

**Projector**

**P502HL/P502WL**

**User's Manual for the APPS MENU**

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**NOTE:**

The explanation in this manual corresponds to the projector's firmware 2 in version "1.02" or after.

The firmware version can be checked in the following procedure:

[INFORMATION] on the onscreen menu → [VERSION(2)] → [FIRMWARE2].

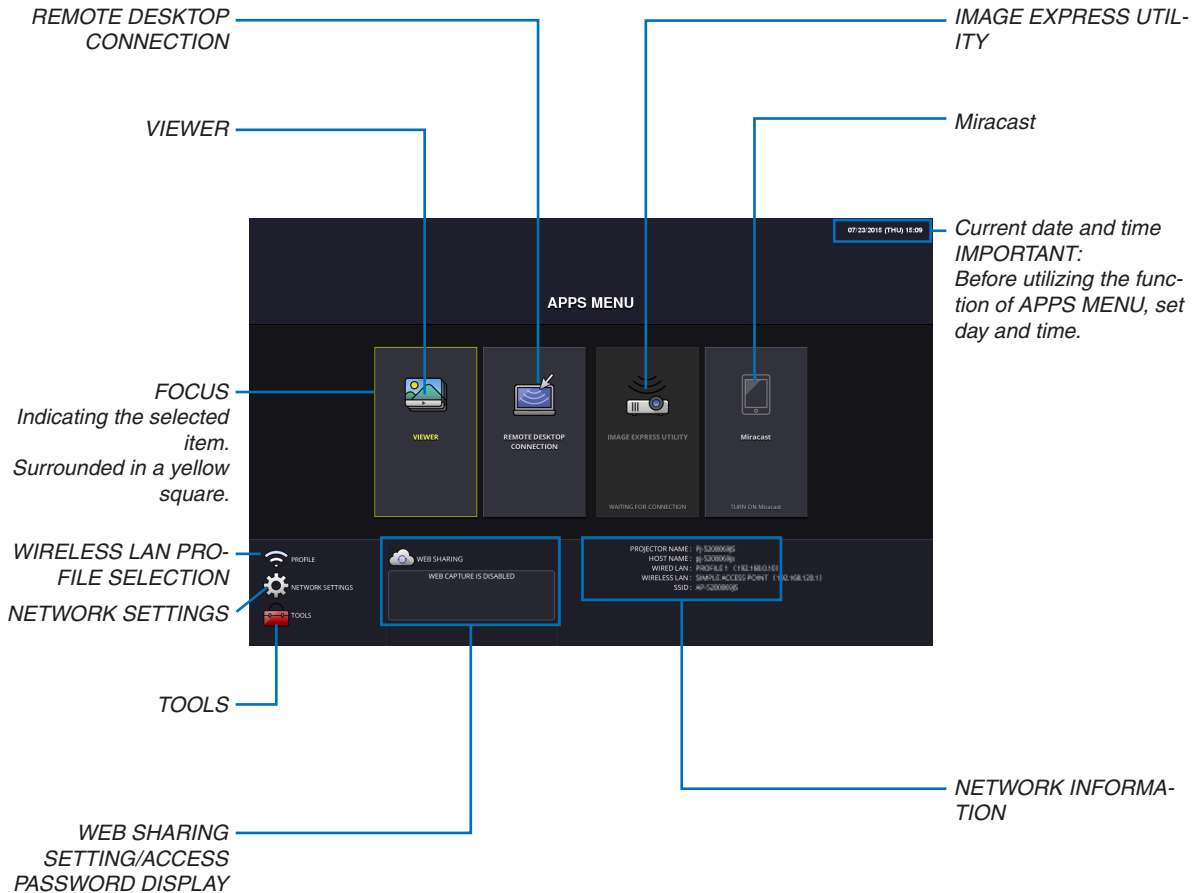
# 1. What can you do with the APPS MENU?

It becomes available to select the expansion functions indicated in below and various setting with the APPS MENU. For displaying the APPS MENU, press the APPS button on the remote control or select [APPS] as the [SOURCE] on the onscreen menu.

## INFORMATION

For going back to the APPS MENU interrupting to use each application in the APPS MENU, press APPS button on the remote control when the onscreen menu is not displayed on.

## APPS MENU screen display



## NOTE:

- When this projector is not in a network, you cannot select [REMOTE DESKTOP CONNECTION], [IMAGE EXPRESS UTILITY], [Miracast], and [WEB SHARING].

## 1. What can you do with the APPS MENU?

### VIEWER

Select the saved images/movies and project them by the projector. This function is available for explained below:

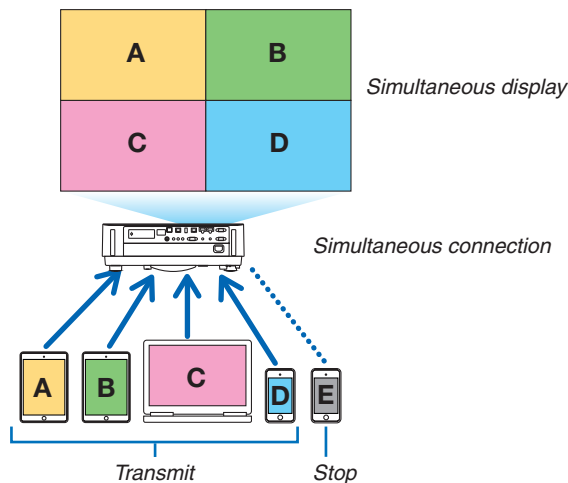
- (1) Projector Memory: Images and movies temporarily saved in the projector built-in memory utilizing the WEB SHARING.
- (2) USB Memory: Images and movies saved in the USB memory connected with the projector.
- (3) Shared Folder: Images and movies saved in the shared folder in a network connected with the projector.

### REMOTE DESKTOP CONNECTION

- Select the computer connected in the same network with the projector, and the projector projects the images on the computer over the network.  
A commercially available USB keyboard can be used for controlling Windows 8 and Windows 7 computers in the network connected with the projector.

### IMAGE EXPRESS UTILITY

- If various terminal units such as a computer, a smartphone, and a tablet are connected with the projector in the network, it enables to transmit images saved on each terminal to the projector and to project them.
- You can connect terminal units in multiple OS (Windows, Mac OSX, Android, and iOS) with the projector simultaneously.
- The projector receives images transmitted from multiple terminal units (Max. 50 units) and projects them on the screen dividing it (Max. 4 × 4) at the same time.



- Install the application software "Image Express Utility Lite", included in the CD-ROM supplied with the projector on computers.
- For a smartphone and a tablet, download the application "Wireless Image Utility" from our web site and install it on these.

### Miracast

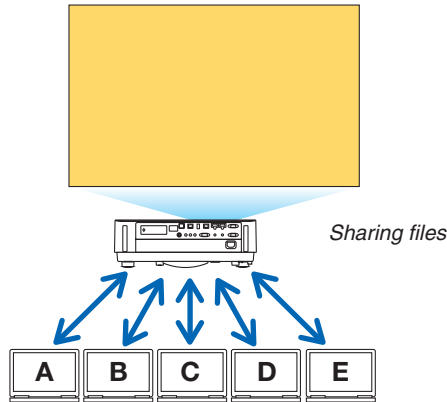
By wirelessly connecting the terminal units supporting the Miracast such as the Android with the projector, it enables the projector to project images transmitted from these terminals.

Before connecting these terminal units, set [Miracast] in the [NETWORK SETTINGS] on the projector.

### WEB SERVER FUNCTION

#### WEB SHARING

Without using the exclusive software, it enables to share images and files among the projector and computers in the same network by accessing the web server of the projector utilizing the web browser.



#### IMAGE EXPRESS UTILITY LITE

It enables to control screen splitting pattern and displaying position of the images that are simultaneously transmitted from each terminal utilizing the application software, Image Express Utility Lite or Wireless Image Utility, on the computer browser screen. Precise controls as changing number of screen portions and pages to display are available.

#### PROJECTOR CONTROL

It enables to control the projector on the web browser screens on the computers.

#### HOW TO ACCESS THE WEB SERVER

Connect the projector and computers in a network and access the URL in below by the web browser of the computers.

URL: <http://<Projector's IP address>>

#### NETWORK SETTINGS

Set up below for connecting the projector with a wired/wireless LAN.

##### PROJECTOR NAME

Set up the projector name and host name. Serial number of the projector is set as factory default.

##### NETWORK INFORMATION

Indicate information when the projector has connected in a network (by a wired/wireless LAN)

##### WIRED LAN

Set up for connecting the projector by a wired LAN.

##### WIRELESS LAN

Set up for connecting the projector by a wireless LAN. At the same time, set up for the SIMPLE ACCESS POINT, Wi-Fi Direct, and Miracast.

##### IMAGE EXPRESS UTILITY

Set up the MODE (FREE, MANAGED) for the IMAGE EXPRESS UTILITY.

##### NETWORK SERVICE

Set up various setting for the AMX, HTTP server, PJLink, Alert mail and CRESTRON.

##### TOOLS

Set up for various features as the mouse, program timer, date and time, administrator mode and default APP.

## 1. What can you do with the APPS MENU?

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### **MOUSE**

A commercially available USB mouse can be used for operating the APPS MENU. Perform the set up for using it.

