

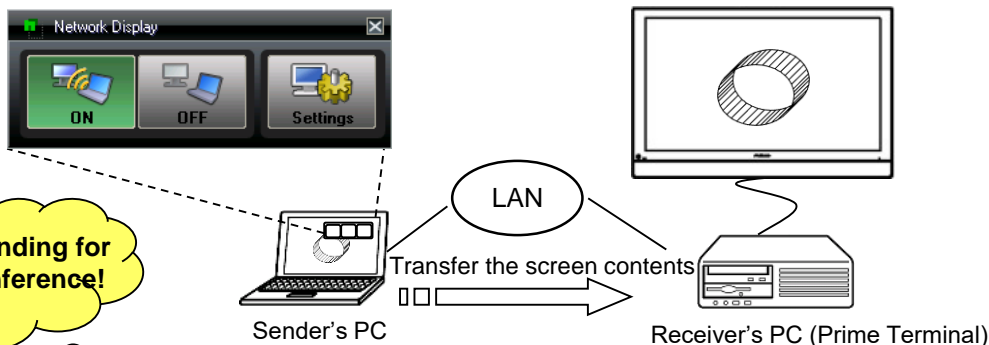
# Introduction

## What is Network Display?

**Network Display is an easy-screen transfer software using the IP network.**

Run the software intended for exclusive use from the Web to build an easy system that transfers the current screen contents in real time using the network.

Use the Network Display with Cyber Conference System (CCS) Prime to have more information shared instantly with all participants in the conference.



### -Network Display is freely accessible-

- **No Software Installation is required**

No software installation required on sender's PC, therefore it can be started directly from the web.

- **One simple click to change the display**

Any number of people can access and use it simultaneously. To switch the screen display (mode), one simple click on desired button. In the past, RGB cable connection was necessary each time the presenter changed but no more required, therefore, a highly effective conference can be achieved.

- **Not necessary to put all the data into one place**

Documents can be seen from each PC, thus no advanced preparation (such as storing the documents in the PC located at conference room) needed.

- **Current display on the screen is released as it is being displayed to Prime terminals at remote location**

Operate each one's PC to start immediate a screen-sharing session with others at remote location.

### Content

<b>Let's Use Network Display</b> -----	<b>2</b>	Task Tray Menu (Receiver Software) -----	7
Preparation -----	2	[Status] Dialog -----	7
Basic Operations (Starting) -----	2	[Destination/Authentication Key Entry] Window --	8
Basic Operations (Screen Display & Exiting) --	3	<b>Setting Items</b> -----	<b>9</b>
Switch the Screen Display -----	4	[Settings] Dialog -----	9
Use Shortcut Key -----	4	Name Display Settings-----	10
<b>Screen Description</b> -----	<b>5</b>	Screen Fit Settings -----	11
Description of Each Button -----	5	Specify the Desired Area -----	12
Auto-minimize [Network Display] Window ----	6	<b>System Configuration &amp; Operating</b>	
Task Tray Menu (Sender Software) -----	6	<b>Environment</b> -----	<b>13</b>

# Let's Use Network Display

## Preparation


Please activate the receiver software (of the Network Display) on the PC where CCS-Prime is installed. Turn the PC on and open "Start" ->"All Programs"->"Start Network Display Receiver"

The image shows a sequence of steps to activate the receiver software. It starts with the Windows Start menu, navigating through 'All Programs' to 'xSync Prime', then to a sub-menu containing 'Start Network Display Receiver', which is highlighted with a red box. Below this, a 'Network Display (Version 2.1.3)' window is shown with 'PCNAME 1' and IP address '111.111.1.11' in the 'Destination' field, and 'Authentication Key' '387389' in the 'Authentication Key' field. A callout box points to the receiver's PC icon. A dashed box contains a note: '\* If you operate the Network Display while the CCS-Prime is activated, that will stimulate the linkage between the Network Display and CCS-Prime. Therefore, any information can be transferred to the remote PC (which is connected with the CCS-Prime).' Below the configuration window, text reads: 'Enter the destination (PC Name/IP Address) and authentication key upon launching the sender software.'

## Basic Operations (Starting)


Here described the basic operation (from start-up to exit the sender software ) of Network Display.

### 1 Start the sender software

1. Turn the power on the sender's PC and click  on the desktop.
2. Go to the login screen (shown as you enter **http://[IP Address]/** and click "Enter" key) and then click the following link.

The screenshot shows a login screen with a 'Password' input field. Below it are two links: 'Click [here](#) to download NetworkDisplay' and 'Click [here](#) to go to Information'. The word 'here' in both links is highlighted with a red box.

\* [IP address] depends on user's environment settings.

3. Enter the IP address (or PC name) and authentication key provided with the receiver's PC in the window shown, and click  .

\* Click "Run" if you get a warning dialog after clicking "Here". You will then be asked "Do you want to run this software", Click "Run".

