
Room101,FP02,192.168.1.102,id,password,model,0,0,4,2      Device information
Room102,FP03,192.168.1.103,id,password,model,1,1,5,1
Room102,FP04,192.168.1.104,id,password,model,1,1,5,2
Room201,FP05,192.168.1.105,id,password,model,2,2,6,1
Room202,FP06,192.168.1.106,id,password,model,2,2,6,2
END

FOLDER_START
1F,1,,1
2F,2,,2
Group1,3,1,1                Group information
Room101,4,3,1
Room102,5,3,2
Room201,6,2,1
FOLDER_END
```

Enter the information for devices in the first half of the CSV file, and the information for groups in the second half.

Note

● Separate each item with a comma (,).

■ Device information

For the device information, enter "START,2.0" on the first line and "END" on the last line, and the definition items in between them.

Definition item list

Room101,FP01,192.168.1.101,id,password,model,0,0,4,1

① ② ③ ④ ⑤ ⑥ ⑦⑧⑨⑩

①	Group name	Enter the name of the group to which the device to be registered will belong. Match this to the group name entered in the group information.
②	Device name	Enter the name of the device. The device will be indicated by the name set here in this software.
③	IP address	Enter the IP address of the device.
④	User name	Enter the user name to use for Web browser control of the device.
⑤	Password	Enter the password to use for Web browser control of the device.
⑥	Model name	Enter the model name of the device.
⑦	Group ID	Number assigned to each group (①). Enter a numerical value from "0" to "127". Enter the same numerical value for devices of the same group. Do not set this to the same numerical value for devices for which the group differs.
⑧	Subnet ID	Number used to identify the subnet. Enter "0" for a device in the same subnet as the computer delivering content. Enter a numerical value from "1" to "127" for a device in a different subnet from the computer delivering content. Enter the same numerical value for devices within the same subnet.
⑨	Tree ID of group to which device belongs	Enter the tree ID assigned to the group of ①.
⑩	Display order number	Specify the display order in each group for displaying the devices in this software. Enter a numerical value of "1" or higher.

Match each of items ③ to ⑧ to the network settings of the devices to be used. For details, refer to the operating instructions of the devices.

■ Group information

For the group information, enter "FOLDER_START" on the first line and "FOLDER_END" on the last line, and the definition items in between them.

Definition item list

Room101,4,3,1

Ⓐ   ⒷⒸⒹ
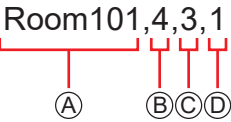
Ⓐ	Group name	Enter the name of the group to define on this line. Enter the same name as the group name entered in the device information.
Ⓑ	Own tree ID	Enter the tree ID assigned to the group (Ⓐ) to be registered.
Ⓒ	Tree ID of parent group	Enter the tree ID of the group that is one level up from the group of Ⓐ. If the level that is one up is "All", do not enter anything.
Ⓓ	Display order number	Specify the display order in the upper group for displaying the groups in this software. Enter a numerical value of "1" or higher.

Note

- Alphanumeric characters other than commas (,) and slashes (/) can be entered for a group name.
- If the names of groups and devices are too long, the indications displayed when selecting a room may be truncated. We recommend that each one is within about 10 characters.
- One device can be registered to multiple groups.
- Up to five hierarchy levels can be registered for a group.
- Up to 64 devices can be registered in one group. If a number of devices that will exceed the limit is entered in the CSV file, the 65th and subsequent devices are not displayed in the software.
- Set the password to use for Web browser control of the device and the password for PJLink to the same value.
- If the user ID or password of a device is wrong, [High Priority] (page 29) will become no longer possible.
- All input following the "FOLDER END" line will be ignored.

Displaying by Selecting Registered Groups and Devices

Display your computer screen by selecting a device from a preregistered group. Register groups and devices in advance (page 19).

> **Note**
>
> ● To use this function, set [NETWORK SETUP] → [NETWORK CONTROL] to "ON" from the "INITIAL SETTING" menu on the device.

1 **Start the software** **to display the launcher and group/device selection screen.**
☞ "Starting the Application" (page 12)
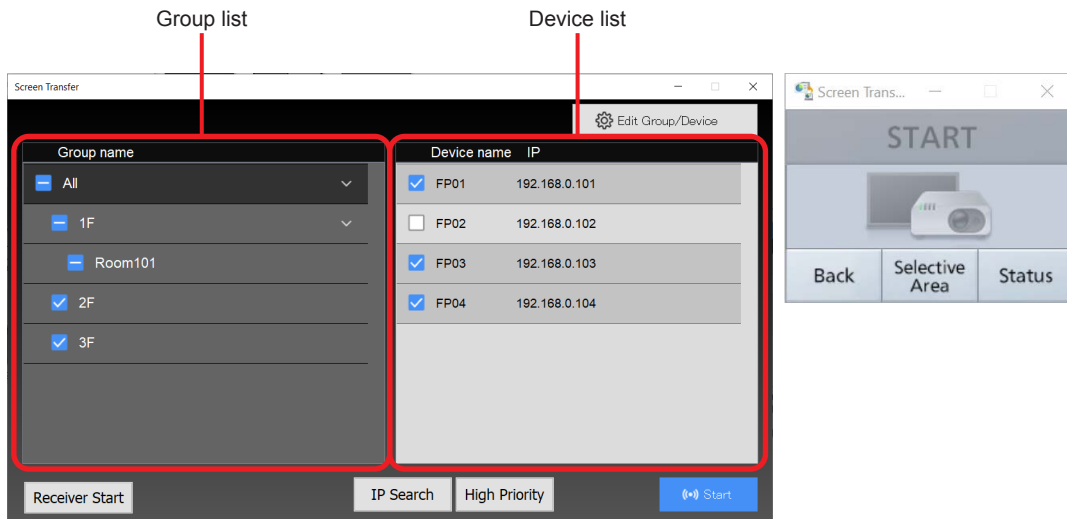
Group list: Displays the registered groups in a hierarchy.

