



Setup Instructions

Extension Software

Model No. **WV-SAE303W**



Thank you for purchasing our product.

- Please read this document carefully, and use the product safely and correctly by following the instructions.
- The model number is abbreviated in some descriptions in this manual.

Preface

Product outline

The Extension Software WV-SAE303W (hereinafter, this product) is designed to enhance the usefulness of optional network cameras. By using this product, it is possible to count the number of people entering or leaving a store or building while monitoring images.

Important:

- For information on the supported models and firmware versions, expansion software, and each type of tool, refer to the following URL for details.
<https://i-pro.com/global/en/surveillance/training_support/support/kms/>

Features

- With this product it is possible to recognize people and count the number of people that have gone over a preconfigured line, and then use this information to provide statistical processing.
- By using the supplied “People Count Setting Tool”, you can easily configure settings for counting people.
- By using the supplied “People Count Output Tool”, you can display graphs and tables of items such as the total number of people entering or leaving a store, the number of people entering or leaving each hour, and the number of people entering or leaving each floor.

* In the above URL, check the models that support this function.

Specifications

The following are the main specifications.

People count method	Cross line
Number of lines	1
Application	Counting people entering and leaving (installed inside buildings) stores or other buildings
Counting tool	Included with this product (People Count Output Tool)
Number of cameras that can be managed	Max of 96 cameras (The data acquisition intervals increase according to the number of cameras)
People count result display function	Yes
Group counting function	Yes
Automatic acquisition from the camera function	Yes
Number of days data can be saved (on the camera)	Internal memory: 1 day SD memory card (4 GB or more): 3 months* ¹
Number of days data can be saved (on the PC)	10 years * Data is deleted when 10 years has passed.

*¹ When the personal computer (hereinafter PC) is being maintained for repairs or other reasons, because count data can be saved for long periods on the camera side, we recommend using an SD memory card.

For more information about the compatible SD memory card, please refer to the Installation Guide of the respective camera.

SD memory cards with a capacity of less than 4 GB cannot be used.

About the setup instructions

This PDF manual contains explanations on how to install “Extension Software” to network cameras, how to install the supplied “People Count Setting Tool” and “People Count Output Tool” to PCs, and how to configure the “People Count Setting Tool”. This product is intended for the use after the registration of “Extension Software” to network cameras. Be sure to refer to the operating instructions of the network cameras in use together with this manual. The illustrations of the screens of the network camera used in these operating instructions may be different depending on the network camera in use.

For information on the settings and operations for the “People Count Output Tool”, refer to the “Operating Instructions” of the WV-SAE303W.

The screens used in PDF manual show the case of WV-S4150. Depending on the model used, the screens shown in the explanations may differ to the actual camera screens.

Adobe® Reader® is required to read these operating instructions (PDF). When the Adobe® Reader® is not installed on the personal computer (hereinafter, PC), download the latest Adobe® Reader® from the Adobe web site and install it.

Authentication

Secure authentication information (passwords) of the “People Count Output Tool” from third-parties.

System requirements

The following is the required PC environment for the PCs that operate cameras installed with “Extension Software” of this product, and “People Count Setting Tool” and “People Count Output Tool”.

CPU	Intel® Core™ i5-2400 or higher, Intel® Core™ i7-860 or higher
Memory	4 GB or more
Network interface	10BASE-T or 100BASE-TX 1 port
Image display function	Resolution: 1024 x 768 pixels or more High-resolution monitor: 3840 x 2160 pixels or more
Supported operating systems/browsers	When using Microsoft Windows 10 (32/64 bit) Windows Internet Explorer 11 (32/64 bit) When using Microsoft Windows 8.1 (32/64 bit) Windows Internet Explorer 11 (32/64 bit) When using Microsoft Windows 7 (32/64 bit) Windows Internet Explorer 11 (32/64 bit)

Important:

- When using a PC that does not meet the above requirements, displaying of images may become slower or the web browser may become inoperable.
- In order to use the record creation function of “People Count Output Tool”, Microsoft Office Excel 2010 or a higher version must be installed.
(Operations have been confirmed for Microsoft Office Excel 2010, 2013, and 2016.)
- When using “People Count Setting Tool” or “People Count Output Tool”, enable “Smaller - 100% (default)” of “Make text and other items larger or smaller” in “Appearance and Personalization” of “Control Panel”. The screen may be unstable if this is not enabled.
- For Microsoft Windows 8.1, use “Classic UI design”. Operations cannot be made with “Modern UI design”.
- When starting up this software, do not shut down or log off from the PC. When logging off or shutting down the PC, close “People Count Output Tool”.

Network requirements

The following is the required network environment when using cameras installed with this product and “People Count Output Tool”.

When using the product in a local environment

Use with a LAN cable.

When using the product in an Internet environment

Use with a Internet line assigned with a global IP address.

* Please prepare the environment for connecting to the Internet by yourself (a contract with a separate provider and devices such as modem or router are required). There is no limitation for the provider that can be used.

[Restrictions]

- Routers must have port forwarding functions.
- Wireless LANs cannot be used.
- IPv6 is not supported.
- When the camera side uses a dynamic DNS service (such as Viewnetcam.com), if the router connected to the camera has multistage connections, data cannot be obtained via the Internet.
- If communications from the PC side (“People Count Output Tool” side) are restricted by a firewall on the camera side, data cannot be obtained via the Internet.
- If communications from the PC side (“People Count Output Tool” side) are restricted by a proxy on the camera side, data cannot be obtained via the Internet.
- If there is a proxy server on the camera side, TCP alarm notification cannot be received on the PC side (“People Count Output Tool” side).
- When a dynamic DNS service is used on the PC side (“People Count Output Tool” side), if the router connected to the “People Count Output Tool” side has multistage connections, TCP alarm notification cannot be received.
- If communications from the camera side are restricted by a firewall on the PC side, TCP alarm notification cannot be received on the PC side (“People Count Output Tool” side).
- If communications from the camera side are restricted by a router on the PC side, TCP alarm notification cannot be received on the PC side (“People Count Output Tool” side).
- If communications from the camera side are restricted by a proxy on the PC side, TCP alarm notification cannot be received on the PC side (“People Count Output Tool” side).
- If the PC side (“People Count Output Tool” side) doesn't use a fixed global IP address or if an IP address is not obtained from the dynamic DNS service, TCP alarm notification cannot be received.

Important:

- Because this product is used connected to a network, it may be possible for this product to receive the following types of damage or problems.
 - ① Information from this product is leaked
 - ② Malicious third-parties may illegally operate this product
 - ③ Malicious third-parties may interfere with or stop this productTo avoid these types of troubles, you must take responsibility and implement sufficient network security measure including the following types of measures.
- Use a firewall, etc. and use this product in a secure network environment.
- When using this product in a system that is connected to a computer, make sure to periodically check for and remove viruses or other unauthorized programs.
- To protect from malicious attacks, control users by using user authentication and configuring user names and passwords.
- After accessing this product with administrator privileges, make sure to close all of the browsers.
- Periodically change the administrator password. Secure authentication information (user names and passwords) from third-parties.
- In order to prevent information such as people count data and authentication information (user names and passwords) from being leaked from the network, implement measures such as restricting access to servers and other connected devices that store this information with user authentication.

Trademarks and registered trademarks

- Microsoft, Windows, Internet Explorer, and Microsoft Excel are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.
- Intel and Intel Core are trademarks of Intel Corporation or its subsidiaries in the U.S. and/or other countries.
- Adobe, Acrobat Reader, and Reader are either registered trademarks or trademarks of Adobe Systems Incorporated in the United States and/or other countries.
- All other trademarks identified herein are the property of their respective owners.
- Microsoft product screen shot(s) reprinted with permission from Microsoft Corporation.

Abbreviations

The following abbreviations are used in these operating instructions.

Network cameras are described as cameras.

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- ④ ANY CLAIM OR ACTION FOR DAMAGES IN REGARDS TO THE DELETION OR LEAKING OF IMAGE DATA, AUDIO DATA, OR SETTING DATA SAVED ON COMPUTERS.
- ⑤ ANY CLAIM OR ACTION FOR DAMAGES ARISING FROM THE LEAKING OF PEOPLE COUNT DATA, SETTING DATA, OR AUTHENTICATION DATA (USER NAMES AND PASSWORDS) FROM THE NETWORK BY ILLEGAL ACCESS OR MALICIOUS THIRD PARTIES.
- ⑥ LOSS OF REGISTERED DATA CAUSED BY ANY FAILURE (INCLUDING INITIALIZATION PERORMED DUE TO FORGETTING AUTHENTICATION INFORMATION SUCH AS USER NAMES AND PASSWORDS).

Personal information/Privacy protection

- Information that can determine people recorded with a system that uses this product, is applicable to “Personal information” as stated in “Act on the Protection of Personal Information”.*
Handle all recorded information in accordance with the law.
* Refer to [Cases corresponding to personal information] for information on “Guidelines (general rule edition) for Act on the Protection of Personal Information” from the Personal Information Protection Commission (Japan).
- In regards to the installation and use of the network camera, it is the responsibility of the customer using the network camera to make considerations for the privacy of recorded individuals and their portrait rights, and appropriately handle personal information.*
* It is generally said that “privacy” means the ability of an individual or group to stop information about themselves from becoming known to people other than those whom they choose to give the information. “Rights of portrait” means the right to be safe from having your own image taken and used indiscriminately without consent.

Supplied software

- **People Count Setting Tool (accessory)**
A tool used to easily configure settings for People count. For a function overview, refer to “People Count Setting Tool” (📄 page 20) of “Install and configure the camera” in this manual.
- **People Count Output Tool (accessory)**
An application to create records with the information obtained from the people count information. For a function overview, refer to “Operating Instructions”.

Before using this product

- Use this product at the entrance/exit and indoors where there is stable illumination. (Install cameras indoors even if the cameras are for outdoor use.)
- Attach cameras that will have this product installed to ceilings so that they will be level in regards to the ground.
- Insert the SD memory card (4 GB or more) into the camera before installing the camera.
- The accuracy of measuring the number of people may be reduced in the following situations.
 - [Problems arising from the installation environment]
 - The camera is too close or too far from the ground. (Recommend distance: 3.0 m to 4.0 m)
 - The camera is too close or too far from the entrance/exit door. (Recommend distance: 1.5 m to 2.0 m)
 - The camera is not installed directly above the measurement site. (Example: the camera is installed in a location away from the measurement site)
 - There is strong outside light entering the shooting area that can cause shadows.
 - Outside light (sunlight, headlights, etc.) enters the shooting area.
 - Luminance level of the measuring site is subject to change. (Example: there is a flickering light source that changes the luminance level of the measuring site)
 - Luminance level is too low. (Even if near-infrared illumination is used, the required people counting measurement accuracy cannot be obtained.)
 - [Problems arising from the measuring scene]
 - There are too many people passing through the measuring site. (Guide: if more than 1000 (500 people enter the store and 500 people exit) pass through in 1 hour, the accuracy decreases)
 - People are remaining in the vicinity of the measuring site.
(Example: there is an information area or display racks for stores in the vicinity of the measuring site that cause people to remain in the measuring site)
 - People who you do not want to count are passing through the measuring site.
(Example: there is a camera installed in the entrance/exit of a store and you want to count the number of people entering and leaving the store, and people cross over the measuring line without entering or leaving the store)
 - People who you want to count are not passing over the specified line.
(Example: just before crossing the specified line at the entrance/exit of the store, people turn left and enter the store)
 - People who you want to count are moving too quickly or slowly.
 - The height of people who you want to count is too tall or short.
(Guide: when the camera's height is 3.0 m and the people are below 120 cm or above 190 cm)
 - There is little luminance difference (difference in brightness) between the floor of the measuring site and the people you want to count.
 - The people you want to count are carrying large packages (example: pushing a shopping cart)
 - The people you want to count are not walking by themselves (example: when holding a baby)
 - [Other problems]
 - A setting other than "Fisheye" is selected for "Image capture mode" of the camera.
 - There are 3 or more streams (H.265/H.264) or JPEG image transmissions from the camera.
 - "On(Super Dynamic)" is selected for "Dynamic range mode" of the camera.(WV-X4171, WV-X4571L)
 - "On" is selected for "Wide dynamic range control" of the camera and a level of 30 or higher is selected. (WV-X4173, WV-X4573L)
 - "On" is selected for "Super dynamic range control" of the camera and a level of 30 or higher is selected. (WV-S4151, WV-S4551L)
 - The camera's lens is dirty.
 - The camera is shaking.
- After connecting power to the camera, changing camera settings, or changing the camera angle, the accuracy may be reduced for about 1 minute.
- i-PRO Co., Ltd. takes no responsibility for settings and results of using the settings such as any inconvenience, damage, or injury incurred.

CONTENTS

Preface

Product outline	2
Features	2
Specifications	2
About the setup instructions	3
Authentication	3
System requirements	3
Network requirements	4
Trademarks and registered trademarks	5
Abbreviations	5
Copyright	5
Disclaimer	5
Personal information/Privacy protection	6
Supplied software	6
Before using this product	7

Preparation

Operations flow	9
Determine the installation position of the camera.....	10
Installing the Extension Software.....	11
About the extension software window.....	13
Installing the “People Count Setting Tool”	15
Installing the “People Count Output Tool”	17

Settings

Install and configure the camera	20
Install the camera.....	20
People Count Setting Tool.....	20
Configure the People count settings	22
People count setting screen for the camera	30
Maintenance	32
Limitations/Errors	33

Others.....	39
Handling export/output data	39
Folders/files	40

Operations flow

Before purchasing

Check the compatible models and software versions in the following URL when registering the Extension Software.

<https://i-pro.com/global/en/surveillance/training_support/support/kms/>

Determine the installation position of the camera
👉 page 10

Check if there is a good position to install the camera.



1

Install the Extension Software
👉 page 11 to page 14



2

Install the “People Count Setting Tool”
👉 page 15 to page 16



3

Install the “People Count Output Tool”
👉 page 17 to page 19



4

Install and configure the camera
👉 page 20 to page 29

Use “People Count Setting Tool” to configure the settings for People count.



Start operations

Use “People Count Output Tool” to add up the count for the number of people. Refer to the “Operating Instructions” for details.

Determine the installation position of the camera

First, determine the installation position of the camera.

Determine the installation location according to the following conditions (“Camera height”, “Camera installation position” and “Camera installation direction”). Also check the information in “Before using this product”.

