

DATA PROJECTOR

Network Function Guide

- Be sure to read the “Safety Precautions” and “Operating Precautions” in the “User’s Guide” document, and make sure you use this product correctly.
- Keep this manual in a safe place for future reference.
- Visit the site below for the latest version of this manual.
<http://world.casio.com/manual/projector/>

Scope of this Manual’s Content

The procedures in this manual are presented based on a Windows computer running Network Connection.

If you are using a different type of device, see the software user documentation that can be obtained from the download page of each type of software.

- The contents of this User’s Guide are subject to change without notice.
- Copying of this manual, either in part or its entirety is forbidden. You are allowed to use this manual for your own personal use. Any other use is forbidden without the permission of CASIO COMPUTER CO., LTD.
- CASIO COMPUTER CO., LTD. shall not be held liable for any lost profits or claims from third parties arising out of the use of this product or this manual.
- CASIO COMPUTER CO., LTD. shall not be held liable for any loss or lost profits due to loss of data due to malfunction or maintenance of this product, or any other reason.
- The sample screens shown in this manual are for illustrative purposes only, and may not be exactly the same as the screens actually produced by the product.

Software Required to Use Network Functions

The software required to use network functions depends on the type of device to be connected to the projector via a LAN, as shown in the table below.

Device	Software
Computer running Windows	Network Connection (for Windows)
Computer running Mac OS	Network Connection (for Mac OS)

Visit the website at the URL below to download the software.

<http://world.casio.com/download/projector/>



Important!

- Before installing the above software on a computer, be sure to visit the CASIO website for information about minimum system requirements, downloading, usage conditions, and other precautions you need to observe.
- For information about how to install the above software, see its download web page.

- DLP is a registered trademark of Texas Instruments of the United States.
- Microsoft and Windows are registered trademarks or trademarks of Microsoft Corporation in the United States and other countries.
- HDMI, the HDMI Logo and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing, LLC.
- Mac OS is a trademark or registered trademark of Apple Inc. in the United States and other countries.
- XGA is a registered trademark of IBM Corporation of the United States.
- PJLink is a pending trademark or a registered trademark in Japan, the United States, and other countries and areas.
- Crestron and Crestron Connected are registered trademarks of Crestron Electronics, Inc. of the United States.
- AMX is a registered trademark of AMX LLC of the United States.
- Android™ is a trademark of Google Inc.
- Other company and product names may be registered trademarks or trademarks of their respective owners.
- Portions of this product are based in part on the work of the Independent JPEG Group.

Contents

Software Required to Use Network Functions.....	2
Projecting Computer Screen Contents Over a LAN Connection	5
Workflow from LAN Connection to Projection	5
Connecting the Wireless Adapter to the Projector.....	6
Establishing a Wireless LAN Connection between the Projector and a Computer	6
Projector SSID	6
Establishing a Direct Wireless LAN Connection between the Projector and a Computer	7
Connecting the Projector to an Outside Network without Terminating a Direct Wireless LAN Connection with a Computer	10
To connect the projector to a wireless LAN access point without terminating a direct wireless LAN connection with a computer	10
To establish a wired LAN connection between the projector and a router while maintaining a direct wireless connection between the projector and a computer	12
Establishing a Connection between the Projector and Computer via a Wireless LAN Access Point.....	13
Connecting the Projector to a Wireless LAN Access Point	13
Establishing a Connection between the Projector and Computer and Projecting via a Wireless LAN Access Point	14
Connecting the Projector to a Computer via a Wired LAN	15
Using a LAN Cable to Connect a Computer Directly to the Projector.....	16
Establishing a Wired LAN Connection between the Projector and a Computer via a Router.....	17

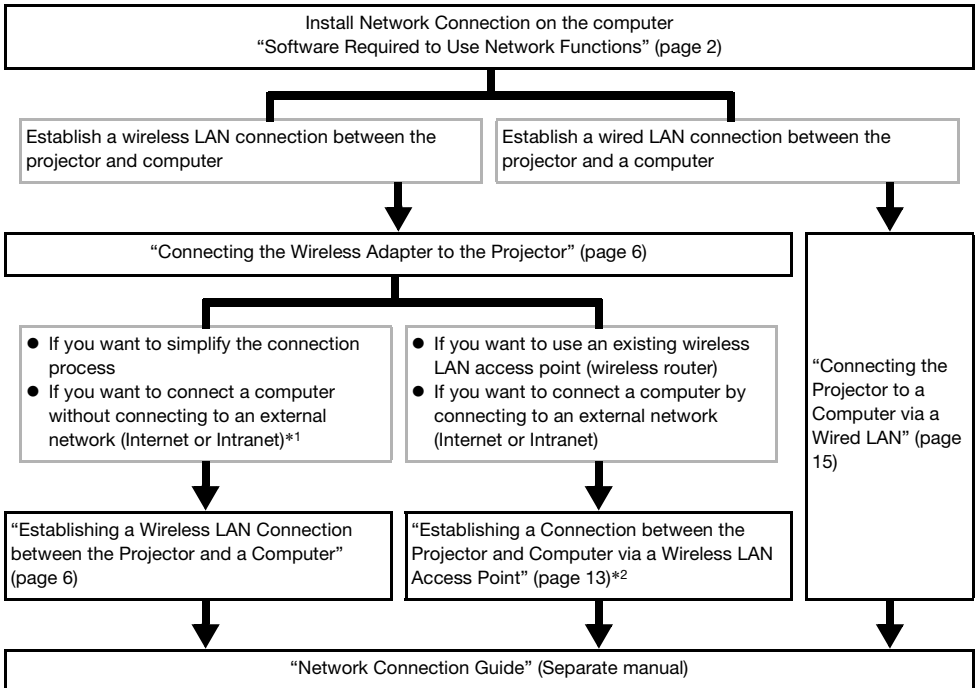
Projector Network Settings.....	18
Using the Projector Setup Menu	18
Using the Projector Admin Pages	20
Logging In to the Projector Admin Pages.....	20
To log in to the Projector Admin pages over a wireless LAN connection	20
To log in to the Projector Admin pages over a wired LAN connection	20
Projector Admin Pages Operations	22
Control Panel Page Network Items	24
Network Settings Page Items.....	25
Remotely controlling the Projector Over a LAN Connection	26
To remotely control the projector from a computer connected via a LAN.....	26
 Projector File Viewer Operations.....	 29
Displaying the Viewer Control Page	29
To display the Viewer Control page over a wired LAN connection.....	29
To return to the “CASIO Projector” top page from the Viewer Control page	29
Viewer Control Page Operations	30
 Appendix	 31
Projecting Via a Wireless LAN Connection with Various Different Devices.....	31
Using the Network Connection to Project from a Mac OS.....	31
Using C-Assist to Project from a Smart Device.....	31
Troubleshooting	32
Wireless LAN Connection between the Projector and a Computer	32
Projector Admin Pages	32

Projecting Computer Screen Contents Over a LAN Connection

This section covers everything you need to know for establishing a LAN connection between the projector and a computer, and projecting the computer's display contents.