### **PROGRAM TIMER**

Once day and time is set up, changing the projector's condition in powering ON/standby, switching input signals, and switching ECO mode can be automatically performed.

### **DATE AND TIME**

Set up current date and time to the projector.

### **ADMINISTRATOR MODE**

Selecting the menu mode of the projector, enable/disable to save all set up values of the projector, and set up a password for the administrator mode.

### **DEFAULT APP**

When the projector is turned on under the condition of being selected the "APPS" terminal, the function set up as the default APP will be started automatically.

In case a terminal besides the APPS terminal has been selected, the function set up as the default APP will be started automatically when the APPS terminal is selected.

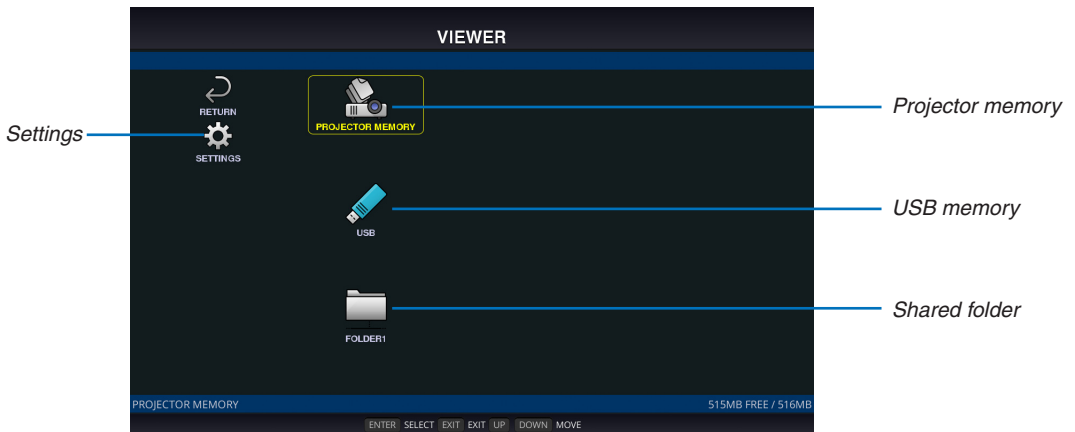
## 2. VIEWER

### What you can do with the viewer

Select a saved image or movie and project it from this device. The following 3 destinations can be used.

- (1) Projector memory: Images and movies temporarily saved in this device's built-in memory utilizing the WEB SHARING.
- (2) USB memory: Images and movies saved in the USB memory connected to this device.
- (3) Shared folder: Images and movies saved in the shared folder on the network connected to this device.

### Top screen of the viewer



- Select [SETTINGS] to change the settings for the slide show, movies, shared folders and so on.
- While "Autoplay" has been set either to "Still" or "Motion image" in the Settings, the projector starts performing "Autoplay" by the operation in below:
  - When the Viewer top screen is displayed on, a USB memory is connected in the projector.
  - When the Viewer screen is displayed on first time after powering ON the projector in which a USB memory has been connected.

For starting "Autoplay", the system will automatically search both the root directory and the folders in the subsequent level in the USB memory and then display found still images or movies in order. The images and movies will be displayed in the "Sorted" order.

#### NOTE:

- Only 1 USB memory can be recognized by the viewer. Do not connect the USB memory to the USB port of this device used for connecting to a wireless LAN.
- 1 to 4 shared folders can be set.
- When the connection to the shared folder fails, an error message is displayed and an "x" is displayed in the folder icon. Carry out the following checks in this case.
  - Is the LAN cable connected correctly?
  - Is the name of the destination folder correct?
  - Is the destination folder set for sharing?
  - Have access rights been set in the destination folder?
  - Are there any displayable files saved in the destination folder?
  - Is date and time set correct?

**Displayable/playable files****Still****Supported formats**

File extension	Supported
*.gif	Interlace, transmission, animation
*.jpg/* .jpe/* .jpeg	Baseline, Progressive, RGB, CMYK
*.png	Interlace, $\alpha$ channel
*.bmp	

\* MS-Office files and PDF files cannot be displayed in the viewer.

**Supported image resolution**

File extension	Resolution
JPEG	Up to 5000 x 5000 pixels
Gif	Up to 1280 x 1280 / file size up to 5 MB
Other images (.png, .bmp)	Up to 4000 x 4000 pixels

**Motion image****Supported formats**

File extension	Video codec	Audio codec
*.mpg/* .mpeg	MPEG2	MPEG Audio Layer2 MPEG Audio Layer3 (MP2/MP3 in abbreviation)
*.wmv	WMV9	WMA 9 Standard (WMA9 in abbreviation)
*.mp4	H.264/AVC	AAC-LC (AAC in abbreviation)

**Detailed information**

Item	Conditions
Resolution	From 320 x 240 up to 1920 x 1080
Video frame rate	Up to 30 FPS
Video bit rate	Up to 30 Mbps
Audio channel	Up to 2-ch stereo
Audio sampling rate	Up to 48 KHz
Audio bit rate	MP2/MP3: Up to 448 kbps WMA9: Up to 384Kbps ACC: Up to 256Kbps
Maximum file size	Up to 2 gigabytes
Unsupported codec	The WMV files containing sound data in the WMA Professional format can not be played.

**NOTE:**

- Depending on a file, it may occur you cannot play it even when it satisfies all above mentioned conditions.
- Depending on network environments, a type of the USB memory, and file bitrate, it may occur a movie cannot be played properly.
- You cannot play DRM files (Digital Right Management files).
- Regardless the setting of file aspect, the MPEG2/WMV formatted movies are played at 1:1

### Compatible USB memory

This device cannot recognize USB memory formatted in the NTFS format. Check the format if this device cannot recognize the connected USB memory.

Format a USB memory in the FAT32 format or FAT16 format for using it in the VIEWER, WHITEBOARD, and COLLABORATION. Refer to the Windows instruction manual or Help file on how to format a USB memory.

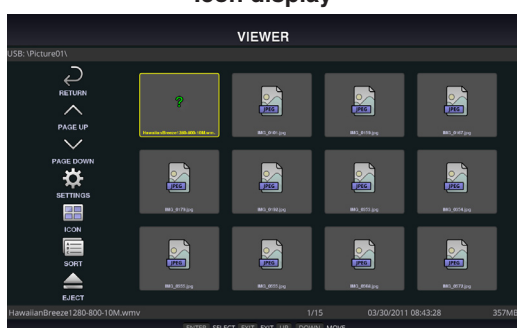
#### NOTE:

- The USB port of this device is not guaranteed to work with all USB memories sold commercially.

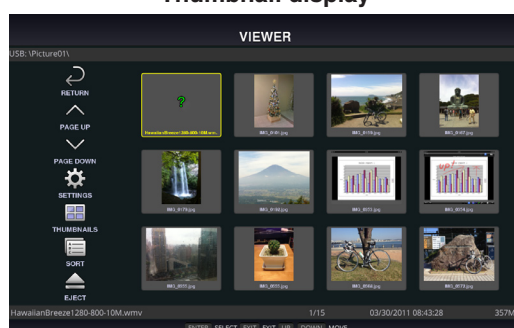
### File display screen









- 12 files (4 lateral × 3 longitudinal) including the folder icons can be displayed on a single screen. Use the “PAGE UP” or “PAGE DOWN” button on the left of the screen to change the list of files displayed.
- The files can be displayed using either icons or thumbnails in the viewer.

Icon display



Thumbnail display



	RETURN	Go back one level higher.
	PAGE UP	Display a list of the previous files.
	PAGE DOWN	Display a list of the next files.
	SETTINGS	Display the setting screen.
	THUMBNAILS/ICON	Switch between thumbnail display and icon display.
	SORT	Change the order to display files by name (filename), type (file extension), date (date of creation), or size (file capacity). The default sorting order is by “Name”.
	DELETE ALL	All the files in the memory can be deleted only when a list of the files in the projector memory is displayed. Be careful when executing “DELETE ALL” as deleted files will not be recoverable.
	EJECT	“Remove” the USB memory when a list of the files in the USB memory is displayed.

#### NOTE:

- The maximum number of files can be displayed in a folder including folder icons is 300.
- Filenames with a “.” at the beginning of the filename will not be displayed.
- The icon of a file whose type cannot be determined is indicated by a “?”.
- A short movie file may be displayed with the thumbnail in black.




### Slideshow display

- Focus on a still image on the file display screen (icon display or thumbnail display) and press the ENTER button to switch to the Slideshow display.
- A slideshow may be displayed using “Manual Playback” in which the images are switched by operating a button on the remote control, or “Auto Playback” in which the images are switched automatically at a set interval (playback mode is “Auto”).
- The default factory setting is “Manual Playback”. To perform “Auto Playback”, set the “Playback Mode” in the “Settings” to “Auto”.
- The images will be displayed in the order selected under “Sort” on the file display screen.
- When still images in high resolutions are projected as the Slideshow, it may back to the file display screen.

### Playback of a movie

- Focus on a motion image in the file display screen (icon display or thumbnail display) and press the (ENTER) button for playing back a movie.

