



# Web Guide

## Extension software (AI Privacy Guard)

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# 1 Introduction

This manual explains how to register extension software AI Privacy Guard application WV-XAE201W (hereinafter referred to as this product) with AI network cameras (sold separately, hereinafter referred to as camera), the settings required prior to starting operation, and how to operate AI network cameras. The camera must be registered before use. Be sure to read the camera's instruction manual when using the camera. The settings shown in this manual may differ depending on the camera model used and the i-PRO Setting Tool version (hereinafter referred to as iCT).

## 1.1 Product Overview

This product is software that makes it easier to use your camera. By installing this product on your camera, you can use the "AI Privacy Guard" function that detects faces and people and applies mosaics to them.



- This product is required for each camera.
- Refer to the following URL for information on the compatible models and software versions of this product.

→ [Equipment compatibility](#) <C0103>

※<Control number: Cxxxx> The number used when searching for the appropriate information on our support website.

## 1.2 Features

Faces or persons in camera images are detected by AI processing, and their regions are pixelated or solid filled to prevent individual identification.

## 1.3 Before using this product

- Pixelating may not be possible in the following cases.
  - When the target face or person is not focused.
  - When the target face or person is blurred.
  - When the target face or person is over-exposed or under-exposed.
  - When part of the target face or person is displayed.
  - When the target face or person is not looking up.
  - When part of the target face or person is displayed, the privacy zone set in [Setup] – [Image/Audio] – [Image quality] of the camera is hidden.
  - When the target face is wearing a mask or sunglasses.
  - When the target face or person is too close to the camera.
  - When the target face or person is too small.
- When “Persons” is selected as the “Privacy Guard target” in the “AI Privacy Guard” settings screen, pixelating may not be possible if the face is not present in the image.
- When too many persons (guideline: 100 or more persons) are present in the camera image, it may not be possible to carry out pixelating for each person.
- Pixelating may not be possible for a part of a person’s body such as legs, arms, etc.
- Pixelating may not be possible when a person who lies down or collapses over the ground.
- Pixelating may be done even in parts of the image where there are no faces or persons.
- Pixelating can even be done for dolls or posters.
- Pixelating may be done in areas larger than the target faces or persons.
- The entire image may be pixelated if autofocus is carried out when the AI Privacy Guard function is active.
- In a pixelated stream, the video transmission from other streams may be delayed.
- i-RPO Co., Ltd. shall be not responsible for any inconveniences, losses, or damages caused by the different settings of the AI Privacy Guard function or as a result thereof.
- The AI Privacy Guard function is not intended for preventing theft, disaster, etc. i-RPO Co., Ltd. shall not bear any liabilities whatsoever for any accidents or damages that have occurred.
- For Disclaimer, Trademarks and registered trademarks, and Copyright, please refer to the Operating Instructions of the camera.

## 1.4 About the Operating Instructions

In this document, "Pixelating" and "Solid filling" are both expressed as "Pixelating" from the next page onwards.

## 2 Preparation

The flow to operation is as follows.

- ① Check compatible models and software versions.  
→[2.1 Check compatible models and software versions](#)
- ② Install the product.  
→[2.2 Install the product](#)
- ③ Configure the required settings.  
→[3 Basic settings](#)

### 2.1 Check compatible models and software versions

Check the compatible model and software version in the following URL.

→[Equipment compatibility<C0103>](#)

### 2.2 Install the product

Download the product and install it on your camera according to the following procedures.

1. Access the download site of the product, download the [AI Privacy Guard], and save it to a PC.



Refer to the following for the download site of this product.

→[Click here for downloads](#)