Workflow from LAN Connection to Projection

There are a number of different ways to establish a LAN connection between the projector and a computer. The workflow below describes what you need to do to create a LAN connection.



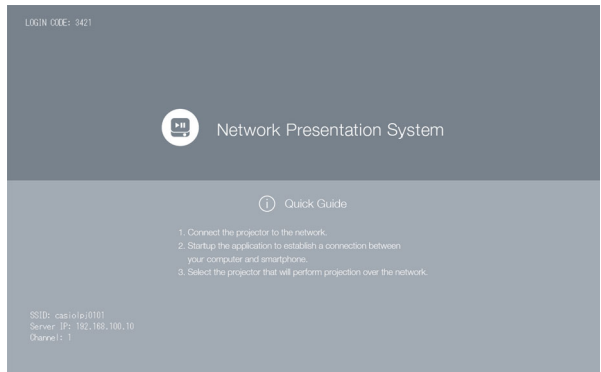
*1 After establishing a direct wireless LAN connection between the projector and computer, the computer will be able to connect with an outside network (Internet or Intranet) via the projector. For more information, see "Connecting the Projector to an Outside Network without Terminating a Direct Wireless LAN Connection with a Computer" (page 10).

*2 To connect this way, you need first to establish a direct LAN connection between the projector and computer, and then configure settings to connect the projector to the wireless LAN access point.

Connecting the Wireless Adapter to the Projector

Connect the CASIO wireless adapter specified for your projector model to its USB-A port. See your projector's User's Guide for detailed information about where ports are located.

If "On" is selected for "Plug and Play" on the setup menu, the input source should automatically switch to "Network" when you connect the wireless adapter to the projector, and the LAN connection standby screen will be projected. If the input source does not switch automatically, press the projector's [INPUT] key as many times as necessary to select "Network", and then press the [ENTER] key.



LAN Connection Standby Screen

Establishing a Wireless LAN Connection between the Projector and a Computer

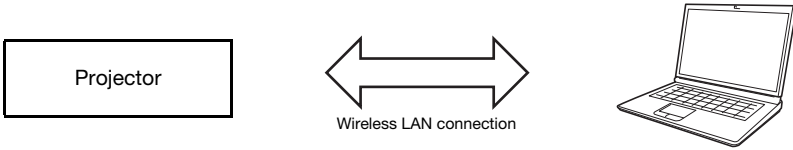
Projector SSID

The procedures in this section explain how to use Network Connection, which is installed on a computer, to search for the SSID emitted by the projector and to establish a connection between the computer and projector. There are three different projector SSID types, each of which is described below. Note that the connection method and required operations are different depending on SSID type.

SSID Type	Description
Simple Connection SSID (Built in)	This type of SSID can be used only when connecting with a Windows Network Connection. Names and settings for each name are built in to the projector. This SSID provides the simplest wireless connection between the projector and a computer. Encryption is WPA-PSK AES.
Generic SSID (Built in)	This type of SSID prompts for input of a passphrase when connecting. Names and settings for each name are built in to the projector. The projector's initial default SSID is casiolpj0101. Encryption is WPA-PSK AES.
User SSID	The name and settings of this type of SSID can be freely configured by you, so a user SSID must be created before it can be used. See "Create a user SSID" (page 23).

Establishing a Direct Wireless LAN Connection between the Projector and a Computer

This section explains how to use Network Connection to search for a projector SSID and establish a wireless LAN connection between the projector and computer. The operations described here establish a wireless LAN connection between the projector and computer and start projection of the computer screen.



Note

- To connect using a user SSID, you first need to create the user SSID. See “Create a user SSID” (page 23).

Projector Operation

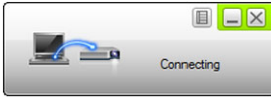
- 1. Connect the wireless adapter to the projector (page 6) and then turn on the projector.**
- 2. Press the projector’s [INPUT] key as many times as necessary to select “Network”, and then press the [ENTER] key.**
 - The input source will switch to “Network”, and projection of the LAN connection standby screen will start.
 - Steps 3 through 6 are not required if you are using a user SSID you created. In this case, advance to step 7.
- 3. Press the [MENU] key and then select the following: “Network Settings” → “Projector Wireless LAN Settings” → “SSID”. On the dialog box that appears, select the SSID you want to use for connection.**

To use this type of SSID:	Select this:
Simple Connection SSID	casio1pj0001, casio1pj0002, casio1pj0003, or casio1pj0004
Generic SSID	casio1pj0101, casio1pj0102, casio1pj0103, or casio1pj0104

- 4. Press the [ESC] key twice to return to “Network Settings”.**
- 5. Use the [▼] key to select “Update Network Settings” and then press the [ENTER] key.**
 - This will display a confirmation dialog box asking if you want to update network settings.
- 6. Press the [▲] key to select “Yes”, and then press the [ENTER] key.**
 - This applies the SSID change to the projector and closes the dialog box. Wait until the LAN connection standby screen starts to be projected again.
 - If multiple projectors are in use nearby, select a separate SSID for each projector.

7. Start up Network Connection.

- If the “Set Network Location” dialog box appears, click [Cancel] to close the dialog box.
- The Network Connection window will appear with the message “Connecting”.



- If the projector could not be found, a [Reconnect] button will appear on the Network Connection window. If this happens, check the points listed below and then click the [Reconnect] button.
 - Check if the wireless adapter is correctly connected to the projector. See “Connecting the Wireless Adapter to the Projector” (page 6).
 - Check if the projector is turned on and projecting the LAN connection standby screen.
- If multiple connectable projectors are found, a “Projector List” dialog box will appear. If this happens, click the SSID of the projector you want to connect with, and then click [OK].

8. What you need to do next depends on the type of SSID you selected in step 3 of this procedure, as described below.

For this type of SSID:	Perform this operation:										
Simple Connection SSID	On the “Enter the login code.” dialog box that appears, enter the user name*1 and login code*2, and then click [OK].										
Generic SSID	<ol style="list-style-type: none"> On the “Enter the passphrase or WEP key.” dialog box that appears, enter the user name*1 and passphrase, and then click [OK]. <ul style="list-style-type: none"> ● In accordance with the SSID of the projector being connected to, input the characters shown below into both the “Passphrase/WEP Key Input” and “Confirm” boxes. <table border="1" data-bbox="383 821 1012 1021"> <thead> <tr> <th>SSID of Projector Being Connected</th> <th>Input Character String (Passphrase)</th> </tr> </thead> <tbody> <tr> <td>casiolpj0101</td> <td>casiolpj01</td> </tr> <tr> <td>casiolpj0102</td> <td>casiolpj02</td> </tr> <tr> <td>casiolpj0103</td> <td>casiolpj03</td> </tr> <tr> <td>casiolpj0104</td> <td>casiolpj04</td> </tr> </tbody> </table> On the “Enter the login code.” dialog box that appears, enter the login code*2 and then click [OK]. 	SSID of Projector Being Connected	Input Character String (Passphrase)	casiolpj0101	casiolpj01	casiolpj0102	casiolpj02	casiolpj0103	casiolpj03	casiolpj0104	casiolpj04
SSID of Projector Being Connected	Input Character String (Passphrase)										
casiolpj0101	casiolpj01										
casiolpj0102	casiolpj02										
casiolpj0103	casiolpj03										
casiolpj0104	casiolpj04										
User SSID	<ol style="list-style-type: none"> On the “Enter the passphrase or WEP key.” dialog box that appears, enter the user name*1 and passphrase, and then click [OK]. <ul style="list-style-type: none"> ● In both the “Passphrase/WEP Key Input” and “Confirm” boxes, enter the text string that you specified as the passphrase when creating the user SSID. On the “Enter the login code.” dialog box that appears, enter the login code*2 and then click [OK]. 										