### Viewer settings

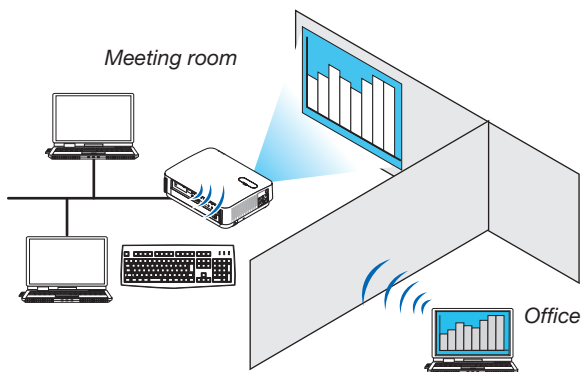
Select the  icon in the file list screen or top screen of the viewer to display the configuration screen of the viewer.

The following settings can be configured on the configuration screen.

Item 1	Item 2	Options (figures within the parentheses [ ] are default values)	Remarks
Slideshow	Screen size	[Best fit]/Actual size	
	Play Mode	Automatic / [Manual]	
	Interval	[5] - 300 seconds	Enabled when “Auto” is selected
	Repeat	[Disable] / Enable (default setting is unchecked)	
Movie settings	Screen size	[Best fit]/Actual size	
	Repeat	[OFF]/One File/All Files	
Auto play	AutoPlay	[OFF]/Still/Motion image	Enabled only when a USB memory device is connected
Shared folder	Folder 1/Folder 2/ Folder 3/Folder 4	[Disable] / Enable (default setting is unchecked)	
		Shared folder [¥¥]	Up to 41 characters
		User name	Up to 64 characters
		Password	Up to 64 characters

# 3. REMOTE DESKTOP CONNECTION

- By selecting the PC connected in the same network with the projector, the image on the PC can be projected to the screen via network.
- Then, by operating the keyboard, you can control Windows 8 or Windows 7 PC connected in the network.
- With the Remote Desktop function, you can remotely operate the PC placed at a distance from the projector.

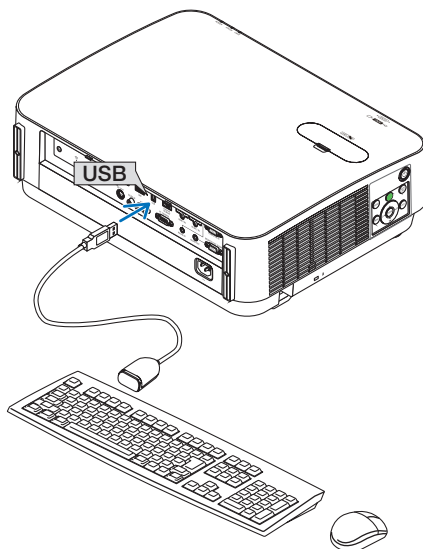


## NOTE:

- The [REMOTE DESKTOP] function will work on the following Windows editions.  
Windows 8 Pro, Windows 8 Enterprise,  
Windows 7 Professional, Windows 7 Ultimate, Windows 7 Enterprise,
- In this user's manual, this feature is described using Windows 7 as an example.
- A USB keyboard is required to use the Remote Desktop connection.
- The Remote Desktop connection can be operated with a keyboard. Using a wireless mouse with a wireless keyboard is more useful for operating.  
Use a commercially available wireless keyboard, a wireless mouse, and a USB wireless receiver.  
Use a commercially available USB keyboard and USB mouse.
- A USB keyboard with a built-in USB hub cannot be used with the projector.
- A wireless keyboard or mouse that supports Bluetooth cannot be used with the projector.
- We do not warrant that the USB port of the projector will support all USB devices in the market.
- On the login screen for the REMOTE DESKTOP CONNECTION, make sure to use the standard US layout keyboard (called 101 keyboard). If Japanese layout keyboard (as JIS layout keyboard) is used, letters differ from printed letters on the keys may be input.

## Prepare a commercially available wireless keyboard (US layout version).

1. Connect the USB wireless receiver to the USB port (Type A) of the projector. Make all necessary settings for your wireless keyboard and mouse.



2. Press [APPS] on the remote to display the APPS MENU.

3. Focus on [TOOLS] and press [ENTER]

4. Focus on [MOUSE SETTING] and press [ENTER]

5. Focus on [MOUSE] and press [ENTER]

Check mark will be added.

6. Focus on [BACK] and press [ENTER]

7. Press [STANDBY] button on the remote twice.

The projector will be powered OFF.

8. Press [ON] button on the remote

The projector will be powered ON and the connected USB mouse will be available.

#### Setting the password to the user account of Windows 7

TIP: If a password has been set for an account, the steps 1 to 8 can be skipped.

1. Click [Start] from the desktop of Windows 7.

2. Click [Control Panel].

3. Click [Add or remove user accounts] displayed under [User Accounts and Family Safety].

4. Click [Administrator].

5. Click [Create a password].

6. Input the password to the [New password] box.

7. Input the same password as that at Step 6 to the [Confirm new password] box.

8. Click [Create a password].

The Administrator is changed to [Password Protection].

#### Setting the Remote Access

1. Click [Start] from the desktop of Windows 7.

2. Click [Control Panel].

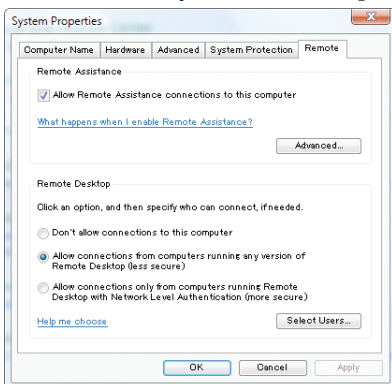
3. Click [System and Security].

4. Click [Allow remote access] displayed under [System].

5. When the [User Account Control] confirmation window appears, click [Continue].

The [System Properties] window appears.

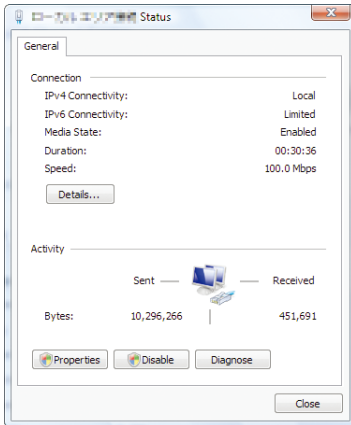
6. Click [Allow connections from computers running any version of Remote Desktop (less secure)] in the Remote Desktop box and click [OK].



#### Checking the IP address on Windows 7

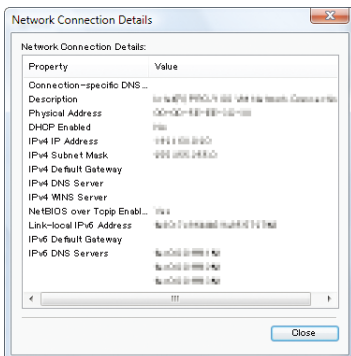
1. Click [Start] from the desktop of Windows 7.
2. Click [Control Panel].
3. Click [View network status and tasks] displayed under [Network and Internet].
4. Click [View status] displayed in blue on the right of [Local Area Connection] in the window.

The [Local Area Connection Status] window appears.



5. Click [Details...].

Write down the value for "IPv4 IP Address" (xxx.xxx.xxx.xxx) displayed.

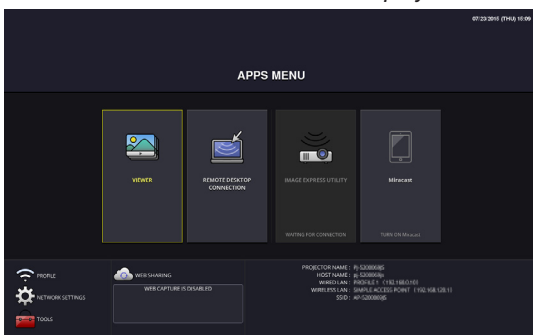


6. Click [Close].
7. Click [X] at the upper right of the window.

The system goes back to the desktop.

#### Starting REMOTE DESKTOP CONNECTION

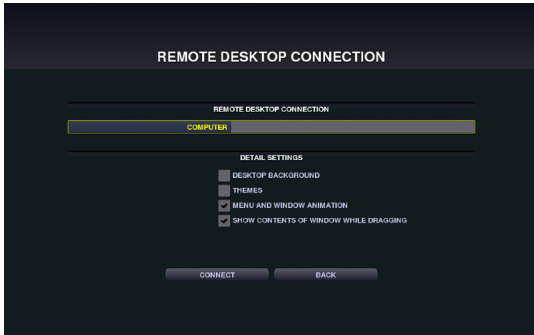
1. Press the APPS button on the remote control when the projector is in the state of powered ON.  
The APPS MENU screen will be displayed.



### 3. REMOTE DESKTOP CONNECTION

#### 2. Select [REMOTE DESKTOP CONNECTION] on the APPS MENU.

The [REMOTE DESKTOP CONNECTION] window appears.



#### 3. Operate one among the wireless keyboard, wireless mouse and the remote control to input the IP address of Windows 7 and click [CONNECTION].

The log-on screen of Windows 7 is displayed in the screen projected by the projector.

#### 4. Operate the wireless keyboard to input the user's password and press "Enter".

The REMOTE DESKTOP CONNECTION is started.

Windows 7 desktop is displayed on the screen projected by the projector.

Log out the computer.

Use the wireless keyboard connected to the projector to operate Windows 7.

