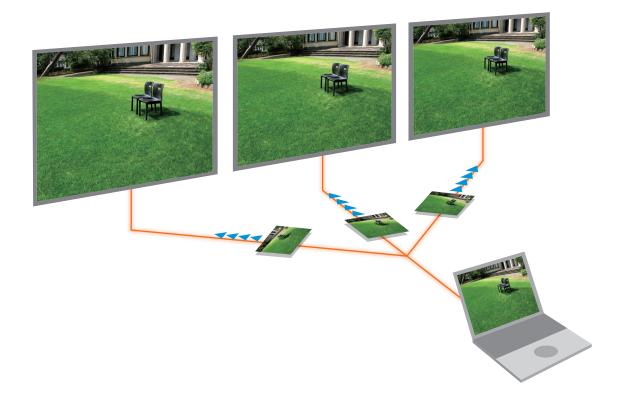
# **Panasonic**®

# Operating Instructions Screen Transfer 1.0

# Windows



Thank you for purchasing this Panasonic product.

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

## Contents

Precautions and Disclaimers	3
Displaying your computer screen on one device  Displaying your computer screen on multiple devices	4
Checking Your Computer  Necessary environment for computers to be connected  System requirements  Computer network settings	6 6
Installing/Uninstalling the Software  Installing the software  Uninstalling the software	8
Preparation	9
Starting the Application	. 13
Selecting the Devices  Displaying on one device  Displaying on multiple devices  Selecting the devices of a registered room	14 16
Operating the Launcher  Launcher  Adjusting the volume  Exiting the application	22 23
Configuring Advanced Settings	
Specifying the Area to Display  Ending selective area transmission	
Version information	. 27
Displayed Messages	. 28
Frequently Asked Questions	. 29

## **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.
- 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.

#### ■ Supported models

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

#### Notes

- 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 the software allows you to display your computer screen on one or multiple devices connected via a wired LAN connection. You can also register multiple rooms, such as conference rooms and classrooms, and devices to display your screen.

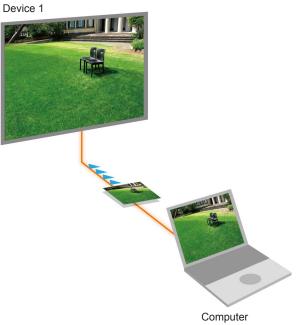
This software has the following features.

- 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

r page 14

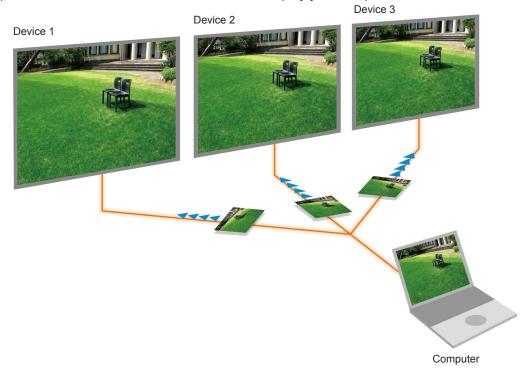
Specify one device with its IP address and then display your computer screen on it.



#### Displaying your computer screen on multiple devices

r page 16

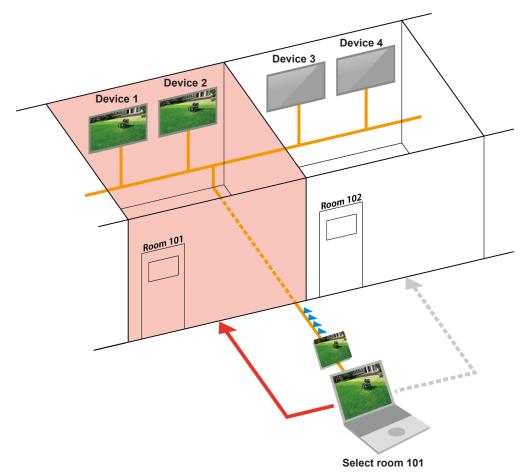
Specify multiple devices with their IP addresses and then display your computer screen on them.



## Registering rooms and devices and displaying by selecting a connection destination room

r page 19

Preregister devices installed in multiple rooms and then display your computer screen by selecting the room to which you wish to connect.



#### Notes

• To use this method, register rooms and devices in advance (page 10).