*1 In the “User Name” box, you can enter any name up to 12 characters long. The user name you enter here will be displayed as the user name on the projection screen.

*2 In the “Login Code” box, enter the four-digit number shown in the upper left corner of the LAN connection standby screen that is being projected. The login code is updated to a new value each time the projector is started up. Each time you perform the above procedure to connect, check the login code on the projection screen and input the correct login code for the current startup.

- While the projector is connected to a computer over a wireless LAN, a Network Connection window like the one shown below will be displayed on the computer screen. The computer screen image (main screen) will be projected.



- For details about Network Connection window operations, see the separate “Network Connection Guide”.

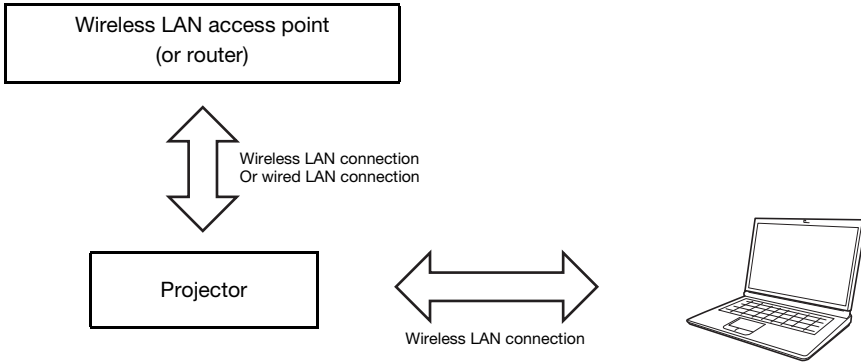


Note**(Wireless LAN connection using Generic SSID or user SSID)**

- After you perform the above operation, Network Connection will remember the passphrase used for the last connection. Because of this, you will not need to input the passphrase again if you re-connect the same computer to the projector (as long as the SSID has not been changed).
- Settings can be configured to eliminate the need for login code input. For information about how to configure settings, see “Configure Control Panel page network settings” (page 22).

Connecting the Projector to an Outside Network without Terminating a Direct Wireless LAN Connection with a Computer


While there is a direct wireless LAN connection between the projector and a computer, the projector can connect with a wireless access point that is connected to an outside network (Internet or Intranet), without terminating the connection with the computer.



Important!

- This type of connection makes it possible for the computer to use the network (Internet or Intranet) service connected to by the wireless LAN access point or router. The network environment that can be connected to from the computer depends on the wireless LAN access point or router.
- This type of connection assumes that a DHCP server is running on the network to which the wireless LAN access point or router belongs.

To connect the projector to a wireless LAN access point without terminating a direct wireless LAN connection with a computer

- 1. Perform the procedure under “Establishing a Direct Wireless LAN Connection between the Projector and a Computer” (page 7) to establish a wireless LAN connection between the projector and computer.**
- 2. On the Network Connection window, click  and then click [Admin Screen] on the menu that appears.**
 - This starts up the computer’s web browser and displays the “CASIO Projector” top page.
- 3. On the left pane, click “Projector Admin”. On the password input screen that appears, enter the password.**
 - The initial default password is “admin”.
- 4. Click the [Login] button.**
 - If login proceeds normally, the “System Status” page will appear.

5. On the left pane, click “Network Settings”.


- This displays the “Network Settings” page.

- Input and settings required here are those surrounded by the red boundaries. You do not need to change other settings.
- For details about this page, see “Configure Network Settings page settings” (page 22).

6. Click the “Obtain an IP address automatically” button so it changes to .

7. Click the “Auto” button in the “DHCP Settings” area so it changes to .

8. Configure settings for connection to a wireless LAN access point from the projector.

1. Click the “Enable” button in the “External Access Point” area so it changes to .
2. Click [Scan Access Point].
 - “Select an access point.” is displayed in the “External Access Point SSID” box.
3. Click the [▼] button to the right of the “External Access Point SSID” box and then select the SSID of the access point you want to connect with on the list that appears.
 - The list that appears when you click the [▼] button shows access points whose signals are detected by the projector at that time, and up to eight previously connected access points.
 - If you want to input an SSID manually, select the “Enter the key.” option on the list. Next, enter the desired SSID in the “External Access Point SSID” box.
4. In the “Passphrase/WEP Key” box, input the passphrase or WEP key of the access point being connected with.
 - You do not need to input anything if the access point you are using does not require passphrase or WEP key input.
 - Each passphrase or WEP key character you input is indicated by an asterisk (*) in the applicable input box. If you want to see the actual characters you input, clear the “Hide characters” check box.
5. To save your connection settings, click [Apply].
 - If the passphrase or WEP key is correct it should normally take anywhere from one minute to a few minutes to establish a connection with the access point.

9. Use the remote controller that comes with the projector to check if the projector is connected to the wireless LAN access point.

1. Press the [MENU] key, and then select “Network Settings” → “Wireless LAN Info”.
2. On the “Wireless LAN Info” dialog box that appears, check “External AP Connection Status”.
 - If “Connected” is shown, it means that the projector is connected to the wireless LAN access point. If “Disconnected” is shown, perform this procedure from step 1 again.
 - When the external access point is operating as a DHCP server, terminating the connection will cause the projector’s IP address to be changed to a value decided by the external access point.



Note

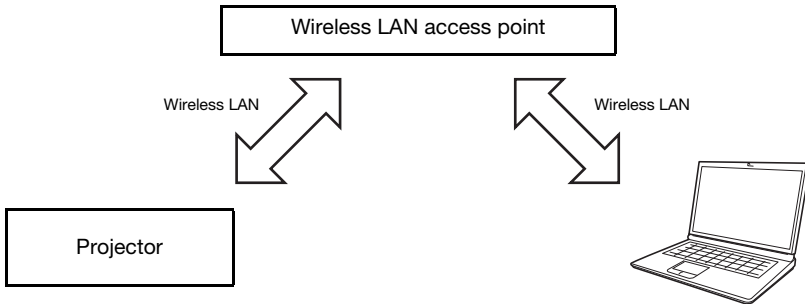
- Once you configure the above settings and connect the projector to a wireless LAN access point, the projector will automatically connect with the same wireless LAN access point whenever you switch its input source to “Network”. This is true as long as the projector is within the connection range of the wireless LAN access point, and as long as the settings of the wireless LAN access point and projector settings have not been changed.