The image shows the 'Network Display (Version 2.1.3)' configuration window with 'Destination' set to '111.111.1.11' and 'Authentication Key' set to '387389'. The 'Connect' button is circled in red. A callout box explains: 'PC Name is only available in the environment where its name can be resolved by DNS.' Below the window, text reads: '[Destination/Authentication Key Entry] Window (P.8)'. An arrow points to the resulting 'Network Display' control panel, which has 'ON', 'OFF', and 'Settings' buttons. A circled '2' indicates the next step.

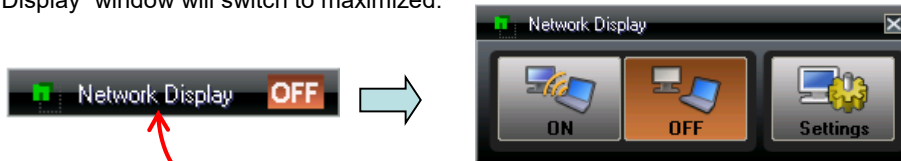
# Let's Use Network Display

## Basic Operations (Screen Display & Exiting)

### 2 Display the sender's PC screen on the receiver's PC

1. If "Network Display" window is opened in a minimized, place the mouse pointer over the window.

-> "Network Display" window will switch to maximized.

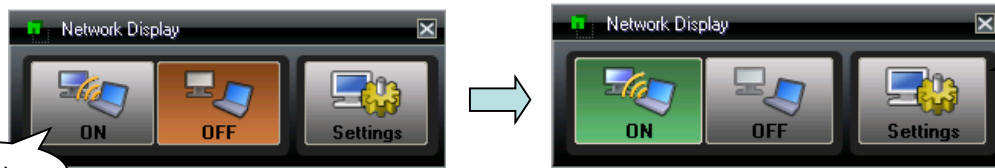


2. Click "ON" button.

3. The screen display on the sender's PC is transferred to the receiver's PC.

At the same time, the receiver's PC screen (Prime Terminal Screen) is released to other sites.

\* The window will switch back to minimized once the mouse pointer moves out of the window area.



Click

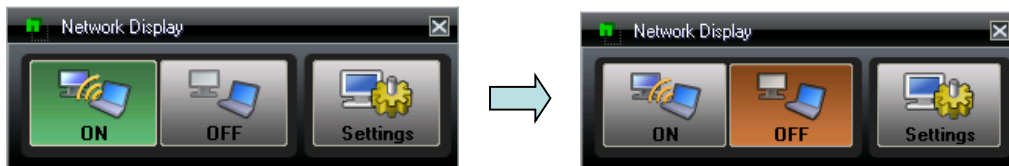
"ON" button is changed to green

A click of the "ON" button allows the following two options to run at once.

- 1) Screen display on the sender's is displayed on the receiver's PC
- 2) Activate "Share Data" feature (See "NOTE" shown with "Description of each button" (P.5))

### 3 Exit the sender software

1. Click "OFF" on "Network Display" window to turn the screen display off.



2. Click "Close" button on "Network Display" window.

-> The sender software will be closed.



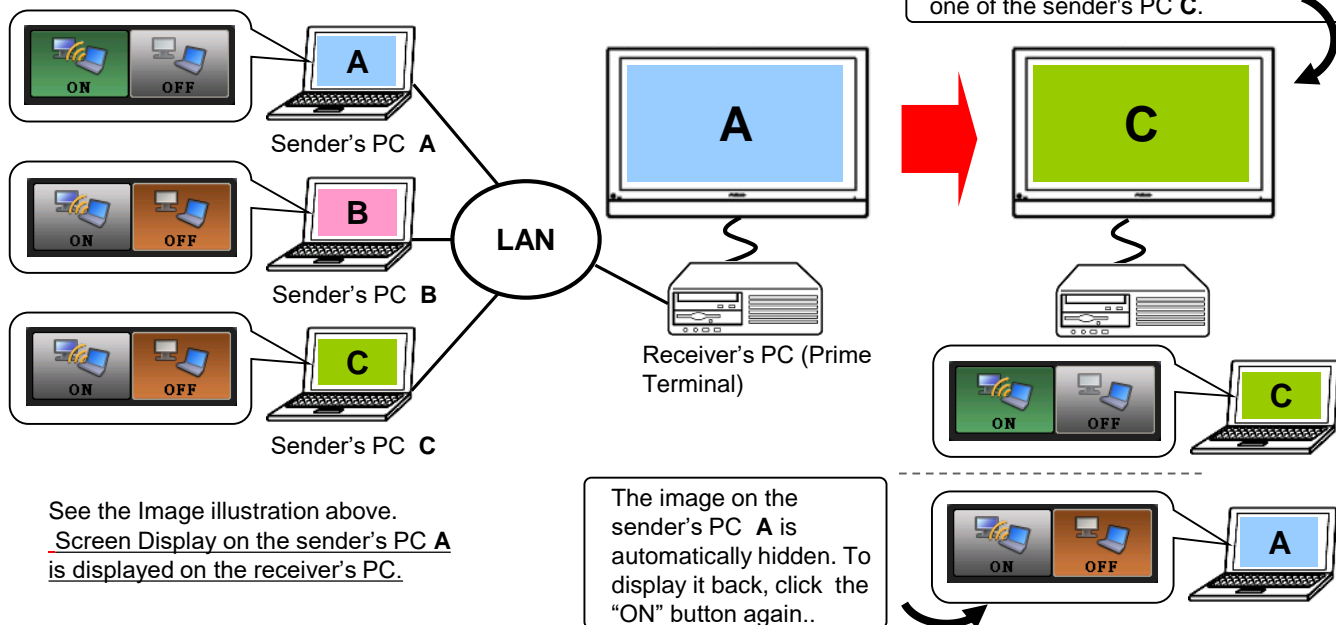
For further details of "Network Display" window, refer to "Description of each button" (P.5).