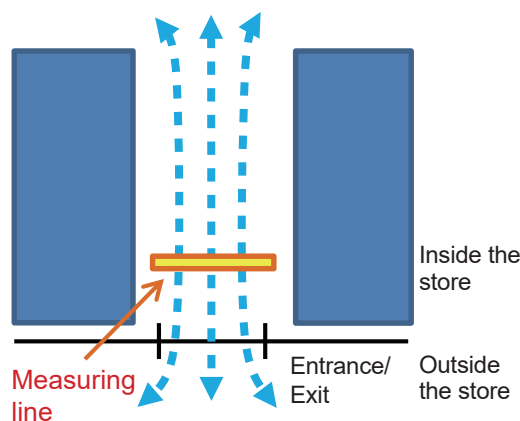
- Camera installation location

Before determining the installation location, observe the line of movement for people you want to count and the line of movement for people passing through the nearby area.

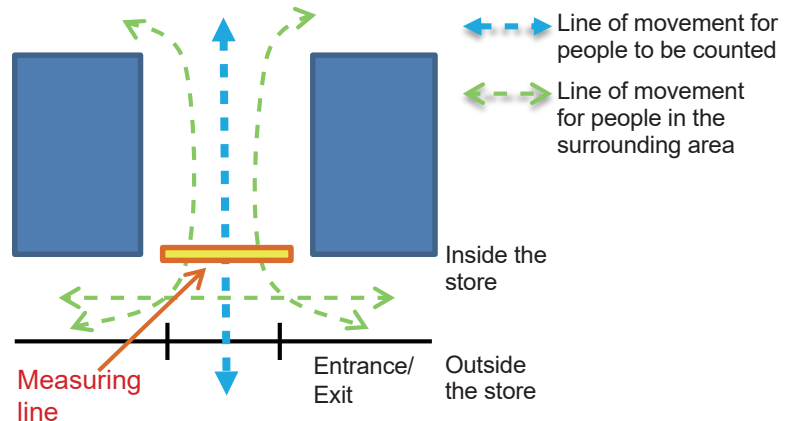
- We recommend locations where there is 1 line of movement passing through the entrance/exit.

- × We do not recommend locations with multiple lines of movement because people who are not entering or leaving the store pass through there.

- 1 line of movement



- × multiple lines of movement



- Camera height

2.5 m to 4.0 m height from the floor (we recommend 3.0 m to 4.0 m)

* When the height is 2.5 m to 3.0 m and people walk quickly, people may not be able to be counted and the count for people may tend to be reduced.

- Camera installation position

Distance from the entrance/exit: 1.5 m to 2.0 m

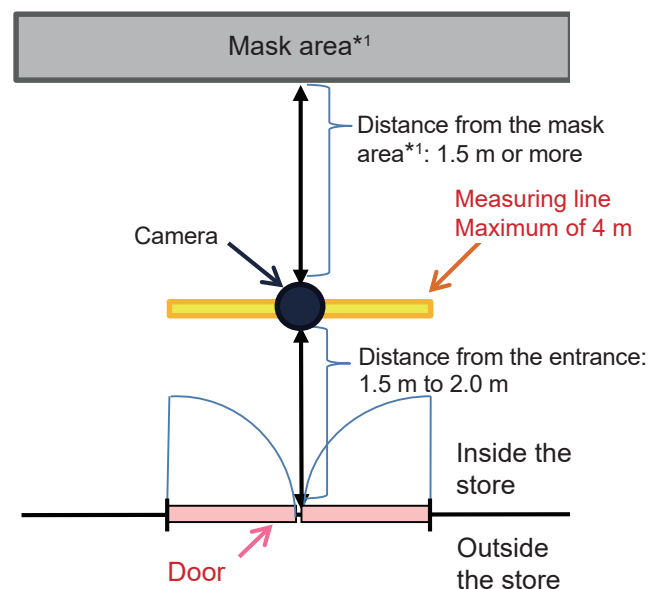
* When there is a sliding door, 1.0 m may be acceptable. However, the count for people leaving the store may tend to be reduced.

Installed in the center of the measuring width (measuring line width = door width [maximum of 4.0 m])

If a mask area is configured, install the camera so that the distance from the mask area to the line is more than 1.5 m.

- Camera installation direction

Install so that the entrance/exit is in one of the 4 directions in the screen



*1 When using a mask area.

Installing the Extension Software

This product needs to be activated by “Registration Key” issued by Key Management System before you start using. The registration of the Registration Key is only operable by users whose access level is “1. Administrator”. Refer to the operating instructions of the camera for how to configure the access level.

Step 1 Update the camera firmware.

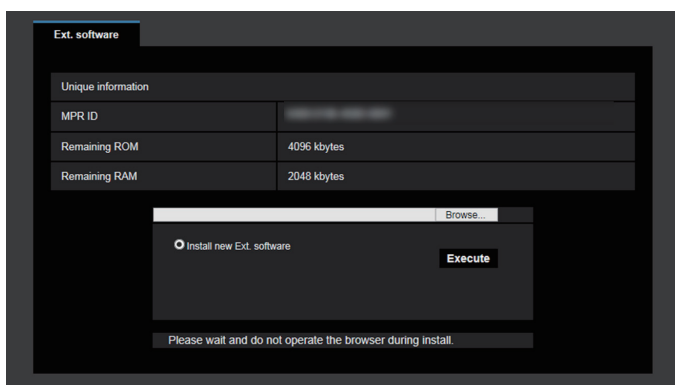
- (1) Access the following URL, confirm the camera firmware version supported by this extension software, and then save it to the PC.
<https://i-pro.com/global/en/surveillance/training_support/support/kms/>
- (2) Update the firmware for the target camera. Refer to the operating instructions of the target camera for information on how to update the firmware.

Step 2 Install the Extension Software.

- (1) Access the following URL to download the Extension Software and save it onto the PC.
<https://i-pro.com/global/en/surveillance/training_support/support/kms/>
- (2) Enter the following URL on the web browser.
[http://\(the IP address of the camera\)/admin/setup_ext_software.html](http://(the IP address of the camera)/admin/setup_ext_software.html)

Note:

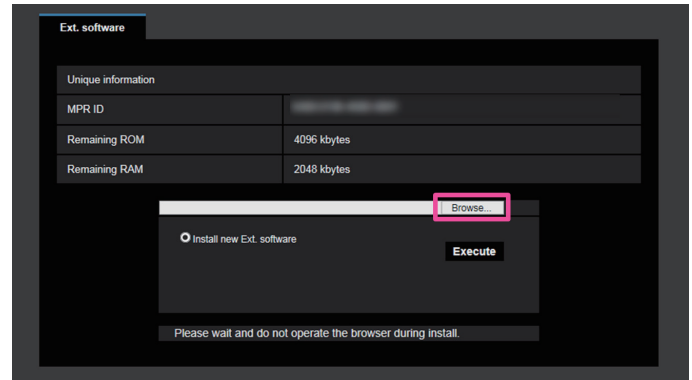
- The “Ext. software” page can be displayed by clicking the [Ext. software >>] button accessing from the setup menu - the “Maintenance” page - the [Upgrade] tab.



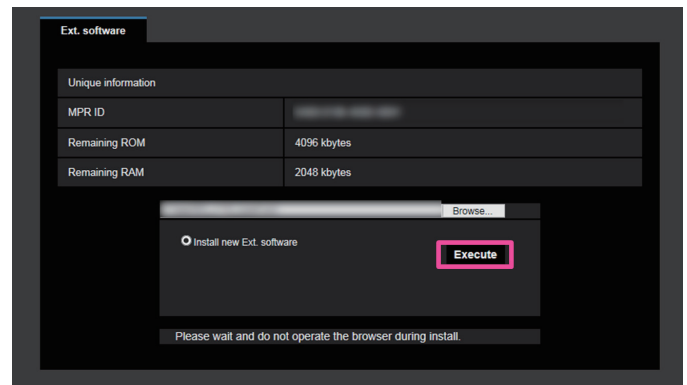
Important:

- Check “Remaining ROM” and “Remaining RAM” of the camera. When the other extension software is already installed, it is necessary to uninstall it or prepare another camera. Refer to page 14 for further information about uninstallation.

- (3) Click the [Browse...] button and designate the downloaded extension software.



- (4) Click the [Execute] button. The installation of the Extension Software will start.



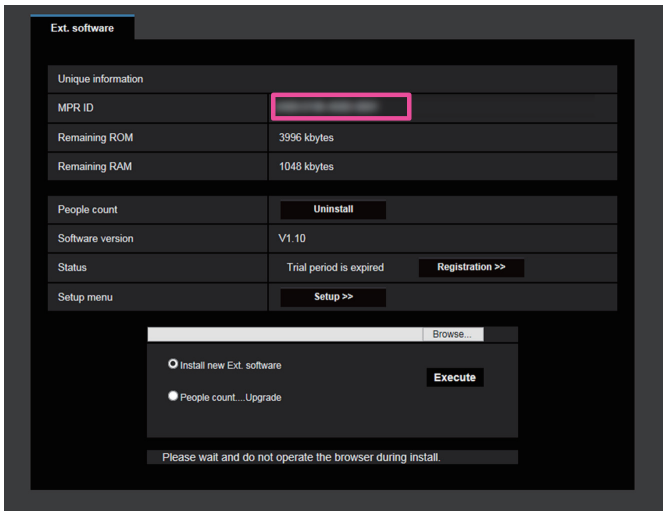
Important:

- Double-byte characters cannot be used for the name of the saving directory.
- Use the file (with an “.ext” extension) specified by us when installing the Extension Software.
- Do not turn off the power of the camera when installing the software. Do not perform any operations until the installation is completed.
- If installation fails, information of the Extension Software will not be displayed. Check the ROM/ RAM volume of the Extension Software and the camera version.

Installing the Extension Software (continued)

Step 3 Obtain the Registration Key.

- (1) Check the MPR ID, Activation Key No. and Registration ID.
 - Enter the following URL in the browser and check “MPR ID”.
`http://(the IP address of the camera)/admin/setup_ext_software.html`



- * The MPR ID can also be checked on the product package.
 - The Activation Key No. and Registration ID are shown on the Activation Key Card.
- (2) Please access and login to the following URL “Key Management System” from your PC or Mobile Phone.
For PC: <<https://kms.business.panasonic.net/ipkms/pc/home.htm>>
Temporary User ID: kmsadmin_reg
Password: hpynBaxb
 - * If this temporary User ID and password does not work, go to the above URL to check the latest temporary User ID and password.For mobile: <<https://kms.business.panasonic.net/ipkms/m-key/>> (To issue the “Registration Key” only.)
 - * Certain mobile phone are not compatible with “Key Management System”.
 - * You may not access “Key Management System” for server maintenance without notice.
 - (3) Please create your User ID and password, if it is the first time to access this system. Please login as a temporary user using the User ID and password written on the web page.
Please register required information and create your account.
 - (4) Enter the registered User ID and password on the “Key Management System” for login.

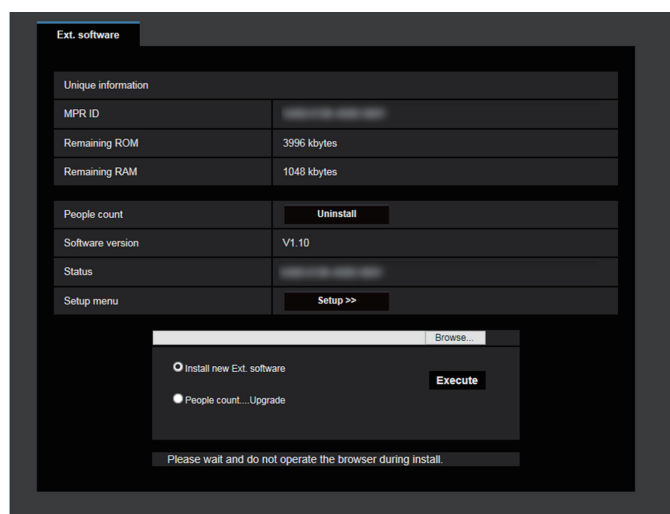
About the extension software window

When the installation of the Extension Software is completed, registration status of the Extension Software and unique information will be displayed. The following operations are available on this window.

- Uninstallation of the Extension Software
- Display of the detailed registration status window
- Display of the extension software setting window
- Updating of the Extension Software

Note:

- It is possible to install up to 2 installations of the Extension Software.
 - The WV-SAE200W Extension Software cannot be installed concurrently with this product.
 - It is impossible to run multiple Extension Software concurrently.
-



Unique information

[MPR ID]

This ID is required to run the Extension Software. Each camera has a unique one.

[Remaining ROM]

Remaining capacity of ROM in the camera to be used for the Extension Software will be displayed. When the Extension Software to be installed requires ROM capacity more than the capacity displayed here, it is impossible to install it.

[Remaining RAM]

Remaining capacity of the RAM in the camera to be used for the Extension Software will be displayed. When the Extension Software to be installed requires RAM capacity more than the capacity displayed here, it is impossible to install it.

Note:

- Capacity that the Extension Software can use may vary depending on the model or version of camera.
-

About the extension software window (continued)

Extension Software

[Uninstall] button

It is possible to uninstall the installed Extension Software.

[Software version]

When the Extension Software is installed, version information of the installed extension software will be displayed.

[Status]

When the Extension Software is installed, registration status of the installed Extension Software will be displayed.

xxxx-xxxx-xxxx-xxxx: When the registration key is displayed, registration of the installed Extension Software is completed. When the registration is completed, it is possible to run the Extension Software.

[Setup >>] button

Displays the setting screen.

Upgrading

Select the installed Extension Software, and then click the [Execute] button to upgrade the Extension Software.

Installing the “People Count Setting Tool”

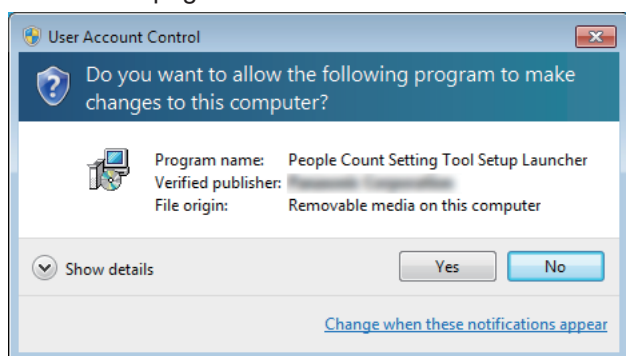
Installation

Step 1 Download “People Count Setting Tool”.