To establish a wired LAN connection between the projector and a router while maintaining a direct wireless connection between the projector and a computer

- 1. Perform the procedure under “Establishing a Direct Wireless LAN Connection between the Projector and a Computer” (page 7).**
- 2. Use a LAN cable (use of a shielded LAN cable (STP) is recommended) to connect the projector to the router.**

Establishing a Connection between the Projector and Computer via a Wireless LAN Access Point

A LAN connection can be established between the projector and computer by connecting both of them to an existing wireless LAN access point inside of a company, etc.



Important!

- This type of connection makes it possible for the computer to use the network (Internet or intranet) service connected to by the wireless LAN access point. The network environment that can be connected to from the computer depends on the wireless LAN access point.
- This type of connection assumes that the wireless LAN access point functions as a DHCP server or that a DHCP server is running on the network to which the wireless LAN access point belongs.

Connecting the Projector to a Wireless LAN Access Point

In place of step 7 under “To connect the projector to a wireless LAN access point without terminating a direct wireless LAN connection with a computer” (page 10), perform the step below.

7. In the “Access Point Function” area, click the “Disable” button so it changes to



- If there is a direct wireless LAN connection between the projector and a computer, clicking [Apply] in step 8 will terminate that connection.

Establishing a Connection between the Projector and Computer and Projecting via a Wireless LAN Access Point

The procedure below assumes the conditions described below.

- The computer is already connected to the wireless LAN access point.
It makes no difference whether the computer is connected by wireless LAN (Wi-Fi) or wired LAN (using a LAN cable). If the computer is connected by wired LAN connection, make sure the computer's wireless LAN function is disabled.
- Projector settings have already been configured using the procedure under "Connecting the Projector to a Wireless LAN Access Point" above, and wireless LAN access point and/or projector settings have not been changed since then.
- The projector is within range supported by the wireless LAN access point.

Projector Operation

- 1. Connect the wireless adapter to the projector (page 6) and then turn on the projector.**
- 2. Press the projector's [INPUT] key as many times as necessary to select "Network", and then press the [ENTER] key.**
 - The input source will switch to "Network", and projection of the LAN connection standby screen will start.

Computer Operation

- 3. Start up Network Connection.**
 - If the "Set Network Location" dialog box appears, click [Cancel] to close the dialog box.
 - The Network Connection window will appear with the message "Connecting".
 - If multiple connectable projectors are found, a "Projector List" dialog box will appear. If this happens, click the IP address of the projector you want to connect to, and then click [OK]. For the projector's IP address, check "Server IP" in the lower left corner of the projection screen (LAN connection standby screen).
- 4. On the "Enter the login code." dialog box that appears, enter the login code and then click [OK].**
 - In the "Login Code" box, enter the four-digit number shown in the upper left corner of the LAN connection standby screen that is being projected.
 - While the projector is connected to a computer over a wireless LAN, a Network Connection window like the one shown below will be displayed on the computer screen. The computer screen image (main screen) will be projected.



- For details about Network Connection window operations, see the separate "Network Connection Guide".



Note

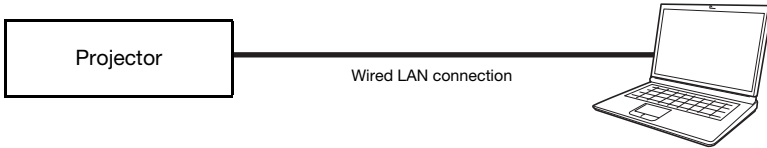
- Settings can be configured to eliminate the need for login code input. For information about how to configure settings, see "Configure Control Panel page network settings" (page 22).

Connecting the Projector to a Computer via a Wired LAN

The method you should use to connect the projector to a computer over a wired LAN depends on whether or not the computer will also be connected to an outside network at the same time.

Wired LAN connection when it is not necessary to connect the computer to an outside network

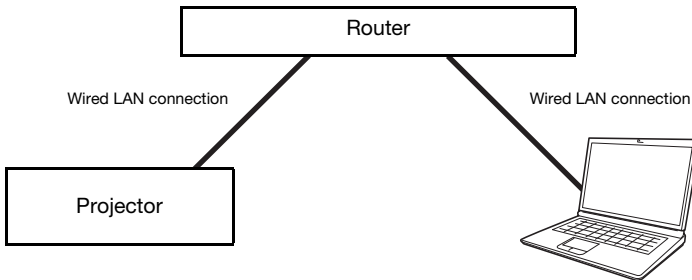
Use a LAN cable to connect the projector and computer.



For information about how to do this, see “Using a LAN Cable to Connect a Computer Directly to the Projector” (page 16).

Wired LAN connection when you also want to connect the computer to an outside network

Use LAN cables to connect the projector and computer to the same router. In this configuration, the computer can use the network (Internet or intranet) service connected to by the router. The network environment that can be connected to from the computer depends on the router.



For information about how to do this, see “Establishing a Wired LAN Connection between the Projector and a Computer via a Router” (page 17).



Important!

- Use of a shielded LAN cable (STP) is recommended for a wired LAN connection to avoid interference from radios, TVs, and other receivers.

Using a LAN Cable to Connect a Computer Directly to the Projector

1. Connect the computer to the projector with the LAN cable (use of a shielded LAN cable (STP) is recommended).

Projector Operation

2. Press the [INPUT] key. This will display the “Input” dialog box.
3. Use the [▼] and [▲] keys to select “Network” and then press the [ENTER] key.
4. Check the IP address (“Server IP”) in the lower left corner of the LAN connection standby screen.
 - Here, we will use a projector IP address of 192.168.100.10 (projector initial default setting).

Computer Operation

5. Check to make sure that settings are configured for automatic acquisition of the computer’s IP address.
 - If you want to specify the IP address of the computer manually, change it to 192.168.100.XXX (XXX is a value from 1 to 9 or 11 to 254).
 - The steps up to this point are to establish a LAN connection between the projector and computer. The steps from here are for projecting the computer screen.
6. Start up Network Connection.
 - If the “Set Network Location” dialog box appears, click [Cancel] to close the dialog box.
 - The Network Connection window will appear with the message “Connecting”.
7. On the “Enter the login code.” dialog box that appears, input the required login code.
 - In the “Login Code” box, input the four-digit number shown in the upper left corner of the LAN connection standby screen that is being projected.
8. When everything is the way you want, click [OK].
 - This will cause the Network Connection window to change as shown below, and projection of the computer screen image (main window) will start.



- For details about Network Connection window operations, see the separate “Network Connection Guide”.



Note

- When using the above type of connection, settings can be configured to eliminate the need for login code input. For information about how to configure such settings see “Configure Control Panel page network settings” (page 22).

Establishing a Wired LAN Connection between the Projector and a Computer via a Router

The procedure below assumes that a DHCP server is running on the network to which the router belongs, and that there is a LAN connection between the computer and router.