## **Checking Your Computer**

#### Necessary environment for computers to be connected

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

#### Check 1 For 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 Wired LAN adapter settings

- Is your wired LAN adapter properly recognized?
- Is your wired LAN adapter switched on?
- Install the wired LAN adapter driver beforehand. For details on how to install the driver, refer to the instructions accompanying the wired 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 29)
- 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 29)

#### **System requirements**

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

OS: Windows 10 Home 64 bit (version 1803 or later)

Windows 10 Pro 64 bit (version 1803 or later)

The Japanese, English and Chinese versions of the above operating systems are

Operation is not guaranteed if Windows 10 is not pre-installed.

CPU: 3rd Generation Intel Core i7/i5/i3 (Ivy Bridge) or later processor with integrated graphics

Memory: 1024 MB or more

Hard disk: At least 100 MB free space

(Extra free space is required to save the device information.)

LAN environment: LAN connector (100BASE-TX/1000BASE-T) required

1024 pixels × 768 pixels or more **Desktop area:** 

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.

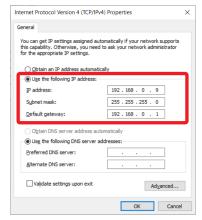
Operation is not guaranteed for all computers that meet the above conditions.

#### **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] → [Change adapter options] of Related settings to display the <Network Connections> screen.
- 4 Right-click [Ethernet] 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.

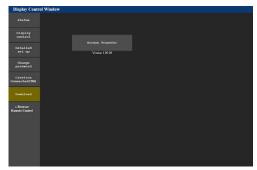
## Installing/Uninstalling the Software

## 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 website (https://docs.connect.panasonic.com/prodisplays/download/software).
- 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. When installation is completed, a shortcut icon is created on the desktop.



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.

#### Notes

• 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.

#### Registering rooms and devices

When devices are installed in multiple rooms, registering rooms and devices in advance enables a connection with your computer without entering an IP address (page 19).

If you wish to use this software without registering rooms and devices, the settings in this explanation are not necessary. Start the software (page 13).

#### Note

- Carry out registration before starting the software.
- Use a file in CSV format for registration. Use a text editor or other application to create and edit the CSV file.

#### Creating a new device management data file

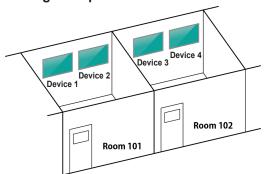
#### 1 Create a file in CSV format.

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

For example, if there are a total of four devices in two rooms, create a CSV file containing the following information.

#### Setting example



#### CSV file information

START,1.0
Room101,No1,192.168.1.101,user,xxxxxxxx,TH-xxSQ1x
Room101,No2,192.168.1.102,user,xxxxxxxx,TH-xxSQ1x
Room102,No3,192.168.1.103,user,xxxxxxxx,TH-xxSQ1x
Room102,No4,192.168.1.104,user,xxxxxxxx,TH-xxSQ1x
END

#### Note

- Separate each item with a comma (,).
- Enter "START,1.0" on the first line and "END" on the last line.
- Devices set in the same room are grouped.

#### Input item list

## Room101,No1,192.168.1.101,user,xxxxxxxxx,TH-xxSQ1x ① ② ③ ④ ⑤ ⑥

1	Room number or name	Enter a number or name for the room you wish to register. The room will be
		indicated by the number or name set here in this software.
2	Device name	Enter the name of the device. The device will 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.

Match each of items ③ to ⑥ to the network settings of the devices to be used. For details, refer to the operating instructions of the devices.

#### Note

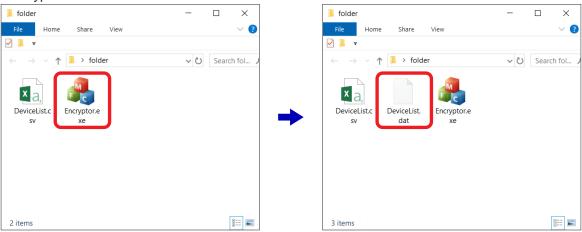
- Alphanumeric characters other than commas (,) and slashes (/) can be entered for a room number (name).
- If the names of rooms and devices are too long, the indications displayed when selecting a room may be truncated. We recommend that each one is within about 10 characters.
- If the user ID or password of a device is wrong, [High Priority] (page 20) and switching between HDMI input and PC input of a device (page 22) will become no longer possible.

