Network Connection Guide

- Be sure to keep all user documentation handy for future reference.
- To obtain the latest version of this manual visit the website at the URL below. http://world.casio.com/manual/projector/
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Network Connection is an application you can use to establish a LAN connection between a projector and a computer, and to send display images, movies, and audio from a connected computer to the projector.



• The explanations in this section assume there is already a LAN connection between the projector and computer, and that the computer screen contents are being projected. Before performing the procedures in this section, you should use the procedure under "Projecting Computer Screen Contents Over a LAN Connection" (see the separate "Network Function Guide") to establish a LAN connection between the projector and computer.

Network Connection Window

The Network Connection window shown below is displayed while there is a LAN connection between the projector and computer.





• The Network Connection window, display screens, and notation used in this manual are all based on Windows. These all may be somewhat different when running on Mac OS.

Network Connection Operations

Network Connection Button Operations

While there is a LAN connection between the projector and a computer, you can use the buttons on the Network Connection window to perform the operations described below.

To do this:	Click this button:
Project a single computer screen that fills the entire projection screen images (project 1 screen)	(project 1 screen)
Divide the projection screen into four parts and project four computer screens (project 4 screens)	One of the following buttons*1: 1, 2, 3, 4
Freeze/unfreeze the computer screen that is currently being projected	(pause)
Project a movie without displaying it on the computer (project video stream)	(project video stream) For more information, see "Projecting a Video Stream" on page 6.
Stop computer screen projection	(stop)
Exit Network Connection	🔀 (close)

*1 Clicking a button will project the computer screen image in the corresponding location: (1) Upper left, (2) Upper right, (3) Lower left, (4) Lower right.



Network Connection Function Menu Operations

While there is a LAN connection between the projector and a computer, you can use the items on the Network Connection function menu (which appears when you click the function menu button) to perform the operations described below.

To do this:	Select this function menu item:	Refer to:
Prioritize display speed over projection screen image quality*1	[Projection Setting] → [High-speed]	-
Prioritize projection screen image quality over display speed*1	[Projection Setting] → [High-resolution]	-
Output computer audio from the projector speaker	[Audio Out]	"Outputting Computer Audio from the Projector Speaker" (page 5)
Switch from main screen projection to extended screen projection*2	[Select the Projection Screen] → [Extended Screen]	
Switch from extended screen projection to main screen projection* ²	[Select the Projection Screen] → [Main Screen]	_
Use a smart device for remote control of a computer that is running Network Connection	[PC Remote]	"Remotely Controlling a Computer from a Smart Device" (page 7)
Configure projector network settings	[Admin Screen]	"Using the Projector Admin Pages" (See the separate "Network Function Guide".)
Remotely control the projector over a LAN connection	[Admin Screen]	"Remotely controlling the Projector Over a LAN Connection" (See the separate "Network Function Guide".)
Change the wireless LAN connection to another projector	[Server Search]	"To terminate the current wireless LAN connection and re-connect" (page 8)
Create a copy of Network Connection on a USB flash drive*1	[Token Wizard]	"Using the Token Wizard (Windows only)" (page 9)
Have your computer automatically connect to an access point whenever Network Connection is started up*3	[Auto WiFi Connect]	-
Delete connection information (passphrase) stored by Network Connection*1	[Initialize]	"To delete connection information (passphrase) stored by Network Connection" (page 8)
Show the IP address and login code of the projector connected via LAN	[Info]	-
Display Network Connection version information	[About]	-
Exit Network Connection	[Exit]	_

*1 Not supported when running on Mac OS.

- *2 With Windows 8/8.1/10 and Mac OS, installation of driver software is required to enable these functions. See "Add-on Driver Software" (page 5).
- *3 Not supported when running on Windows.

Outputting Computer Audio from the Projector Speaker

You can use Network Connection to output computer audio from the projector speaker while a computer screen is being projected over a LAN connection.

• To output computer audio from the projector speaker, select [Audio Out] on the Network Connection function menu so there is check mark next to it.

Enabling projector speaker output will mute the audio output from the computer speaker(s).

• To disable projector speaker audio output and re-enable output from the computer speaker(s), select [Audio Out] on the function menu again to remove the check mark.



• The function menu [Audio Out] item is unchecked (disabled) whenever you start up Network Connection.

Add-on Driver Software

Use of some parts of the Network Connection requires installation of the driver software shown in the table below. For information about how to obtain this software, go to the CASIO website (http://world.casio.com/download/projector/).

To use this function:	Install this driver software:
Extended screen output function	VDD driver (for Windows 8/8.1/10) Syphon-Virtual-Screen*1 (for Mac OS)
Audio output function	Sound Flower*1 (for Mac OS)

*1 When installing Network Connection on a Mac OS, a dialog box will appear asking whether or not you want to install Syphon-Virtual-Screen and Sound Flower. Be sure to select [Yes] if you plan to use extended screen output and audio output. Extended screen output and audio output will not be possible if you select [Skip].