Clicking < displays the groups below the selected group.

Device list: Displays the devices registered in the group.

> **Note**
>
> ● A device list can display up to 64 devices.
> ● If you click [IP Search], you can display on just a specific device or display on the devices of a different group in combination regardless of the registration details (page 30).

2 **Select the groups and devices you wish to connect.**

You can select the devices to which to delivery content by selecting the check boxes of the devices you wish to connect.

If you select the check box of a group, all of the devices belonging to that group will be selected. You can also clear the check box and deliver content just to specific devices in the group.

Content can be delivered to up to 64 devices. If 65 or more devices are selected, an error message appears.

3 **Click [Start] or [High Priority].**

[Start]

This starts the connection with the target devices. When delivery starts, authentication is performed using the user ID and password set during device registration. A connection can be started even in the following states.

● Power of a devices is off (standby)

● Input of a device is other than "Screen Transfer"

Selecting the [Start screen sharing when a device is selected] check box in the <Settings> screen (page 35) of this software allows you to start screen sharing upon connection.

[High Priority]

This starts screen sharing with the target devices. When delivery starts, authentication is performed using the user ID and password set during device registration. Screen sharing can be started even in the following states.

● Power of a device is off (standby)

● Input of a device is other than "Screen Transfer"

● Another user is performing screen sharing or the [Cut in] setting of a device is off

● [PIN code] of a device is on

● [Start screen sharing when a device is selected] check box in the <Settings> screen (page 35) of this
   software is not selected

When priority delivery is performed, the input of a device is changed to "Screen Transfer" automatically. When priority delivery ends (screen sharing stops), the input returns to the original setting automatically.

> **Note**
>
> ● If audio output is enabled, the audio is output from all devices of the selected group.
> ● To use this function, you need to set a user ID and password for each device.
> ● If delivery to some devices is not possible, a message to confirm whether to continue delivery appears. If
>   delivery to all devices is not possible, an error message appears.

When the device becomes able to display images, launcher operation is enabled.

☞ "Launcher" (page 31)
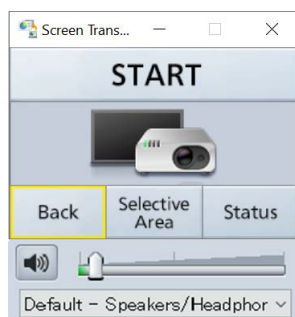
Displaying by specifying the IP address

Even if groups and devices are registered, you can specify a specific device with its IP address and then display your computer screen on it. Specifying multiple devices allows you to also combine the devices of different groups.

Note

● The basic operations and limitations are common to when using the software without registering groups and devices. Also refer to "Displaying on one device" (page 13) and "Displaying on multiple devices" (page 16).
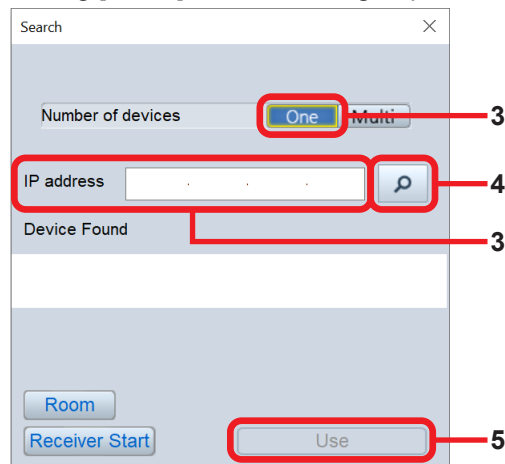
1 **Display the group/device selection screen.**
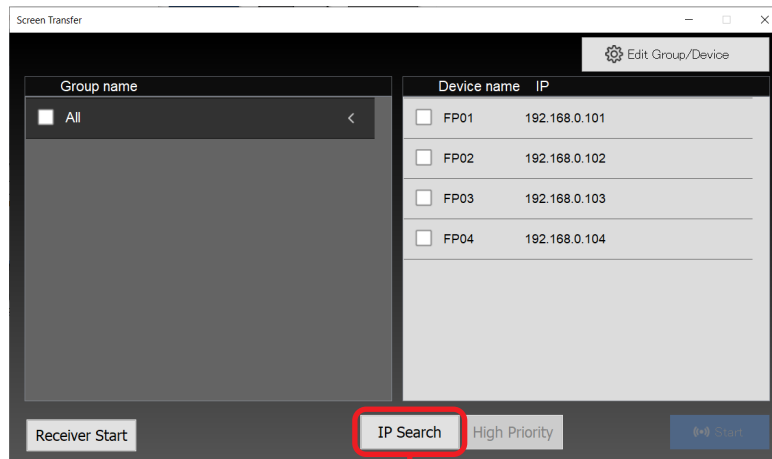
2 **Click [IP Search].**

The <Search> screen appears. Clicking [Room] returns to the group/device selection screen.