## Let's Use Network Display

### Switch the Screen Display

If the Network Display is used with the multiple sender's PC connected, click "ON" to easily change the display.

- \* There is no limit on the number of sender's PCs that can connect to the receiver at the same time.
- \* Only one of the sender's PCs allowed to display.
- \* Every time a user clicks the "ON" button, the use's PC (sender) is shown preference over another.



### Use Shortcut Key

Use the shortcut key to toggle the Network Display ON and OFF when its window opens minimized.

Available shortcut keys with the Network Display are as shown below.

If the shortcut key is to be used on the sender's PC, you will need to enable "Shortcut Settings" from the settings dialog.

PC	Shortcut Key	Toggle	Contents	"Settings" area
Sender	Ctrl key twice	"ON"	Image on the sender's PC is displayed on the receiver's PC, and it is release to other sites. (See "NOTE" P.5)	"Options"-."Shortcut Settings"
	Left Alt key twice	"OFF"	Image on the receiver's PC is hidden.	Same as above
Receiver	Ctrl key twice	"OFF"	Image on the sender's PC is hidden and display the desktop on the receiver's PC.	None

\* For any further details of [Settings] dialog, refer to "[Settings] Dialog"(P.9).

## Description of Screen

### Description of Each Button











Here describes each button on "Network Display" window.

Network Display's Operation is simple, just one click the desired button located on "Network display" window.

Once the sender software is launched, "Network Display" window will appear.



\* "Network Display" window will be automatically minimized if no activity is detected for a period of time. For further details, see "Auto-minimize Network Display window" shown the next page.

Illustration	Title	Contents	at turning ON	at turning OFF
	ON	Image on the sender's PC is displayed on the receiver's PC, and it is release to other sites. (See "NOTE" below)		
	OFF	Hide the image on the receiver's PC. "OFF" is selected (the default) when launching the sender software.		
	Settings	Open [Settings] dialog.		
	Close	Exit the sender software.		

#### NOTE

**A click of the "ON" button allows the following two options to run at once.**

- 1) Display the current sender's PC screen on the receiver's PC
- 2) Activate "Share Data" feature (\*)

\* "Share Data" on the operation panel is automatically turned ON and the sender's PC screen is displayed to other Prime terminals at remote location.

The frame of Desktop is generally covered in orange while "Share Data" is used, but is covered in green while the sender's PC screen is released.

**In the following cases, "Share Data" will be stopped. ("ON" button will automatically changed to "OFF".)**

- 1) When "Stop Sharing" on Prime Terminal at local site is clicked
- 2) When "Whiteboard" is clicked by any sites including the local site
- 3) When "ON" is clicked by any sender's PC located at other site.

For any further details of "Share Data", refer to the manual described below.