Projecting a Video Stream

You can use Network Connection to play a movie and output the playback image to the projector for projection. Only the movie's video stream is displayed on the projection screen. You can leave the normal desktop and Network Connection window (which are not projected) on the computer screen.

Supported Playback Files

AVI: 20 Mbps maximum 720/30P (MJPEG video, ADPCM audio)
MOV: 20 Mbps maximum 1080/30P (H.264 video, ADPCM audio or AAC audio)
MP4: 20 Mbps maximum 1080/30P (H.264 video, AAC audio)

To project a video stream

- 1. On the Network Connection window, click 🗉 (project video stream).
 - This will cause the appearance of the Network Connection window to change as shown below.



2. Click 🔳 (select file).

- **3.** Use the select file dialog box that appears to select the movie file you want to play and then click [Open].
 - This starts playback of the file you selected and displays a full-screen view of the movie on the projection screen.
- 4. To stop movie playback, click 🔳 (stop).

5. To return to normal computer screen projection, click 🚊 (project PC screen).

Note Note

- Video stream projection is always performed in full-screen view. In this case, the projection screen cannot be divided into four parts as when projecting computer screen images.
- When projecting a video stream the audio of the movie is always output by the projector.

Remotely Controlling a Computer from a Smart Device

This section explains how to use a smart device for remote control of a computer running Network Connection.



• To perform remote control operation described here, your smart device will need to have C-Assist installed on it (see the separate "Network Function Guide").

To start PC remote

- 1. Perform the procedure under "Establishing a Direct Wireless LAN Connection between the Projector and a Computer" in the separate Network Function Guide.
- On the smart device, start up C-Assist and then perform the steps below.
 (1) Log in to the projector.
 (2) Enter PC Remote standby.
- **3.** On the Network Connection window, click i and then click [PC Remote] on the menu that appears so there is a check mark next to it.
 - This will cause an image of the computer screen to appear on the smart device's touch screen.
 - The above indicates that you can use the smart device's touch screen to perform computer mouse operations. You can also use the smart device's on-screen keyboard to input and edit data on the computer.
- 4. Control the computer from the smart device as required.

To exit PC Remote

On the Network Connection window, click 🔲 and then click [PC Remote] on the menu that appears to clear the check mark next to it.

To terminate the current wireless LAN connection and re-connect

- 1. On the Network Connection function menu, select [Server Search].
 - This terminates the current wireless LAN connection, and changes the projection screen to the LAN connection standby screen.
- 2. Perform the procedure under "Establishing a Direct Wireless LAN Connection between the Projector and a Computer" in the separate Network Function Guide.

To delete connection information (passphrase) stored by Network Connection

- **1.** On the Network Connection function menu, select [Initialize].
- 2. On the initialize confirmation dialog box that appears, click [OK] to initialize or [Cancel] to cancel.
- **3.** Restart the Network Connection.



[•] After you perform the above operation, the wireless LAN connection between the projector and computer will be terminated. To re-establish a wireless LAN connection, perform the operation under "Establishing a Direct Wireless LAN Connection between the Projector and a Computer" in the separate "Network Function Guide".

Using the Token Wizard (Windows only)

You can use the Network Connection token wizard to copy Network Connection to a USB flash drive. After you do that, you can run Network Connection on a computer that does not have the program installed simply by plugging the USB flash drive (called a "USB Token") into the computer's USB port. Using USB tokens is recommended when connecting to the projector from multiple computers.

To install Network Connection on a USB flash drive

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- Using the procedure below to install Network Connection on a USB flash drive creates a file named "autorun.inf" (which is a Network Connection auto run file) in the USB flash drive root directory. If the USB flash drive root directory already contains a file with the same name, the existing file will be renamed by adding ".bak" or a three-digit number (.001, .002, etc.) to the end of its file name.
- Using the following procedure to install Network Connection on a USB flash drive will change the name of the USB flash drive to "USB Token" and also change its icon to 🔛.
- **1.** On the Network Connection window, click i and then click [Token Wizard] on the menu that appears.
 - This displays the token wizard.

Click [Next >].

- This displays a USB drive selection screen.
- If there is no USB flash drive connected to the computer, the message "USB memory could not be detected." will appear. If this happens, connect the USB flash drive and wait until its USB flash drive name appears in the "USB Drive" box.
- 3. If there are multiple USB flash drives connected to the computer, click the [▼] button to the right of the "USB Drive" box and select the name of the drive where you want to install Network Connection.

4. Click the [Next >] button.

- This installs Network Connection on the specified USB flash drive. The message "Wizard ended normally." appears on the display after installation is complete.
- **5.** Click [Exit] to close the token wizard screen.

To use a USB token to connect a computer to the projector via a wireless LAN

Connect the USB token to the computer's USB port and then double click the Network Connection icon in the token. After Network Connection starts up, you can perform the same operations you do when Network Connection is installed on a computer.