3 **Click [One] or [Multi] and enter the IP address of the device.**

4 **Click** 🔍 **.**

When the device is found, the device name is displayed in the lower part of the screen.

5 **Click [Use].**

If the PIN code is turned on in the settings on the device, the <Enter PIN code> screen appears when connecting. Enter the PIN code and then click [OK].

Operating the Launcher

A variety of operations, including device operations (starting and stopping image display) and volume adjustment, can be performed using the launcher.
The buttons used to control image display are enabled when communication with the device is enabled.

Launcher
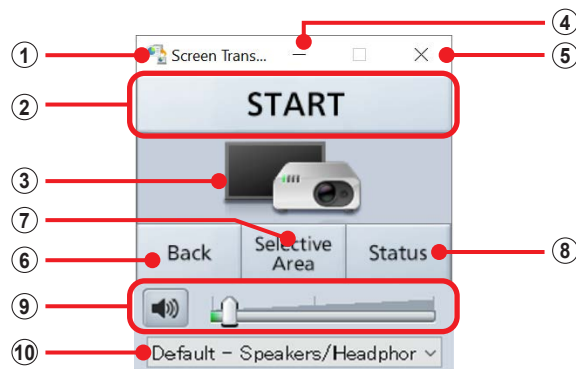
① **Display the system menu.**
☞ page 35

② **Start or stop image display.**
This changes to [STOP] during image display.

③ **Indicates the status of device communication via an icon.**

	Image display not possible	No communication due to lack of device selection.
	Image display possible	Devices are selected and communication is established.
	Image display in progress	Images are being displayed via devices and communication is established.

④ **Minimize the launcher display.**

⑤ **Quit the software.**
☞ page 34

⑥ **The <Search> screen or group/device selection screen appears.**
This displays a screen to select a device. The screen used when the device to display images was selected is displayed.

⑦ **Display the <Selective Area Transmission> window.**
☞ page 37

⑧ **Display the <Device's status> screen.**
☞ page 33

⑨ **Adjust the volume.**
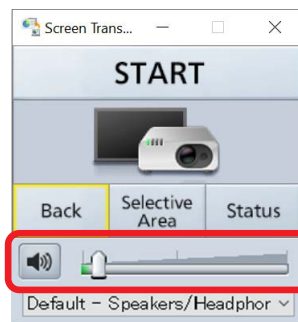☞ page 32

⑩ **Change the audio input source.**
☞ page 33

Note

- The launcher may appear in the image display of the device. Minimize the launcher to hide its display.
- The launcher position can be changed by dragging it with the mouse.
- When the launcher display is minimized and placed on the taskbar, it can be displayed again by clicking on the taskbar.
- When "Start screen sharing when a device is selected" (page 35) is enabled, image display will start when connection with the device is established, and [START] does not need to be clicked.
- Video portions may not play back depending on the video playback application used.
- You need to turn on the devices and switch the input to "Screen Transfer" in advance of starting screen sharing.
- You can set the duration from clicking [START] to displaying images.
  ☞ "Configuring Advanced Settings" (page 35)

Adjusting the volume

- **Adjust 🔊 ▭▭▭▭ in the launcher.**
  This adjusts the volume of the output audio.

If the volume adjustment icon is not displayed

Click the top left of the launcher to display the system menu and select the [Settings] → [Produce audio along with video during screen sharing] check box.
☞ "Configuring Advanced Settings" (page 35)

Note

- If a group and devices are registered, the audio is output from all devices registered to the group. In this case, the volume will differ depending on each device. You can also batch change the volume setting of multiple devices.
  ☞ "Configuring Advanced Settings" (page 35)
- The audio is output from the device only when images are displayed while this software is running.

Change the audio input source

● **Click on the launcher's audio input source specification field to change the input source.**
You can change the input source for the audio output to the device.
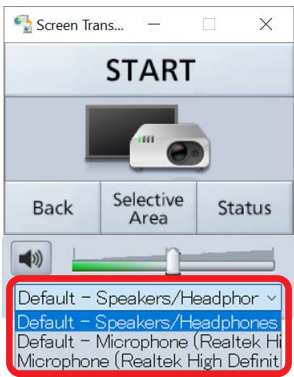
The following are available as audio input sources. The name of the input source displayed will vary depending on your computer.