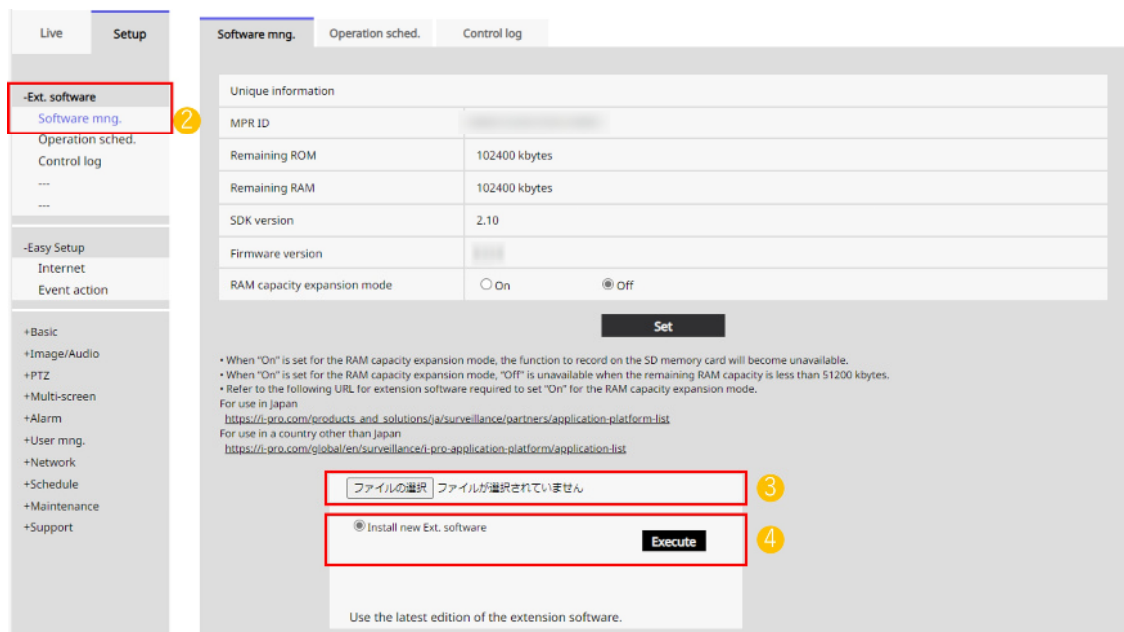


Do not use spaces or double-byte characters in the name of the destination directory.

## 2 Preparation

### 2.2 Install the product

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2. Go to the [Setup] menu > [Ext. software] page > [Software mng.] tab.



Check the [Remaining ROM] [Remaining RAM]. If you are running out of space, uninstall another installed extension software. For the uninstallation procedure, refer to the operation manual and settings of the camera.

3. Click [Browse...] to specify the [AI Privacy Guard] that was downloaded.
4. Make sure that [Install new Ext. software] is selected and press [Execute].
  - Installation of the software starts. When the installation is completed, "AI Privacy Guard" will be added to the list of extended software and the "Software mng." screen. (The names may be partially omitted.)



- Do not turn off the camera during installation.
- Do not perform any operation during installation until the installation is completed.

## 3 Basic settings

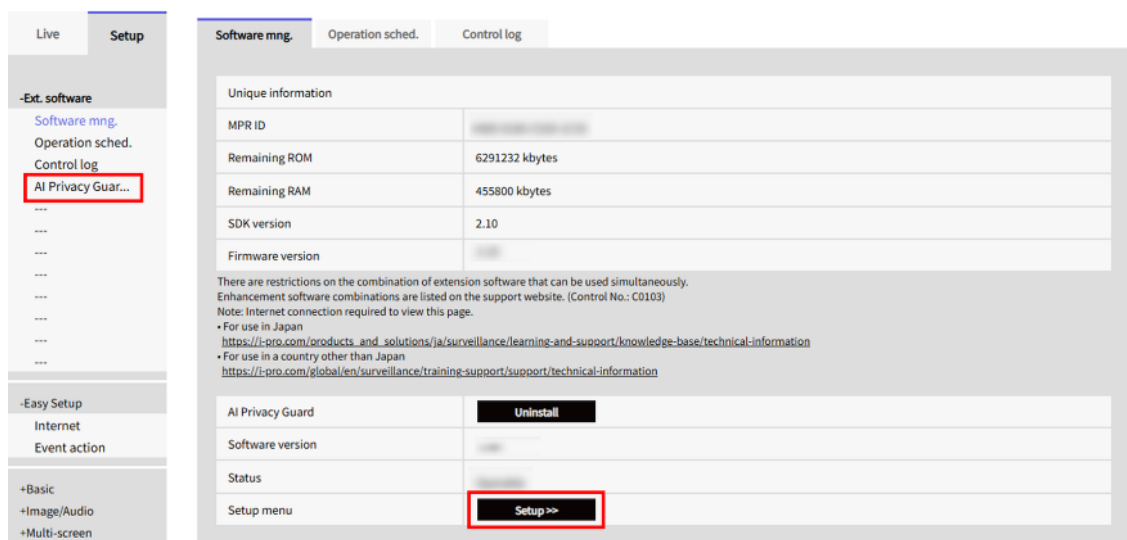
The procedure for configuring Basic settings is as follows.

- ① Open the setting menu  
→3.1 Open the setting menu
- ② Setting up Privacy Guard  
→3.2 Setup menu
- ③ Setting up the AI Privacy Guard extension  
→3.3 AI Privacy Guard extension setting
- ④ Set AI Privacy Guard Restricted Areas  
→3.4 AI Privacy Guard prohibited area setting

### 3.1 Open the setting menu

When you install the AI Privacy Guard application, the [AI Privacy...] menu will be added to the camera's [Settings] menu > [Extension Software] page > [Software Management] tab.

Click the [AI Privacy Guard] tab or the [Go to Settings Screen] button to go to [AI Privacy Guard Settings].



### AI Privacy Guard

Upon selecting this, the "AI Privacy Guard setting" screen is displayed.