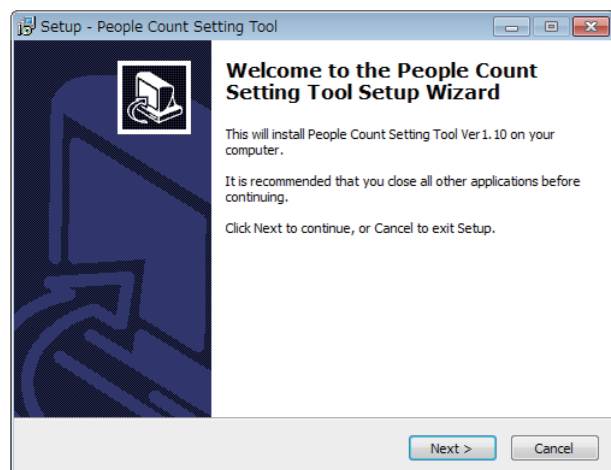
- (1) Access the following URL, download the “People Count Setting Tool”, and save it to the PC.
<https://i-pro.com/global/en/surveillance/training_support/support/kms/>
- (2) Unzip the saved ZIP file.

Step 2 Install “People Count Setting Tool”.

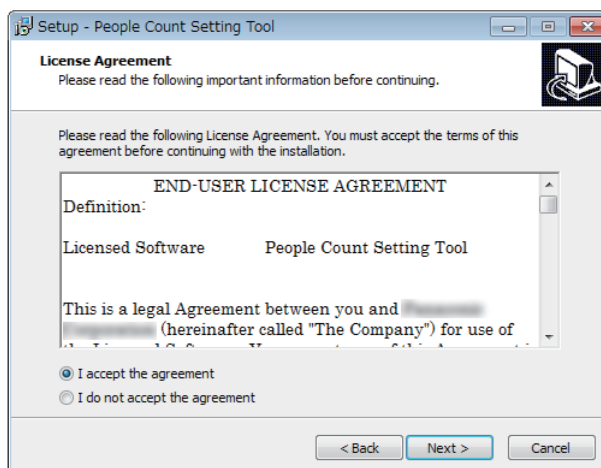
- (1) Open the unzipped folder and double-click “PeopleCountSetting_v***En.exe”.
- (2) Administrator user rights are required in order to install the software. Click “Yes” on the user account control page.



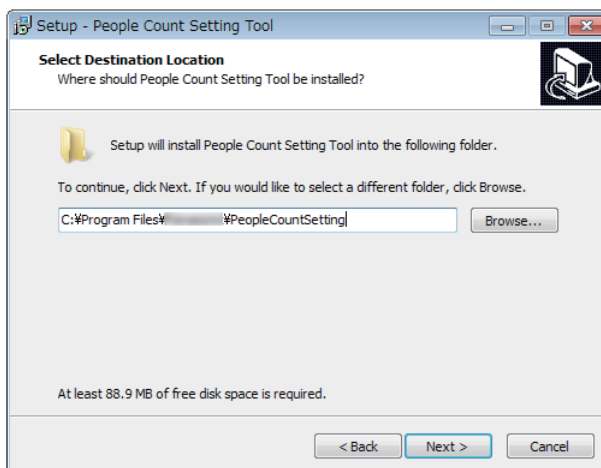
- (3) The installation start page is displayed. Click “Next”.



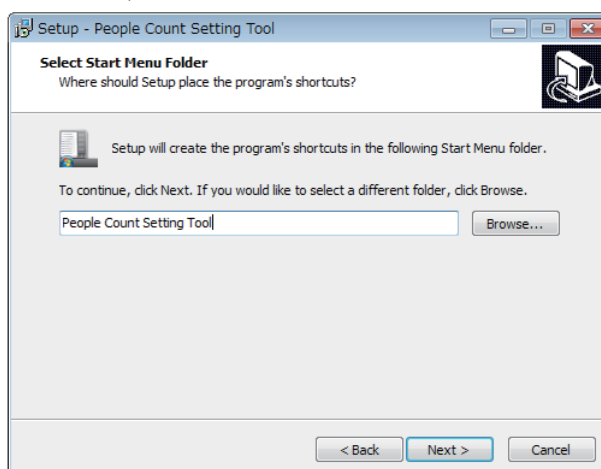
- (4) Read the contents of the Licensing page and if you agree with the terms, click “I accept the agreement” and then click “Next”.
If you cannot agree with the terms, you cannot install “People Count Setting Tool”.



- (5) Specify where the software is saved to. You can change the save destination folder by clicking “Browse...”. After specifying the folder, click “Next”.

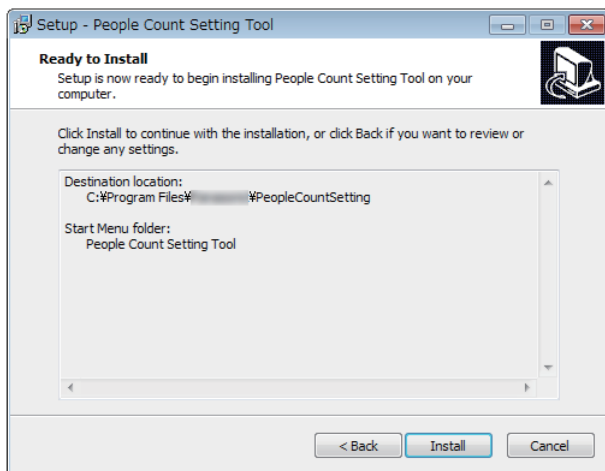


- (6) You can specify a location to create and save a start-menu shortcut to. You can change a different folder by clicking “Browse...”. After specifying the folder, click “Next”.

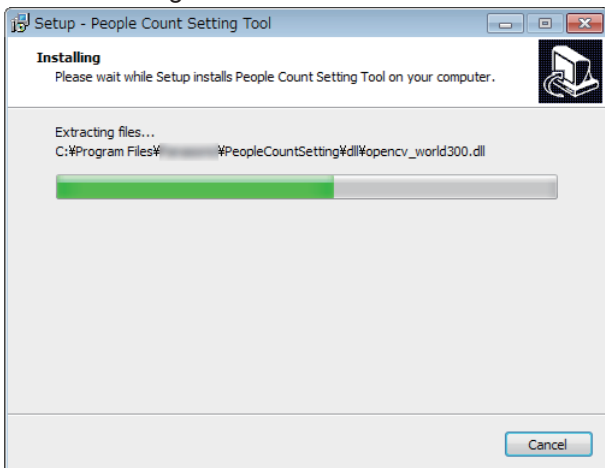


Installing the “People Count Setting Tool” (continued)

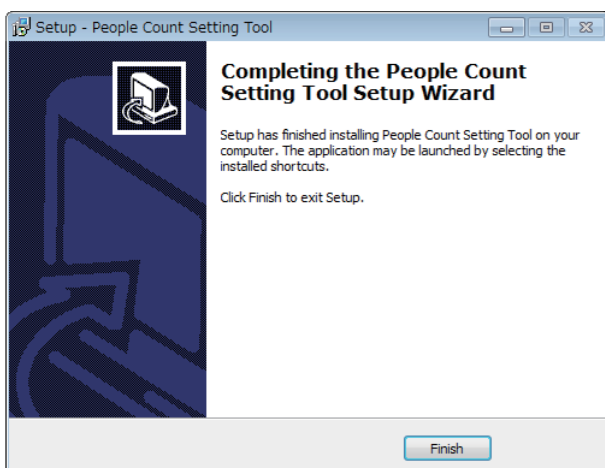
- (7) If there is no problem with the specified installation location and program group, click “Next”.



- (8) Wait until the installation is completed.
- * The following related program is also installed. Do not delete this program. If it is deleted, “People Count Setting Tool” may not operate correctly.
 - Microsoft Visual C++ 2005 Redistributable Package



- (9) Finally, a shortcut for “People Count Setting Tool” is created and saved to the desktop. Click “Finish” on installation completed page to complete the installation.



Important:

- When a folder that stored an uninstalled program from the past is specified, if settings values for that program were saved, they will be applied to the new program.

Uninstallation

Before uninstalling, stop “People Count Setting Tool”. The following lists the uninstallation procedure for each operating system.

<Windows 7>

- (1) Click the “Start” button of the Window mark of the operating system.
- (2) Click “Control Panel” on the right side of the start menu.
- (3) Click “Uninstall a program” under “Programs”.
- (4) Right-click “People Count Setting Tool V*. **” from the program list and then click “Uninstall”.

<Windows 8.1>

- (1) Click the “↓” button at the bottom of the start menu of the operating system.
- (2) Right-click “People Count Setting Tool V*. **” from the application list and then click “Uninstall”.

<Windows 10>

- (1) Click the “Start” button of the Window mark of the operating system.
- (2) Click “Settings” of the gear icon in the bottom left of the start menu.
- (3) Click “Apps”.
- (4) Right-click “People Count Setting Tool V*. **” from the “Apps & features” program list and then click “Uninstall”.

Important:

- All files except for logs are deleted when the program is uninstalled.

Upgrading

Before upgrading, stop “People Count Setting Tool”. The upgrade procedure is almost the same as the installation procedure, however, you do not need to installation location when upgrading. Also, when upgrading the current setting values are kept. For information on the procedure, refer to “Installation” (page 15).

Installing the “People Count Output Tool”

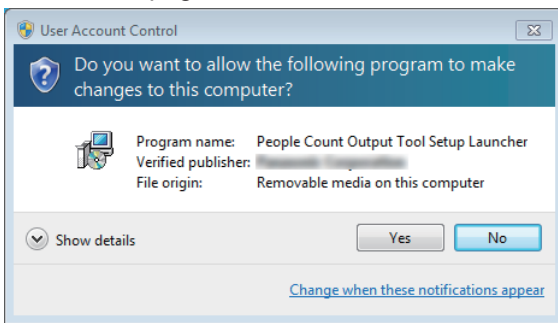
Installation

Step 1 Download “People Count Output Tool”.

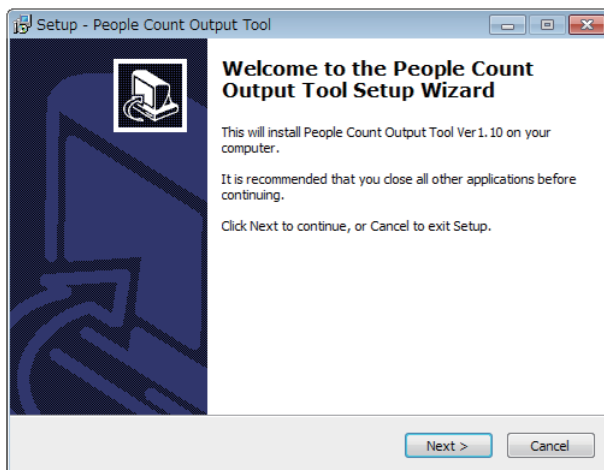
- (1) Access the following URL, download the “People Count Output Tool”, and save it to the PC.
<https://i-pro.com/global/en/surveillance/training_support/support/kms/>
- (2) Unzip the saved ZIP file.

Step 2 Install “People Count Output Tool”.

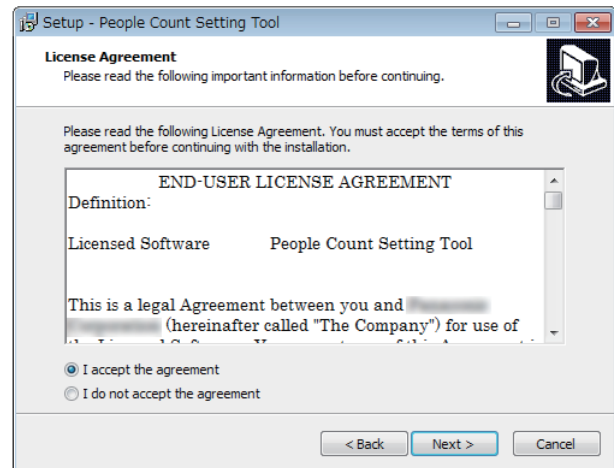
- (1) Open the unzipped folder and double-click “PeopleCountOutput_v**En.exe”.
- (2) Administrator user rights are required in order to install the software. Click “Yes” on the user account control page.



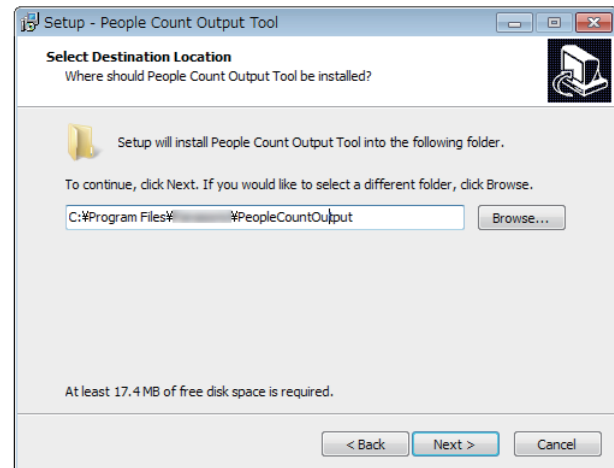
- (3) The installation start page is displayed. Click “Next”.



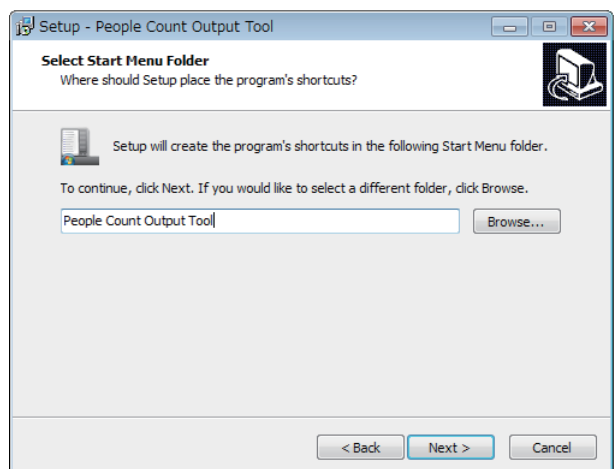
- (4) Read the contents of the Licensing page and if you agree with the terms, click “I accept the agreement” and then click “Next”.
If you cannot agree with the terms, you cannot install “People Count Output Tool”.



- (5) Specify where the software is saved to. You can change the save destination folder by clicking “Browse...”. After specifying the folder, click “Next”.

