Panasonic

Network Disk Recorder
IP Quick Setup Tool

Operating Instructions

Model No. WJ-ND300

Before attempting to connect or operate this product,
please read these instructions carefully and save this manual for future use.

Contents

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Preface

By using this software, the following settings of the digital disk recorder WJ-ND300 can be configured on a PC via a network.
• Network settings
• Registration of cameras, and deletion/edit of the registered cameras
IP addresses of the cameras connected to the WJ-ND300 can be automatically assigned with this software.
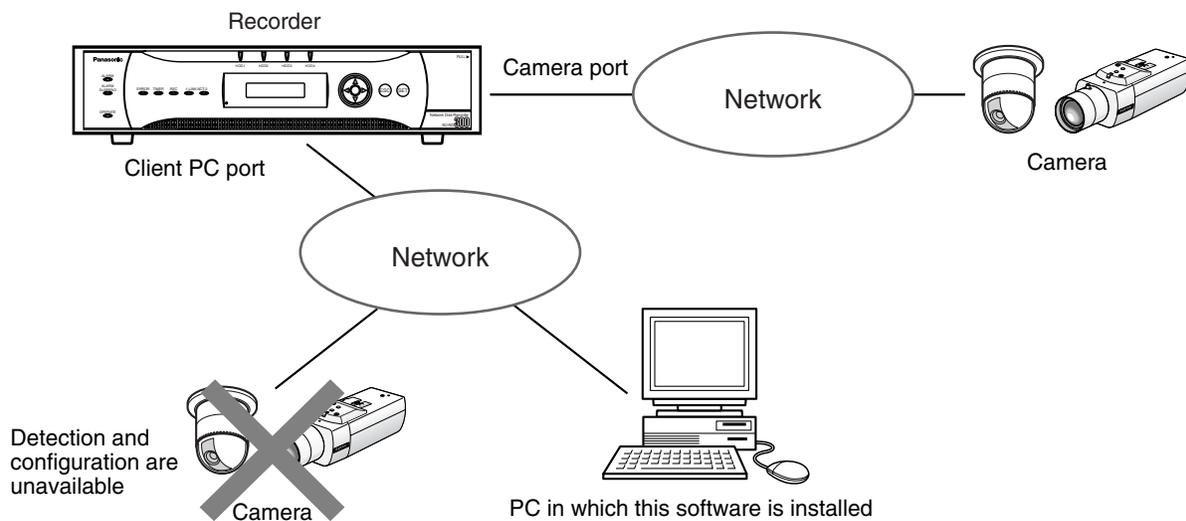When using multiple network disk recorders, it is necessary to configure the above settings independently.
This software works only when the software version of the WJ-ND300 is 3.00 or later.
When failed to configure the above settings with this software, configure them using the setup menu of the WJ-ND300. To configure the settings of the connected cameras, use the setup software of the cameras.
Refer to the setup instructions (PDF) of the WJ-ND300 or the operating instructions of the camera for further information.

System Configuration

To configure the settings with this software, connect the PC in which this software is installed to the client PC port of the WJ-ND300 and the camera to the camera port of the WJ-ND300. When the camera is connected to the client PC port, it is impossible to detect and configure the camera.

Recorder

Camera port

Network

Camera

Client PC port

Network

Detection and configuration are unavailable

Camera

PC in which this software is installed

Important:
• This software is inoperable in a different subnet over a router.
• The WJ-ND300 can be detected and configured using this software. However, for enhancing security, this software will not detect the WJ-ND300 when 20 minutes have passed after the power is turned on once the default settings are changed.
  To detect the WJ-ND300 after the settings have been changed, click the [Available] button of "IP Setup Tool" on the "NW Camera Setup" page (under the "Camera" page of the WJ-ND300 setup menu). Refer to the setup instructions (PDF) of the WJ-ND300 for further information.
• Depending on the model of camera, this software will not detect it when 20 minutes have passed after the power is turned on once the default settings are changed. Refer to the operating instructions of the camera in use for further information.

System Requirement for a PC

This software is operable when installed on a PC that meets the following system requirements.

OS   Microsoft® Windows® 2000 Professional SP4
                          Microsoft® Windows® XP Professional SP2
                          Microsoft® Windows® XP Home Edition SP2
CPU   Intel® Pentium® 4 1.4 GHz or faster
Memory   512 MB or more
Monitor   1024 x 768 pixels or more
Network interface   100 Mbps Network interface card must be installed
Adobe® Reader   Required to read these operating instructions.When the Adobe® Reader is not installed
                          on the PC, download the latest Adobe® Reader from the Adobe web site and install it.