#### **2** Convert the CSV file.

Convert the CSV file to a device management data file (.dat format). Copy "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 Place the file created by conversion into the specified folder.

Move the setting file created by conversion (DeviceList.dat) to the following folder.

C:\ProgramData\Panasonic\ScreenTransfer

The above is not normally displayed because it is a hidden folder. To display it, change a setting on your computer (page 12).

#### Note

- If a registered room or device is not displayed in this software, the information in the setting file is incorrect. Check the information again and recreate the setting file.
- The DeviceList.dat device management data file is not deleted when this software is uninstalled. If it is no longer required, delete it manually.

#### Displaying a hidden folder

If the save destination for the device management data file is not displayed, you can display it with the following procedure.

#### Caution

- Files related to the system are stored in hidden folders. To prevent accidental changes, return the setting to its original state after saving the device management data file.
- 1 Right-click [ (Start) and then select [Explorer].
- 2 Select the C drive and then click the [View] tab.
- 3 Select the [Hidden items] check box.
  The hidden files in the C drive are displayed.
- 4 Open the ProgramData folder and save the device management data file in the specified folder.
- 5 Clear the [Hidden items] check box.

## **Starting the Application**

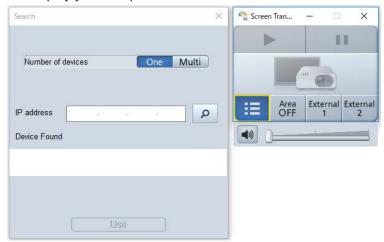
To start the software that has been installed:



Double-click on the desktop.

The software can also be started up by selecting [  $\blacksquare$  Start]  $\rightarrow$  [  $\blacksquare$  Panasonic]  $\rightarrow$  [  $\blacksquare$  Screen Transfer].

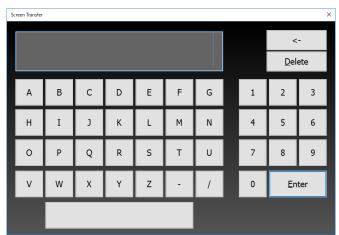
• When the software is started up without registering rooms and devices The launcher and <Search> screen appear. Enter the IP address of the device you wish to display in the <Search> screen and then display your computer screen on the device.



When you wish to display your computer screen on one device r page 14

When you wish to display your computer screen on multiple devices r page 16

• When rooms and devices are registered and then the software is started up If rooms and devices have been registered in advance (page 10), the room number specification dialog box appears. Select a room or device and display your computer screen. r page 19



#### Note

• If a registered room or device is not displayed in this software, the information in the setting file is incorrect. Check the information again and recreate the setting file (page 10).

## **Selecting the Devices**

## Displaying on one device

Select one device and display your computer screen on it without registering rooms and devices in advance.

#### 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 9).
- 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 <Search> screen.
  - starting the Application" (page 13)



- 2 Click [One] and enter the IP address of the device.
- **3** Click ... When the device is found, the device name is displayed in the lower part of the screen.



#### 4 Click [Use].

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



Enter the PIN code displayed in the standby screen of the 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 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 24) allows you to start display upon selection. 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 22)

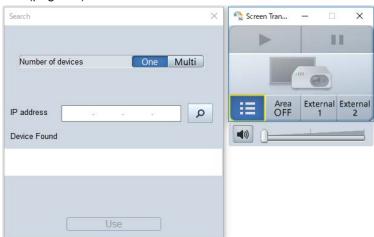


#### Displaying on multiple devices

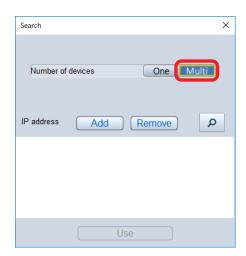
Select multiple devices and display your computer screen on them without registering rooms and devices in advance.

#### Note

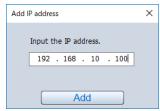
- Up to eight devices can be used.
- You need to turn on the devices and switch the input to "Screen Transfer" in advance.
- Specify the devices to display with their IP addresses. Turn on the devices and check their IP addresses in advance (page 9).
- If the PIN code is turned on in the settings on 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 <Search> screen.
  - "Starting the Application" (page 13)



2 Click [Multi].



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



4 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.