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#### NOTE:

- If you cannot connect with the REMOTE DESKTOP CONNECTION properly and black screen remains to display, or you cannot perform the REMOTE DESKTOP CONNECTION caused on unexpected shut down, etc., press (APPS) button on the remote control for displaying the APPS MENU, select the REMOTE DESKTOP CONNECTION then select DISCONNECT. Try to reconnect the REMOTE DESKTOP CONNECTION.
- 

#### Exiting the REMOTE DESKTOP CONNECTION

##### 1. Operate either the wireless keyboard or wireless mouse to click [Start] from the desktop screen projected by the projector.

##### 2. Click [LOG OFF] on the right of the start menu.

The remote desktop connection is stopped.

##### 3. Press the button for an input terminal other than APPS on the remote control.

#### TIP:

Setting [DETAIL SETTINGS] in REMOTE DESKTOP CONNECTION

[DETAIL SETTINGS] will allow you to display the desktop background, or to enable the window animation function during the Remote Desktop operation.

DESKTOP BACKGROUND: Clear the check mark to display the desktop background in a single color.

THEMES: Clear the check mark not to use Themes.

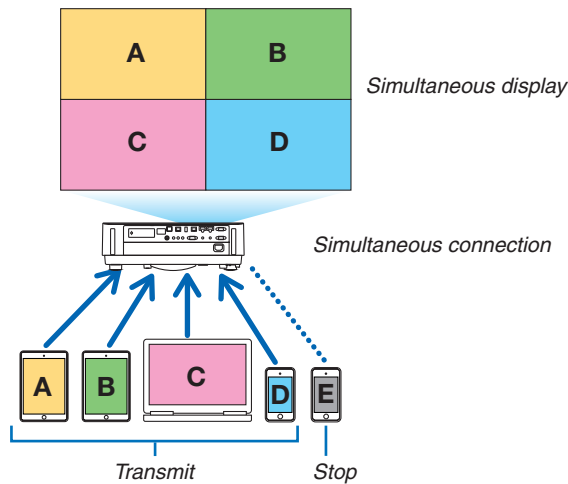
MENU AND WINDOW ANIMATION: Clear the check mark to disable menu and window animation.

SHOW CONTENTS OF WINDOW WHILE DRAGGING: Clear the check mark to show only the window pane while dragging.

# 4. IMAGE EXPRESS UTILITY

- When the projector is connected with various terminal units as a computer, a smartphone, and a tablet over a network, it enables to transmit and project images saved on each terminal using this Image Express Utility software program.
- Terminal units in various OS (Windows, Mac OSX, Android, and iOS) can be connected to the projector simultaneously.
- The projector enables to receive images transmitted from multiple terminal units (max. 50 units) at once and project them splitting up its screen display into portions (max. 4 × 4).
- IMAGE EXPRESS UTILITY has two performance modes, the FREE mode and MANAGED mode. Each mode can be selected on the network setting for IMAGE EXPRESS UTILITY (See page 29)
  - In the Free mode, you can freely connect to the projector via Image Express Utility Lite installed on a computer or Wireless Image Utility installed on a smartphone, etc. The splitting pattern of the display screen is based on the number of connected terminals. At the same time, you can select either splitting screen display or full screen display from each terminal.
  - In the Managed mode, same as in the Free mode in the state of the connection with several terminals, you can switch the splitting/full screen display to the full/splitting screen display either by the remote or via the WEB SERVER.

REMOTE	Once pressing the ENTER button during projecting the connected terminals' screen, the menu for selecting display splitting pattern will be displayed on.
WEB SERVER	Precise setup is available as changing the screen splitting pattern and displaying position (See page 20)

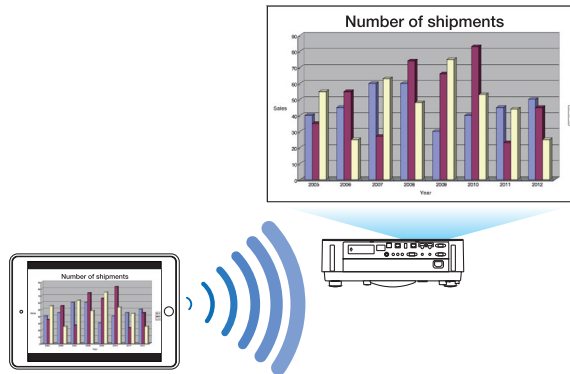


- Install the application software, “Image Express Utility” that is contained on the CD-ROM supplied with the projector. Please refer to the help file about detailed software information.
- Download and install the application software, “Wireless Image Utility” onto terminal units as a smartphone and a tablet. About detailed information of this application software, please refer to the Wireless Image Utility manual that is uploaded on our web site.
- Our application software, Image Express Utility 2.0, is also available. Download from our web site and install it on your computer. Please be reminded the simultaneous connection and simultaneous display are not functioned by Image Express Utility 2.0.

# 5. Miracast

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This device can be connected wirelessly to a wireless terminal such as an Android terminal etc. that supports the Miracast standard to project mirroring images transmitted from the terminal. Set the network setting of this device to “Miracast” before connecting it. (→ page 24)



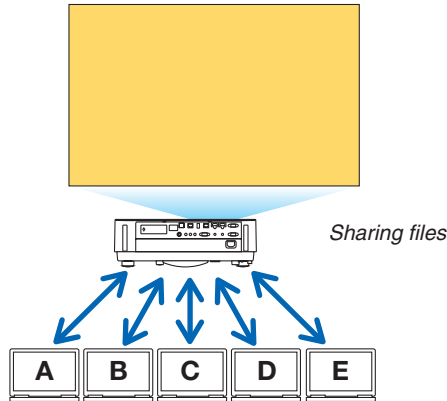
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## NOTE:

- Depending on the wireless terminal supported the Miracast in use and the environment of radio wave, images and sound may be interrupted.
  - The procedure to connect with Miracast is differed from each Miracast supported wireless terminal. For detailed information, please refer to the user's manual of Miracast supported wireless terminal or the HELP file.
  - The Miracast functions on the projector are not guaranteed for connecting all Miracast supported wireless terminals sold commercially.
-

# 6. WEB SERVER FUNCTION

- Without using the exclusive software, it enables to share images and files among the projector and computers in the network by accessing the projector's web server utilizing the web browser. (→ this page, WEB SHARING)
- While images on various terminals are transmitted and simultaneously projected on the projector by utilizing the IMAGE EXPRESS UTILITY, it enables to control screen splitting pattern and change the order to display by utilizing the web browser on the computer. (See page 19, IMAGE EXPRESS UTILITY LITE)
- It is able to control the projector by the web browser screen on the computer. (→ page 21, PROJECTOR CONTROL)



- The WEB Server Function supports the web browsers in below:  
Screen indication language is English only.

For Windows	Internet Explorer 11 Chrome (latest version)
For Mac OS X	Safari 6 or later
For iOS	Safari (latest version)
For Android	Chrome (latest version)

- \* Compared with the computer, some functions can be restricted for utilizing the WEB SHARING on smartphones or tablets.
- \* The PC CONTROL supports PC version only.

## How to access the WEB SERVER

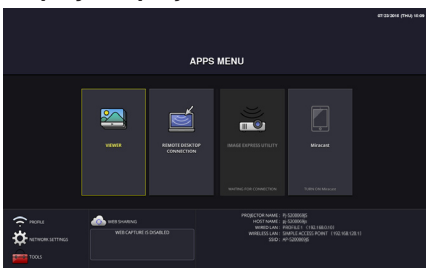
Connect the computer and the projector (this device) in a network.  
Boot up the web browser on the computer and then access the following URL:  
URL=http://(Projector's IP address)

- The projector's IP address is indicated at the right bottom of the APPS menu.
- If the SIMPLE ACCESS POINT mode for the wireless LAN is set on the projector, it enables to access the WEB SERVER by inputting any characters to the column for inputting URL. In this case, you do not need to input the projector's IP address, however, please input the projector's IP address if it fails to access the WEB SERVER.

## 6-1. WEB SHARING

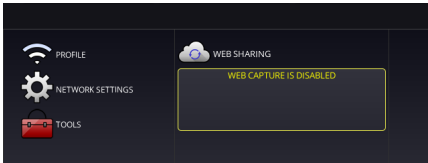
### Setting for the WEB SHARING

1. Connect the projector with your computer over a network.
2. Display the projector APPS MENU



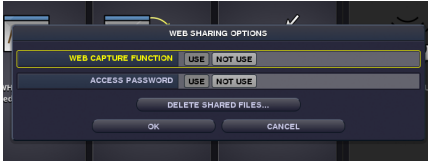


3. Move the focus to the box under the WEB SHARING in the APPS MENU.



4. Press ENTER button on the remote control.

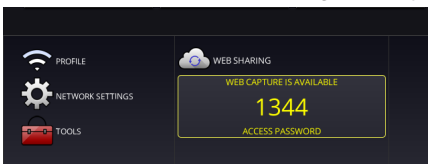
Display the WEB SHARING options setting screen.



Item	Explanation	Remark
WEB CAPTURE	Select USE/NOT USE capture from the WEB browser. By setting this ON, the projector screen will be displayed onto the browser screen every 5 seconds.	Factory default setting is NOT USE
ACCESS PASSWORD	Select whether to USE/NOT USE the password for accessing the WEB SHARING.	Factory default setting is NOT USE
DELETE SHARED FILES	Delete all shared files	

5. After setting up options, move the focus to OK and press the ENTER button.

If USE is selected both for WEB CAPTURE and ACCESS PASSWORD, the screen in below will displayed on. The access password will be changed every time the password is reset or the projector is powered ON and OFF.