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Abbreviations

The following abbreviations are used in these operating instructions.
• Microsoft® Windows® 2000 Professional Service Pack 4 is described as Windows 2000.
• Microsoft® Windows® XP Professional SP2 and Microsoft® Windows® XP Home Edition SP2 are described as Windows XP.

Start/exit the software

Start: Double-click the "IP Quick Setup Tool" icon (ND300IPsetup.exe) to start this software. The software will start and the main window will be displayed.

Exit: Click the [Exit] button on the main window or the [x] button at the top right of the window to exit the software.

Notes:
- When using a PC on which Windows XP SP2 is installed, the security warning window may be displayed when the IP setup tool is started. When this occurred, click the [Unblock(U)] button.
- When multiple network interface cards are installed on the PC, the network adapter selection window will be displayed when the software starts. Select a network adapter to be used.

Main window

Network settings area
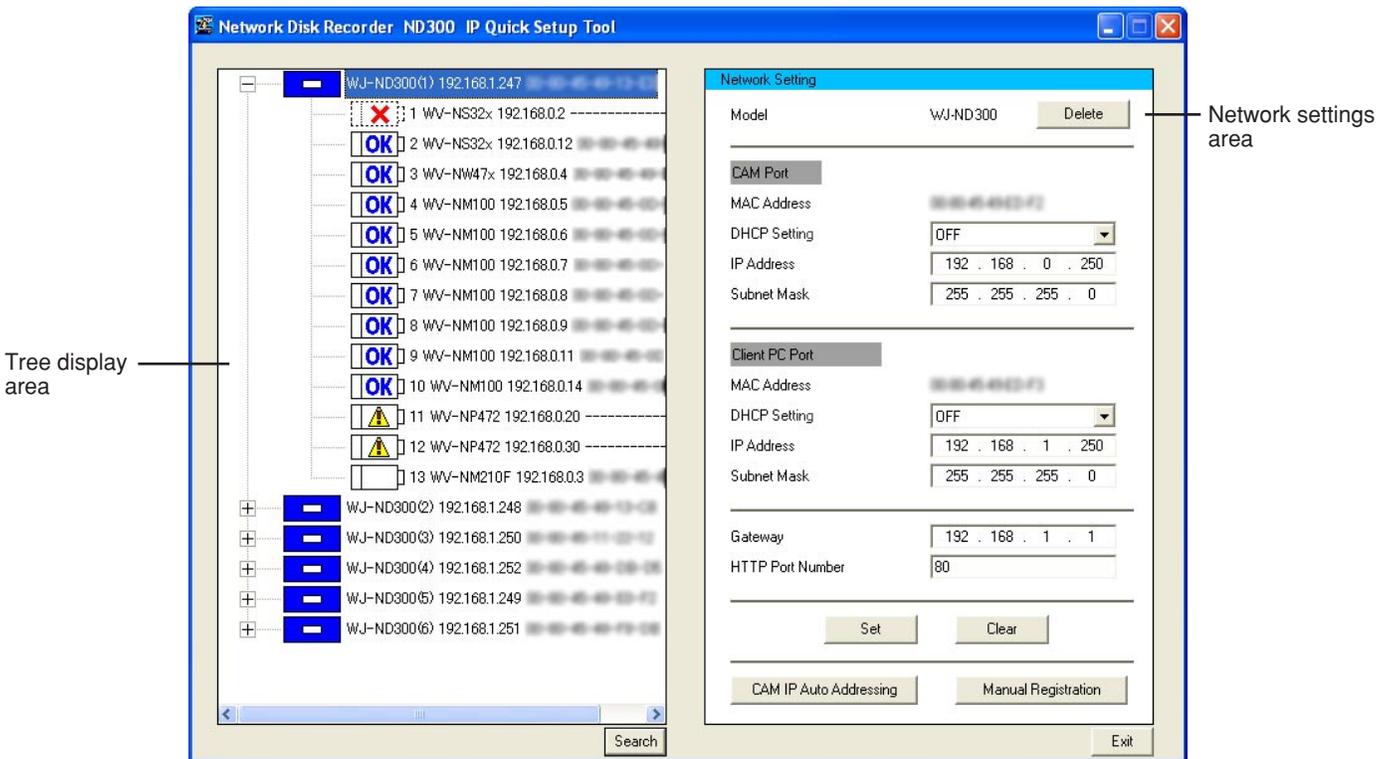
Tree display area

Tree display area
Icons of the detected recorders and cameras will be displayed and their IP addresses and MAC addresses will be displayed. (When failed to detect the camera, its MAC address will not be displayed.) Refer to the next page for further information about the icons.