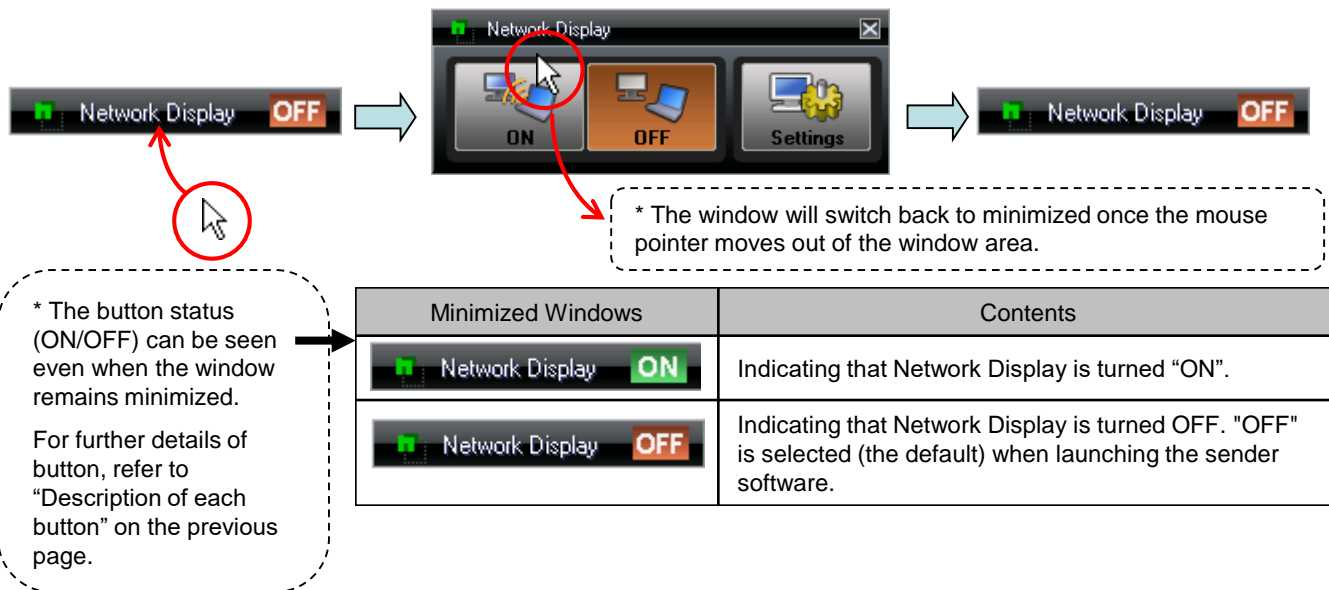
"Simplified Manual" - "Present (Illustrate Documents)" (P.8)

"Detailed Manual" - "Conference Operations" - "Share Data" (P.59), "Stop Sharing the Data" (P.60)

## Description of Screen

### Auto-minimize [Network Display] Window

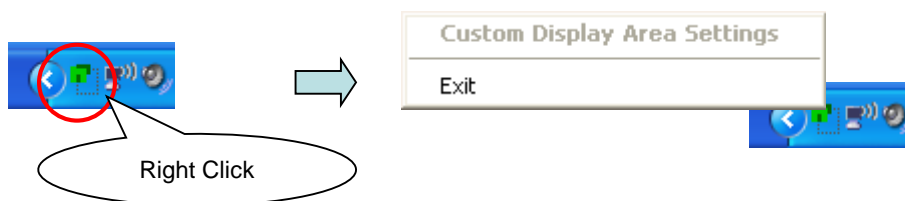
"Network Display" window on the sender's PC is automatically minimized. Move the mouse pointer over "Network Display" window due to single-click button operation.



### Task tray Menu (Sender Software)

Network Display icon remains in the task tray while the sender software is active.

Here describes the task tray menu (shown below) by right click on the Network Display icon.




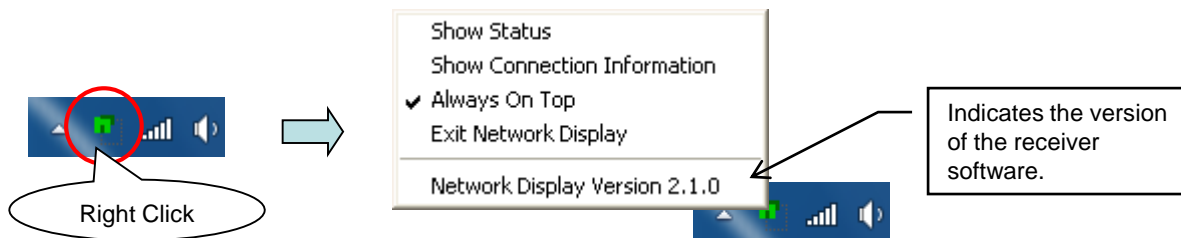
Custom Display Area Settings *	Shows the screen transfer area highlighted in red.
Close	Close the Network Display.

\* This menu option will be enabled only when "Dot by Dot" (see P.9) is selected ([Settings] Dialog>"Screen Fit Settings") under the screen resolution of the sender's PC is set higher than the one of the receiver's PC. For any further details, refer to "Specify the Desired Area" (P.12).

## Description of Screen

### Task Tray Menu (Receiver Software)

Network Display icon  will appear in the task tray when CB-Link Prime is activated. Here describes the task tray (shown below) by right click on the Network Display icon.



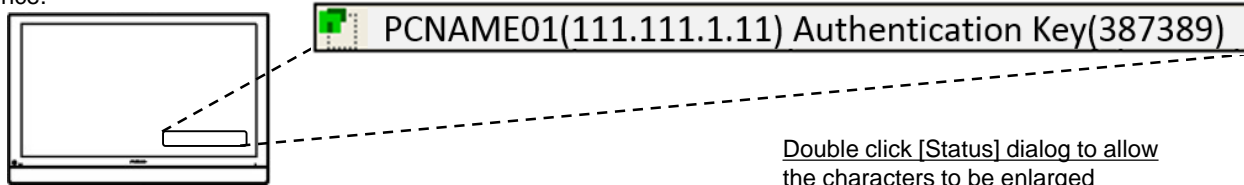
Show Status Dialog *	Switch to show or hide [Status] dialog.
Show Connection Information	Show all sender's PCs connected to the receiver's PC (Connection Information Dialog)
Always On Top	Keep [Status] dialog always on top or back.
Exit Network Display	Exit the Network Display.