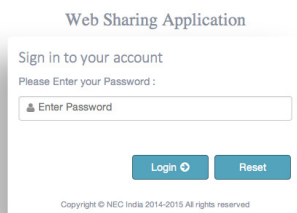
**Starting the WEB SHARING**

1. Start up the web browser on the computer and access the WEB SERVER.

- Please refer "How to access the WEB SERVER" on the previous page

2. Input four digits number displayed on the APPS MENU and then click LOGIN.

- If NOT USE is selected for the access password at the step [5], the WEB SHARING screen will be displayed.
- The projector screen will be switched to the PROJECTOR CONTROL screen once you click the PROJECTOR CONTROL tab, same as it, the projector screen will be switched to the IMAGE EXPRESS UTILITY LITE screen once you click the IMAGE EXPRESS UTILITY LITE tab.

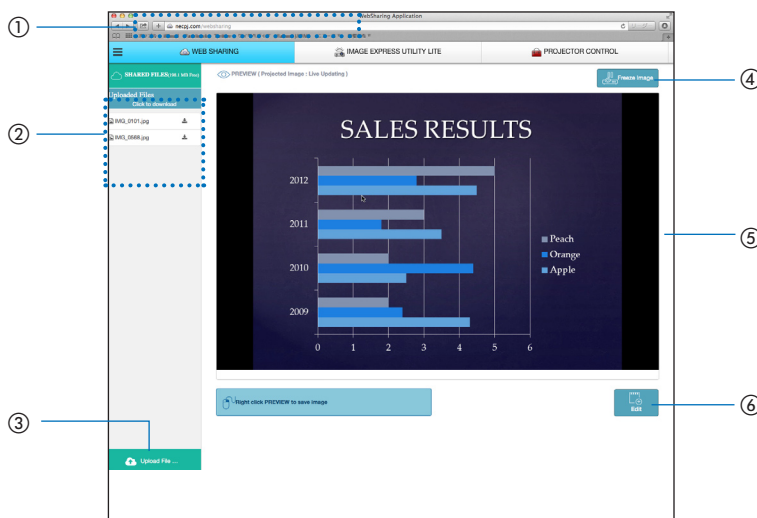


**Operations on the WEB SHARING screen**

- By using this WEB SHARING, it enables to display projected functions of the APPS MENU as VIEWER, REMOTE DESKTOP CONNECTION, IMAGE EXPRESS UTILITY, etc onto the web browser screen every 5 seconds and you can save them onto your computer. (WEB capture)
  - \* When the projector is in one of the below state, captured screens would not be updated every 5 seconds:
    - Played back movie screen in the Viewer.
    - When the Miracast has been selected for the APPS menu.
- When you will save the projected screen, you can add text on the projected screen (memo) and save these up to 10 pages and save it on the computer as one image.
- It enables to upload the image saved on the computer and share it among the computers connected in the network.

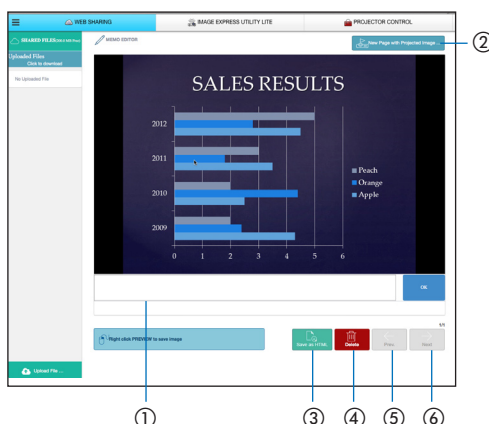
**NOTE:**

- If Safari is used, screen displays may be distorted depending on the timing of reloading. In this case, try again by rebooting the Safari.
- Data storing function in HTML format (explained at ③ in the clause of Memo creating screen on the next page) is not available on both the IOS and OS X devices. On these devices, you need to save text added screens page by page.
- If you use the browser, Internet Explorer, data saving by right click may not be performed correctly in performing the web capture. Recommend to try capturing after stopping the every 5 seconds display by pressing ④ freeze button in the below picture.
- Up to 20 units (10 units are recommended) can be connected simultaneously. However, number of units that can be connected at the same time is vary depending on the performance of the projector and the network environment.



Number	Description
①	http://<Projector's IP address>
②	Indicate the file names saved in the projector memory. The file can be downloaded by clicking the file name. <i>NOTE: For utilizing the downloaded files on the terminals as tablets, it may be required to use other application.</i>
③	Upload the file on the computer that will be shared. Name of the called out file is indicated as the uploaded file.
④	Stop to update every 5 seconds. Click again to resume updating.
⑤	Display projected functions of the APPS MENU (VIEWER, REMOTE DESKTOP, IMAGE EXPRESS UTILITY, etc) onto the screen every 5 seconds.
⑥	Create text added screen (memo) utilizing the screen displayed at the center.

## Memo creating screen



Number	Explanation
①	Click to input text. After inputting, click [OK] at the right side.
②	Create a new page
③	Save all pages in 1 file. <i>NOTE: This is not displayed on the iOS and OS X devices.</i>
④	Delete the editing page
⑤	Back to the previous page
⑥	Move to the next page

## 6-2. IMAGE EXPRESS UTILITY LITE

### Set the **MODE** to **MANAGED** for the **IMAGE EXPRESS UTILITY**

1. Focus on the **NETWORK SETTING** on the **APPS MENU** and press the **ENTER** button.
2. Focus on the **IMAGE EXPRESS UTILITY** and press the **ENTER** button.  
The **IMAGE EXPRESS UTILITY** setting screen will be displayed on.
3. Focus on the **MODE** column and select **MANAGED**.
4. Focus on **OK** and press the **ENTER** button.

#### Reference:

- If [HTTP password] has been set up, the password input window is displayed on before switching to the **IMAGE EXPRESS UTILITY LITE** window by the web browser.

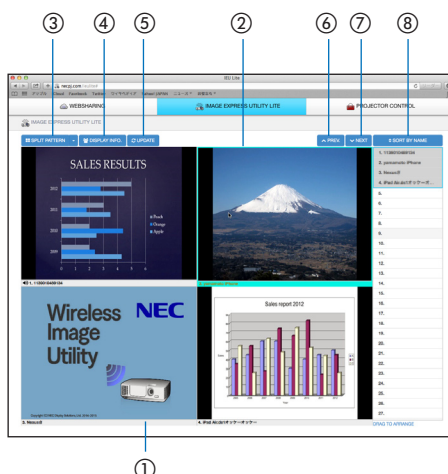
### Display images transmitted by various terminals as computers and tablets and simultaneously project them on the projector

- The Image Express Utility Lite is contained on the CD-ROM supplied with the projector. It is also available to download from our web site.
- The Wireless Image Utility is available to download from the App Store and Google Play.
- For detailed information about installation and operation of each software, please see the User's Manual of the projector and the HELP command for each software.

## Start the IMAGE EXPRESS UTILITY LITE

1. Connect the computer and the projector in a network.
2. Start the web browser on the computer and then access to the following URL:  
URL=http://(Projector's IP address)
  - Projector's IP address is indicated at the right bottom of the APPS menu.
  - The Web Sharing screen will be displayed on.
3. If [HTTP password] has been set for the IMAGE EXPRESS UTILITY LITE in NETWORK SETTING on the APPS menu, input the password. The IMAGE EXPRESS UTILITY LITE screen will be displayed on after confirming the password.

## Control on the IMAGE EXPRESS UTILITY LITE screen



Number	Explanation
①	Thumbnail Gallery <ul style="list-style-type: none"> <li>• Thumbnails that are transmitted to the projector via the Image Express Utility Lite or Wireless Image Utility. Thumbnails will be displayed in black when no one uses the screens or the IMAGE EXPRESS UTILITY has not selected on APPS MENU.</li> <li>• Enables to switch the thumbnail displayed position by the drag and drop</li> </ul>
②	Focus <ul style="list-style-type: none"> <li>• Focus is displayed on with a light blue frame.</li> </ul>
③	Changing screen split pattern <ul style="list-style-type: none"> <li>• Once the "SPLIT PATTERN" button is clicked, it enables to change screen split pattern. Based on meeting purposes, you can select one pattern among 2×1, 2×2, 3×3, 4×4, 1×12.</li> </ul>
④	Selection to Indicate or Not to indicate terminal names on the projected screen. <ul style="list-style-type: none"> <li>• Enables to switch either to indicate or not to indicate terminals' information on the projected screen</li> </ul>
⑤	Update the thumbnail gallery <ul style="list-style-type: none"> <li>• Once the "UPDATE" button is pressed, it update and display the latest thumbnail gallery.</li> </ul>
⑥ ⑦	Page change <ul style="list-style-type: none"> <li>• Change the page to display to the previous page by pressing the "PREV" button and to the next page by pressing the "NEXT" button.</li> </ul>

⑧	<p>Terminal list</p> <ul style="list-style-type: none"> <li>• List of terminals that are connecting with the projector via Image Express Utility Lite or Wireless Image Utility.</li> <li>• The terminal names currently shown on the display are listed in gray .</li> <li>• Able to switch the position to display by the drag and drop terminal names.</li> <li>• Terminal names can be sorted by clicking the SORT BY NAME.</li> </ul>
---	--

**NOTE:**

- For utilizing this function, images transmitted from the computer and other terminals must be projected on. For more detailed information for utilizing the Image Express Utility Lite and the Wireless Image Utility, please see the HELP for each application.
- This is the function for exclusive one person. You cannot share to use this function while it has been utilized on other computers.