Network settings area
The network settings of the recorder/camera selected in the tree display area will be displayed.
[Delete] button: Click this button to delete the icon of the selected recorder/camera.
[Set] button: Click this button to determine the edited settings.
[Clear] button: Click this button to cancel the edited settings and return to the previous settings. The settings will return to the previous settings only when the [Set] button is not clicked yet.
[CAM IP Auto Addressing] button*: Click this button to register the edited settings in the recorder. IP addresses will automatically be assigned to the cameras connected to the recorder.
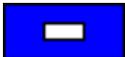**[Manual Registration] button*:** Click this button to register the edited settings to the recorder/camera.

* The [CAM IP Auto Addressing] button and the [Manual Registration] button will be displayed only when the WJ-ND300 is selected in the tree display area.

[Search] button: Click this button to search the connected recorder and the cameras connected to the recorder. The search result will be displayed in the tree area.

[Exit] button: Click this button to exit this software.

Icons in the tree display area

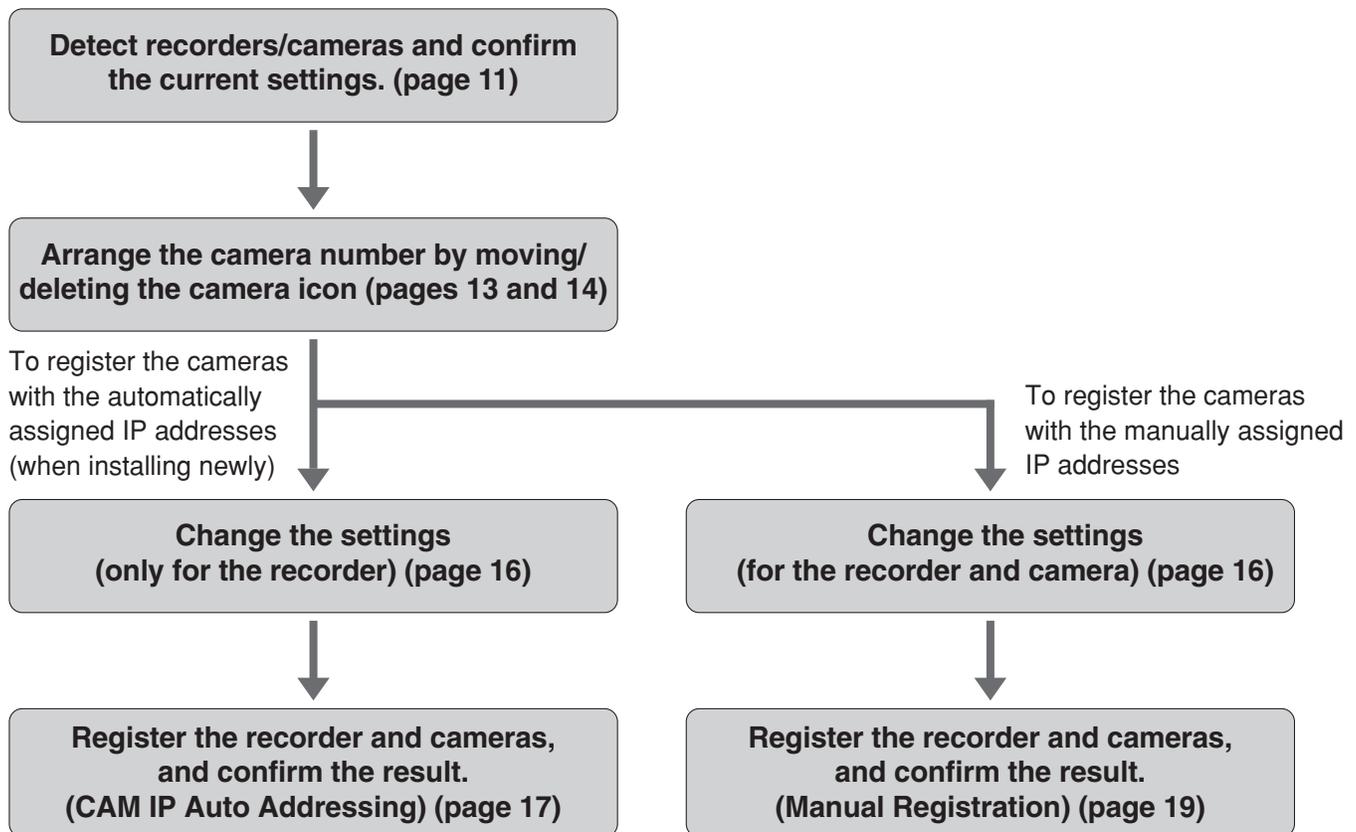| Type	Icon (Name)	Description
Recorder	(Recorder)	Indicates the network disk recorder WJ-ND300. (Normal display)
	(Recorder)	This icon will be displayed when number of the detected cameras that are connected to the recorder is 33 or more.
Camera	(New)	Indicates a camera whose network information is not registered in the recorder. It is necessary to configure the network settings and register them in the recorder.
	(Edited)	Indicates a camera whose network settings are edited with this software. To apply the edited settings to the recorder/camera, it is necessary to register this camera again.
	(Camera in normal status)	Indicates that the network information of this camera is conformed to the information registered in the recorder and the camera. (Camera in normal status)
	(Not applicable)	Indicates that this camera is not applicable with this software to configure the network settings even though the network information of this camera is registered in the recorder. (Including cameras of other manufacturers) Network setting configuration is unavailable with this software.
	(Host name)	Indicates the camera whose host name is registered in the recorder, instead of IP address. Network setting configuration is unavailable with this software. Moving and copying the icon of this camera is also unavailable.
	(Not detected)	Indicates a camera not detected even though its network information is registered in the recorder. For enhancing security, some cameras may not respond (not be detected) even though whose status is normal.
	(Incorrect settings)	Indicates that the network information of this camera is not conformed to the information registered in the recorder and the camera (IP address, etc.) even though the camera is normally detected. This icon will be displayed when there is no available IP address for this camera or when failed to automatically assign an IP address to this camera.
	(33rd or later)	Indicates the 33rd detected camera or later. The settings for this camera will not be applied since the recorder can register up to 32 cameras.
	(Settings changed)	Indicates that the camera number of this camera has been changed since this camera is deleted or moved. It is necessary to register this camera in the recorder again. When this camera is registered in the recorder again, it is necessary to configure the settings since the settings such as the recording rate will return to the default settings.
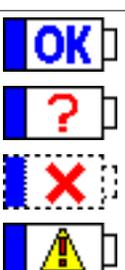
Operation flow