\* [Status] dialog will appear in the lower right of the screen when the receiver software is activated. For any further details, refer to [Status] dialog description below.

### [Status] Dialog

[Status] dialog indicates the authentication key and IP address of the receiver's PC required when activating the sender software.

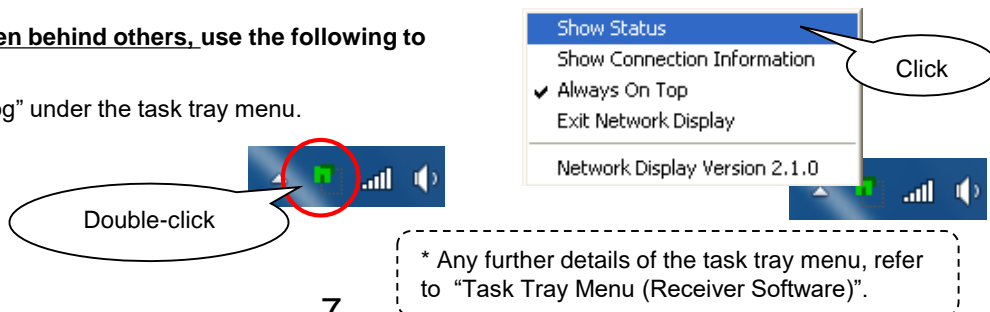
\* That is the default position, however, its position will depend upon where it was located to at closing the previous conference.



PC Name (IP Address)	Show the PC name and IP address of the receiver's PC.
Authentication Key	Show the authentication key required when activating the sender software.

**If [Status] dialog is hidden behind others, use the following to display it.**

- Click "Show Status Dialog" under the task tray menu.

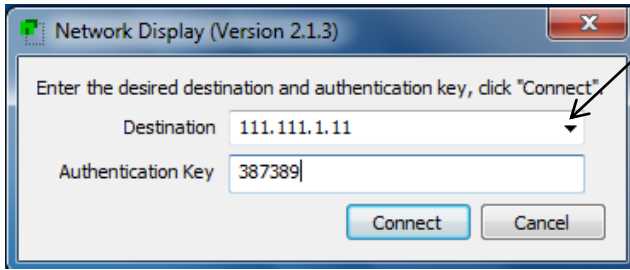


## Description of Screen

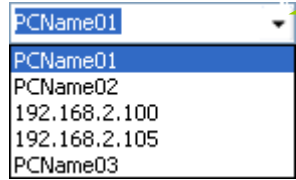
### [Destination/Authentication Key Entry] Window

Authentication key entry is required upon launching the sender software, in order to avoid transferring your viewing screen to an incorrect receiver's PC.

Here describes [Destination/Authentication Key Entry] window shown when the sender is launched.



Up to 5 histories can be viewed.



Click the pull-down to view the history

Destination	Enter IP address or PC name(*) shown on [Status] dialog(P.7) or select the destination from the histories by using the pull-down. * It is only available in the environment where the PC name can be resolved by DNS.
Authentication Key	Enter the authentication key shown on [Status] dialog(P.7).