## 5 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].

#### 6 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 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 24) allows you to start display upon connection. When this setting is enabled, [Use] changes to [Start screen sharing].

#### **Selecting the Devices**

When the device becomes able to display images, launcher operation is enabled.  $_{\ \ \, \ \ \, }$  "Launcher" (page 22)



#### Selecting the devices of a registered room

Select devices from a room registered in advance and display your computer screen on them. Register rooms and devices in advance (page 10).

#### 1 Start the software.

"Starting the Application" (page 13)

If rooms and devices are registered, the room number input dialog box appears.



2 Enter the number or name (part or all) of the room containing the device you wish to connect.

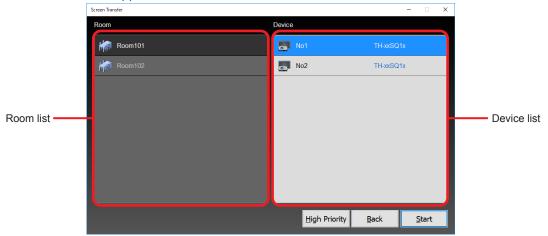


#### Note

- If you enter only part of a room name, you can specify all rooms for which the beginning of the name matches the entered characters.
- Clicking [Enter] without entering a room name allows you to specify all registered rooms.
- If you click [<-], one character is deleted.
- If you click [Delete], all characters are deleted.

#### 3 Click [Enter].

The room selection screen appear.



Room list: Displays a list if multiple rooms were found.

Device list: Display the devices registered in the room. When you select a device here, the sound of the computer is output from the selected device.

#### Note

- Up to eight devices can be displayed.
- Clicking [Back] returns to the room number input dialog box.
- If a registered room or device is not displayed in this software, the information in the setting file is incorrect. Check the information again and recreate the setting file (page 10).

## 4 Select the room you wish to connect and click [Start] or [High Priority]. [Start]

This starts the connection with the target devices. Authentication is performed using the user ID and password in the device management data file at startup. 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 24) of this software allows you to start screen sharing upon connection.

#### [High Priority]

This starts screen sharing with the target device. Authentication is performed using the user ID and password in the device management data file at startup. 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 24) 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 the device selected in the device list.
- To use this function, you need to set a user ID and password in the device management data file.

#### **Selecting the Devices**

When the device becomes able to display images, launcher operation is enabled.  $_{\ \ \, \ \ \, }$  "Launcher" (page 22)



## **Operating the Launcher**

A variety of operations, including device operations (starting and stopping image display), volume adjustment, and display of other screens, 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.

r page 24

2 Start or stop image display.

This changes to <a> (stop)</a> during image display.

3 Pause image display.

This can only be used during image display.

When used, the displayed image freezes.

4 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.

- 5 Minimize the launcher display.
- 6 Quit the software.

r page 23

① Display the <Search> screen or room number input dialog box.

This displays a screen to select a device. The screen used when the device to display images was selected is displayed.

**8** Display the **Selective Area Transmission** window.

r page 25

9 Switch to HDMI input of a device.

This is available only when rooms and devices are registered and the user ID and password of the devices are set (page 19).

If there are multiple HDMI inputs, it switches to <HDMI 1>.

10 Switch to PC input of a device.

This is available only when rooms and devices are registered and the user ID and password of the devices are set (page 19).

11 Adjust the volume.

r page 23

#### 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 the taskbar.
- When "Start screen sharing when a device is selected" (page 24) is enabled, image display will start when connection with the device is established, and b 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.

#### 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 24)

#### Note

- If rooms and devices are registered, the audio is output from the device selected in room selection screen.
- When the computer is connected with multiple devices by specifying IP addresses, audio is not output.
- The audio of the computer is output from the device only when images are displayed while this software is running.

#### **Exiting the application**

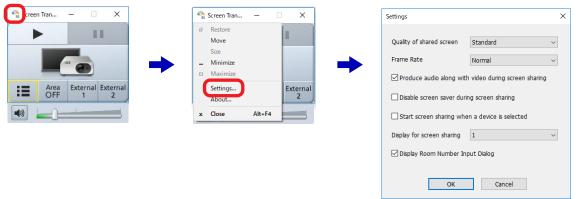
Click X in the launcher.