## 6-3. PROJECTOR CONTROL

There are 2 types of screen available, a "PROJECTOR ADJUSTMENTS" screen to control the projector and a "NETWORK SETTINGS" to configure the network settings. You can switch between these 2 screens using the tabs.

### Start the PROJECTOR CONTROL

1. **Connect the projector and the computer in a network.**
2. **Boot up a browser on the computer and access to the WEB SERVER.**
  - Please refer to "How to access the WEB SERVER" on page 16.  
The screen of the WEB SHARING will be displayed.
  - Click the [PROJECTOR CONTROL] tab for switching it to the PROJECTOR CONTROL.

### Controlling the projector (PROJECTOR ADJUSTMENTS)

Enable to control image and volume and switch the input terminal. At the same time, it can be used for checking the light hours used.

### Configure network settings (NETWORK SETTINGS)

See "7. NETWORK SETTINGS" for details on the wired LAN and wireless LAN settings. (→ page 22)

- Set the alert mail (ALERT MAIL)  
Refer to Page 29 for the functional description.
- NETWORK SERVICE  
Set each login password for the HTTP server and PJLink, and validity of AMX BEACON.
- CRESTRON setting  
Refer to Page 30 for the functional description.
- Network information (INFORMATION)  
Display the information of the network set in this device.

# 7. NETWORK SETTINGS

Configuration for connecting this device to a wired LAN or wireless LAN.

## 7-1. PROJECTOR NAME

Set the projector name and host name. The default factory setting is the manufacturing number of this device.

Item	Description	Remarks
Projector name	Set up the projector name	A maximum of 16 alphanumeric characters
Host name	Set the host name of this device.	A maximum of 16 alphanumeric characters

## 7-2. NETWORK INFORMATION

Display the information when this device is connected to a network (wired LAN / wireless LAN).

## 7-3. WIRED LAN

Configure the settings for connecting this device to a wired LAN.

Item	Description	Remarks
Profile	The settings when connecting this device to a wired LAN can be registered in 2 ways (Profile 1 and Profile 2).	
DHCP/IP ADDRESS/ SUB NETMASK/ GATEWAY/AUTO- MATIC DNS	Perform required settings	
Reconnection	Try connecting to the network again. Reconnect after changing the settings.	

*NOTE:*

- If you cannot obtain IP address by disconnecting/connecting the LAN cable under the state the DHCP has been set, power off this device once and then power it on again.

## 7-4. Wireless LAN

Configure the settings for connecting this device to a wireless LAN.

Item	Description	Remarks
Profile	Select the configuration name when connecting this device to a wireless LAN. <ul style="list-style-type: none"><li>• Disable: No radio waves will be transmitted from the wireless LAN unit connected to this device.</li><li>• Simple access point: Connect to a computer or smartphone by setting this device as a simple access point.</li><li>• Wi-Fi Direct: Connect to a device compatible with Wi-Fi Direct.</li><li>• Miracast: Connect to a device compatible with Miracast</li><li>• Profile 1 / Profile 2: The wireless LAN settings can be registered in 2 ways.</li></ul>	<ul style="list-style-type: none"><li>• The default factory setting when shipped is "Disable".</li><li>• If a simple access point has been set up, the IP address of this device will be "192.168.120.1" or "192.168.130.1".</li></ul> <p><i>NOTE: When a simple access point is set up. Up to 20 units can be connected simultaneously. Recommend to connect approx. 10 units for normal operation.</i></p>
DHCP/IP address/ Subnet mask/Gate- way/DNS	These can be set when Profile 1 or Profile 2 is selected.	
Advanced settings	The configuration items differ for each profile option. Refer to the following table.	
Reconnection	Try connecting to the network again. Reconnect after changing the settings.	

### Advanced settings (simple access point)

Item	Description	Remarks
WPS settings	Select the WPS push button method. <ul style="list-style-type: none"> <li>• Disable: Disable the WPS function.</li> <li>• Push button: Select the WPS push button method. WPS push button will be displayed in the application menu.</li> </ul>	
Security setting	Select the security type (WPA2-PSK).	<ul style="list-style-type: none"> <li>• The default factory setting when shipped is "Disable".</li> <li>• The WPA2-PSK key consists of 8 - 63 half-byte alphanumeric characters.</li> </ul>
SSID	Set the SSID.	This consists of 1 - 32 half-byte alphanumeric characters. The default factory setting is the manufacturing number of this device.
LAN mode	Choose the wireless mode.	The default factory setting when shipped is "IEEE802.11b/g/n".
Channel	Choose the wireless channel.	The default factory setting when shipped is "6".

### Connection method with the push button method

**1. Press the WPS push button under the application menu of the projector (AP).**

*A countdown of the WPS appears in the application menu.*

**2. Press the WPS push button on the WPS supported wireless terminal (Client side) during the countdown.**

*The WPS supported wireless terminal (Client side) will connect to the projector (AP).*

### Advanced Settings (Wi-Fi Direct)

Item	Description	Remarks
WPS settings	Select the WPS push button method. <ul style="list-style-type: none"> <li>• Auto push button: Enable to omit the procedure searching the terminal when receiving connection request from the Wi-Fi Direct supported wireless terminal.</li> <li>• Push button: Perform the procedure for accepting the connection request reply from the Wi-Fi Direct supported wireless terminal.</li> </ul>	The default factory setting when shipped is "Auto Push Button".

### How to connect with the auto push button method

**1. Perform to search the Wi-Fi Direct supported device on the Wi-Fi Direct supported wireless terminal.**

**2. Select the projector name (this device) that is displayed in the search results.**

*The Wi-Fi Direct supported wireless terminal will connect to this device.*

### How to connect with the push button method

**1. Display the APPS MENU screen on the projector.**

**2. Perform to search the Wi-Fi Direct supported device on the Wi-Fi Direct supported wireless terminal**

**3. Select the projector name (this device) that is displayed in the search results.**

*Countdown for connection request will appear on the APPS MENU of the projector*

**4. Press the accept button of the connection request reply dialog box during the countdown.**

*The Wi-Fi Direct supported wireless terminal will connect to this device.*

### Advanced settings (Miracast)

Item	Description	Remarks
WPS settings	Select the WPS method. <ul style="list-style-type: none"> <li>• Auto push button: Enable to omit the searching procedure when receiving the connection request from the Miracast supported wireless device.</li> <li>• Push button: Perform the searching procedure to accept the connection request reply from the Miracast supported wireless device.</li> <li>• PIN code: Input the PIN code indicated on the projector onto the Miracast supported wireless device.</li> </ul>	The default factory setting when shipped is "Auto Push Button"
HDCP setting	Choose the function of contents protection by HDCP. <ul style="list-style-type: none"> <li>• Disable: Does not support HDCP</li> <li>• Enable: Support HDCP</li> </ul>	The default factory setting when shipped is "Enable". This projector supports HDCP2.2.

#### How to connect with the auto push button method

- 1. Perform to search a Miracast supported device (receiver side) on the Miracast supported wireless terminal (sender side)**
- 2. Select the projector name (this device) that is displayed in the search result.**  
*The connection between the projector and the Miracast supported wireless terminal (sender) will be established and start the Miracast transmission.*

#### How to connect with the push button method

- 1. Display the APPS MENU of this projector.**
- 2. Perform to search a Miracast supported device (receiver side) on the Miracast supported wireless terminal (sender side)**
- 3. Select the projector name (this device) that is displayed in the search result.**  
*Countdown for requesting the connection will appear on the APPS MENU of this device.*
- 4. button during the countdown**  
*The connection between the projector and the Miracast supported wireless terminal (sender) will be established and start the Miracast transmission.*

#### How to connect with the PIN code method

- 1. Display the APPS MENU of this projector.**
- 2. Perform to search a Miracast supported device (receiver side) on the Miracast supported wireless terminal (sender side)**
- 3. Select the projector name (this device) that is displayed in the search result.**  
*Countdown for requesting the connection will appear on the APPS MENU of this device.*
- 4. button during the countdown**  
*The connection between the projector and the Miracast supported wireless terminal (sender) will be established and start the Miracast transmission.*



### Advanced Settings (Profile 1 / Profile 2)

Item	Description	Remarks
Site survey	<ul style="list-style-type: none"> <li>Run the site survey and display the detected access points.</li> <li>A maximum of 64 access points can be displayed.</li> <li>Only 1 access point with the same name as SSID is displayed.</li> <li>The applicable access points are the security-disabled WPA-PSK, WPA2-PSK, WPA-EAP and WPA2-EAP.</li> <li>A "Key" mark is attached when the security setting of the access point has been enabled.</li> </ul>	<p>Selection is not possible if this device is not connected to a wireless LAN unit.</p> <p><i>NOTE: If any access point is not searched, select the site survey again after selecting [RECONNECT] on the wireless LAN screen.</i></p>
Security setting	<p>Select the type of security.</p> <ul style="list-style-type: none"> <li>Disable: Disable the security setting.</li> <li>WPA2-PSK: Input column of the key is displayed.</li> <li>WPA/WPA2-PSK: Input column of the key is displayed.</li> <li>WPA2-EAP: Authentication settings are displayed.</li> <li>WPA/WPA2-EAP: Authentication settings items are displayed</li> </ul>	<ul style="list-style-type: none"> <li>The default factory setting when shipped is "Disable".</li> </ul>
SSID	Set the SSID.	<p>This consists of 1 - 32 half-byte alphanumeric characters.</p> <p>The default factory setting when shipped is "NECPJ".</p>

### [AUTHENTICATION]

Setting is required for using WPA2-EAP or WPA/WPA2-EAP.