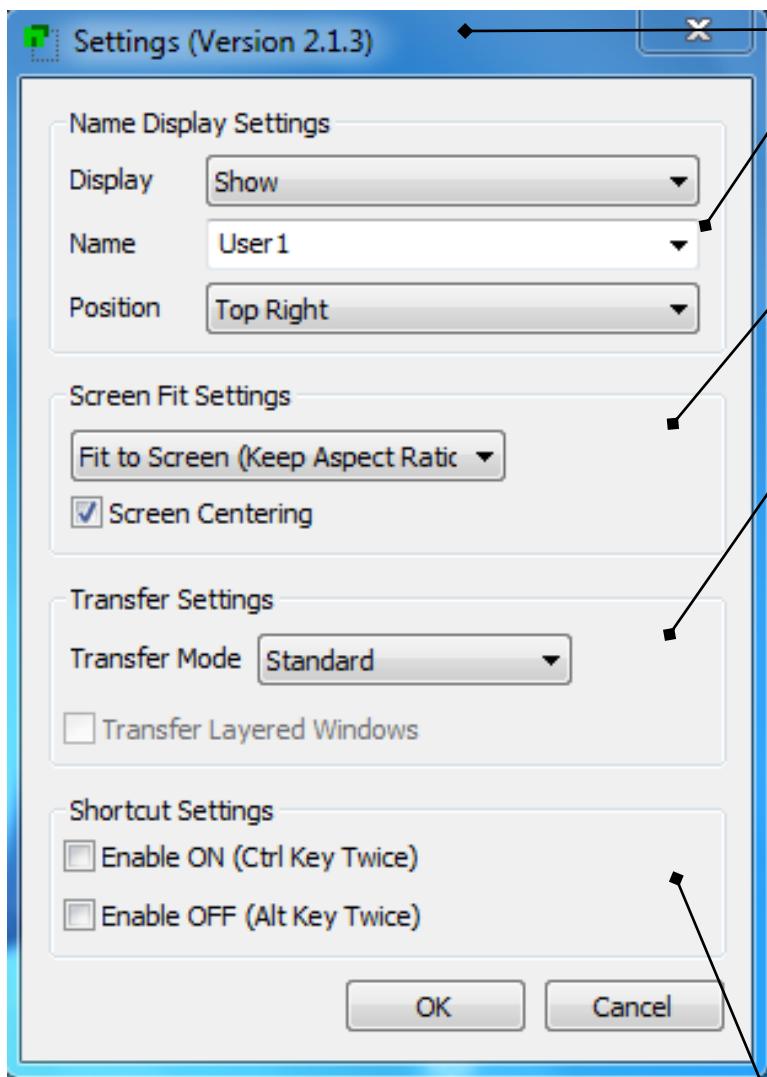


## Setting Items

### [Settings] Dialog

Here describes [Settings] dialog that allows users to change all available settings of Network Display.

Click [Settings] located on [Network Display] window to display its dialog below.



#### (Version x.x.x.)

Display the version number of the current sender software.

#### ■ Name Display Settings

Select the desired display mode on the receiver's PC from the drop-down menu. For any further details, refer to "Name Display Settings" on the next page.

#### ■ Screen Fit Settings

Select the desired display mode from the drop-down menu (3 modes available) For any further details, refer to "Screen Fit Settings" on page 11.

#### ■ Transfer Settings

Select the desired transfer mode from the drop-down menu (3 modes available)

- Standard
- Image Quality Priority
- Low Load

#### ● When the check box is cleared

The [Network Display] related window and the desktop content displayed on the sender PC are sent and displayed on the receiver PC.

#### ● When the check box is selected


All layered windows and the desktop content displayed on the sender PC are displayed on the receiver PC.

\* if Windows Aero feature is turned ON (Windows Vista / Windows 7), this option described above is always enabled.

#### ■ Shortcut Settings

Either tick or leave the blank the checkbox of Shortcut Key. If the checkboxes are checked, it allows users to turn the display ON/OFF from the keyboard.

\* Once the settings are complete, click "OK" to save the changes you made.

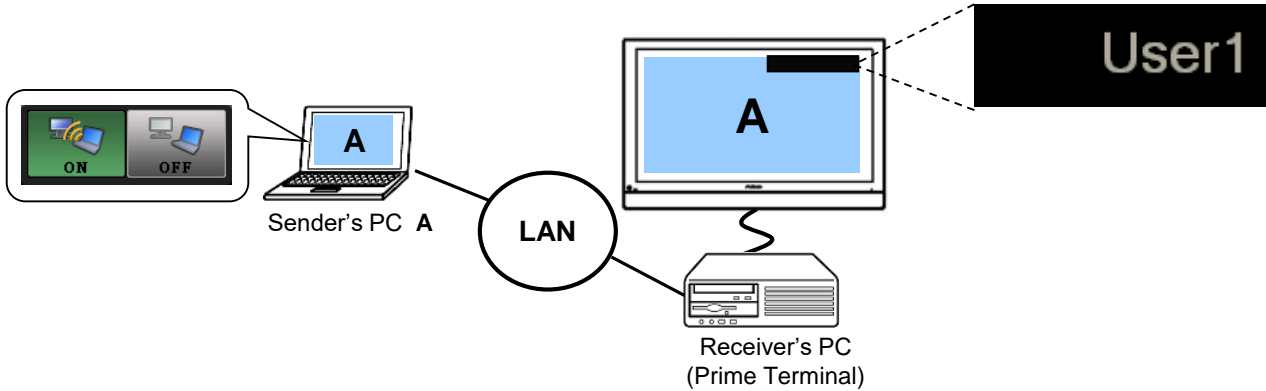
When the dialog is closed by using "  Close" before clicking OK, any changes will be not saved.

If you wish to quit without saving, click "Cancel".

## Setting Items

### Name Display Settings

Name will be displayed on the Receiver's PC when the Sender's PC is set to ON.



To change Name Display Settings, click



to open [Name Display Settings].

Name Display Settings

Display Show

Name User1

Position Top Right

Display	Select from Don't Show, Show or Show Always. When set to Show, the name will automatically disappear after 3 seconds.
Name	Enter the name to be displayed. Or, select from the drop-down menu: Full name set in the Login User ID, Login User ID or PC name.
Position	Select from Top Left, Top Right, Lower Left or Lower Right.