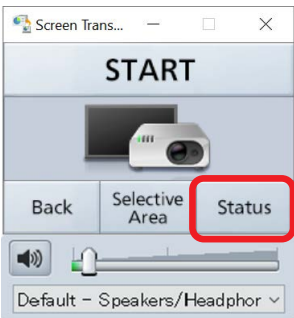
● Audio output from the computer (e.g., "Speakers/Headphones")
● Audio input from the microphone (e.g., "Microphone")

Note

● The state of the software is saved upon exit, and is restored at the next startup.

Checking the delivery status of devices

● **Click [Status] in the launcher to display the <Device's status> screen.**

The statuses, device names, group names, IP addresses, and model names of the devices target for delivery are displayed.

▣	FP01	/1F/Room101/	192.168.0.101	model1
↻	FP02	/1F/Room101/	192.168.0.102	model2
■	FP03	/2F/	192.168.0.103	model3
⚠	FP04	/3F/	192.168.0.104	model4

Device statuses are indicated by the following icons.

|		
	Delivering normally	Content is being delivered normally.
	Retrying delivery	Retrying delivery because screen sharing failed.
	Delivery stopped	Delivery is stopped.
	Delivery not possible	Delivery is not possible because unable to communicate.

Note

- If you click each device, the delivery status is displayed in a message.
- If the retrying delivery status continues, check whether or not input of a device is set to "Screen Transfer".
- If deliver is not possible, check the communication environment and power state of the device.
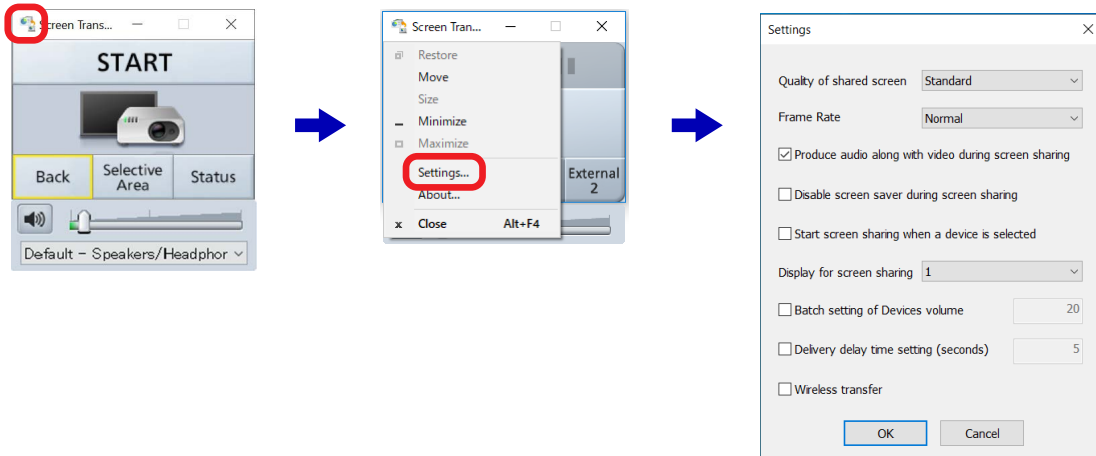
Exiting the application

- **Click ✕ in the launcher.**
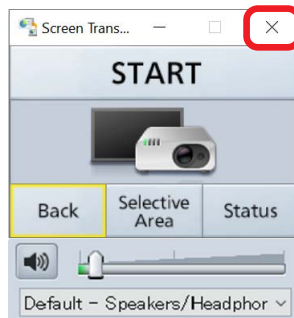
Configuring Advanced Settings

The advanced settings, such as the picture quality and whether or not there is audio output, can be configured in the <Settings> screen.
To display the <Settings> screen, click the top left of the launcher and select [Settings] from the system menu.

<Settings> screen

"Quality of shared screen"

Set the display quality.
"High": This setting is suitable for displaying still images.
"Standard": This setting is suitable for displaying video (default setting).
"Low": This setting is suitable for display on multiple devices because the amount of data transmitted decreases.
"Live priority": Use this when the wireless environment is not good.

"Frame Rate"

Use this setting to adjust the frame rate of the shared screen.
"High": This is a high frame rate.
"Normal": This is the normal frame rate (default setting).
"Low": This is a low frame rate. Use it when you wish to reduce throughput.

"Produce audio along with video during screen sharing"

If the check box is selected, audio is output from the connected device (default setting: checked).
If you do not wish to output audio, clear this check box.

"Disable screen saver during screen sharing"

If this check box is selected, the screen saver function of the computer is disabled during image display (default setting: not checked).
● If the screen saver starts, this software will stop screen sharing automatically. If you do not want screen sharing to stop, select the check box for this setting.
● Be careful when you leave your computer because the setting of a screen saver with a password will also be disabled.

"Start screen sharing when a device is selected"

If this check box is selected, displaying images is started automatically when a device is selected from the <Search> screen or device selection screen (default setting: not checked).
There will be no need to click [START] in the launcher.

"Display for screen sharing"

If you are using your computer in a multi-display environment, select which display to show on the device.

"Batch setting of Devices volume"

You can batch change the volume setting of multiple devices when using the software with groups and devices registered (default setting: not checked).