## **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.

#### "Frame Rate"

Use this setting to adjust the frame rate of the shared screen.

Normal: This is the normal frame rate (default setting).

High: This is a high frame rate.

#### "Produce audio along with video during screen sharing"

Output the audio of your computer from a connected device.

If you do not wish to output audio, clear this check box.

• When the computer is connected with multiple devices by specifying IP addresses, this is not available.

#### "Disable screen saver during screen sharing"

Disable the screen saver function of the computer during image display.

- 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"

Start displaying images automatically when a device is selected from the <Search> screen or device selection screen.

There will be no need to click \rightarrow 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.

#### **Display Room Number Input Dialog**

Set whether or not to display the room number input dialog box when using this software with rooms and devices registered. When the check box is selected, the room number input dialog box is displayed.

page 19

## **Specifying the Area to Display**

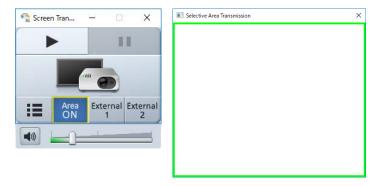
You can specify just the area of your computer screen that you need to display and then display that area on the device.

1 Click [Area OFF] 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.



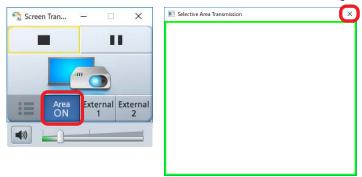
3 Click in the launcher.

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



## **Ending selective area transmission**

• Click X at the top right of the <Selective Area Transmission> window or click [Area ON] in the launcher.



#### Notes

- 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.

## **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.
Screen Transfer is already running.	An attempt was made to run two instances of this software.
No LAN adapter found.	No wired LAN adapter was found in the computer.
Failed to communicate with the device.	A communication error occurred between the device and computer.
Communication was canceled by the device.	Communication with the device was disconnected forcibly.
The connection was interrupted by the device, since the device was turned OFF.	Communication was disconnected forcibly by turning off the device.
The connection to the device was interrupted by another user cutting in.	Communication with the device was disconnected forcibly because another user accessed the device.
The connection was interrupted by the device, since the mode was changed to something other than "Screen Transfer".	The connection was disconnected forcibly because the input of the device was changed to other than "Screen Transfer".
Failed to start screen sharing.	Screen sharing failed to start because a timeout occurred.
Another user occupying destination device.	Another user is using the device.
Screen sharing failed. Turn on the power and switch the input to "Screen Transfer", and then restart screen sharing.	Screen sharing failed to start because the device was off.
Screen sharing failed since the device is not in "Screen Transfer".  Switch the input to "Screen Transfer", and then restart screen sharing.	Screen sharing failed because the input of the device is not "Screen Transfer".
This IP address is already registered.	The added IP address is already registered.
Up to eight IP addresses can be registered.	There are already eight device IP addresses registered.
This function is only available when connecting by room number.	The [External 1] and [External 2] buttons in the launcher are available only when a room is registered.
Authentication of all devices failed.	Authentication of all registered devices failed when connecting by room number.
Authentication of the following devices failed. Connect to devices other than those listed below?	Authentication of some of the registered devices failed when connecting by room number.
Could not operate due to failure to authenticate.	Operation was not possible because authentication failed when the [External 1] or [External 2] button in the launcher was used.

## **Frequently Asked Questions**

#### Wired 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.

 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] → [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 wired LAN adapter recognized correctly?

The LAN adapter being used may not be recognized correctly in some cases.

Check that the wired 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 wireless 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 wired LAN adapter.

For details on updating the driver, contact the manufacturer of your computer or wired LAN adapter.

#### The wired 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 3)?
- 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 6).
- Is the computer CPU speed slow? (page 6)
  - 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 24).
- Screen display may become slow if [High] is selected in the launcher system menu → [Settings] → [Frame Rate] (page 24).
- 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 wireless 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 6)?
- 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.

#### The computer's audio is not heard from the device 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.
- This cannot be used when communicating with multiple devices simultaneously.
- Check that the launcher system menu → [Settings] → [Produce audio along with video during screen sharing] check box is selected (page 24).
- When using the software with rooms and devices registered, the audio is output from the device selected when the room is selected (page 19).
- 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 24).

#### 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 24).

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