## Setting Items

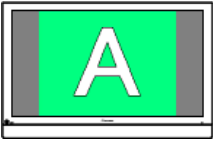




### Screen Fit Settings

This function allows users to zoom in/out the entire screen (sender's PC) to match the one (receiver's PC) due to screen resolution differences between the sender's PC and receiver's PC. Follow the step below to find this settings.

[Settings] dialog->"Options"->"Screen Fit Settings"

The following is a quick guide of "Screen Fit settings". Refer to this guide if the different resolution settings between the sender's PC and receiver's PC are used.

#### ■ Screen Resolution of the sender's PC is lower than the one of the receiver's PC

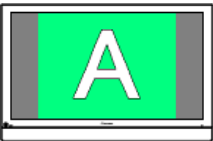




	<input checked="" type="checkbox"/> Screen Centering	<input type="checkbox"/> Screen Centering
1 Fit to Screen (Keep Aspect Ratio ▾)		
2 Fit to Screen ▾		Same as the left image
3 Dot by Dot ▾		

1: Zoom in the image to fit the window but keep the ratio between height and width of the sender's PC.

2: Zoom in the image to fit the window without the aspect ratio.

3: Display the image at the same size it is currently being displayed on the receiver's PC.

#### ■ Screen Resolution of the sender's PC is higher than the one of the receiver's PC

	<input checked="" type="checkbox"/> Screen Centering	<input type="checkbox"/> Screen Centering
1 Fit to Screen (Keep Aspect Ratio ▾)		
2 Fit to Screen ▾		Same as the left image
3 Dot by Dot ▾		

1: Zoom out the image to fit the window but keep the ratio between height and width of the sender's PC.

2: Zoom out the image to fit the window without the aspect ratio.

3: Display the image at the same size it is currently being displayed on the receiver's PC, moreover. To display the rest of the area that is not visible, use "Custom & Display Area Settings" under Task Tray Menu (P.6).

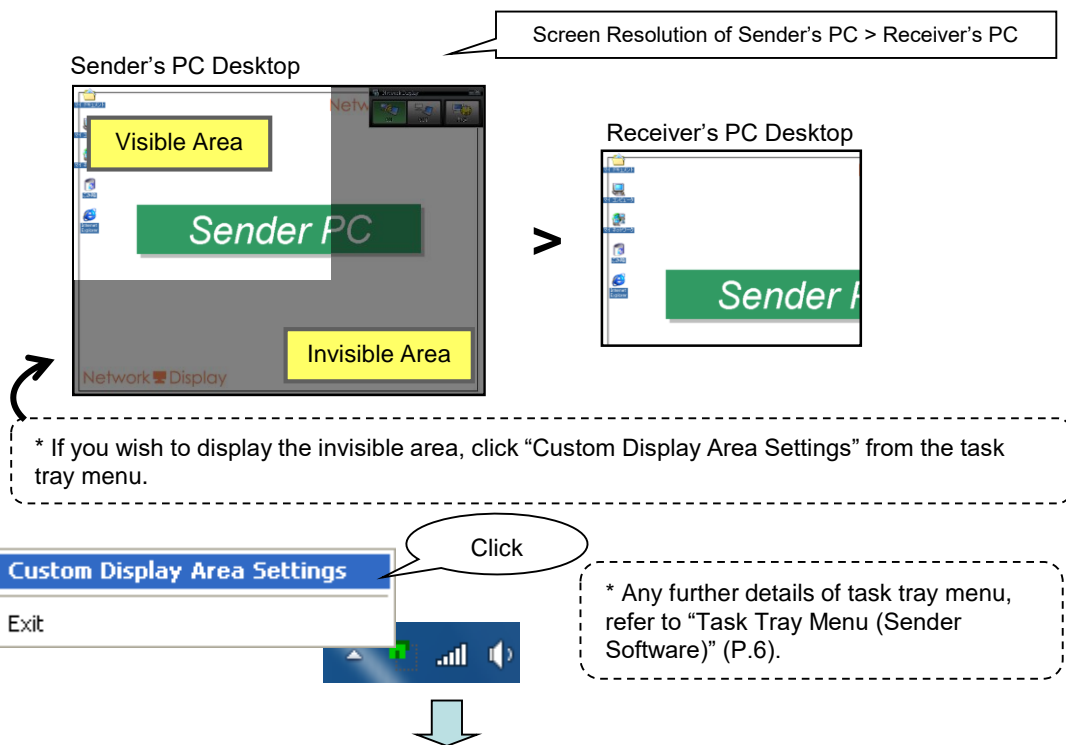
## Setting Items

### Specify the Desired Area

“Custom Display Area Settings” feature allows users to specify any particular area that you are focused on and display its area.