#### Preparation before setting

Select a wireless LAN compliant WPA-EAP or WPA2-EAP authentication and install a digital certificate on the projector.

1. Set [DATE AND TIME] and [TIME ZONE] on the projector. (→ page 33)
2. Use a computer to save digital certificates (files) for WPA2-EAP setting to your USB memory device.  
After completing saving the file, remove the USB memory device from the computer.

#### Important:

- The supported file extensions for client certificate are ".pfx" and ".p12", for root certificate are ".cer" and ".der".
- The file formats of digital certificate that are supported by the projector are DER and PKCS#12 only.
- The projector cannot handle any digital certificate whose file size exceeds 8 KB.

3. Plug the USB memory device into the USB port of the projector.

### Setting Procedures

1. Select either [WPA2-EAP] or [WPA/WPA2-EAP] for the [SECURITY TYPE] on the [SECURITY] page  
The pull-down list will be displayed.
2. Focus on the [AUTHENTICATION].  
Select either [EAP-TLS] or [PEAP-MSCHAPV2] for [EAP TYPE]. The setting items vary depending on the EAP type.

See the table below.

EAP Type	Setting Item	Note
EAP-TLS	User Name	1 character or more and 32 characters or less
	Client Certificate	PKCS#12 format file
	CA Certificate (Certificate authority's certificate)	DER format file
PEAP-MSCHAPV2	User Name	1 character or more and 32 characters or less
	Password	1 character or more and 32 characters or less
	CA Certificate (Certificate authority's certificate)	DER format file

### ① Selecting [EAP-TLS] for [EAP TYPE]:

The operation for selecting [EAP-TLS], refer the step 3 on this page.

The operation for selecting [PEAP-MSCHAPV2] refer the step 3 on page 27.

### 3. Focus on [USER NAME] field and press the ENTER button.

The character entry screen (software keyboard) will be displayed. Set a user name.

- A user name must be 1 character or more and 32 characters or less.

### 4. Focus on [CLIENT CERTIFICATE] and press the ENTER button.

A list of files ([FILES] screen) will be displayed.

- To return to the [AUTHENTICATION] page, press the EXIT button.

NOTE:

### Installing a digital certificate

You can install each digital certificate (client certificate and CA certificate) for [PROFILE 1 (or 2)] on a file-by-file basis.

- Install a root CA certificate for a CA certificate.
- If you install a digital certificate over your existing digital certificate, the existing digital certificate will be overwritten with the new digital certificate.
- Once a digital certificate has been installed, its information cannot be deleted even if you stop setting WPA2-EAP, WPA/WPA2-EAP.

### 5. On the [FILES] screen, focus on a digital certificate (PKCS#12 format file) saved in your USB memory device and press the ENTER button.

The password screen will be displayed.

### 6. Focus on [PASSWORD] field and press the ENTER button.

The character entry screen (software keyboard) will be displayed. Set the password of the private key. A password must be 1 character or more and 32 characters or less.

The selected digital certificate file will be installed on the projector.

- When the root CA certificate is not included in the file that was selected in Step 5, proceed to Step 7. When the root certification authority certificate is included, proceed to Step 9.

### 7. Focus on [CA CERTIFICATE] and press the ENTER button.

The drive list screen will be displayed.

### 8. On the [FILES] screen, focus on a digital certificate (DER format file) saved in your USB memory device and press the ENTER button.

- Select your root CA certificate here.

The selected digital certificate will be installed on the projector.

**9. After completing required settings, focus on [OK] and press the ENTER button.**

*Back to the [SECURITY] page.*

**10. Select [OK] and press the ENTER button.**

*Back to the [ADVANCED] setting screen.*

This will complete setting [EAP-TLS] for [EAP TYPE] in [WPA-EAP] or [WPA2-EAP].

*TIP:*

---

**Clearing the digital certificate that is installed on the projector**

To clear the digital certificate installed on the projector, follow the steps below.

By doing the following procedure, all the digital certificates for the currently displayed profile will be cleared.

**1. Focus on [CLEAR CERTIFICATES] at the bottom of the [ADVANCED] setting screen and press the ENTER button.**

*A message for confirmation will be displayed.*

**2. Focus on [YES] and press the ENTER button.**

*The digital certificates will be cleared.*

---

**② Selecting [PEAP-MSCHAPV2] for [EAP TYPE]:**

**3. From the [AUTHENTICATION] page, focus on [EAP TYPE] field and press the ENTER button.**

*The pull-down list will be displayed.*

**4. Focus on [PEAP-MSCHAPV2] and press the ENTER button.**

**5. Focus on [USER NAME] field and press the ENTER button.**

*The character entry screen (software keyboard) will be displayed. Set a user name.*

- A user name must be 32 characters or less.

**6. After completing setting a user name, focus on the [PASSWORD] field and press the ENTER button.**

*The character entry screen (software keyboard) will be displayed. Set a password.*

- A password must be 32 characters or less.
- You can select either "Use the certificate" or "Not use the certificate" for PEAP-MSCHAPV2. For using the certificate, set at "Use the certificate", on the other hand, if you do not use the certificate, set at "Not use the certificate".

**7. After completing setting the password, focus on [CA CERTIFICATE] field and press the ENTER button.**

*The drive list screen will be displayed.*

- To return to the [AUTHENTICATION] page, press the EXIT button.
- 

*NOTE:*

**Installing a digital certificate**

You can install each digital certificate (client certificate and CA certificate) for [PROFILE 1 (or 2)] on a file-by-file basis.

- Install a root CA certificate for a CA certificate.
  - If you install a digital certificate over your existing digital certificate, the existing digital certificate will be overwritten with the new digital certificate.
  - Once a digital certificate has been installed, its information cannot be deleted even if you stop setting WPA2-EAP, WPA/WPA2-EAP.
- 

**8. On the [FILES] screen, focus on a digital certificate (DER format file) saved in your USB memory device and press the ENTER button.**

*The selected digital certificate will be installed on the projector.*

**9. After completing required settings, focus on [OK] and press the ENTER button.**

*Back to the [SECURITY] page.*

**10. Focus on [OK] and press the ENTER button.**

This will complete setting [PEAP-MSCHAPV2] for [EAP TYPE] in [WPA2-EAP].

*TIP:*

---

### **Clearing the digital certificate that is installed on the projector**

To clear the digital certificate installed on the projector, follow the steps below.

By doing the following procedure, all the digital certificates for the currently displayed profile will be cleared.

**1. Focus on [CLEAR CERTIFICATES] in the bottom left of the [ADVANCED] setting screen and press the ENTER button.**

*A message for confirmation will be displayed.*

**2. Focus on [YES] and press the ENTER button.**

*The digital certificates will be cleared.*

---

## 7-5. IMAGE EXPRESS UTILITY

Configure the settings when using Image Express Utility Lite.

Item	Description	Remarks
Mode	Select the operating mode. Free: Set the free mode. Control: Set the managed mode.	The default factory setting when shipped is "Free".
HTTP Password	Able to setup a password to log in the MANAGED MODE for the IMAGE EXPRESS UTILITY in the WEB SERVER functions	Max 32 alphanumeric characters. If it leaves in blank, the password becomes "Null". Default setting: Blank

### NOTE:

- If you change the setting of the operating mode, connecting to the IMAGE EXPRESS UTILITY, it will not be reflected immediately. When the IMAGE EXPRESS UTILITY becomes unused condition, the change in the operating mode will be reflected.

## 7-6. NETWORK SERVICE

### AMX setting

If you connect this device to a network compatible with the NetLinx control system of AMX Corporation, you can enable/disable the detection setting from AMX Device Discovery. A check mark is not when the device is first shipped from the factory.

See the website of AMX Corporation for more information on AMX Device Discovery.

### HTTP server configuration

Set the password for logging into the PROJECTOR CONTROL screen. A maximum of up to 10 alphanumeric characters can be set for the password.

### PJLink setting

Set the login password for using PJLink. A maximum of up to 32 alphanumeric characters can be set for the password.

### Alert e-mail setting

When using this device connected to a network, computers and other devices will be notified of the status of this device via e-mail if the lamp of this device is due for replacement, or if an error occurs.