● This can be set within the range of 1 to 100.
● Click [START] in the launcher after changing the setting.
● When the computer is connected with the devices by specifying IP addresses, this function will not be executed.

"Delivery delay time setting (seconds)"

You can set the duration from clicking [START] to displaying images (default setting: not checked).
● This can be set within the range of 0 to 10 seconds.
● If you select [High Priority] when selecting registered groups and devices, this function will not be executed.

"Wireless transfer"

If this check box is selected, content is delivered using the transmission method for wireless (default setting: not selected). Select the check box if there is a wireless path within the network.

Specifying the Area to Display

You can specify just the area of your computer screen that you need to display and then display that area on the device.
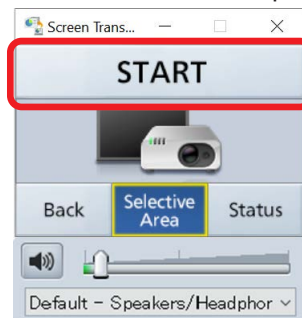
1 **Click [Selective Area] in the launcher.**

The <Selective Area Transmission> window (area selection window) appears.
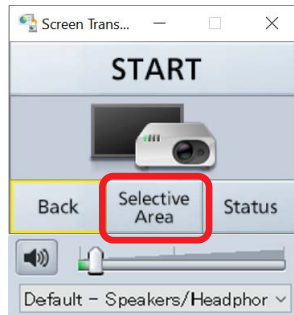
2 **Specify the portion you wish to be transmitted in the <Selective Area Transmission> window.**

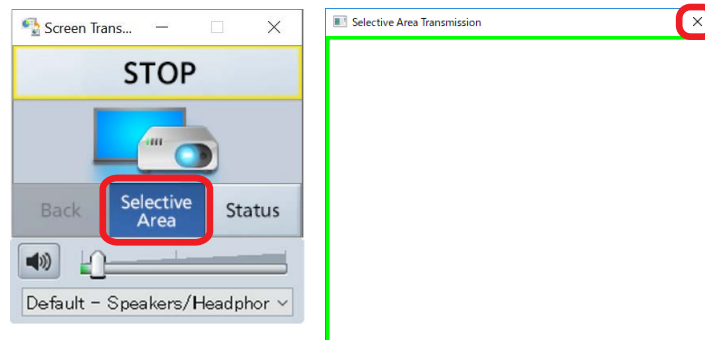The <Selective Area Transmission> window allows you to adjust the size and position with normal window operations.
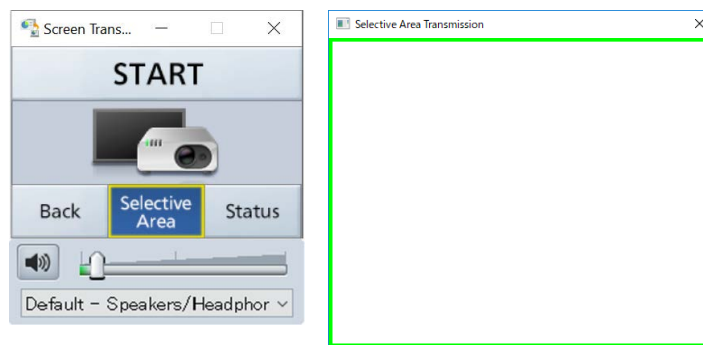
3 **Click [START] in the launcher.**

The images in the <Selective Area Transmission> window are displayed on the device.

Ending selective area transmission

● **Click ✕ at the top right of the <Selective Area Transmission> window or click [Selective Area] in the launcher.**

Note

● Operations cannot be performed with the mouse in the <Selective Area Transmission> window. Take care not to the place the launcher inside the frame of the <Selective Area Transmission> window.
● If the launcher is placed within the frame of the <Selective Area Transmission> window, close the <Selective Area Transmission> window and move the launcher to an area outside of the frame. If you open the <Selective Area Transmission> window again, it will open at the same size and position as last time.
● This function is available only when "1" is selected for [Display for screen sharing] in the <Settings> screen.

Check video being delivered

By setting a receiver for video delivery, video displayed on the device can be viewed on a computer.

To start the receiver, double-click ![STReceiver icon] on the desktop or click "Receiver Start" on the group/device selection screen or <Search> screen.

Note
- If a wireless LAN is used, video cannot be received normally by the receiver. When using a receiver, connect the computer via a wired LAN.