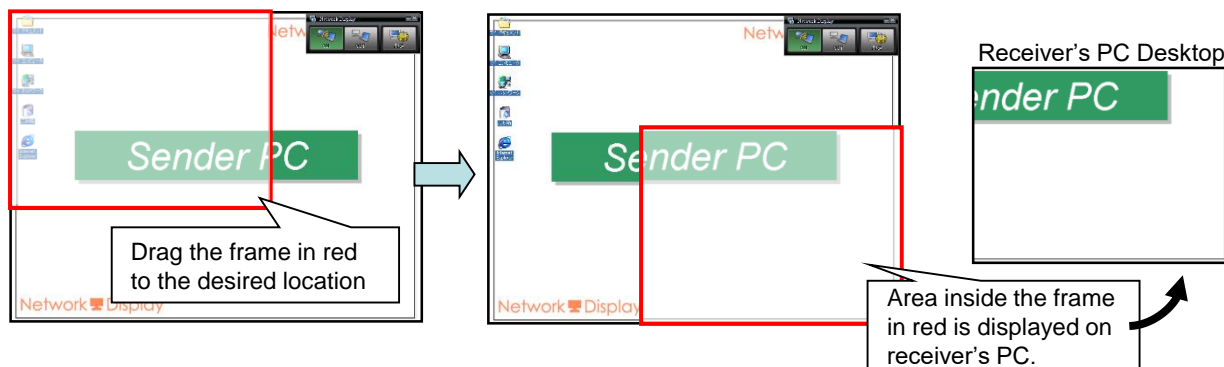
If “Dot by Dot” is selected for “Screen Fit Settings” under the screen resolution of sender’s PC is higher than the one of the receiver’s PC, there will always be the invisible are on the screen due to only the area (that matches it’s currently displayed on the sender’s PC at its resolution) is visible.

In that case, use “Custom Display Area Settings” feature to allow users to specify the desired area and display it on the receiver’s PC.



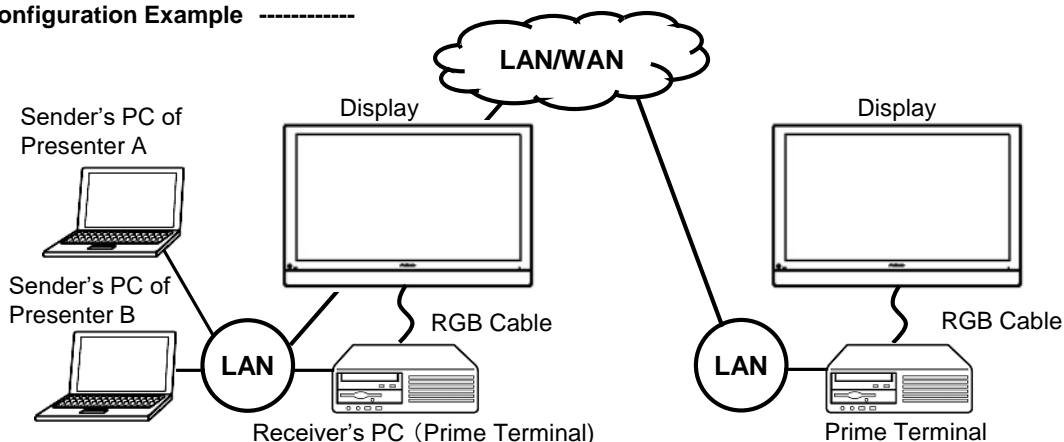
Screen transfer area at the screen resolution size (receiver’s PC) highlighted in red is displayed, then drag it to the desired location.

Only the area highlighted in red will be displayed on the receiver’s PC.



## System Configuration & Operating Environment

### System Configuration Example -----



Receiver's PC	It is connected to the shared display and receives the display signal output from the sender's PC. It is based on where CB-Link Prime is installed and its license is registered on the "Site" PC. * Shared Display = Display screen of the receiver's PC (Example: Large Size Display such as Plasma)
Sender's PC	It is the PC that activates the sender software. Moreover, is the laptop computers brought by the participants who gathered at "Site". Required to put the sender's PC on the same network as the receiver's PC. A number of PCs are acceptable.
Receiver Software	It is the software to display images of the sender's PC. It will be installed on CB-Link Prime's terminal.
Sender Software	It is the software to transfer images to the receiver's PC. It will be activated via the Web.
Prime Terminal	It is the PC which CB-Link Prime is installed.

### Operating Environment (Sender Software) -----

\* The operating environment of the receiver software needs to be matched with the one of CB-Link Prime.

OS *1	Microsoft® Windows® 10 (32 bit/64 bit)(English) Microsoft® Windows® 8.1 (32 bit/64 bit)(English) Microsoft® Windows® 7 SP1(32 bit/64 bit)(English)
CPU	Intel® Pentium®4 Processor 2.4 GHz or higher Intel® Pentium®M Processor 1.0 GHz or higher
Memory *2	1GB
Network	TCP/IPv4, Port: 50005
Necessary Software	Microsoft® Internet Explorer® 11
Precautions	*1 It is highly recommended that Windows Aero feature is turned OFF. *2 It is necessary to enhance the memory capability to meet the application, Antivirus or Screen Resolution (UXGA or higher) you use.  Multi-display is NOT supported.

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