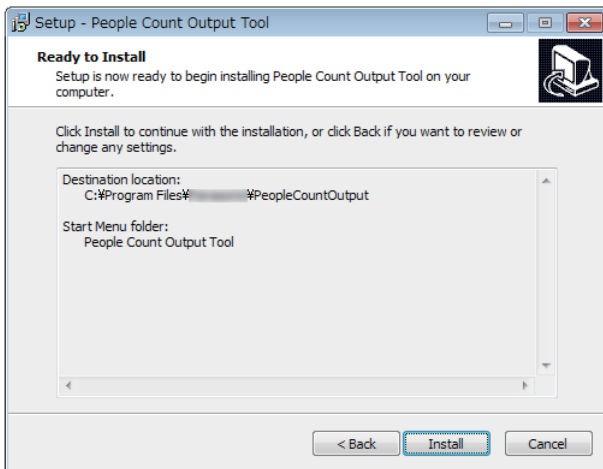


- (6) You can specify a location to create and save a start-menu shortcut to. You can change a different folder by clicking “Browse...”. After specifying the folder, click “Next”.

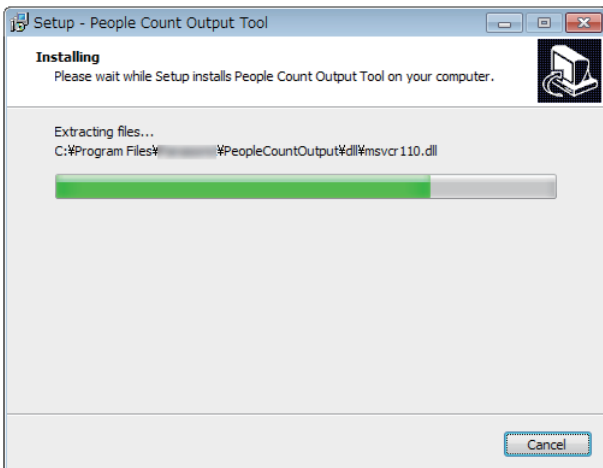


Installing the “People Count Output Tool” (continued)

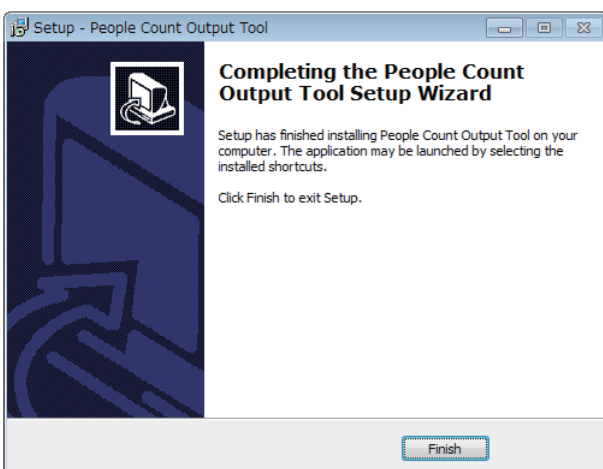
- (7) If there is no problem with the specified installation location and program group, click “Install”.



- (8) Wait until the installation is completed.



- (9) Finally, a shortcut for “People Count Output Tool” is created and saved to the desktop. Click “Finish” on installation completed page to complete the installation.



Important:

- When a folder that stored an uninstalled program from the past is specified, if settings values for that program were saved, they will be applied to the new program.
- If Microsoft Excel is not installed on the PC, a warning message is displayed during installation. If Microsoft Excel is not installed on the PC, the Form output function cannot be used.

Uninstallation

Before uninstalling, stop “People Count Output Tool”. The following lists the uninstallation procedure for each operating system.

<Windows 7>

- (1) Click the “Start” button of the Window mark of the operating system.
- (2) Click “Control Panel” on the right side of the start menu.
- (3) Click “Uninstall a program” under “Programs” category.
- (4) Right-click “People Count Output Tool V*.***” from the program list and then click “Uninstall”.

<Windows 8.1>

- (1) Click the “↓” button at the bottom of the start menu of the operating system.
- (2) Right-click “People Count Output Tool V*.***” from the application list and then click “Uninstall”.

<Windows 10>

- (1) Click the “Start” button of the Window mark of the operating system.
- (2) Click “Settings” of the gear icon in the bottom left of the start menu.
- (3) Click “Apps”.
- (4) Right-click “People Count Output Tool V*.***” from the “Apps & features” program list and then click “Uninstall”.

Important:

- All files except for logs are deleted when the program is uninstalled.

Installing the “People Count Output Tool” (continued)

Upgrading

Before upgrading, stop “People Count Output Tool”.

The upgrade procedure is almost the same as the installation procedure, however, you do not need to installation location when upgrading. Also, when upgrading the current setting values are kept.

For information on the procedure, refer to “Installation” (☞ page 17).

Install and configure the camera

Install the camera

Install the camera in the position determined in “Determine the installation position of the camera” (☞ page 10) by following the instructions of the camera, and then connect to the camera with a web browser of a PC.

People Count Setting Tool

This tool is used to easily configure settings for People count.

This tool has the following functions.

Note:

- If the display language for Windows is a language other than Japanese, all screens are displayed in English.
- For information on the folders or files for “People Count Setting Tool”, refer to “Folders/files” (☞ page 40) of “Others”.

Important:

- If “Setting value output”, “Start test”, or “Maintenance” are executed, take care because JPEG images are saved to a PC. For information on the folder that data is saved to, refer to “Folders/files” (☞ page 40) of “Others”.

Easy setup function

- Each type of settings for cameras
Configures each type of setting.
 - VMD alarm - Function type: People count
 - Image capture mode: Fisheye
 - Camera height: desired height between 2.0 m to 4.0 m (can be specified in 0.1 m intervals)
 - SD memory card: Use/Not use
 - Save location: SD memory card (4 GB or more)/internal memory
 - Information addition: On
 - Interval to store: 1 hour
- Automatic settings for lines
Lines can be automatically configured by specifying the position of the door (4 directions).
 - Detection area range setting
The detection area enabled for the People count that is matched to the specified line can be automatically created.
 - Mask range setting
A mask can be automatically created for the door area that is considered to be not necessary for the People count.
A mask can be optionally created for areas that are considered to be not necessary for the People count.

Test function

- Test mode
The statistical information of the size ratio can be calculated using the frame size information of people obtained by taking a test walk.
The optimal size threshold can be calculated from the statistical information.
- Referring to the test results
The time the test was taken, the amount of data collected, and the calculated frame ratio can be referred to.
- Threshold size settings
The frame ratio (size threshold) obtained in the test can be configured.

Maintenance function

- Maintenance
The frame status can be checked in the live images displayed in the web browser automatically opened by setting the frame display to on.
The frame display can be set to off after completing the maintenance.

Install and configure the camera (continued)

“People Count Setting Tool” basic page

“Camera information Import” button

Imports exported camera information files

“Exit” button

Exits from the tool.

“Test result output” button

Exports test results to each camera

“Camera information Export” button

Exports camera information saved to the tool to a specified file

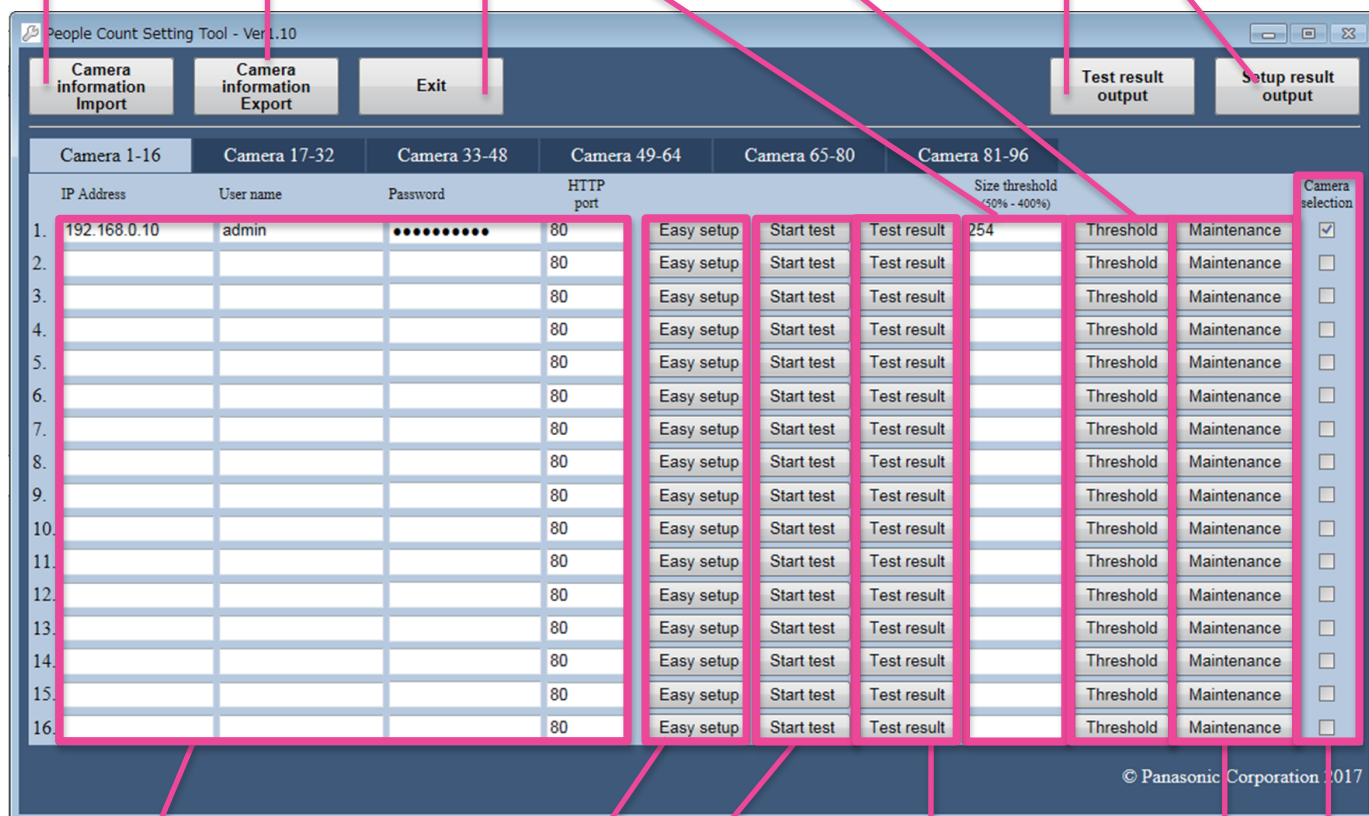
Size threshold for each camera can be entered

“Threshold” button

Sets the entered size threshold to the camera

“Setup result output” button

Outputs camera settings to each camera



Implements the Easy setup and test
Configures the camera information

“Easy setup” button
Configures the People count settings

“Start test” button
Starts the test mode used in order to calculate the size threshold

“Maintenance” button
Opens the camera browser with the frame display on

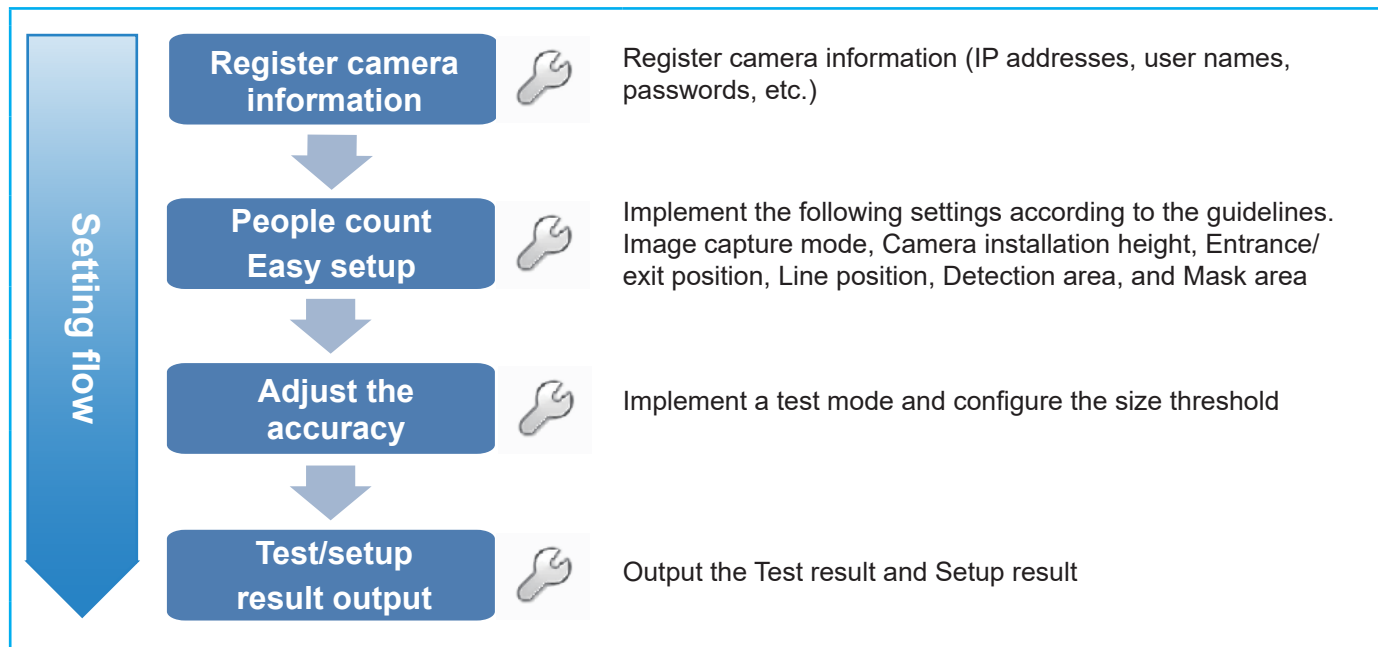
“Test result” button
Refers to the implemented test's results and sets the size threshold

Selects “Test result output” and “Setup result output” for the applicable camera.

Install and configure the camera (continued)

Configure the People count settings

Use “People Count Setting Tool” to configure the following settings.



Step 1 Start “People Count Setting Tool”

- (1) Double-click the “People Count Setting Tool” shortcut created on the desktop.
 - * Multiple tools cannot be started.
- (2) “People Count Setting Tool” is started.

Step 2 Register the camera information

- (1) Configure all of the camera information for counting people.
- (2) From the 17th camera open the [Camera 17-32] tab and configure the settings.
 - A maximum of 96 cameras can be registered.
 - * For information on character entry limitations, refer to “Limitations/Errors” (page 33) described later.