AI Privacy Guard setting	
Privacy Guard target	Off ▾
Target stream	Off ▾
Masking method	Blurring ▾
Extension setting	Setup >>
Prohibited area setting	Setup >>

Set

## 3.2 Setup menu

### Privacy Guard target

Select the target for pixelating using the detection result by AI processing.

Off: No pixelating is carried out.

Face: If the AI determines that the image is a face, pixelating is carried out the areas.

Human: If the AI determines that the image is a human, pixelating is carried out the areas.

Except face: If the AI determines that the image is a face, pixelating is carried out other than the areas.

Except human: If the AI determines that the image is a human, pixelating is carried out other than the areas.

All: Pixelating is carried out on the entire screen.

Initial value: Off

### Target stream

Select the target stream for carrying out pixelating.

Off: No pixelating is carried out for any stream.

Stream (1): Pixelating is carried out only for Stream (1).

Stream (2): Pixelating is carried out only for Stream (2).

Stream (3): Pixelating is carried out only for Stream (3).

Stream (4): Pixelating is carried out only for Stream (4).

Stream (2) & Stream (4): Pixelating is carried out only for Stream (2) and Stream (4).

Initial value: Off



· When "Stream (2) & Stream (4)" is selected, "Stream (1)" and "Stream (2)" of the camera will have the same resolution. In addition, "Stream (3)" and "Stream (4)" of the camera will have the same resolution.

· Set to "Stream (2) & Stream (4)" when the AI Privacy Guard function is used using a recorder made by our company.

· AI Privacy Guard does not support JPEG distribution.

### Masking method

Select the type of masking.

Blurring: Blurring is done for the detected target.

Filling: Filling is done for the detected target.

Initial value: Blurring

## 3.3 AI Privacy Guard extension setting

Clicking the [Setup >>] button under [Extension setting] opens the AI Privacy Guard extension setting screen in a separate window.

AI Privacy Guard extension setting	
Sensitivity	High ▾
Intensity of blurring	Middle ▾

**Set**

### Sensitivity

Select the sensitivity of AI Privacy Guard. The higher the sensitivity, the easier blurring will be applied.