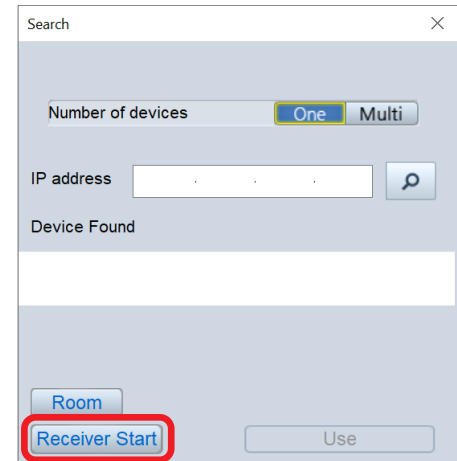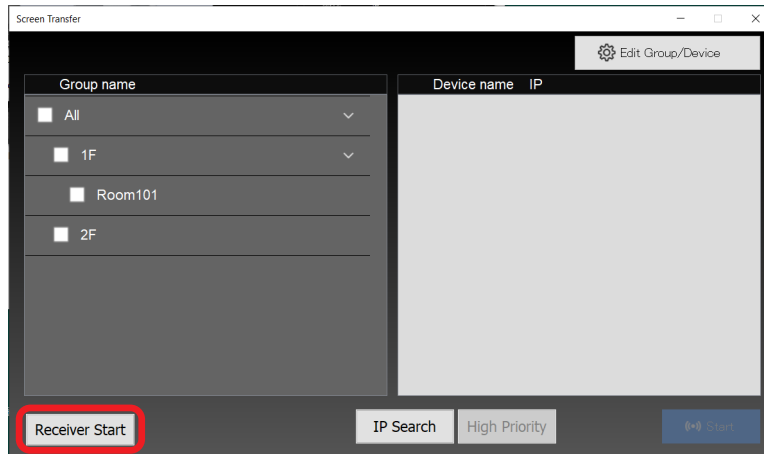
Receiver
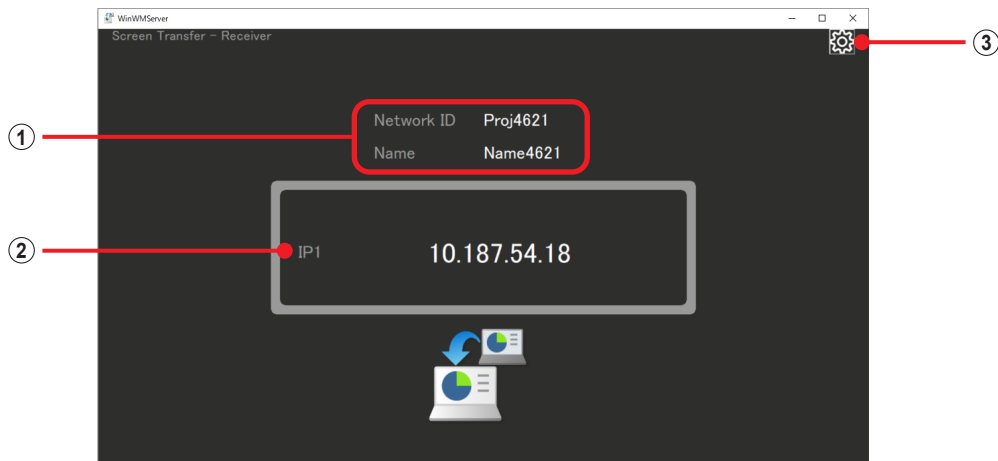
① **Displays the receiver device name.**
This is the device name displayed when searching for devices in the software.

② **Displays the IP address of the computer running the receiver.**
This is the IP address used by the software when searching.
Up to 4 devices can be displayed.

③ **Displays the <Settings> screen.**
Here you can set information necessary to register receivers.
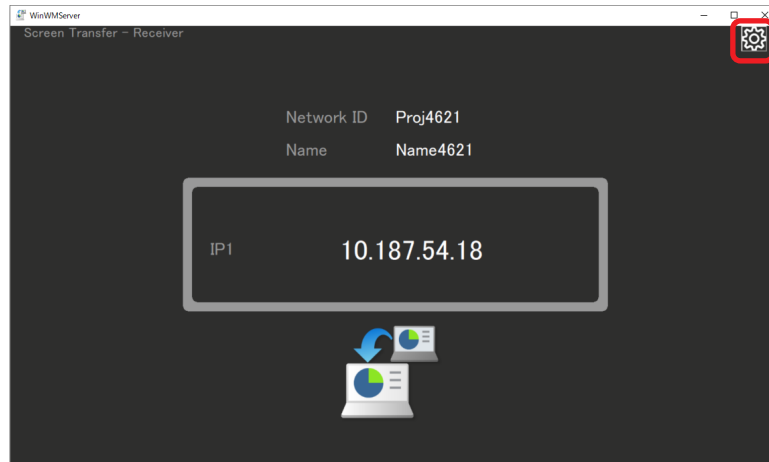☞page 40

Note
- The "F11" key on the keyboard can be used to switch the screen to full screen mode.
- Depending on the specifications of your computer, the displayed image may be distorted, or the audio may cut out or be adversely affected by noise.
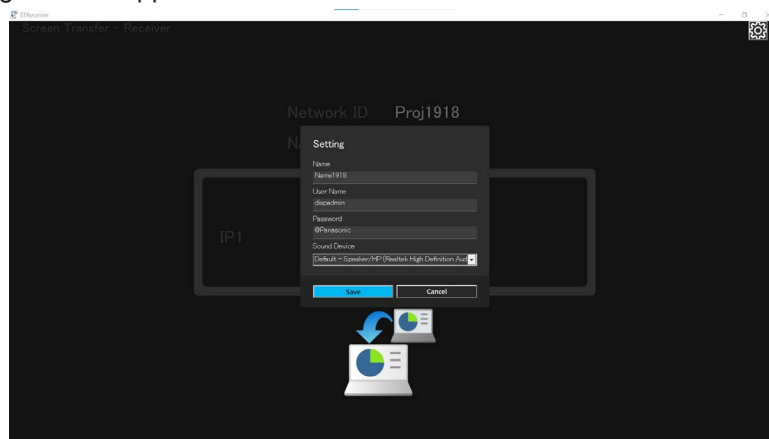
Registering receivers

Receivers can be registered in the same manner as devices.