Projector Operation

- 1. Use a LAN cable (use of a shielded LAN cable (STP) is recommended) to connect the projector to the router to which the computer is connected via the LAN.**
- 2. On the projector, select “Auto” for “IP Settings”.**
 1. Perform the following steps to display the IP Settings dialog box: [MENU] key → “Network Settings” → “Projector Wired LAN Settings”.
 2. Press the [◀] key to select “Auto” for “IP Settings”.
 3. Press the [ESC] key to return to “Network Settings”.
 4. Select “Update Network Settings” and then press the [ENTER] key.
 5. In response to the network setting update dialog box that appears, press the [▲] key to select “Yes” and then press the [ENTER] key.

Computer Operation

- 3. Perform the operation from step 3 under “Establishing a Connection between the Projector and Computer and Projecting via a Wireless LAN Access Point” (page 14).**


Projector Network Settings

There are two types of projector network settings: basic settings that can be configured by the projector alone, and more detailed settings that can be configured by using a computer connected to the projector via a LAN connection to access the “Projector Admin” pages.

Using the Projector Setup Menu

You can use the “Network Settings” main menu, which is included in the projector setup menu, to display information about and configure settings for the projector and external device LAN connection.


To do this:	Perform this operation:
Display wired LAN information	<ol style="list-style-type: none">1. Press the [MENU] key and then select the following: “Network Settings” → “Wired LAN info”.2. Press the [ENTER] key. This will display the information below. Projector name: The initial default setting is the rightmost six digits of the MAC address. You can change the projector name using the procedure under “Configure Control Panel page network settings” (page 22). MAC Address: Fixed wired LAN MAC address assigned to each projector IP Address: IP address currently assigned to the projector DHCP: Shows the current projector DHCP server function status (“Auto” or “Disable”).
Display wireless LAN information	<ol style="list-style-type: none">1. Press the [MENU] key and then select the following: “Network Settings” → “Wireless LAN Info”.2. Press the [ENTER] key. This will display the information below. SSID: Shows the projector’s current SSID (which is used for wireless LAN connection with an external device). Wireless MAC Address: Fixed wireless LAN MAC address assigned to each wireless adapter. IP Address: IP address currently assigned to the projector. DHCP: Shows the current projector DHCP sever status (“Auto” or “Disable”). Security Settings: Shows the encryption system being used by the projector’s current SSID. External AP SSID: Appears when “Enable” is specified for “External Access Point” on the “Network Settings” page. When the projector is connected to an external wireless LAN access point, shows that access point’s SSID. When not connected, shows “No connection”. External AP Connection Status: Appears when “Enable” is specified for “External Access Point” on the “Network Settings” page. When the projector is connected to an external wireless LAN access point, shows “Connected”. When not connected, shows “Disconnected”.

To do this:	Perform this operation:
Change the SSID	 <p>Important!</p> <ul style="list-style-type: none"> ● If a user SSID has already been created, you will not be able to change the SSID using the projector menu. <ol style="list-style-type: none"> 1. Press the [MENU] key and then select the following: “Network Settings” → “Projector Wireless LAN Settings” → “SSID”. 2. Press the [ENTER] key. <ul style="list-style-type: none"> ● This displays a list of selectable SSIDs. 3. Use the [▲] and [▼] keys to select the SSID you want and then press the [ENTER] key. 4. Use the [ESC] key to return to “Network Settings”. 5. Use the [▼] key to select “Update Network Settings” and then press the [ENTER] key. 6. On the confirmation dialog box that appears, press the [▲] key to select “Yes”, and then press the [ENTER] key.
Change the IP settings	<ol style="list-style-type: none"> 1. Press the [MENU] key and then select the following: “Network Settings” → “Projector Wired LAN Settings” or “Network Settings” → “Projector Wireless LAN Settings” → “IP Settings”. 2. On the “IP Settings” dialog box that appears, configure the settings below. <ul style="list-style-type: none"> ● To specify auto acquisition of an IP address, select “Auto” for “IP Settings”. ● To specify the IP address manually, specify “Manual” for “IP Settings” and input an IP address manually (see below). <ol style="list-style-type: none"> (1) Use the [▼] key to select “IP Address” and then press the [ENTER] key. <ul style="list-style-type: none"> ● This displays the “Input IP Address” dialog box. (2) Use the [◀] and [▶] keys to specify the first octet (three digits) of the IP address. After the setting is the way you want press the [▼] key. (3) Repeat step (2) to specify octets two through four. <ul style="list-style-type: none"> ● A value within the following ranges can be specified for each octet: 1st: 1 to 223; 2nd: 0 to 255; 3rd: 0 to 255; 4th: 1 to 254. (4) When the IP address is the one you want, press the [ESC] key. 3. Use the [ESC] key to return to “Network Settings”. 4. Use the [▼] key to select “Update Network Settings” and then press the [ENTER] key. 5. On the confirmation dialog box that appears, press the [▲] key to select “Yes”, and then press the [ENTER] key.
Initialize network settings	<ol style="list-style-type: none"> 1. Press the [MENU] key and then select the following: “Network Settings” → “Initialize Network Settings”. 2. Press the [ENTER] key. 3. On the confirmation dialog box that appears, press the [▲] key to select “Yes”, and then press the [ENTER] key.

Using the Projector Admin Pages

Logging In to the Projector Admin Pages

To log in to the Projector Admin pages over a wireless LAN connection

1. Perform the procedure under “Establishing a Direct Wireless LAN Connection between the Projector and a Computer” (page 7) to establish a wireless LAN connection between the projector and computer.
2. On the Network Connection window, click  and then click [Admin Screen] on the menu that appears.
 - This starts up the computer’s web browser and displays the “CASIO Projector” top page.
3. On the left pane, click “Projector Admin”. On the password input screen that appears, enter the password. (The initial default password is “admin”.)
4. Click the [Login] button.
 - If login proceeds normally, the “System Status” page will appear.

To log in to the Projector Admin pages over a wired LAN connection

1. Perform one of the operations below ((A), (B), or (C)) to connect a computer to the projector over a wired LAN connection.

(A) To establish a wired LAN connection between the projector and computer using the IP address automatically assigned to the computer

1. Use a LAN cable (use of a shielded LAN cable (STP) is recommended) to connect a computer directly to the projector.

Projector Operation

2. Perform the following steps to display the IP Settings dialog box: [MENU] key → “Network Settings” → “Projector Wired LAN Settings”.
3. Press the [▶] key to select “Manual” for “IP Settings”.
4. Press the [ESC] key to return to “Network Settings”.
5. Select “Update Network Settings” and then press the [ENTER] key.
6. In response to the confirmation dialog box that appears, press the [▲] key to select “Yes” and then press the [ENTER] key.

Computer Operation

7. Check to make sure that settings are configured for automatic acquisition of the computer’s IP address.
 - An IP address is automatically assigned to your computer in accordance with the projector IP address, and a wired LAN connection is established.

(B) To specify your computer's IP address manually for a wired LAN connection (when your computer's IP address is fixed)

1. Perform steps 1 through 6 of (A), above.

Computer Operation

2. Specify an IP address for the computer. Octets 1, 2, and 3 should be the same as those for the projector's IP address. For Octet 4, specify a value in the range of 1 to 254, which is different from that of the projector's IP address.
 - For example, if the projector's IP address is 192.168.100.10 (which is its initial default), you should specify a computer IP address of 192.168.100.XXX, where XXX is a value from 1 to 9, or 11 to 254.