The following settings can be configured with this software.
  • Network settings of the recorder (Camera port, client PC port)
  • Camera network settings of the recorder (Camera registration for each channel)
  • Network settings of the cameras connected to the recorder (IP address, etc.)
Configure the network settings of the recorder/camera as follows.

Detect recorders/cameras and confirm the current settings. (page 11)

↓

Arrange the camera number by moving/deleting the camera icon (pages 13 and 14)

To register the cameras with the automatically assigned IP addresses (when installing newly)

To register the cameras with the manually assigned IP addresses

Change the settings (only for the recorder) (page 16)

Change the settings (for the recorder and camera) (page 16)

↓

↓

Register the recorder and cameras, and confirm the result. (CAM IP Auto Addressing) (page 17)

Register the recorder and cameras, and confirm the result. (Manual Registration) (page 19)

Important:
  • Any recording currently being performed on the recorder will stop in the processes of "CAM IP Auto Addressing" and "Manual Registration".
  • The model WV-NS202 accepts "Manual Registration" only.

Notes:
  • When using multiple recorders, repeat the above procedures for each recorder.
  • Do not change the network settings of the cameras and register the cameras with the automatically assigned IP addresses when automatically assigning IP addresses to the cameras. (page 17)

The settings for the recorder/camera will be different as follows according to how the registration is made ("CAM IP Auto Addressing" or "Manual Registration").

Setup item			Manual Registration	CAM IP Auto Addressing
Recorder	Camera port	DHCP setting	Edited value	"OFF" only *1
		IP address	Edited value	Edited value
		Subnet mask	Edited value	Edited value
	Client PC port	DHCP setting	Edited value	Edited value
		IP address	Edited value	Edited value
		Subnet mask	Edited value	Edited value
	Default gateway		Edited value	Edited value
	HTTP port number		Edited value	Edited value
	NW camera setup (Manufacturer, MODEL/COM-PRESSION, ADDRESS, Port number)		Cameras will be registered for each channel with edited values.*2	Cameras will be registered for each channel with edited values.*2
	Live image transmission rate		Fixed at "1 ips"	Fixed at "1 ips"
	Rate settings other than the live image transmission rate		Default setting	Default setting
Camera	DHCP setting		Edited value	Fixed at "OFF"
	IP address		Edited value	Auto incremented value (+1) starting from the IP address of the camera port of the recorder *3
	Subnet mask		Edited value	Same value as for the camera port of the recorder
	Gateway		Edited value	Same value as for the default of the recorder
	HTTP port number		Edited value	Fixed at "80"