Step 3 Export camera information (Import)

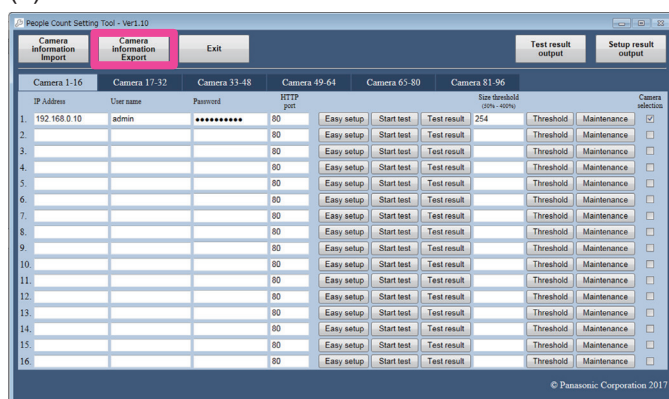
- (1) Click the “Camera information Export” button.
- (2) Add a name and save.

Important:

- The camera information file exported after completing the settings is used as import data when starting “People Count Output Tool”.
- Only camera information files exported by this tool can be imported to this tool. Camera information files exported by “People Count Output Tool” cannot be imported to this tool.
- If the camera settings are changed after starting operations, import the camera setting files exported from “People Count Setting Tool”.

Note:

- Follow the following procedure when importing camera information files the next time you start this tool.
 - ① Click the “Camera information Import” button.
 - * Because previously entered camera information is deleted when importing, export the information before starting imports.
 - ② Specify the file to be imported and click “Open”.
 - ③ A message asking if you want to obtain the size threshold or not is displayed. Select “Yes”. If the size threshold cannot be obtained, check the connections with the camera and select “Retry”.



Install and configure the camera (continued)

Step 4 Easy setup for People Count

Configure the People count settings for 1 camera at a time. The following is a summary of the setting items.

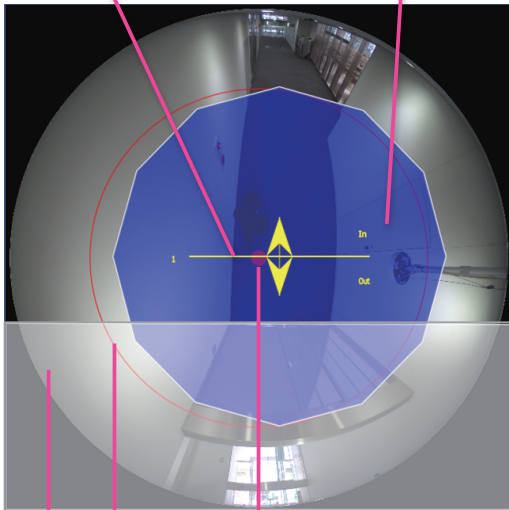
Measuring line (yellow line)

The number of people who cross this line are counted separately depending on their direction. Lines can be configured with the “People Count Setting Tool”.

Detection area (blue line area)

Area the people count is enabled for. The outside of the area is not enabled. People cannot be counted if the measuring line is outside of this area.

This can be automatically generated with “People Count Setting Tool”.



Red circle: center position of the image

Red circular line: range the center of the line can move

Mask area (gray area)

Area the people count is disabled for. Up to 8 areas can be created. Masks can be configured for obstructions such as doors that can be opened and closed and benches.

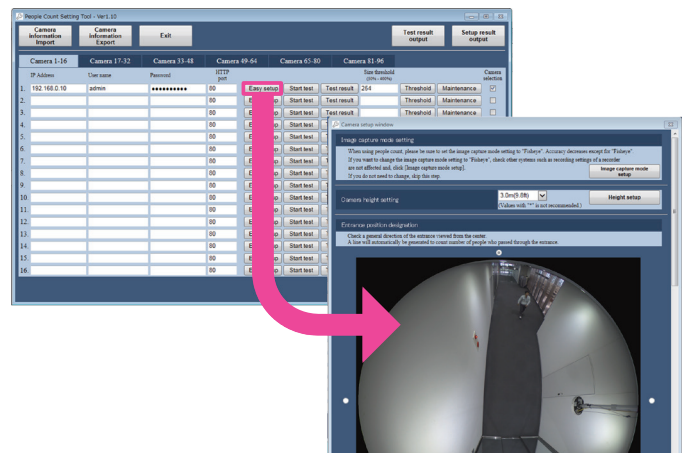
With the “People Count Setting Tool”, only masks for door positions can be generated automatically. The order or priority is mask area > detection area.

Image capture size

When “Easy setup” is executed, the JPEG image capture size of the camera will be set to the following depending on the image capture mode.

- WV-S4150, WV-X4171, WV-X4571L
Fisheye: JPEG(2) 320x320
Dual monitor: JPEG(1) 320x320
- WV-S4151, WV-S4551L, WV-X4173, WV-X4573L
Fisheye: JPEG(1) 320x320
Dual monitor: JPEG(1) 320x320

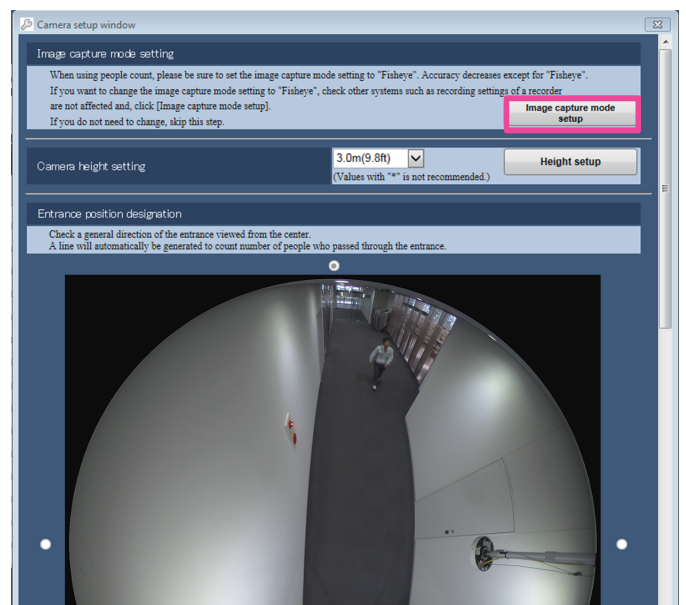
- (1) Click the “Easy setup” button to display “Camera setup window”.



Note:

- For information on the error display when the “Easy setup” button is clicked, refer to “Limitations/Errors” (page 33) described later.
- In “Camera setup window”, if settings are configured in order from the above items, the following settings can be configured.

- (2) Configure “Image capture mode”.
We recommend that “Fisheye” is selected for “Image capture mode” when this software is operated. When “Fisheye” is selected for “Image capture mode”, click the “Image capture mode setup” button. When a setting other than “Fisheye” is selected for “Image capture mode”, skip this item.



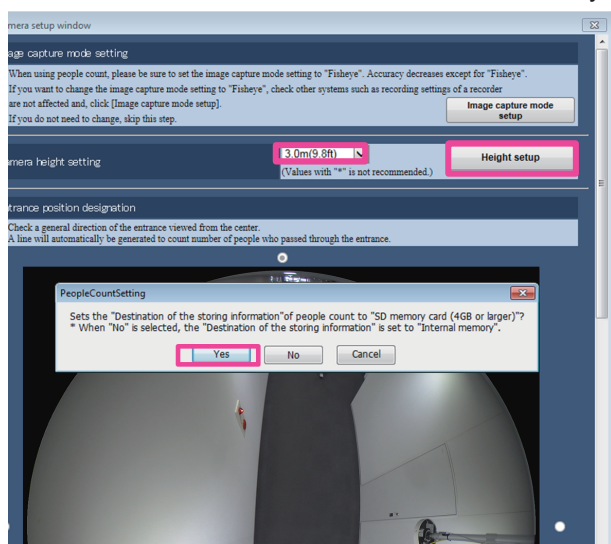
Install and configure the camera (continued)

- (3) Configure the camera height settings.
Select the camera's installation height and click the "Height setup" button. The height setup and the following settings are executed at the same time.
[When SD memory cards (4 GB or more) are inserted]

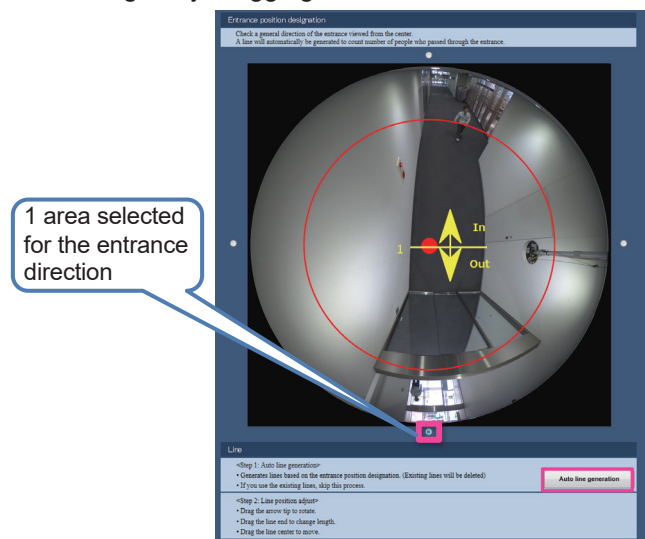
- * The recording period is about 3 months.
 - Information addition: On
 - SD memory card: Use
 - Information save location: SD memory card (4 GB or more)

[When SD memory cards are not inserted]

- * The recording period is about 1 day.
 - Information addition: On
 - Information save location: internal memory



- (4) Configure the Entrance position designation/Line.
Select just 1 radio button for the direction of the entrance when viewed from inside the store. When the "Auto line generation" button is clicked, a yellow line is displayed on the image. After generating a line, adjust its length. The length of lines can be changed by dragging the end of the line.

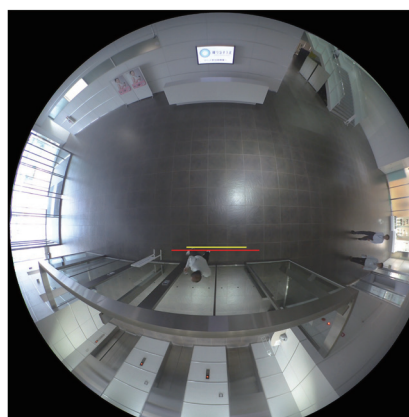


Important:

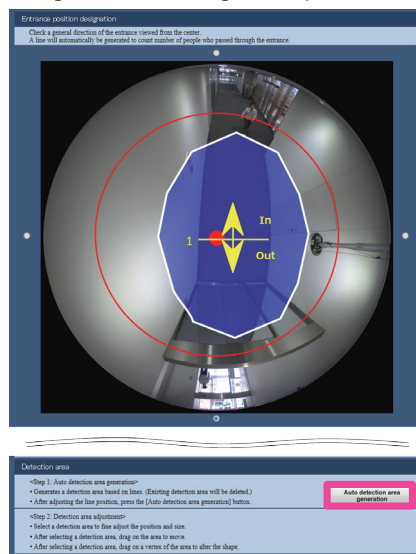
- Use the width of the door as a guide when adjusting the length of a line.
- Although lines can also be rotated and moved in parallel, we recommend that you use the default settings.

[Example of adjusting the length of a line]

If lots of people don't enter or exit the store going over the line perpendicularly, extend the length of the line in the next image (red line) in regards to the line the width of the door (yellow line). If there is a wall or other obstruction that prevents people from passing through the ends of the line, you can reduce the number of people who are not counted by making the line longer than the width of the door.



- (5) Configure the detection area.
When the "Auto detection area generation" button is clicked, the detection area is displayed with blue lines on the image. The shape of detection areas can be adjusted by dragging the mouse over the image after clicking each peak of the detection area.



Important:


- Although areas can also be moved in parallel, we recommend that you use the default settings.


Install and configure the camera (continued)

(6) Configure the mask area.
When there is a door in the entrance, if the “Auto door mask area generation” button is clicked, the mask area is displayed in gray on the image. (This step is not necessary if there is an automatic door or a sliding door, or if there is no door.)

Add masks to other areas such as benches, information desks, and escalators that may affect the accuracy of people counting. Refer to the following for the additional procedure.

① Click the “Quadrangle mask” or “Polygon mask” button to add mask areas.

 When “Quadrangle mask” is selected:
Create a mask area by clicking and dragging on the area that you want to add the mask area to.

 When “Polygon mask” is selected:
Create a mask in the desired shape by clicking the peaks several times. The area drawing is completed by connecting the start and end points together. (there is a limit of 16 peaks)

② When the additions from are completed, click the button selected in ① again.

* If this operation is not executed, other mask areas cannot be selected again.

Note:

- When deleting a mask area, select the mask area that you want to delete, and then click the “Delete” button.
- If a mask area is configured, install the camera so that the distance from the mask area to the line is more than 1.5 m.

- Areas where people gather such as inside cafes, rest spaces, and benches.
- Inside a store where people move a lot
Space in passages is slightly cleared so that parts of the bodies of people who you want to count who walk along passages do not enter the mask area.
- Escalator
- Shopping cart return area

(7) Apply the settings.
Press the “Set” button when all of the settings are completed.

*If this operation is not executed, settings for (5) to (7) are not applied.

If the settings are correctly completed, “Camera setup window” is automatically closed. If you want to close “Camera setup window” without applying settings, click “x” on the top part of the screen.

Note:

- If a detection area is configured with “People Count Setting Tool”, the current detection area is deleted.
- If a mask area is configured with “People Count Setting Tool”, the current mask area is deleted.

Step 5 Implement a test mode to determine the size threshold*.

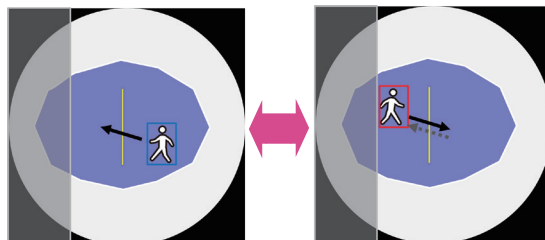
- * The test mode is a test to determine the size threshold.
- * The size threshold indicates the size of a person in an image counted as 1 person in the environment where the camera is installed.

Because the value of the size threshold changes depending on factors such as the installation height of the camera and the environment, check the value of the size threshold by doing a test walk in the environment where the camera is actually installed.