1 **Click ⚙ on the receiver to display the <Settings> screen.**

The receiver's settings screen appears.

2 **Set the receiver information.**
Name: Set the device name of the receiver.
User Name: Set the user name of the receiver.
Password: Set the receiver password.
Sound Device: Set the receiver audio device.

3 **Click [Save].**

4 **Registering receivers**
Register the receivers as devices using the settings that you made in step 2.
Perform registration in the <Edit Group/Device> screen or device management data file.
☞ "Registering groups and devices" (page 19)

Version information

The version information of the software can be displayed. Click the top left of the launcher to display the system menu and then select [About...].
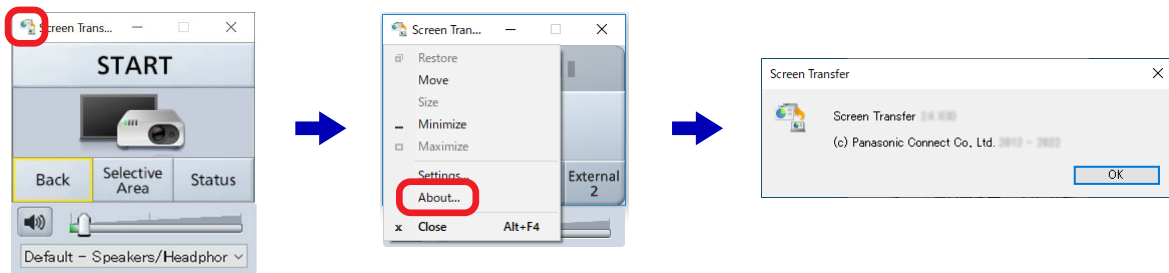
Displayed Messages

If an error occurs while you are using this software, a message will be displayed.

Message	Description
Failed to start Screen Transfer.	This software cannot be started. It may not be installed properly. Uninstall the software and then reinstall it. ☞ "Uninstalling the software" (page 10) ☞ "Installing the software" (page 10)
Screen Transfer is already running.	An attempt was made to run two instances of this software.
This IP address is already registered.	The added IP address is already registered.
Up to 64 IP addresses can be registered.	There are already 64 device IP addresses registered, which is the limit.
Connection of all devices failed.	Connecting with all registered devices failed. Check that the power of the registered devices is on and that the input is "Screen Transfer". Also check whether communication with the registered devices is established. ☞ "Checking the device" (page 11)
Connection of the following devices failed. Are you sure you want to continue?	Connecting with some of the registered devices failed. Check that the power of the registered devices is on and that the input is "Screen Transfer". Check whether communication with the registered devices is established. ☞ "Checking the device" (page 11)
The IP address is already in use.	The IP addresses of multiple devices were duplicated when screen sharing was run.
Failed to start screen sharing on some devices. Check the "Status".	When the [START] button was clicked in the launcher, delivery failed to start for some devices. Click the [Status] button in the launcher, and check the delivery status of the devices. ☞ "Checking the delivery status of devices" (page 33)
Some devices have changed to "Screen sharing stopped", "Retrying", or "No Communication". Check the "Status".	Some devices are unable to accept delivery. Click the [Status] button in the launcher, and check the delivery status of the devices. ☞ "Checking the delivery status of devices" (page 33)
Failed to communicate with the device.	Communication (connection retries) between the device and computer failed for a certain period of time. Check whether communication with the device is established. ☞ "Checking the device" (page 11)
Your dat file is invalid.	Registering from the dat file failed. Check whether the settings contained in the CSV file are correct, and then generate the dat file again.
STReceiver is already running.	An attempt was made to run two instances of "STReciever".
Failed to generate dat file. Please check your PC resources.	DeviceList.dat generation failed. Check the usage of PC resources (memory and CPU). If there is no problem with the resources, restart this software.
Input IP address is invalid.	An invalid value is entered in an IP address field. Enter the correct IP address.

Frequently Asked Questions

LAN connection cannot be established between the devices and the computer.

- **Have the correct network settings been configured?**
  Check whether or not the device network settings and computer network settings are correct.
  Delivery will not be performed if the computer and devices are not within the same network.
- **Connection failure may occur in some cases immediately after turning on the device or immediately after switching the input.**
  Wait at least 1 minute before performing connection.
- **Is a network bridge set?**
  If a network bridge is set, a connection may not be possible. If the network bridge is no longer required, delete it.
  For details, check with the network administrator.