*1 "CAM IP Auto Addressing" is available only when "OFF" is selected for the DHCP setting of the camera.
*2 The compression method will automatically be applied (JPEG/M-JPEG).
*3 Check if the same IP addresses are not in use already even vacant IP addresses are searched and assigned automatically. When the message saying that no IP address is available is displayed, check the settings and perform "Manual Registration".
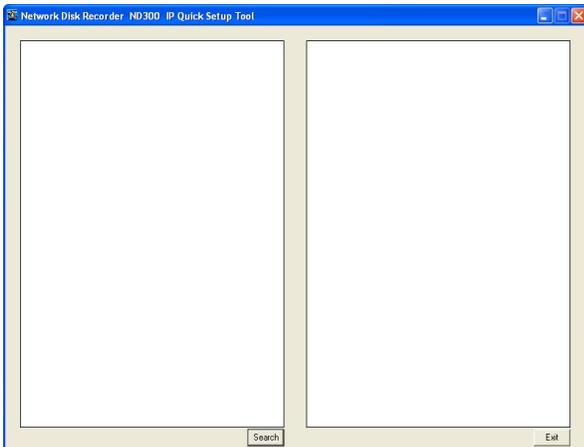
Detect recorders/cameras and confirm the current settings

The detected recorders/cameras will be displayed with icons.
The current network settings of the selected recorder/camera will be displayed in the network setting area.

Screenshot 1
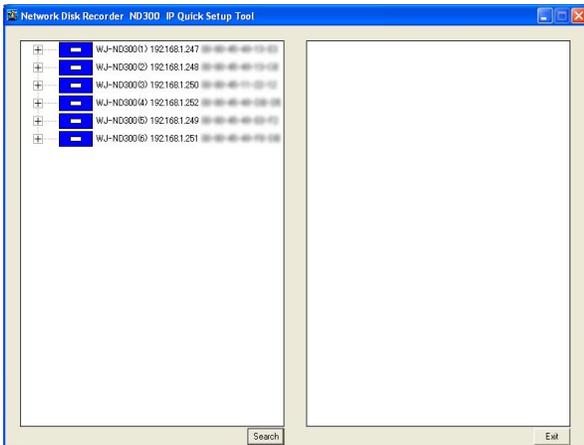Start operation when displaying the main window.

Step 1
Click the [Search] button.

Screenshot 2
The search processing window will be displayed, and then the search result will be displayed.


Step 2
Click the icon of the recorder/camera whose settings are to be checked.

Notes:
- When "+" displayed on the left of the recorder icon is clicked, the icons of the camera registered already or detected newly will be displayed.
- When the PC and multiple recorders are on the same network, multiple icons (up to 16) will be displayed.
- Order of the recorder icon displayed in the tree display area will change each time search is executed.

The network settings of the selected recorder/camera
will be displayed.
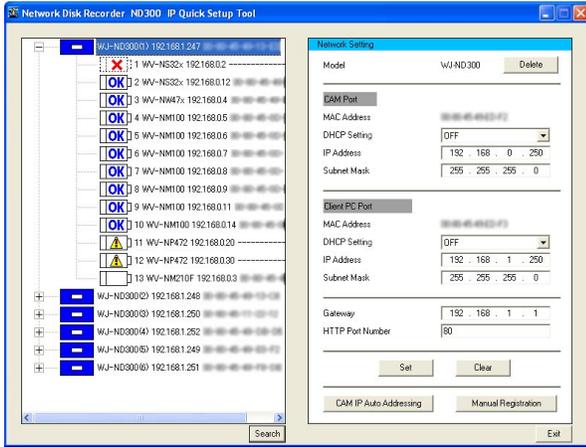
Notes:
• When "ON" is selected for the host authentication
function on the recorder, it is impossible to search
recorders using a PC that is not allowed to edit the
network settings of the recorder.
• When search is executed by multiple PCs simultane-
ously, cameras may not be searched correctly.