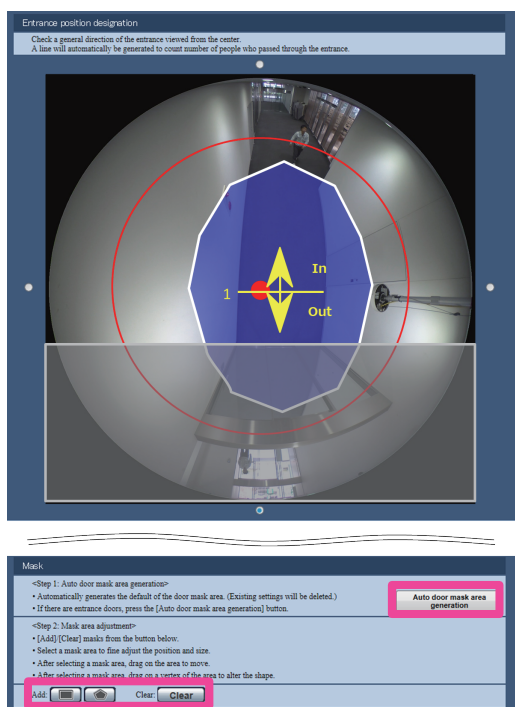
(1) Prepare the test mode beforehand.

Test modes are explained in the following.

- ① Test method
 - Perform tests with a 2 person group consisting of a data gatherer and a walker.
- ② Walking route



- Walk back and forth in a range before and after the measurement line.
- Turn around before the mask area go back and forth within the detection area (the area within the frame).



Example: Mask area
Examples of mask areas added are shown in the following.

Install and configure the camera (continued)

<① Cautions for the test method>

- The walker should wear clothes that are not the same color of the floor, and with the same color top and bottom.
- We recommend that the height of the test walker when he or she is wearing shoes be between 160 and 175 cm (match the height of the test walkers to the actual height of customers that visit the stores).
- The walker should not walk holding a large package or with his or her hands extended.
- We recommend that you implement tests when there are not many other people in the test location (such as outside of trading hours).
- When implementing tests outside of trading hours, make all of the arrangements and lighting environment in filming area are the same as those used during trading hours.
- Avoid times when there is direct sunlight such as when the sun is rising or setting.
- Before implementing a test mode, check the walking route (see “② walking route”) and how to apply frames (see the following paragraph) with live images of this tool.

Acceptable pattern of frames for 1 person			
All of the body	Head or feet slightly cut off	Diagonal direction	With shadows

Unacceptable pattern of frames for 1 person	
No frame	Multiple frames
	Although very small frames are removed, if the frames are not clearly applied to a person, accurate data will not be collected.
Holding packages	Reflected on glass or other surfaces
Not suitable for the size of one person.	Frames are applied to the reflections and the frame can become too big.

<② Cautions for the test route>

- If there is a door, turn around before the door. If you exit the detection area, the frame disappears each time you go back and forth and it will take time for data to be collected.
- If there are multiple lines of movement or doors after going past the measuring line from the

entrance, select the 1 to 2 routes that most people will take and go back and forth evenly.

- Try and walk straight and with the same route and same speed as much as possible perpendicularly to the measuring line.
 - Do not stop in the middle of the walking test.
 - Do not take routes where there are partitions, shelves, etc. that hide part of people’s bodies.
 - If a person other than the test walker walk through the test location, cancel the test and start it again.
 - If during the test there are big changes to the image conditions, such as when the lighting levels are changed or the shutters are opened or changed, wait for about 3 minutes for the software to adapt to the background and start the walking test again.
 - Before commencing the test, do not stand and stop on the route for more than 1 minute.
 - Before doing the test walk, wait outside of the detection area (positions with no frames).
- (2) Execute the test mode.

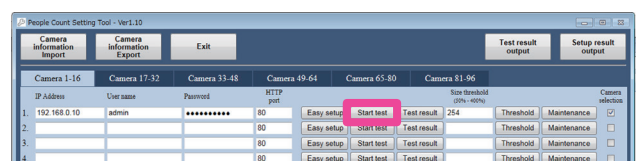
In the following, the data gatherer will be referred to as “A” and the walker will be referred to as “B”.

- ① “A” clicks the “Start test” button of the “People Count Setting Tool”. Live images of this tool are displayed.

- * For information on the error display when the “Start test” button is clicked, refer to “Limitations/Errors” (page 33) described later.
- * Red frames are for areas that have already counted people, and the blue frames are for the target people whose movement has been detected.
- * In the test mode, gather the information from the red frames and calculate the threshold size.

Note:

- In order to stabilize the test mode, do not connect to the camera with a web browser.

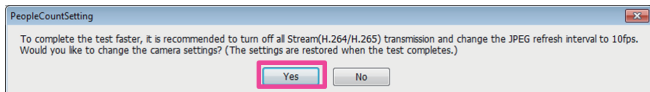


- ② Change the camera settings for the test mode. When implementing a test, you can make measurements in a short time by using the recommended camera settings. Tests can also be implemented even without changing the settings. (With changes: about 1 and a half minutes/Without changes: about 3 minutes)
- * Because the following settings stop the transmission of streams for monitoring images, take care when using them with cameras already in use. When “Yes” is selected, only perform the following settings during tests. (Settings can be automatically returned to their previous values when the test ends.)

Install and configure the camera (continued)

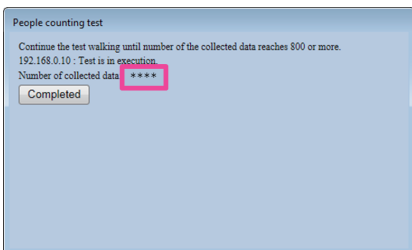
- Stream(1): Off
- Stream(2): Off
- JPEG Refresh interval: 10 fps

→When “25fps mode” is selected for “Frame rate mode” of the camera, “8.3fps” is set for “JPEG Refresh Interval”. (WV-S4151, WV-S4551L, WV-X4173, WV-X4573L)



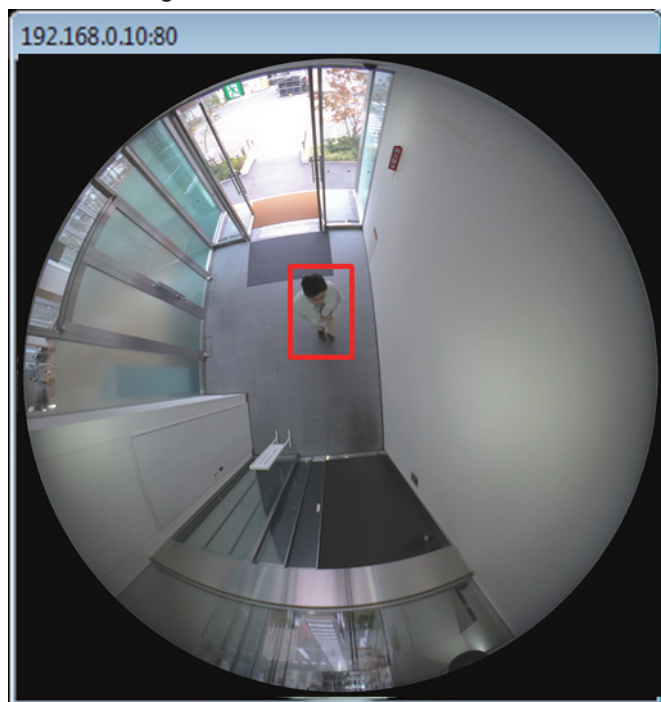
③ After the test starts, “A” checks the displayed “Number of collected data:****”.

* “****” displays the number of collected data.



④ “A” instructs “B” to start walking.

⑤ “A” checks the number of collected data while watching the status of the displayed frames in the live images.



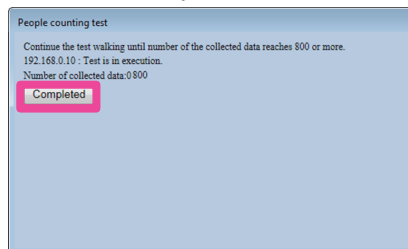
⑥ Repeat the walking until the number of collected data exceeds 800.

Check the following if it takes a long time for the values to be updated.

- Are the frames always in red?
 - If the frames do not go across the line, adjust the length or position of the line.
 - If the frames become smaller or disappear at the turning point, instructs “B” to turn around at the position where the entire body of “B” is in a

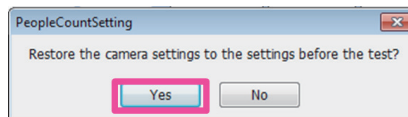
frame.

- If there is a door/when a door mask is configured
 - If the frame disappears just before (on the line side) of the door, change the door mask.
 - Is the entire body in the frame?
 - Check “<A Cautions for the test method>” of “(1) Prepare the test mode beforehand.”.
- ⑦ when the number of collected data exceeds 800, “A” clicks the “Completed” button and ends the test.



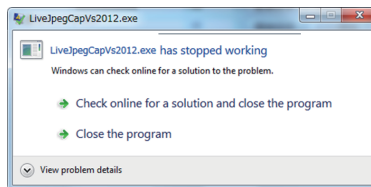
⑧ “A” instructs “B” to stop walking.

⑨ A dialog box is displayed if the camera settings were changed. Return the settings to their previous values.



Note:

- If an error occurs before the test, although the following screens are displayed, because they are only displayed for about 20 seconds, please wait. After that, if “Failed to initialize communication library.” is displayed, select [OK] and stop the test. Before starting the test again, check that live images from the camera are not open and then start the test again. If the test is consecutively failed, restart the tool and the camera.



- If the tool is forcibly stopped, start the tool again and import the camera information saved by “Camera information Export”.
 - *For information on importing camera information, refer to the “Step3 Export camera information (Import)” (page 22)

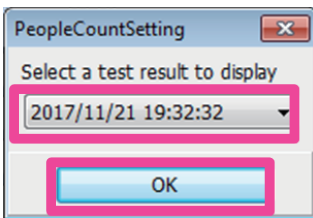
Install and configure the camera (continued)

Step 6 Apply the test results to the size threshold

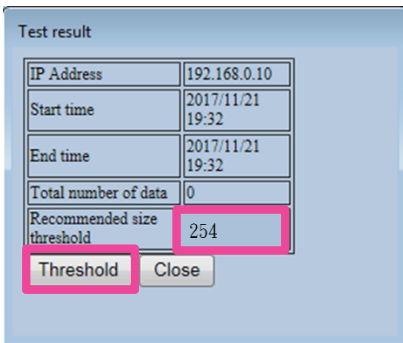
- (1) Click the “Test result” button.



- (2) Select the time and date of the test results that you want to display and click the “OK” button to display the test results.



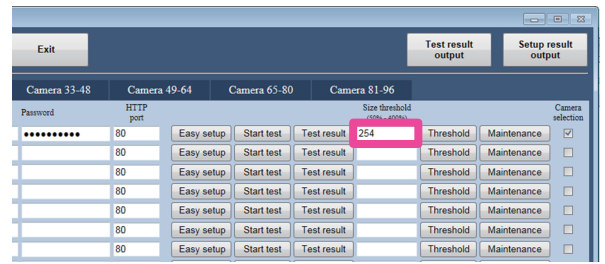
- (3) Check the value for “Recommended size threshold”.
If the values are between 50 to 400, click “Threshold” and configure the size threshold for the camera.



- (4) When the settings are completed, click “Close”.

Note:

- By directly entering the size threshold in the Basic page and clicking “Threshold”, an optional size threshold can be configured. Make adjustments in situations such as the following examples.
(Example 1) When 2 person is counted as 1 people
The size threshold may be too big. Set the value to a smaller value than the current value.
(Example 2) When 1 person is counted as 2 people
The size threshold may be too small. Set the value to a larger value than the current value.

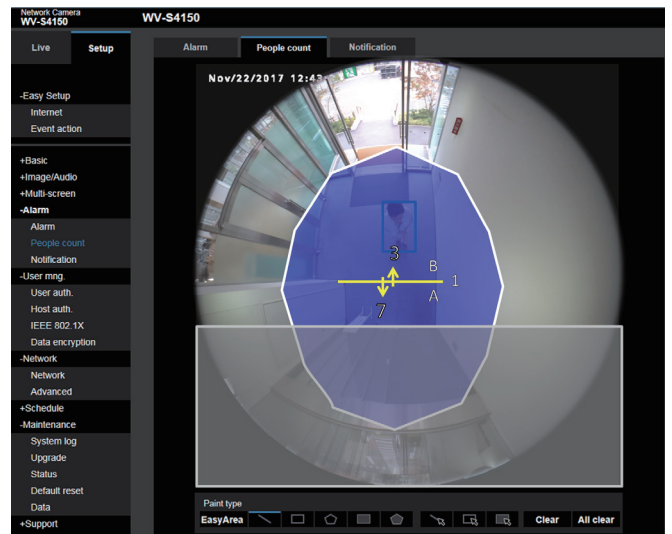


Step 7 Operations check

- (1) Click the “Maintenance” button to display the live image of the camera in a browser. During maintenance, frames are displayed in the live image displayed in the browser. If you want to check the status of the mask area or detection area at the same time, use a web browser and check them in the following setting screen.

* “Setup” ⇒ “Alarm” ⇒ “People count” ⇒ Line/area “Setup >>”

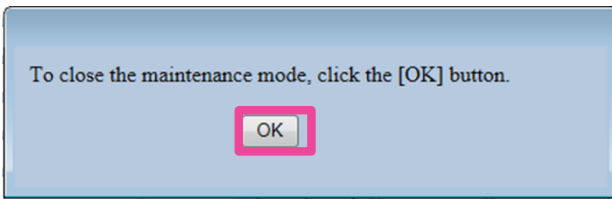
For information on the “People count” setting screen, refer to “People count setting screen for the camera” (page 30).



- (2) Walk so that you step across the line.
When walking to into consideration the line of movement for people you want to count and the line of movement for people passing through the nearby area that you observed before.
- (3) Check if the “Count value” is being added to normally.
* When doing the confirmation walk, walk until the outside of the detection area.
* After you check 1 person walking, we recommend checking 2 people walking the same way side-by-side.
- (4) When the check is completed, click “OK” and stop the maintenance.