  To verify whether there is a network bridge:
  1 Click [▦] (Start) or press the Windows key to display the Start menu.
  2 Click [⚙] (Settings) to display the <Windows Settings> screen.
  3 Select [Network & Internet] → [Ethernet] ([Wi-Fi] when using a wireless LAN) → [Change adapter options] of Related settings to display the <Network Connections> screen.
     If [Network Bridge] is displayed in the <Network Connections> screen, a network bridge is set.

  To delete the network bridge:
  1 Right-click [Network Bridge] in the <Network Connections> screen and then select [Delete].
  2 If the [Confirm Connection Delete] dialog box is displayed, click [Yes].
  3 If the [User Account Control] dialog box is displayed, click [Continue].

- **Is this software registered in Windows Firewall?**
  To register to Windows Firewall:
  Register this software in [Allow an app through firewall] with the following procedure.
  1   Click [▦] (Start) or press the Windows key to display the Start menu.
  2   Click [⚙] (Settings) to display the <Windows Settings> screen.
  3   Select [Update & Security] → [Windows Security] → [Firewall & network protection] under "Protection areas" to display the <Firewall & network protection> screen.
  4   Click [Allow an app through firewall].
  5   Click [Change settings], and change to the allow registration mode.
  6   Click [Allow another app] to display the <Add an app> screen, and click [Browse].
  7   Select "Screen Transfer.exe" in the folder in which this software is installed, and click [Open].
      Installation destination if a folder was not specified:
      C:¥Program Files (x86)¥Panasonic¥ScreenTransfer
  8   Check that this software is displayed in the [Apps] list on the <Add an app> screen, and click [Add].
  9   Confirm that the software has been added to the [Allowed programs and features] list.
  10 Confirm that check marks are placed next to Private and Public.
  11 Click [OK] in the <Allowed apps> screen.
      The software will be registered as an application on the Windows firewall exception list.

- **Are any firewall-containing applications installed?**
  If an application with a firewall function has been installed, it may not be possible to communicate with devices. (Even if the application is not running, the firewall function may still operate simply because the application has been installed.)
  In such cases, firewall settings must be changed in order to allow connection.
  For details on the firewall settings, refer to the operating instructions for the application.

The "Cannot find LAN adapter" error is displayed.

● **Is the LAN adapter recognized correctly?**
The LAN adapter being used may not be recognized correctly in some cases.
Check that the LAN adapter is recognized correctly in [Device Manager] on your computer.
If [?] appears for [Network Adapter] in [Device Manager], installation may not have completed properly.
We recommend referring to the operating instructions for your computer or LAN adapter and reinstalling the driver.

To display [Device Manager]:
1　Right-click [▦] (Start).
2　Select [Device Manager] from the menu.

● **Operation may become possible if you update the driver of the LAN adapter.**
For details on updating the driver, contact the manufacturer of your computer or LAN adapter.

The LAN connection is lost.

If image display is suspended or communication is cut off, select the device again in the software.
If communication with the device is still not possible, turn off the power of the device and wait a while and then turn off the main power switch. If there is no main power switch, disconnect the power plug.
Turn the power back on, and then select the device again from the software.

There is no "Screen Transfer" in the input signals of the device.

● Does the device support the Screen Transfer function (page 4)?
● Is the Screen Transfer function of the supported device enabled? For details, refer to the operating instructions of your device.

Image display is slow or moving images are not displayed smoothly.

● If the display of your computer supports 4K resolution, change the resolution to 2048 × 1536 pixels or less before using this software.
● When using a laptop computer, be sure to connect the AC adapter (page 7).
● Is the computer CPU speed slow? (page 8)
Displaying images and playing moving images depend largely on the performance of the computer's CPU.
● Screen display may become slow if [High] is selected in the launcher system menu → [Settings] → [Quality of shared screen] (page 35).
● Screen display may become slow if [High] is selected in the launcher system menu → [Settings] → [Frame Rate] (page 35).
● The speed may be slower when any other applications are running concurrently.
● Display may be slow when moving images are played.

There is a time lag between operations on the computer and their resulting image display.

● The software imports the computer screen, compresses the data, and transmits it to devices. In addition, the received data is extracted on the device before it is displayed.
Due to this processing time and factors in the LAN environment, some delays will occur. Different computers may also produce varying lag times.

Images are not displayed.

● Is the software being used with a computer with the necessary system requirements (page 8) ?
● Operation may become possible if you update the video driver (graphics driver) of your computer. For how to update the video driver, contact the manufacturer of your computer or Intel Corporation.

Audio from the device is not heard during image display.
• The volume may not be able to be changed correctly if the output device was switched after starting this software. Try quitting and restarting the software. • Check that the launcher system menu → [Settings] → [Produce audio along with video during screen sharing] check box is selected (page 35). • If the problem persists even after performing the above, try quitting and restarting the software.
The software's colors are not displayed properly and the characters are hard to read.
• Display the launcher system menu → [Settings] → [Quality of shared screen] and then select [High] (page 35).
The screen saver is not displayed during image display.
• Clear the launcher system menu → [Settings] → [Disable screen saver during screen sharing] check box to enable the screen saver. However, if the screen saver starts, this software will stop screen sharing automatically (page 35).

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