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Arrange the camera number by moving/deleting the camera icon

The camera numbers will be assigned to each camera channel of the recorder in order of the camera icons displayed in the tree display area.
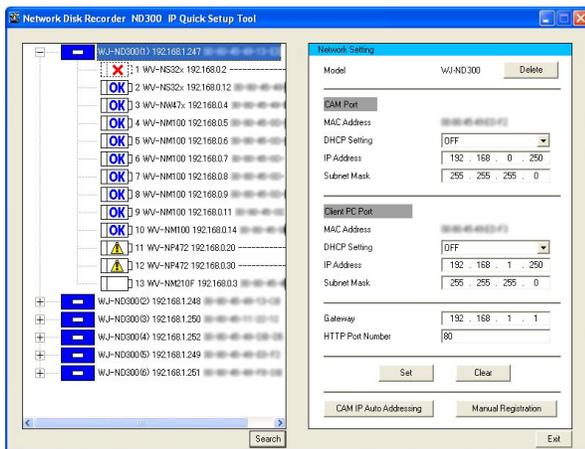The camera numbers can be changed by changing the order of the icons in the tree display area.
By deleting the icons of the cameras from the tree display area, the deleted camera will not be registered. It will be useful to prevent registering unwanted cameras.

Move a camera icon

Screenshot 1

Start operation when the search result is displayed on the main window.

Step 1
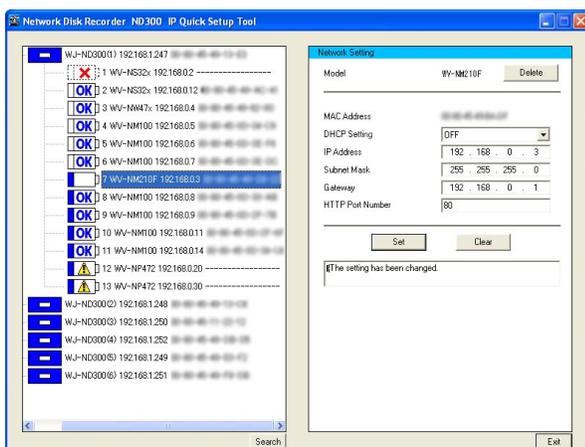
Drag the desired camera icon and drop to the desired point. (Dropped between 6 and 7 on screenshot 2.)

Note:
Moving and copying the icon is unavailable when the respective camera is registered with the host name.

Screenshot 2

The camera icon will be moved.

Note:
When multiple recorder icons are displayed, the camera icon can be copied onto the other recorder by drag and drop.

Delete a camera icon

Start operation when the search result is displayed on the main window.

The settings of the selected camera will be displayed.

Step 1

Click to select the icon of the camera not to be used with the recorder.

Step 2

Click the [Delete] button.

Step 3

Click the [OK] button when the confirmation window is displayed.

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Screenshot 3

The selected camera icon will be deleted.
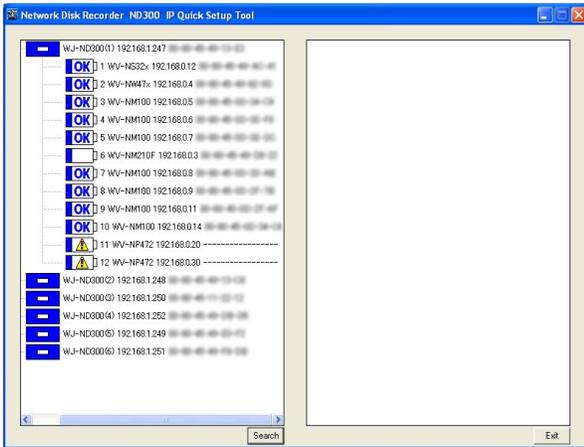
Notes:
 • When the selected icon is deleted, the camera icons below the deleted icon will move up.
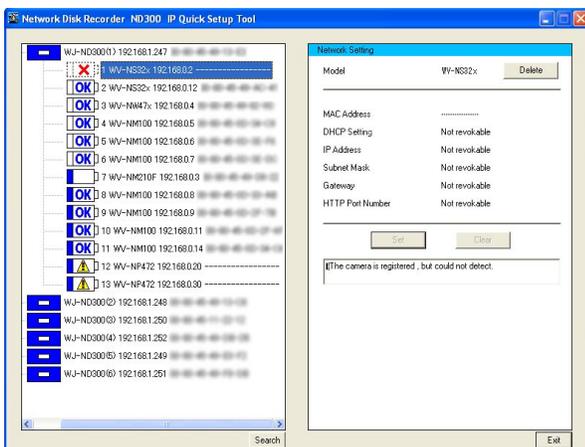 However, the camera number of the camera registered with the host name (displayed with " URL ") will not be changed.
 • When the [Delete] button is clicked after selecting the recorder icon with " ➖ ", the selected recorder icon will be deleted from the tree display area.