(C) To establish a wired LAN connection between the projector and a computer via a router *1

1. Use a LAN cable (use of a shielded LAN cable (STP) is recommended) to connect the projector to the router to which the computer is connected via the LAN.

Projector Operation

2. Perform the following steps to display the IP Settings dialog box: [MENU] key → "Network Settings" → "Projector Wired LAN Settings".
3. Press the [◀] key to select "Auto" for "IP Settings".
4. Perform steps 4 through 6 of (A), above.

*1 This procedure assumes that a DHCP server is running on the network to which the router belongs, and that there is a LAN connection between the computer and router.

Projector Operation

- 2. Press the projector's [INPUT] key as many times as necessary to select "Network", and then press the [ENTER] key.**
 - This will project the LAN connection standby screen.
- 3. Check the IP address ("Server IP") in the lower left corner of the LAN connection standby screen.**

Computer Operation

- 4. Start up the computer's web browser, input "http://<IP address you looked up in step 3 above>" into the address bar, and then press [Enter].**
 - This will display the "CASIO Projector" top page.
- 5. On the left pane, click "Projector Admin". On the password input screen that appears, input the password. (The initial default password is "admin".)**
- 6. Click [Login].**
 - If log in proceeds normally, the "System Status" page will appear.

Projector Admin Pages Operations

Perform the operations below after logging in to the Projector Admin Pages. For information about the operation up to login, see “Logging In to the Projector Admin Pages” (page 20).

To do this:	Perform this operation:
Display the system status	<p>On the left pane, click “System Status”. This displays the information below.</p> <p>Firmware Version: This is the version of the projector’s firmware (built-in software).</p> <p>IP Address: IP address currently assigned to the projector.</p> <p>Subnet Mask: Subnet mask value currently configured on the projector.</p> <p>Default Gateway: Default gateway currently configured for the projector.</p> <p>MAC Address: Fixed wired LAN MAC address assigned to each projector.</p> <p>Wireless MAC Address: Fixed wireless LAN MAC address assigned to each wireless adapter.</p> <p>Projection Status:</p> <ul style="list-style-type: none"> Projection Standby: Standing by for projection over a LAN connection. Projecting: Projecting over a LAN connection. <p>Number of Users: Number of users currently projecting from computers via a LAN connection.</p> <p>Login Code: Projector’s current login code.</p>
Configure Control Panel page network settings	<ol style="list-style-type: none"> 1. On the left pane, click “Control Panel” to display the “Control Panel” page. <ul style="list-style-type: none"> ● “Control Panel” page setting items are divided between the two groups shown below. You can configure the settings of one group’s items at a time. <ul style="list-style-type: none"> Group 1 : Projector name, Login Code Group 2 : Show User Name, Remote On, PJLink Authentication, IEEE 802.11n (Wi-Fi), Channel Width 2. On the “Control Panel” page, configure the settings of either Group 1 or Group 2. <ul style="list-style-type: none"> ● For information about how to configure settings, see “Control Panel Page Network Items” (page 24). 3. To apply Group 1 settings, click [Apply] below “Login Code”. To apply Group 2 settings, click [Apply] below “Channel Width”. This displays a dialog box asking if you want to restart the projector. 4. To restart the projector and reflect the changed settings, click [OK]. <ul style="list-style-type: none"> ● Clicking [OK] will reflect the changed settings and restart the projector. The LAN connection between the projector and computer will be terminated at this time.
Configure Network Settings page settings	<ol style="list-style-type: none"> 1. On the left pane, click “Network Settings”. 2. On the “Network Settings” page that appears, configure the settings you want. <ul style="list-style-type: none"> ● For information about the setting you can configure and the operation required to do so, see “Network Settings Page Items” (page 25). 3. To reflect “Network Settings” page changes on the projector, click [Apply]. This displays a dialog box asking if you want to restart the projector. 4. To restart the projector and reflect the changed settings, click [OK]. <ul style="list-style-type: none"> ● Clicking [OK] will reflect the changed settings and restart the projector. The LAN connection between the projector and computer will be terminated at this time.
Change the password for logging in to the Projector Admin pages	<ol style="list-style-type: none"> 1. On the left pane, click “Change Passwords”. 2. Under “Projector Admin”, input up to eight single-byte characters for the new password into both “New Password” and “Reinput Password”. Input the same password into both boxes. 3. Click [Apply].

To do this:	Perform this operation:
Create a user SSID	<ol style="list-style-type: none"> 1. On the left pane, click “Network Settings”. 2. In the “SSID” box, input the character string you want to use as the user SSID. <ul style="list-style-type: none"> ● The final user SSID will be in the format: casiolpj0<character string you input> ● You can enter up to 23 single-byte characters as the user SSID. Note that none of the following can be used as the text input portion of a user SSID: 001, 002, 003, 004, 101, 102, 103, or 104. This is because using these numbers would make the user SSID name the same as a simple SSID or generic SSID. 3. Click the [▼] button to the right of the “Security” box and then select the desired security protocol on the list that appears. <p>WPA-PSK AES: Performs communication encryption using WPA-PSK protocol. WPA (Wi-Fi Protected Access) is a security function for encrypting communication data.</p> <p>WPA2-PSK AES: Performs communication encryption using WPA2-PSK protocol. WPA2 is a new standard of WPA.</p> <p>Disable: Turns off wireless LAN security, so communications are not encrypted.</p> <ul style="list-style-type: none"> ● If you selected “Disable”, you do not need to perform step 4. 4. Enter the passphrase in the “Passphrase/WEP Key Input” text box. <ul style="list-style-type: none"> ● Input a passphrase of 8 to 63 single-bytes alphanumeric characters or a 64-digit hexadecimal value. ● Each passphrase key character you input is indicated by an asterisk (*) in the applicable input box. If you want to see the actual characters you input, clear the “Hide characters” check box. ● The passphrase you input will be required when you use the user SSID to establish a wireless LAN connection between the projector and a computer. Make sure you do not forget the passphrase you input. 5. To create a user SSID in accordance with your settings above, click [Apply]. <ul style="list-style-type: none"> ● This creates the user SSID and applies it to the projector. ● If the projector and computer are connected via wireless LAN, this terminates the wireless LAN connection between the projector and computer, and changes the projection screen to the LAN connection standby screen.
Initialize all settings on the Projector Admin pages	<ol style="list-style-type: none"> 1. On the left pane, click “Initialize Settings”. 2. On the “Initialize Settings” page that appears, click [Apply]. This displays a dialog box asking if you want to restart the projector. 3. To restart the projector and return its settings to their initial defaults, click [OK]. <ul style="list-style-type: none"> ● Clicking [OK] will initialize settings and restart the projector. The LAN connection between the projector and computer will be terminated at this time.
Input information for connecting to a Crestron controller	<ol style="list-style-type: none"> 1. On the left pane, click “Crestron Control”. 2. On the “Crestron Control” page that appears, input the information described below. <p>IP Address: Input the Crestron controller IP address.</p> <p>IP ID: Input the Crestron controller IP ID.</p> <p>Port: Input the port number to be used for communication with the Crestron controller (normally 41794).</p> 3. To apply the settings you input on the projector, click [Apply].
Log out from the Projector Admin pages	<p>In the upper right corner of the web browser window, click “Logout”.</p> <ul style="list-style-type: none"> ● This returns to the “CASIO Projector” top page.