3 Basic settings

3.4 AI Privacy Guard prohibited area setting

Low, Medium, High  
Default setting: High

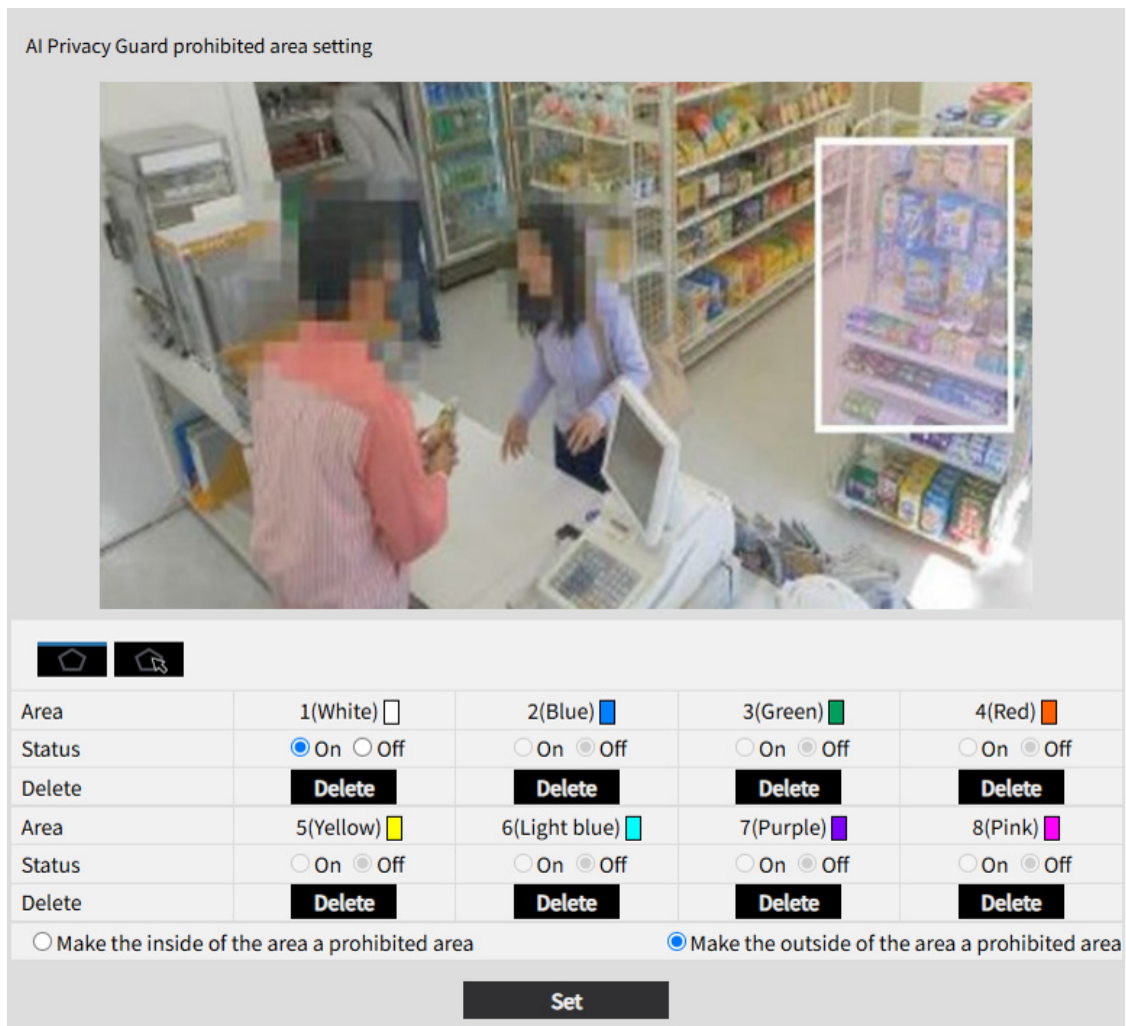
Intensity of blurring

Select the intensity of blurring. The stronger the value, the more difficult it is to see the subject.

Low, Middle, High  
Default setting: Middle

### 3.4 AI Privacy Guard prohibited area setting

Clicking the [Setup >>] button under [Prohibited area setting] opens the AI Privacy Guard extension setting screen in a eparate window.



### Drawing type

Click an icon to select drawing format.



**Area (Polygon):** Draws the prohibited area as a polygon (max. 16 squares).



**Area (Select):** Selects the drawn prohibited area.



- When drawing an area (polygon), selecting the starting point at the end completes the area setup.
- The prohibited area selected in Area (Selection) can be changed in size, length, and shape by dragging the end points of the corners of the frame. It can be moved by dragging inside the frame.
- Multiple prohibited areas cannot be selected at the same time.
- When [Image capture mode] or [Image rotation] is changed in the [Set] menu of the camera, the prohibited area setting will return to the default setting.
- For PTZ cameras, the prohibited area is applied to the current image regardless of camera orientation. In addition, the prohibited area will be applied to image of cameras that are set to "Off(ceiling)" (or where "Upside down" is set to "Off").

### Area

**Masking zone (max. 16 squares):** Draw the prohibited area as a max. 16 squares. Settings for up to 8 locations are distinguished by the color of the drawing line.

The color of the drawing line is in order starting with "1 (White)".

### Status

Set whether the prohibited area is enabled or not.

**On:** Prohibited area is enabled. Frames are displayed in solid lines for areas with occupancy detection enabled.

**Off:** Prohibited area is disabled. Frames are displayed in dashed lines for areas with

occupancy detection disabled.

Default setting: [Area 1]/[Area 2]/[Area 3]/[Area 4]/[Area 5]/[Area 6]/[Area 7]/[Area 8]

Off

### Delete

Delete the selected prohibited area.

### [Make the inside of the area a prohibited area] [Make the outside of the area a prohibited area]

Select the area to be a prohibited.

Default setting: [Make the inside of the area a prohibited area]



- Using the AI Privacy Guard feature will disable the use of JPEG(2).
- If the AI Privacy Guard function is used, it is not possible to make the "Maximum exposure time" settings of "2/30 s max", "4/30 s max", "6/30 s max", "10/30 s max", "16/30 s max", "2/25 s max", "4/25 s max", "6/25 s max", "10/25 s max", and "16/25 s max". In addition, "On (Framerate Control)" in "GOP control" of "Smart coding" cannot be used.
- If the setting of the target stream of the AI Privacy Guard function is changed, video transmission of the camera and manual recording in an SD card will be stopped temporarily.
- Based on the camera which is used, the transmission frame rate is limited when using AI Privacy Guard function. Refer to the following URL for details.  
→ [Technical Information](#) <Control No.:C0103>
- It is possible to schedule the time to operate AI privacy Guard may by setting the "Operation schedule". For the procedure for setting the operation schedule, refer to the Operating Instructions of the camera.

## 4 Others

### 4.1 Specifications

#### 4.1.1 PC environment required

For information about the PC environment, requirements, and supported browsers used for settings, refer to the camera's instruction manual.

#### 4.1.2 Compatible cameras



Refer to the following for the combinations and restrictions of this product and camera.

→[Equipment compatibility<C0103>](#)

### 4.2 Copyright

Transfer, copying, disassembly, decompilation, and reverse engineering of the software contained in this product are prohibited. In addition, any act of export that violates the export laws and regulations of all software included in this product is prohibited.