Important:
 When the camera number is changed once, the settings such as the recording rate will become "OFF" after registration. It is necessary to configure the settings again.

Edit the settings

Edit the network settings of the recorder/camera such as IP address.

Start operation when the search result is displayed on the main window.

Edit the network settings of the recorder/camera such as IP address.

Click the [Set] button after editing the settings.

Notes:
- It is possible to cancel the settings edited in step 1 and return to the previous settings by clicking the [Clear] button when the [Set] button is not clicked yet.
- When the settings are changed once, the respective camera icon will turn to the edited icon ( ).
- To register the newly detected camera ( ) without changing the network settings, click the [Set] button without changing the settings and display the edited icon ( ).
  The camera respective to the edited icon will be registered in the recorder.
- When IP addresses are to be automatically assigned, do not change the settings of the cameras. When the camera settings are changed, the [CAM IP Auto Addressing] button will become unavailable. In this case, click the [Search] button again.
- When the recorder settings are edited, registration will be unavailable until the [Set] button or the [Clear] button is clicked.

Register the recorder and cameras, and confirm the result (CAM IP Auto Addressing)

Register the edited settings in the recorder and the automatically assigned IP addresses in the cameras.

Start operation when the search result is displayed on the main window.

Select the icon of the recorder to be registered.

Click the [CAM IP Auto Addressing] button.

Note:
Select "OFF" for the DHCP setting of "CAM Port" in advance since the [CAM IP Auto Addressing] button will become unavailable if "ON" is set.

Click the [OK] button when the confirmation window is displayed.

Important:
• Automatically incremented value (+1) starting from the IP address of the camera port of the recorder will be assigned to the cameras orderly.
The subnet should be "255.255.255.0" since the value will be determined at the fourth octet of the IP address. When the subnet cannot be not "255.255.255.0", register recorders/cameras manually.
The cameras displayed in the tree display area are subject to be registered in the recorder using "CAM IP Auto Addressing". Delete unwanted cameras in advance.
• Any recording currently being performed on the recorder will stop in the process of "CAM IP Auto Addressing".
• The model WV-NS202 accepts "Manual Registration" only.

Notes:
• IP addresses will not automatically be assigned to cameras that are not applicable with this software (⚠) and cameras registered with the host name (URL).
• IP addresses can automatically be assigned to up to 32 cameras.

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The registration processing window will be displayed, and then the registration result will be displayed.
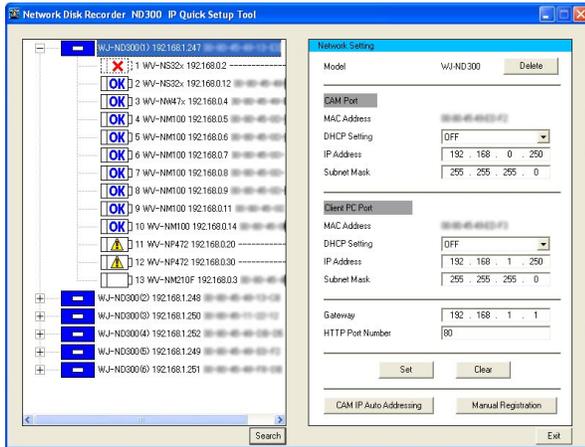

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Register the recorder and cameras, and confirm the result (Manual Registration)

Register the edited settings in the recorder and the camera. When not registered, the edited settings will not be applied to the recorder.

Screenshot 1

Start operation when the search result is displayed on the main window.

Step 1

Select the icon of the recorder to be registered.

Step 2

Click the [Manual Registration] button.

Step 3

Click the [OK] button when the confirmation window is displayed.

Important:
- To register the newly detected camera ( ) in the recorder, the camera icon should be the edited icon ( ). (page 16)
- Any recording currently being performed on the recorder will stop in the process of "Manual Registration".

Notes:
- Edit of the settings of the cameras that are not applicable with this software ( ) and of the cameras registered with the host name (URL) is unavailable.
- IP addresses can automatically be assigned to up to 32 cameras.