Control Panel Page Network Items

To do this:	Perform this operation:
Change the projector name	In the "Projector name" box, input up to 16 single-byte characters (no symbols) for the projector name.
Specify whether or not to require log in code input when establishing a wireless LAN connection	In the "Login Code" area, click "ON" (prompt for login code input) or "OFF" (do not prompt for login code input).
Specify whether to show or hide the user name of the computer currently projecting on the projector via a wired LAN	In the "Show User Name" area, click either "ON" (show) or "OFF" (hide).
Specify whether projector power can be turned on via LAN while the projector is in standby	In the "Remote On*1" area, click "Enable" (enable power on) or "Disable".
Enable or disable PJLink connection authentication	In the "PJLink Authentication" area, click "Enable" or "Disable".
Enable or disable wireless LAN standard IEEE802.11n	In the "IEEE 802.11n (Wi-Fi)" area, click either "Enable" or "Disable".
Specify whether wireless LAN channel width should be set automatically or should be fixed (20 MHz)	In the "Channel Width" area, click "20MHz" or "Auto".

*1 Projector standby power consumption depends on whether or not "Remote On" is enabled. For information about power consumption in each standby state, see the "User's Guide".

Network Settings Page Items

To do this:	Perform this operation:
Specify auto acquisition of an IP address from the external LAN device	In the "IP Settings" area, click "Obtain an IP address automatically".
Specify the IP address manually	<ol style="list-style-type: none"> 1. In the "IP Settings" area, click "Use the IP address below". 2. In the "IP Address" boxes, enter the IP address you want to assign to the projector (Initial Default: 192.168.100.10). 3. In the "Subnet Mask" boxes, enter a value that will be used to determine range of IP addresses of the network (subnet) to which the projector will belong (Initial Default: 255.255.255.0). 4. In the "Default Gateway" boxes, input the IP address of the default gateway (Initial Default: 192.168.100.10).
Specify auto allocation of IP addresses to computers and smart devices by the projector	<ol style="list-style-type: none"> 1. In the "DHCP Settings" area, click "Auto". 2. Specify the range of automatically allocated IP addresses as required. <ul style="list-style-type: none"> ● In "Starting Address" and "Ending Address", input a value in the range of 11 to 254 for the fourth octet. ● Only the fourth octet can be specified by you. The other octets cannot be changed.
Specify no allocation of IP addresses to computers and smart devices by the projector	In the "DHCP Settings" area, click "Disable".
Enable wireless LAN connection to the projector from a computer and/or smart device (by enabling the built-in access point function)	Change the "Wireless Settings" area "Access Point Function" setting to "Enable".
Disable wireless LAN connection to the projector from a computer and/or smart device (by disabling the built-in access point function)	Change the "Wireless Settings" area "Access Point Function" setting to "Disable".
Enable/disable SSID broadcasting	In the "Wireless Settings" area, select "Enable" or "Disable" for "SSID Broadcast".
Specify the channel for wireless LAN communication	In the "Wireless Settings" area, click [▼] on the right side of the "Channel" box. On the list that appears, select a channel from 1 to 11.
Specify auto selection of the wireless LAN channel to be used	In the "Wireless Settings" area, click [▼] on the right side of the "Channel" box. On the list that appears, select "Auto".
Connect the projector to an external wireless access point	<p>In the "External Access Point" area, click "Enable" and configure settings as required.</p> <p>For details, see "To connect the projector to a wireless LAN access point without terminating a direct wireless LAN connection with a computer" (page 10).</p>
Do not connect the projector to an external wireless access point	In the "External Access Point" area, click "Disable".

Remotely controlling the Projector Over a LAN Connection

You can use the procedure below to control the projector from a computer or other external device over a LAN connection.

To remotely control the projector from a computer connected via a LAN

1. Referring to “Logging In to the Projector Admin Pages” (page 20), log in to the Projector Admin pages.
2. In the left pane, click “Control Panel”.
 - This will display the “Control Panel” page.

Network Presentation System

CASIO Projector > Projector Admin > Control Panel Logout

System Status
Control Panel
Network Settings
Change Passwords
Initialize Settings
Crestron Control

Projector Status

Refresh

Projector Status ON
Error Info No error
Power On Power Off

Network Settings

Projector name
Login Code ON OFF
Apply
Show User Name ON OFF
Remote On Enable Disable
PJLink Authentication Enable Disable
IEEE 802.11n(Wi-Fi) Enable Disable
Channel Width 20MHz Auto
Apply

Projector Control

Input Computer 1(Auto)
Color Mode Standard
Blank ON OFF
Aspect Ratio Standard(Computer)
Brightness 0 (128 - 127) Apply
Contrast 0 (100 - 100) Apply
Light Control Light Sensor
 Light Output 1
 OFF(Normal)
 OFF(Bright)
Audio Volume 15 (0 - 30) Apply
Mute Audio ON OFF
Audio Out Speaker Line
Audio In Audio IN 1
Projector ID All
Initialize Cancel

Copyright © 2014 CASIO COMPUTER CO., LTD. All Rights Reserved.

- Projector remote control items are those surrounded by the red boundaries above. For detailed information about each of these items, see “Control Panel Page Remote Control Items”.
- For information about items other than the above (“Network Settings” items), see “Configure Control Panel page network settings” (page 22).

- 3. After you are finished with remote control operations, click “Logout” to log out from the Projector Admin pages.**



Note

- The projector supports the external devices and commands below.

External Devices and Commands	Refer to:
All PJLink Class1 (Version 1.00) commands	http://pjlink.jbmia.or.jp/english/
Crestron Electronics controller and software (RoomView®) commands	http://www.crestron.com/
AMX Device Discovery	http://www.amx.com/

Control Panel Page Remote Control Items

Depending on its model, some of the items and their functions may not be supported by and may not be available on your projector.

Group	Item	Description
Refresh (Button)		Click to refresh the screen with the latest information.
Projector Status	Projector Status	Shows the projector's current status as either "ON" or "Standby".
	Error info	Shows one of the following. No error: Operating normally. Temperature Error: Temperature error occurred. Fan Error: Fan error occurred. Light Error: Light source unit error occurred. Other Error: Error other than above occurred.
	Power Off (Button)	Click to turn the projector off.
	Power On (Button)	Click to turn on the projector. This operation is supported only when "Enable" is selected for "Remote On".
Projector Control	Input	Specifies the input source.
	Color Mode	Specifies the color mode.
	Blank	Selecting "ON" for this setting temporarily blocks the image from the input source. "OFF" causes the image from the input source to be projected.
	Aspect Ratio	Changes the aspect ratio of the projected image.
	Brightness	Input a value into the box and then click the [Apply] button. This will change the projector's "Brightness" setting accordingly.
	Contrast	Input a value into the box and then click the [Apply] button. This will change the projector's "Contrast" setting accordingly.
	Light Control	Configures the "Light Control" settings and "Light Control Off Mode" settings.
	Audio Volume	Input a value into the box and then click the [Apply] button. This will change the volume setting accordingly.
	Mute Audio	Specifies the mute setting. Audio is output while "OFF" is selected for this setting, and muted when "ON" is selected.
	Audio Out	Specifies either output from the projector's speaker or audio output terminal for audio. Speaker: Audio output from the speaker Line: Audio output from the AUDIO OUT terminal
	Audio Input	Specifies the audio input for the input source currently selected by the projector.
	Projector ID	Specifies the projector ID.
	Initialize (Button)	Click to return all Network Projection Control items, except for the "Projector Status" items, to their initial factory defaults.