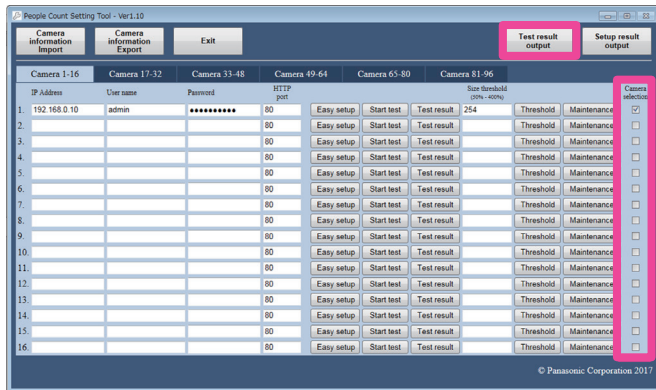
Install and configure the camera (continued)

When the maintenance is stopped, the frames on the live image of the camera disappear.



Step 8 Test result output

Test results for multiple cameras can be outputted at the same time. The test results (statistical information of frames, information displayed in the test results, etc.) of each camera are contained in the outputted data (Results_YYYYMMDDhhmmss).

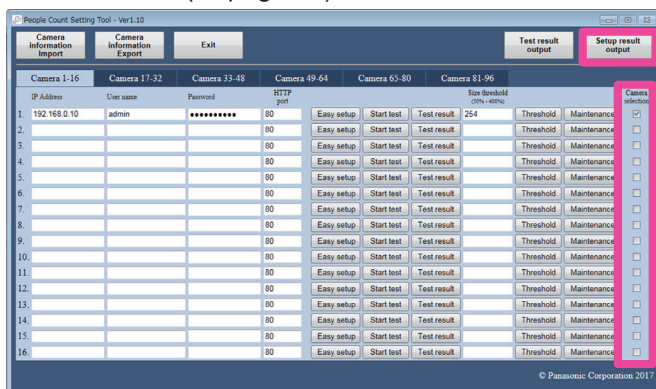


- (1) Check the “Camera selection” check box for the camera that you want to output test results for.
- (2) Click the “Test result output” button.
- (3) Specify the save destination folder and save the data.

* For information on the error display when the “Test result output” button is clicked, refer to “Limitations/Errors” (page 33) described later.

Step 9 Setup result output

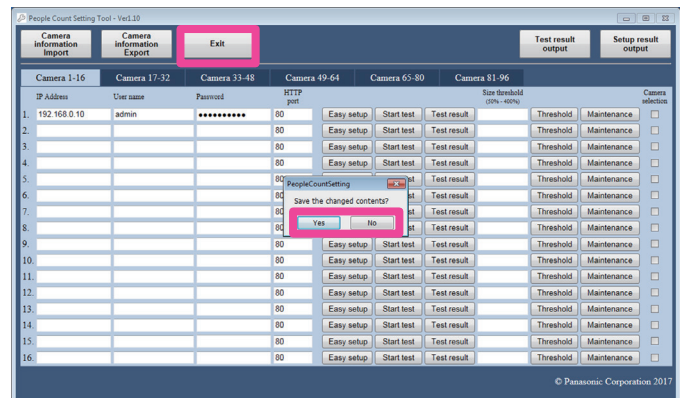
Camera setting values can be outputted. Each camera’s captured images, configured size threshold values, and camera setting data are contained in the outputted data (Settings_YYYYMMDDhhmmss). For information on restoring the camera setting data to the camera, refer to “Maintenance” (page 32).



- (1) Check the “Camera selection” check box for the camera that you want to output setup results for.
 - (2) Click the “Setup result output” button.
 - (3) Specify the save destination folder and save the data.
- * For information on the error display when the “Setup result output” button is clicked, refer to “Limitations/Errors” (page 33) described later.

Step 10 Stop “People Count Setting Tool”

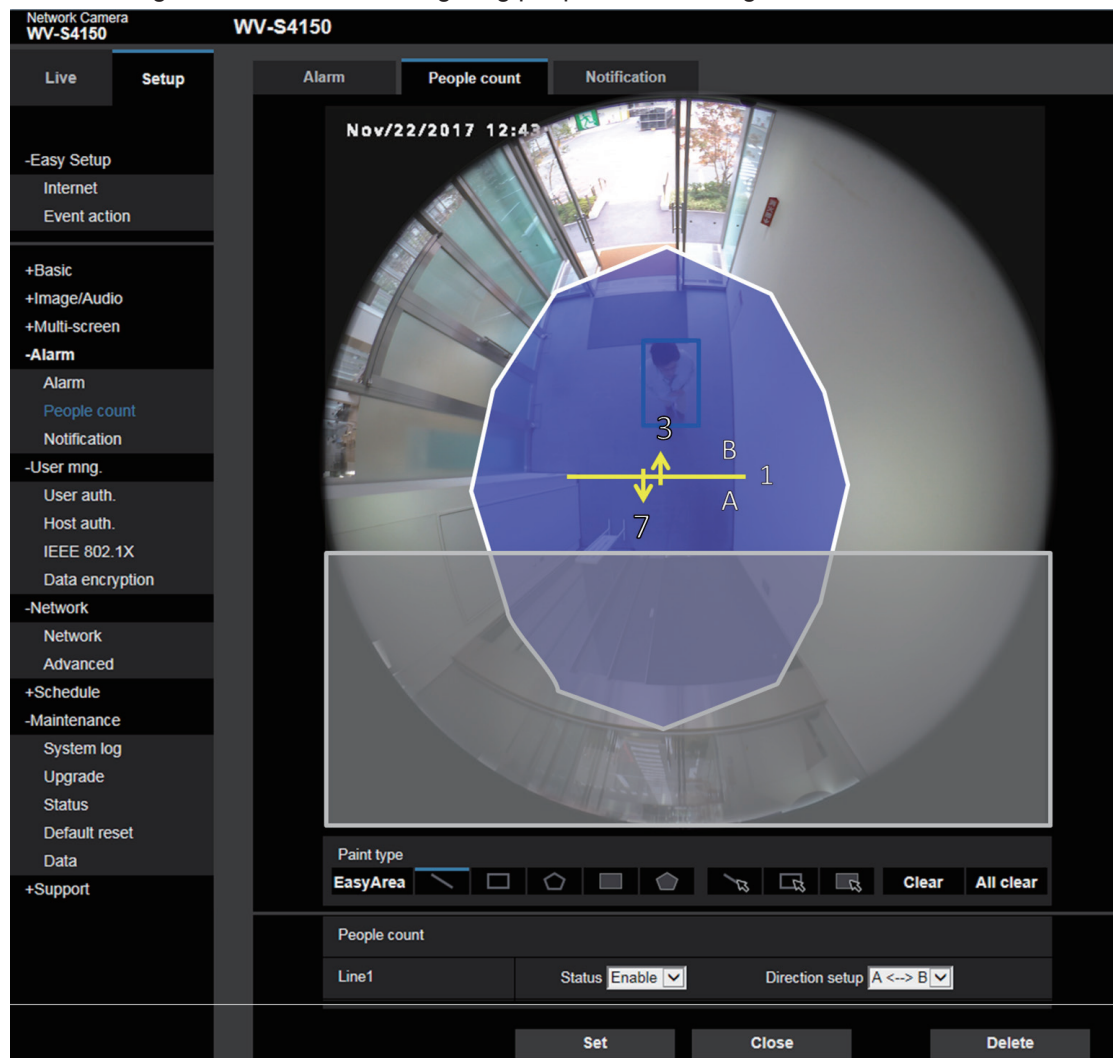
- (1) Click the “Exit” button.
- (2) If the camera information has not been exported, a confirmation pop-up is displayed.
- (3) If you want to save the data, click “Yes” to export the data.
- (4) If you do not want to save the data, click the “No” button to stop the tool.



Install and configure the camera (continued)

People count setting screen for the camera

The following is the method for configuring people count settings for cameras from a web browser.



Step 1

Configure the line used for counting people. Click the “Line setting” icon of “Paint type”, and then configure the line by dragging your mouse over the image. (Up to 1 line can be configured.) When a line is configured, its “Status” becomes “Enable”.

Note:

- To move a line, click the “Line setting (select)” icon of “Paint type”, and then drag the line drawing with the mouse.
- You can change the length of lines by dragging the ends of lines.
- To delete a line, click the “Line setting (select)” icon of “Paint type”, select the line on the image with the mouse, and then click the [Clear] button.
- If the [All clear] button is clicked, all of the selected lines, detection areas, and mask areas are deleted.
- Only line 1 can be configured. Line 2-12 cannot be configured.

Step 2

You can configure whether or not to perform people count for the configured line by selecting “Enable” or “Disable” for “Status”. If the “Status” of a line is changed to “Disable”, the disabled line will be displayed as a dotted line.

Disabled lines do not perform people count.

Enable: Lines perform people count.

Disable: Lines do not perform people count.

Default: Disable

Step 3

Configure “Direction setup” used for counting people. When measuring the count for U-turns, make sure to set to “A <--> B direction”.

A --> B direction/B --> A direction/A <--> B direction

Direction: A --> B direction

Install and configure the camera (continued)

Step 4

Configure the detection area.

Up to 8 detection areas can be configured.

By clicking the [EasyArea] button, you can configure a detection area in accordance with the status of line 1.

Note:

- If the [EasyArea] button is clicked, existing detection area settings are deleted.

To freely configure a detection area, click the “Detection area(Quadrangle)” icon or “Detection area(Polygon)” icon for “Paint type”, and then select paint style.

When using “Detection area(Quadrangle)”

Configure the square shape area by dragging your mouse over the image.

When using “Detection area(Polygon)”

Configure the polygon shape area by specifying peaks on the image. Areas can be drawn by connecting the end and start points together. (there is a limit of 16 peaks)

Note:

- To move a frame, click the “Detection area (select)” icon of “Paint type”, and click and drag inside the frame with the mouse. You can change the size (length) and shape*1 of frames and lines by dragging the ends of frame corners and lines.
*1 When using “Detection area(Polygon)”
- To delete a frame, click the “Detection area (select)” icon of “Paint type”, select the detection area on the image with the mouse, and then click the [Clear] button.
- If the [All clear] button is clicked, all of the selected lines, detection areas, and mask areas are deleted.
- If a detection area is configured with “People Count Setting Tool”, the current detection area is deleted.

Step 5

Configure the mask area. Up to 8 mask areas can be configured. Detections are not performed for people within the configured mask areas.

Click the “Mask area(Quadrangle)” icon or “Mask area(Polygon)” icon for “Paint type”, and then select the shape of the frame to draw.

When using “Mask area(Quadrangle)”

Configure the square shape area by dragging your mouse over the image.

When using “Mask area(Polygon)”

Configure the polygon shape area by specifying peaks on the image. Areas can be drawn by connecting the end and start points together. (there is a limit of 16 peaks)

Note:

- To move a frame, click the “Mask area (select)” icon of “Paint type” and drag with the mouse. You can change the size (length) and shape*1 of frames and lines by dragging the ends of frame corners and lines.
*1 When using “Mask area(Polygon)”
- To delete a frame, click the “Mask area (select)” icon of “Paint type”, select the mask area on the image with the mouse, and then click the [Clear] button.
- If the [All clear] button is clicked, all of the selected lines, detection areas, and mask areas are deleted.

Step 6

Press the “Set” button when all of the settings are completed to save the setting contents.

If the [Close] button is clicked, the configured contents are not saved and the software returns to the People count settings page.

To save the configured contents, click the [Set] button and then click the [Close] button.

Note:

- If the [Delete] button is clicked, all of the currently displayed contents are deleted and the settings are returned to their default status. A confirmation dialog is displayed before the deletion is executed. Click [OK] if you want to execute the deletion.

Install and configure the camera (continued)

Maintenance

The method for restoring the camera settings outputted by “Setup result output” of “People Count Setting Tool” is explained here.

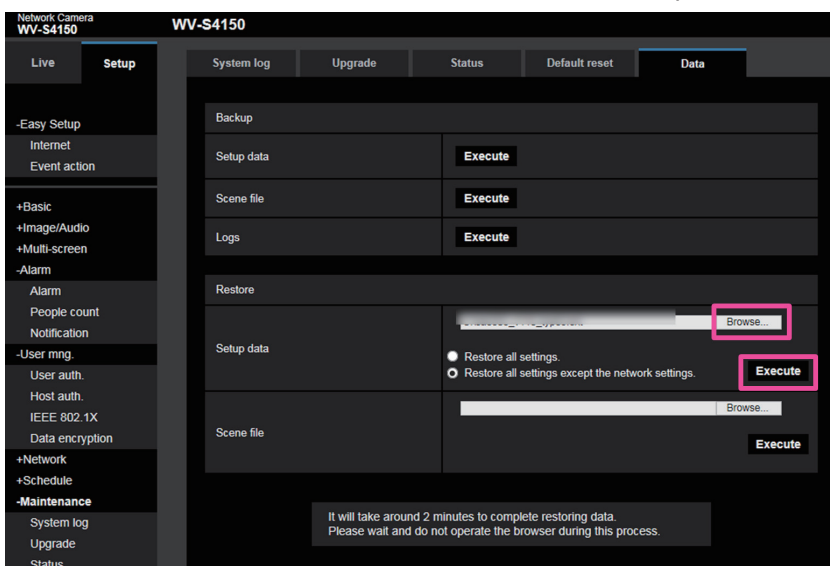
Configure settings from a web browser.

- (1) Open the “Maintenance” page from the “Setup” menu.
- (2) Open the [Data] tab.
- (3) Click the [Browse...] button of “Setup data” in “Restore”.
- (4) After specifying the file to be restored, click “Open”.

For the settings file, specify the setupdata.dat in the folder with the IP address of the camera that you want to restore that is in the folder outputted with “Setup result output”.

- (5) Click the [Execute] button.

Either one of the 2 radio buttons can be selected with no problems.



Install and configure the camera (continued)

Limitations/Errors

The following are the character input limitations for the “People Count Setting Tool”.

Item	Available characters	Available number of characters	Unavailable characters	Notes
IP address	0 - 9 and the period (.)	15	-	-
User name	alphanumeric characters and symbols	32	" & ; ; \	-
Password	alphanumeric characters and symbols	32	" &	4 characters or more
HTTP port	0 - 9	5	-	Default: 80

The following is a list of the error messages for “Camera information Export” and their countermeasures.

Message	Cause	Countermeasure
Cannot write the file.	The folder specified for writing to is writing protected.	Specify a folder than can be written to.
Camera information contains a blank item to be filled. Cancels the process.	The IP address is not entered.	Enter an IP address.
	The HTTP port number is not entered.	Enter an HTTP port number.
	The user name is not entered.	Enter a user name.
	The password is not entered.	Enter a password.
The address is duplicated.	The same address is used in multiple places.	Do not enter the same address in multiple places.
Incorrect information entered.	The IP address is entered incorrectly.	Enter a correct IP address.
	The HTTP port number is entered incorrectly.	Enter a correct HTTP port number.
	The user name is entered incorrectly.	Enter a correct user name.
	The password is entered incorrectly.	Enter a correct password.