The registration processing window will be displayed, and then the registration result will be displayed.
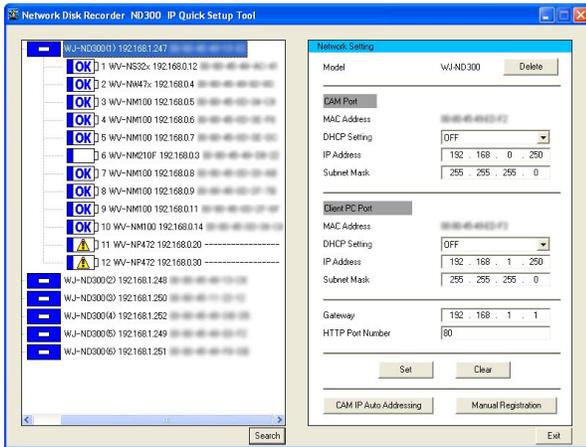
Confirm the registration result. Display live images from the camera and confirm that they are normally displayed.

Notes:
- Display live images from the camera and confirm that they are normally displayed. The live image transmission rate is set to "1 ips" on the recorder. The image compression method of the camera is set to "JPEG" or "M-JPEG".
- The recording rate, camera title, and user name/password of the camera will return to the default when the already registered camera is registered again. It is necessary to configure them again.
- The deleted camera icon will be displayed as the newly detected icon (   ) after registration. (Not registered in the recorder)

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Tips to configure the settings

When having a problem to configure the settings with this software, check and try the solution described below.

Problem	Tip	Reference pages
Need to register the network settings of the newly detected camera without changing.	• Display the network settings of the camera and click the [Set] button without changing the settings. The newly detected icon will turn to the edited icon (▮▯) and the settings will be registered in the recorder.	
The cameras with the same MAC address are displayed with the ✗ and ? icons.	• The IP addresses of the camera registered in the recorder and in the camera are not the same. Configure as follows. ① Delete a camera icon ✗. ② Click the [Set] button after selecting the camera icon ? to turn the icon to the edited icon ▮▯. ③ Select the recorder icon and click the [Manual Registration] button.	
IP address is not displayed when registered after selecting "ON" for the DHCP function of the camera.	• It may take time for the camera to obtain the IP address. Wait for a while and display IP address by executing search. Registration of the camera (registration of IP address, etc.) in the recorder is necessary after displaying the IP address.	
No live image is displayed even though the camera icon OK is displayed.	• When the camera is already registered, the model number of the camera or the HTTP port number may be incorrect. When the user authentication of the camera is "ON", it is necessary to register the user name/password on the "Camera" page of the recorder. Check and edit the settings.	

Troubleshooting

Contact your dealer if a problem cannot be solved even after checking and trying the solution or a problem is not described below.

Symptom	Cause/solution	Reference pages
The recorder is not detected using this software.	• Is the Ethernet cable firmly connected to the 100BASE-Tx port? Confirm the cable is firmly connected.	–
	• Is the connection indicator of the 100BASE-Tx port lit? When it is not lit, connection to a LAN is not established or a network is not working correctly. Confirm that the connection indicator of the 100BASE-Tx port is lit. Refer to a system administrator if it is not lit.	–
	• Is the hub installed between the recorder and a network applicable for 100 Mbps? When the hub is not applicable for 100 Mbps, the recorder may not be detected correctly.	–
	• Has 20 minutes passed after the default settings of the recorder such as IP address had been changed? The recorder can be detected only 20 minutes after changing the default settings. To detect the recorder after the settings have been changed, click the [Available] button of "IP Setup Tool" on the "NW Camera Setup" page (under the "Camera" page of the WJ-ND300 setup menu. The recorder can be detected only for 20 minutes.	Setup Instructions (PDF)
	• Isn't the host authentication function set to "ON"? Is the PC (host) in use to search allowed to edit the network settings of the recorder? When the host authentication is "ON", use a PC (host) that is allowed to edit the network settings of the recorder.	Setup Instructions (PDF)
	• Is the DISK CONFIG MENU of the recorder being operated, or is the recorder in the process of the measurement operation? When the DISK CONFIG MENU of the recorder is being operated or when the measurement operation is being executed, the settings cannot be configured. Try to search the recorder after the DISK CONFIG MENU operation or the measurement operation is finished.	Setup Instructions (PDF)

Symptom	Cause/solution	Reference pages
Cameras cannot be detected from the recorder.	▶ • Has 20 minutes passed after the default settings of the camera such as IP address had been changed? Some models can be detected only 20 minutes after changing the default settings. To apply the settings, reboot the camera.	Operating instructions of the camera
	▶ • When multiple recorders are used, some models cannot be detected correctly. (Some recorders may detect them and some may not.) In this case, register the camera using the WJ-ND300 setup menu.	–

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