Projector File Viewer Operations

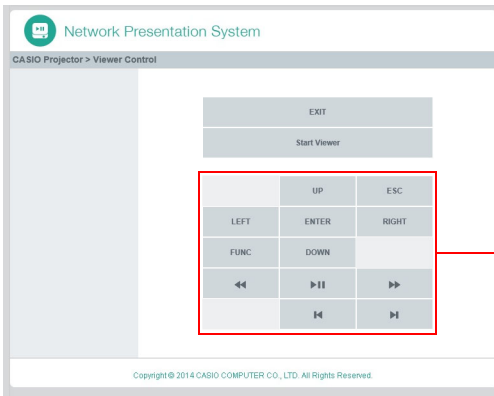
This section provides information about File Viewer operations you can perform with a web browser.

Displaying the Viewer Control Page

To use a web browser to perform File Viewer operations, first display the Viewer Control page. Note that the Viewer Control page can be used only while there is a wired LAN connection.

To display the Viewer Control page over a wired LAN connection

1. Perform steps 1 through 4 under “To log in to the Projector Admin pages over a wired LAN connection” (page 20).
2. On the left pane, click “Viewer Control”.
 - This displays the “Viewer Control” page like the one shown below, and starts projection of the File Viewer main screen by the projector. For information about the operations you can perform from this point, see “Viewer Control Page Operations” (page 30).



While File Viewer is being projected, these buttons perform the same operations as the corresponding buttons on the remote controller that comes with the projector.

To return to the “CASIO Projector” top page from the Viewer Control page

In the upper left corner of the web browser window, click “CASIO Projector”.

Viewer Control Page Operations

To do this:	Perform this operation:
Start File Viewer projection	Click [Start Viewer].
Perform File Viewer remote controller operations	Click the desired buttons under [Start Viewer]. The keys have the same functions as the corresponding projector remote controller key. For details about File Viewer operations, see the separate User's Guide.
Exit the Viewer Control page and return to the "CASIO Projector" top page	Click [EXIT]*1.

*1 File Viewer will not be exited if you click [EXIT] while it is projecting.

Projecting Via a Wireless LAN Connection with Various Different Devices

Using the Network Connection to Project from a Mac OS

You can project the screen contents of a computer running a Mac OS*1 that is connected to the projector over a wireless LAN connection. The conditions below are required in order to do so.

- On the projector, perform the required operation to change the projector's SSID to a generic SSID (casiolpj0101, casiolpj0102, casiolpj0103, casiolpj0104) or a user SSID. For more information, see "Change the SSID" (page 19).
- Run Network Connection*2 on the Mac OS computer, and then log in to the projector from Network Connection.

*1 Note that functions may be limited by the version of Mac OS being used. For the latest information about operating environments, visit the CASIO website.

*2 You can download Network Connection for Mac OS from the CASIO projector support site located at the URL shown below. The CASIO projector support site also includes information about required computer environments and operation details.

<http://world.casio.com/download/projector/>



Using C-Assist to Project from a Smart Device

Installing C-Assist on an Android or iOS smart device makes it possible to project smart device images from the projector. C-Assist also makes it possible to use the smart device to control the computer to which the projector is connected. The conditions below are required to perform these operations.

- On the projector, perform the required operation to change the projector's SSID to a generic SSID (casiolpj0101, casiolpj0102, casiolpj0103, casiolpj0104) or a user SSID. For more information, see "Change the SSID" (page 19).
- On the smart device, start up C-Assist and use C-Assist to log in to the projector.

Troubleshooting

Wireless LAN Connection between the Projector and a Computer

Problem	Cause and Required Action
I can't establish a wireless LAN connection between the projector and a computer.	<ul style="list-style-type: none"> ● If any other wireless LAN utility besides Network Connection is running on the computer, close it. ● Try moving the projector closer to the computer. Also, make sure there is no wall or other obstruction between the projector and computer. ● If a nearby microwave oven, Bluetooth device, or other device is interfering with the wireless LAN signal, relocate the interfering device. ● If the projector is off, turn it on. ● If the projector does not have the wireless adapter connected, connect it (page 6). ● If the computer's wireless LAN function is disabled, enable it.
The wireless LAN connection between the projector and computer keeps dropping.	<ul style="list-style-type: none"> ● If any other wireless LAN utility besides Network Connection is running on the computer, close it. ● Try moving the projector closer to the computer. Also, make sure there is no wall or other obstruction between the projector and computer. ● If a nearby microwave oven, Bluetooth device, or other device is interfering with the wireless LAN signal, relocate the interfering device.
I can establish a wireless LAN connection between the projector and computer, but the computer screen contents won't project.	<ul style="list-style-type: none"> ● If something other than "Network" is selected as the projector's input source, press the [INPUT] key and then select "Network". ● If computer screen contents won't project while "Network" is selected as the input source, click  (Project 1 screen) on the Network Connection window. ● If the projection image has been frozen or cut off by pressing the [FREEZE] or [BLANK] key on the projector's remote controller, press the remote controller's [ESC] key to cancel the freeze/blank operation.
Projection image switching is slow.	<ul style="list-style-type: none"> ● On the Network Connection window, click  and then check "Projection Setting". If "High-resolution" is selected, change the setting to "High-speed". ● On the computer, exit all applications that you are not using. ● On the computer, disable Windows Aero™.
Wireless LAN connection problems when multiple projectors are being used at the same time.	Check if more than one projector is assigned the same SSID number. Each projector should have its own unique SSID. For information about the required operation, see "Change the SSID" (page 19).

Projector Admin Pages

Problem	Cause and Required Action
The Projector Admin pages do not appear when I try to access them from Network Connection.	The browser you are using may be configured to use a proxy server. Since a proxy server configuration can make it impossible to access the Projector Admin pages, you should change your browser configuration. For information about proxy server settings, see the help and other user documentation for your browser.
I forgot the login password I specified for the Projector Admin pages.	Perform the operation under "Initialize network settings" (page 19) to return projector network settings to their initial defaults.

CASIO®

CASIO COMPUTER CO., LTD.
6-2, Hon-machi 1-chome
Shibuya-ku, Tokyo 151-8543, Japan

MA1703-A

© 2017 CASIO COMPUTER CO., LTD.