The following is a list of the error messages for “Camera information Import” and their countermeasures.

Message	Cause	Countermeasure
File not found.	A file name that doesn't exist was specified.	Specify a file name that does exist.
The file is illegal.	The camera information file has been changed.	Specify a camera information file that has not been changed since exporting.
	It is not a camera information file.	Specify a camera information file.
You don't have permission to open this file.	The file is read protected.	Remove the read protection from the file.
Extension software for people count is not introduced.	WV-SAE303W is not installed.	Install WV-SAE303W.
Incorrect user name/password.	The user name/password saved in the import file are incorrect.	Stop the processing for obtaining the threshold size and enter the correct values for the user name/password. Also, after exporting, import again and obtain the threshold size.
•Cannot connect to the camera. •Unknown error occurred.	Not connected to the applicable camera.	Connect to the applicable camera.
	The IP address is incorrect.	Enter the correct IP address.
	The HTTP port number is incorrect.	Enter the correct HTTP port number.

Install and configure the camera (continued)

Message	Cause	Countermeasure
This file cannot be imported, because it was created by the "People Count Output Tool".	The import file was created by the "People Count Output Tool".	Import a file exported by "People Count Setting Tool".

The following is a list of the error messages for "Easy setup" and their countermeasures.

Message	Cause	Countermeasure
Camera information contains a blank item to be filled. Cancels the process.	The IP address is not entered.	Enter an IP address.
	The HTTP port number is not entered.	Enter an HTTP port number.
	The user name is not entered.	Enter a user name.
	The password is not entered.	Enter a password.
Cannot connect to the camera.	The IP address is incorrect.	Enter the correct IP address.
	The HTTP port number is incorrect.	Enter the correct HTTP port number.
	The PC is not connected to the camera's network.	Connect the PC to the camera's network.
Incorrect user name/password.	The user name is incorrect.	Enter the correct user name.
	The password is incorrect.	Enter the correct password.
Extension software for people count is not introduced.	WV-SAE303W is not installed.	Install WV-SAE303W.
The camera height setting is illegal.	The camera height's value is outside of the supported range.	Set the camera height's value to within the supported range. * To operate with a height outside of the supported range, configure a line/mask from the camera.
Incorrect information entered.	The IP address is entered incorrectly.	Enter a correct IP address.
	The HTTP port number is entered incorrectly.	Enter a correct HTTP port number.
	The user name is entered incorrectly.	Enter a correct user name.
	The password is entered incorrectly.	Enter a correct password.
Line 1 is not superimposed on the screen. The intermediate coordinate position of line 1 is set to the edge of the screen.	The intermediate coordinate position of line 1 configured to the camera is set to the edge of the screen.	<If there is no problem with initializing the detection area and mask area> In the Easy setup screen, configure the line/detection area/mask area from the beginning. <If there is a problem with initializing the detection area and mask area> From the camera browser, click "Setup" → "Alarm" → "People count" → "Setup>>" of the line/area, and then move the intermediate coordinate position of line 1 near to the center of the screen.

Install and configure the camera (continued)

Message	Cause	Countermeasure
Detection area 1 is not superimposed on the screen. This tool supports only dodecagons; the number of corners of the detection area is not 12.	This tool supports only dodecagons; the number of corners of the detection area configured to the camera is not 12.	<If there is no problem with initializing the mask area> In the Easy setup screen, configure the detection area/mask area. <If there is a problem with initializing the mask area> From the camera browser, click “Setup” → “Alarm” → “People count” → “Setup>>”, click the EasyArea button, and then create a detection area.
Failed to set the SD memory to “Use”.	Because of the settings of other cameras, the SD memory card to cannot be set to “Use”.	From the camera browser, click “Setup” → “Basic” → “SD memory card”, and then set the SD memory card to “Use”.
Formatting the SD memory card. Setting destination of the storing information is canceled.	The camera’s SD memory card is being formatted.	After the formatting is completed, excute “Height setup” again.
Checking the SD memory card. Setting destination of the storing information is canceled.	The camera’s SD memory card is being checked.	After the checking is completed, excute “Height setup” again.
The SD memory card was not recognized. The “Destination of the storing information” is set to “Internal memory”.	The camera’s SD memory card was not recognized.	After the inserting a normal SD memory card, excute “Height setup” again.

The following is a list of the error messages for “Start test” and their countermeasures.

Message	Cause	Countermeasure
Camera information contains a blank item to be filled. Cancels the process.	The IP address is not entered.	Enter an IP address.
	The HTTP port number is not entered.	Enter an HTTP port number.
	The user name is not entered.	Enter a user name.
	The password is not entered.	Enter a password.
•Cannot connect to the camera. •Unknown error occurred.	The IP address is incorrect.	Enter the correct IP address.
	The HTTP port number is incorrect.	Enter the correct HTTP port number.
	The PC is not connected to the camera’s network.	Connect the PC to the camera’s network.
Incorrect user name/password.	The user name is incorrect.	Enter the correct user name.
	The password is incorrect.	Enter the correct password.
Extension software for people count is not introduced.	WV-SAE303W is not installed.	Install WV-SAE303W.
“People count” is not enabled.	People count is not enabled.	Execute “Easy setup”.
Cancels the test due to remaining capacity shortage of the folder in which the tool is located.	The remaining capacity of the drive in which this tool is located is low.	Make 100 MB or more capacity in the drive in which the tool is located.
Failed to initialize communication library.	Failed to initialize communication library used for obtaining JPEG images.	Install “People Count Setting Tool” again.

Install and configure the camera (continued)

Message	Cause	Countermeasure
Terminating the previous test.	The previous test is being terminated.	The test can be started again after the displayed number of seconds has passed.
The target device is not supported by this application.	A camera that does not support WV-SAE303W is connected.	Connect to a camera that supports WV-SAE303W.
Failed to change the camera settings below.	Stream is selected in "Setup" → "Basic" → "SD memory card" → "Recording format" of the camera browser.	Change the setting to JPEG in "Set" → "Basic" → "SD memory card" → "Recording format" of the camera browser.
Cannot start of live streaming.	Failed starting to obtain the JPEG images used for tests.	Restart the camera and "People Count Setting Tool".
The detection frame superimpose setting of live image cannot be restored to the setting before the test starts.	Failed to communicate with the camera when the test was completed.	Check the connection with the camera and then start the test again.
The camera settings cannot be restored to the settings before the test starts.	Failed to communicate with the camera when the test was completed.	Check the connection with the camera, refer to the file displayed in the line below this message, enter and execute the CGI command written in the file, and then fix the camera settings.

The following is a list of the error messages for "Test result" and their countermeasures.

Message	Cause	Countermeasure
No test is being executed.	A test has never been performed for the camera with the target IP address.	Execute "Start test".
Camera information contains a blank item to be filled. Cancels the process.	The IP address is not entered.	Enter an IP address.
	The HTTP port number is not entered.	Enter an HTTP port number.
	The user name is not entered.	Enter a user name.
	The password is not entered.	Enter a password.
Incorrect information entered.	The IP address is entered incorrectly.	Enter a correct IP address.
	The HTTP port number is entered incorrectly.	Enter a correct HTTP port number.
	The user name is entered incorrectly.	Enter a correct user name.
	The password is entered incorrectly.	Enter a correct password.
Extension software for people count is not introduced.	WV-SAE303W is not installed.	Install WV-SAE303W.
Incorrect user name/password.	<ul style="list-style-type: none"> •The user name is incorrect. •The password is incorrect. 	Stop the processing for setting the threshold size and enter the correct values for the user name/password.
<ul style="list-style-type: none"> •Cannot connect to the camera. •Unknown error occurred. 	Not connected to the applicable camera.	Connect to the applicable camera.
Specified value is out of setting range.	Specified value is out of the setting range of the threshold size.	Execute "Start test" again.

Install and configure the camera (continued)

The following is a list of the error messages for “Threshold” setup and their countermeasures.

Message	Cause	Countermeasure
Camera information contains a blank item to be filled. Cancels the process.	The IP address is not entered.	Enter an IP address.
	The HTTP port number is not entered.	Enter an HTTP port number.
	The user name is not entered.	Enter a user name.
	The password is not entered.	Enter a password.
Incorrect information entered.	The threshold size is entered incorrectly.	Enter a correct size threshold.
	The IP address is entered incorrectly.	Enter a correct IP address.
	The HTTP port number is entered incorrectly.	Enter a correct HTTP port number.
	The user name is entered incorrectly.	Enter a correct user name.
	The password is entered incorrectly.	Enter a correct password.
Extension software for people count is not introduced.	WV-SAE303W is not installed.	Install WV-SAE303W.
Incorrect user name/password.	The user name is incorrect.	Enter the correct user name.
	The password is incorrect.	Enter the correct password.
•Cannot connect to the camera. •Unknown error occurred.	Not connected to the applicable camera.	Connect to the applicable camera.
Specified value is out of setting range.	Specified value is out of the setting range of the threshold size.	Execute “Start test” again.

The following is a list of the error messages for “Maintenance” and their countermeasures.

Message	Cause	Countermeasure
Camera information contains a blank item to be filled. Cancels the process.	The IP address is not entered.	Enter an IP address.
	The HTTP port number is not entered.	Enter an HTTP port number.
	The user name is not entered.	Enter a user name.
	The password is not entered.	Enter a password.
Cannot connect to the camera.	The IP address is incorrect.	Enter the correct IP address.
	The HTTP port number is incorrect.	Enter an HTTP port number.
	The PC is not connected to the camera’s network.	Connect the PC to the camera’s network.
Incorrect user name/password.	The user name is incorrect.	Enter the correct user name.
	The password is incorrect.	Enter the correct password.
Extension software for people count is not introduced.	WV-SAE303W is not installed.	Install WV-SAE303W.
*: “People count” is not enabled.	People count is not enabled.	Execute “Easy setup”.
Cancels the maintenance due to remaining capacity shortage of the folder in which the tool is located.	The remaining capacity of the drive in which this tool is located is low.	Make 100 MB or more capacity in the drive in which the tool is located.
Failed to initialize communication library.	Failed to initialize communication library used for obtaining JPEG images.	Install “People Count Setting Tool” again.
Cannot start of live streaming.	Failed starting to obtain the JPEG images used for the Maintenance.	Restart the camera and “People Count Setting Tool”.
Failed to open the NW camera window.	Windows Internet Explorer is not installed.	Install Windows Internet Explorer.
Failed to change the camera setup.	Failed to communicate with the camera when the Maintenance was completed.	Check the connection with the camera and then start the Maintenance.

Install and configure the camera (continued)

The following is a list of the error messages for “Test result output” and their countermeasures.
 (“*” is the camera’s IP address)

Message	Cause	Countermeasure
Select a camera.	There are no checks in the Camera select checkboxes.	Check the “Camera select” checkbox for the camera that you want to output test results for.
No test is being executed for the following cameras. *1 *2 ...	There is a camera with that has not been tested.	Execute a test for cameras that have not been tested. However, even if there are cameras that have not been tested, test results for the cameras that have been tested are saved.

The following is a list of the error messages for “Setup result output” and their countermeasures.

Message	Cause	Countermeasure
Select a camera.	There are no checks in the Camera select checkboxes.	Check the “Camera select” checkbox for the camera that you want to output setup results for.
Camera information contains a blank item to be filled. Cancels the process.	The IP address is not entered.	Enter an IP address.
	The HTTP port number is not entered.	Enter an HTTP port number.
	The user name is not entered.	Enter a user name.
	The password is not entered.	Enter a password.
•Cannot connect to the camera. •Unknown error occurred.	The IP address is incorrect.	Enter the correct IP address.
	The HTTP port number is incorrect.	Enter the correct HTTP port number.
	The PC is not connected to the camera’s network.	Connect the PC to the camera’s network.
Incorrect user name/password.	The user name is incorrect.	Enter the correct user name.
	The password is incorrect.	Enter the correct password.
Extension software for people count is not introduced.	WV-SAE303W is not installed.	Install WV-SAE303W.

Others

Handling export/output data

Because this data is used for a backup after installation and configuration are completed, for maintenance, and for corrections of camera setting information, store the final export/output data.

Data use list

Function	Contents	Notes
Camera information Import	Uses data exported from “People Count Setting Tool” in order to register camera information	Export data from “People Count Output Tool” cannot be imported.
Camera information Export	After completing the editing of the camera information, exports the camera information and uses it as camera import information for “People Count Setting Tool”	Exported camera data is also used for import data for “People Count Output Tool”.
Test result output	Outputs the results after tests are completed and uses it for checking the threshold size	-
Setup result output	Outputs the camera settings and uses them for maintenance	For information on how to restore camera settings, refer to “Maintenance” (🔗 page 32).

Folders/files

Some information about folders and files for “People Count Setting Tool” are explained here.

The default settings for the installed folders are shown below.

C:\Program Files\xxxxx\PeopleCountSetting (for Microsoft Windows (32 bit))

C:\Program Files (x86)\xxxxx\PeopleCountSetting (for Microsoft Windows (64 bit))

Name	Folder/File	Contents
Results_***** (“*” is the date and time)	Folder	When “Test result output” is executed, a folder and file are created, and data obtained to calculate the threshold size is saved
Settings_***** (“*” is the date and time)	Folder	When “Setup result output” is executed, a folder and file are created, and camera setting values, threshold size values, and 1 JPEG image are saved
config.txt	File	Saves setting values of “People Count Setting Tool”
log	Folder	Saves maintenance logs
log.txt	File	Saves maintenance logs
Settings_bf_vup	Folder	Backs up the config.txt file made when updating the version
live.jpg	File	Saves 1 JPEG image from when “Easy setup” is executed
MovCnt***_***_***_***\Test (“*” is the IP address)	Folder	Saves the JPEG images that had red frames added by “Start test” and the data obtained to calculate the size threshold
MovCnt***_***_***_***\Maintenance (“*” is the IP address)	Folder	Saves the JPEG images that had blue frames and red frames added by “Maintenance”

Note:

- The exported camera setting information file (*.dat) is saved to a folder in the output destination specified by the customer.
- The files that execute “Test result output” and “Setup result output” are saved to a folder in the output destination specified by the customer.

Important:

- Because the JPEG images saved in the folder contain images of the installation, take care in handling these images.
- Take care in handling the files in the folder. This application may not be able to start if the files are corrupted or edited.

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