ALERT MAIL	This option will notify your computer of lamp replace time or error messages via e-mail when using wired LAN. Placing a checkmark will turn on the Alert Mail feature. Clearing a checkmark will turn off the Alert Mail feature. Sample of a message to be sent from the projector: THE COOLING FAN HAS STOPPED. [INFORMATION] PROJECTOR NAME : PJ-XXXXXXXX LIGHT HOURS USED : XXXX[H]
SENDER'S ADDRESS	Enter sender's address.
SMTP SERVER NAME	Enter the SMTP server name to be connected to the projector.
RECIPIENT'S ADDRESS 1, 2, 3	Enter your recipient's address. Up to three addresses can be entered.

## 7. NETWORK SETTINGS

TEST MAIL	Send a test mail to check whether your settings are correct or not. <i>NOTE:</i> <ul style="list-style-type: none"><li>• If you execute a test, you may not receive an Alert mail. Should this happen, check if network settings are correct.</li><li>• If you entered an incorrect address in a test, you may not receive an Alert mail. Should this happen, check if the Recipient's Address is correct.</li></ul>
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### CRESTRON SETTINGS

Configure the settings for connecting this device to a CRESTRON product.

Item	Description
ROOMVIEW	Check this when controlling the unit with a computer.
CRESTRON CONTROL	Check this when controlling the unit with a controller.
IP address	Set the IP address of the controller.
IP ID	Set the IP ID of the controller.

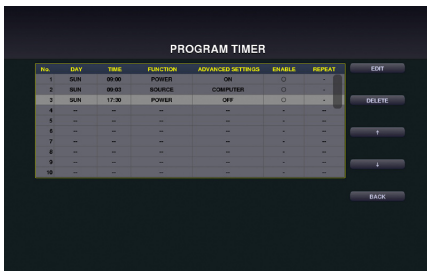
# 8. TOOLS

## 8-1. MOUSE

When this device is connected to a USB mouse sold commercially, the menu can be operated using the mouse. The configuration of the mouse is as follows:

Item	Description	Remarks
Mouse	If a check mark is marked, it enables to use the mouse connected with the projector from the next booting up.	
Button setting	Switch the functions of the left and right buttons on the mouse.	
Speed setting	Select the pointer speed reflecting mouse motion among three levels.	

## 8-2. PROGRAM TIMER



By setting day and time onto the projector, it enables the projector to automatically switch the power, the condition of standby, the video signal and the condition of ECO mode. As an example based on the above, every Sunday projector is powered on at 9 AM, is switched to the computer display at 9:03 and is gone into the Standby condition at 17:30.

### NOTE:

- Before using [PROGRAM TIMER], make sure that the [DATE AND TIME] feature is set. (→ page 34)  
Make sure that the projector is in the standby condition with the POWER cord connected.  
If the projector leaves for over two weeks without the power supply, the set date and time will be reset to the factory default setting and the program timer function will become ineffective. When the program timer function becomes ineffective, set "Date and time" again.
- \* For utilizing the program timer, set [NETWORK STANDBY] for [STANDBY MODE].

### Setting a new program timer

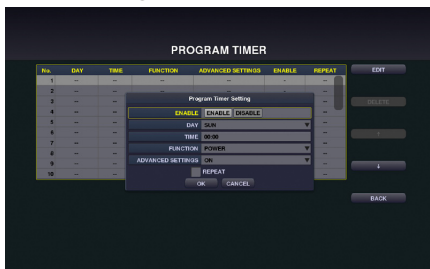
1. On the **PROGRAM TIMER** screen, use the **▲** or **▼** button to select [EDIT] and press the **ENTER** button.



The [PROGRAM LIST] screen will be displayed.

2. Focus on a blank program number and press the **ENTER** button.  
The [EDIT] screen will be displayed.

### 3. Make settings for each item as required.



ENABLE ..... Select to enable or disable the event.

DAY ..... Select days of the week for the program timer. To execute the program from Monday to Friday, select [MON-FRI].

To execute the program in everyday basis, select [EVERY DAY].

TIME ..... Set the time to execute the program. Enter time in 24-hour notation.

FUNCTION ..... Select a function to be executed. When [POWER] is selected, you can set powering ON/OFF at [ADVANCED SETTINGS], when [SOURCE] is selected, you can set video signal at [ADVANCED SETTINGS] and when [ECO] is selected, you can set [OFF]/[ECO1]/[ECO2] for ECO mode at [ADVANCED SETTINGS].

ADVANCED SETTINGS.. Based on the selected item in [FUNCTION], select to power ON/OFF, a type of video source, and setting ECO MODE to OFF/ECO1/ECO2.

REPEAT..... Place a check mark to repeat the program continuing basis. To use the program this week only, clear the check mark.

### 4. Focus on [OK] and press the ENTER button.

This will complete the settings.

You will be returned to the [PROGRAM LIST] screen.

### 5. Focus on [BACK] and press the ENTER button.



You will be returned to the [PROGRAM TIMER] screen.

### 6. Focus on [OK] and press the ENTER button.

You will be returned to the [TOOLS] screen.

#### NOTE:

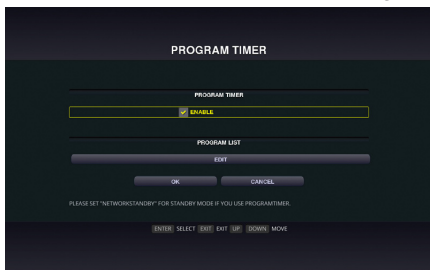
- Up to 30 different timer settings can be programmed.
- Once the program not marked with a check in [REPEAT] has been executed, the check mark in the [ENABLE] check box will be cleared automatically and the program will be disabled.
- If several programs are set at the same time, these programs are executed in order of the program list number.
- The on-time setting will not be executed while the cooling fans are running or an error is occurring.
- If the off-time setting is expired under the condition in which the power off is not possible, the off-timer setting will not be executed until the power off becomes possible.
- Programs not marked with a check mark in [ENABLE] of the [EDIT] screen will not be executed even if ENABLE for the Program Timer is not activated.
- When the projector is turned on by using the program timer and if you want to turn off the projector, set the off-time or do it manually so as not to leave the projector on for a long period of time.



## Activating the program timer

1. Focus on [ENABLE] at the top of the [PROGRAM TIMER] screen and press the ENTER button.

The check mark is added to the program list.



### NOTE:

- The program will not be executed without adding a check mark “√” to ENABLE for the program timer even when a check mark is added for the program list.
- Even a check mark is added for the effective setting of [PROGRAM TIMER], the [PROGRAM TIMER] will not work until the [PROGRAM TIMER] screen is not closed.

## Changing the programmed settings

1. On the [PROGRAM LIST] screen, focus on a program you want to edit and press the ENTER button.
2. Change the settings on the [EDIT] screen.
3. Focus on [OK] and press the ENTER button.

The programmed settings will be changed.

You will be returned to the [PROGRAM LIST] screen.

## Changing the order of programs

When set time is come, the program will be executed in order of program list number (smaller first)

1. On the [PROGRAM LIST] screen, focus on a program you want to change and press the ► button.
2. Press the ▼ button to select ↑ or ↓.
3. Press the ENTER button a few times to select a row to which you wish to move the program.

The order of the programs will be changed.

## Deleting the programs

1. On the [PROGRAM LIST] screen, focus on a program number you want to delete and press the ► button.
2. Press the ▼ button to focus on [DELETE].  
The confirmation screen will be displayed.
3. Focus on [DELETE] and press the ENTER button.

The program will be deleted.

This will complete deleting the program.

### 8-3. DATE AND TIME

Set the current date and time in this device.

Item	Description	Remarks
Time zone settings	Set the time difference with UTC (Universal Time, Coordinated) and the region where this device is used.	The default value is "+00:00". Example: When using the device in Japan, set it to "+09:00".
Date and time settings	Set the current date and time. Synchronize with the NTP server on the network and put a check mark in "Internet Time Server" to obtain the correct time. Then enter the IP address or host name of the NTP server to perform updating.	The default date is "01/01/2015" (Thu). The default time is "00:00".
Summer time setting	Set summer time. When Enable is checked, summer time is enabled. Set the various time differences and the start and end of summer time.	

*Important:*

- When using the clock function of this device, leave the device in the standby mode if it is not going to be used. If the projector leaves for over two weeks without the power supply, the set date and time will be reset to the factory default setting and the clock function will become ineffective. When the clock function becomes ineffective, set "Date and time" again.

*NOTE:*

- If date and time is reset around the timing of starting or finishing Summer time, Summer time setting may not become effective properly. In case date and time is required to reset, perform the settings in order of TIME ZONE → DATE AND TIME SETTING → SUMMER TIME.

### 8-4. ADMINISTRATOR MODE

Select the menu mode of this device, enable/disable the saving of settings of the entire projector, and configure the password setting in the administrator mode.

Item	Description	Remarks
Menu mode	Select the basic menu or advanced menu. See the user's manual of the projector for the items that can be used in the respective menus.	
Do not save the settings	Put a check mark if you are not saving the value of the configured item in the on-screen menu.	No check mark as the factory default setting.
New password / Confirm new password	Set the password in the administrator mode.	A maximum of 10 alphanumeric characters.

### 8-5. DEFAULT APP

Omit to display the application menu and select the start-up function either when the APPS button on the remote control is pressed, or [APPS] is selected as the input terminal on the onscreen menu.

Item	Description	Remarks
Default application	When the projector is turned on under the condition of being selected the "APPS" terminal, select function either the APPS MENU or the viewer.	The default factory setting is "APPS MENU".

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