1 Smartphone application i–PRO Mobile APP

1.1 Operation Guide V12.1



The illustration of screens in this document are of the Android application edition and used as examples.

They may be different from the actual screens.

1.2 Preface

1.2.1 Outline

i-PRO Mobile APP is a smartphone application that makes possible to view videos from/in the following i-PRO devices. (Hereinafter referred to as this app)

- Network Camera (Hereinafter referred to as camera)
- Network Interface Unit (Hereinafter referred to as encoder)
- Digital Disk Recorder (Hereinafter referred to as recorder)
- Network Disk Recorder

For further information about compatible devices, refer to the website of this app.

https://i-pro.com/products_and_solutions/en/surveillance/products/nvr-system/i-pro-mobile-app

Camera images taken with Remote Monitoring as a cloud service for P2P functions can be displayed by this app.

1.2 Preface

 $\label{lem:https://i-pro.com/products_and_solutions/en/RemoteMonitoring/en/html/RemoteMonitoring_webguide_en/index.html$

Viewing of live video from a camera or playback of video in a recorder will become available by connecting with 3G/4G/5G/LTE line or wireless LAN (Wi-Fi).

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Functions that use external services or other devices may stop or malfunction due to their influences.

2 Preparations

2.1 Preparation of i-PRO Mobile APP

2.1.1 Installation

Install this app from Google Play or App Store on your smartphone or tablet PC.



App name: i-PRO Mobile APP

Supported OS: Android™ OS 10.0 or later

iOS 13.0 or later

2.1.2 Start up

Tap to start up this app installed on your smartphone or tablet PC.



2.2 Registration of device information

First of all, registration of a camera or a recorder to be connected with is required to use this app.



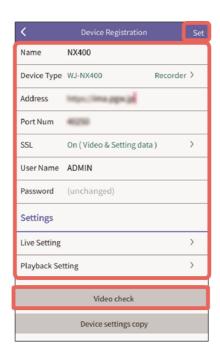
• For number of cameras or recorders that can be registered, refer to "5.1 Specifications".

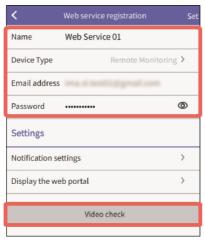
When this app is started up for the first time, the following screen will be displayed.



- 1 Tap [Agree].
- \Rightarrow The "Device Setting" screen will be displayed.

- 2 Tap 🔁.
- ⇒ The "Device Registration" screen will be displayed.





Web service registration screen
(Displayed when "Remote
Monitoring" is selected for "Device
Type")

3 Tap each item and complete the settings.

Refer to "Setting item list" on the right for each setting item.

- 4 When completed all items, tap [Set].
- 5 Tap [Video check].
- ⇒ The camera list screen for registered devices and the web service will be displayed. (3.1 Check live video)

2.2.1 Setting item list

Item	Setting content
Name	Enter a name of up to 16 characters to be displayed on this app.
	Example: i-pro recorder (Available characters: Alphanumeric characters,
	1-byte symbols)

Device Type	Select the type of the device to be registered.
	Recorder/ Camera/ Camera(Multi-directional)/ Encoder/ Camera(ONVIF)/
	Remote Monitoring*1
Address	Depending on the connection environment, "Address" is to be configured as
	follows.
	When using via the Internet*2:
	Enter the URL of DDNS*3 being set to the device to be registered or the
	global IP address of the router.
	When using within the local network:
	Enter the local IP address of the device to be registered.
Port Num	Enter the HTTP port number (0 to 65535) or the HTTPS port number (0 to
	65535) of the device to be registered.
	When using while setting "SSL communication" to "On" or "On (Video &
	Setting data)"
	Configure the HTTPS setting on the device to be registered in advance. For
	further information including how to set up, refer to the operating
	instructions of each device.
SSL	Select a method to communicate with the device to be registered from the
	following.
	When "Camera", "Camera(Multi-directional)", "Encoder", or "Camera
	(ONVIF)" is selected for "Device Type":
	Off/ On
	When "Recorder" is selected for "Device Type":
	Off/ On (Setting data only)/ On (Video & Setting data)
СН	This will be displayed when "Encoder" is selected for "Device Type".
	Enter a CH (channel) of the encoder to be displayed.
Camera Num	This will be displayed when "Camera(Multi-directional)" is selected for
	"Connection destination type". Select a camera number of the multi-
	directional camera to be displayed.
User name	Enter the user name registered in the device.
Password	Enter the password registered in the device.
Live Setting	Configure the image capture size and the frame rate for live video stream.
	Refer to 2.2.3 Live stream settings, 2.2.4 Frame rate setting, 2.2.5
	Resolution setting for further information.

Playback Setting	This will be displayed when "Recorder" is set for "Device Type" and
	registered with this app.
	Select a playback mode from the following.
	Transcode/ Normal/ Low Load (Default: Transcode)
	Refer to "3.9 Switch the settings for playback" for further information.
E-mail address	This will be displayed when "Remote Monitoring" is selected for "Device
	Type". Enter the e-mail address registered to Remote monitoring.
Password	This will be displayed when "Remote Monitoring" is selected for "Device
	Type". Enter the password registered to Remote monitoring.

- *1 If "Remote Monitoring" is not listed in "Device Type", refer to "4.3.1 Select web service"
- *2 When using via the Internet, set the port forwarding function of the router. Refer to the manuals provided with the router for further information.

Automatic setting with the router is possible by setting the UPnp (auto port forwarding) of the camera to "On". (Only when a router supporting UPnp is in use)

For how to configure, refer to the manual of the camera in use that is available to downloaded from the URL below.

*3 Please use the DDNS service below. https://www.viewnetcam.com/ip_ddns/

2.2.2 Live video type

There are three types of live videos and available video and audio format are different depending on the live video type.

IP Connection

For IP connection, enter the device's IP address, port number, user name, and password to register the device.

(1) Live video from an independent camera

Live video being captured and sent from an independent camera.

What is an "independent camera"?

An "independent camera" is a camera that is independently registered in this app as "Camera",

"Camera(Multi-directional)", "Encoder", or "Camera(ONVIF)" for "Device Type".

(2) Live video from a camera connected to a recorder (via recorder)

Live video being captured from a camera connected to a recorder and sent via the recorder.

What is a "camera connected to a recorder"?

A "camera connected to a recorder" is one of cameras connected to and registered in a recorder that is registered in this app.

(3) Live video from a camera connected to a recorder (camera direct)

Live video being captured from a camera connected to a recorder and sent directly from the camera (not via the recorder).

Cloud service Connection (Remote Monitoring)

For Cloud service connection (Remote Monitoring), enter the email address and password for the Remote Monitoring account to register the service.

(4)Live video from a camera registered with Remote Monitoring

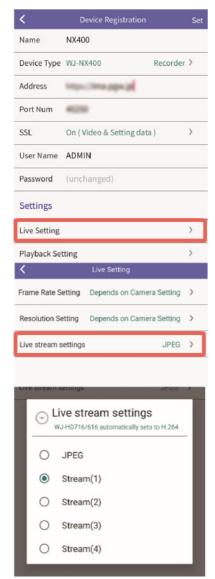
Live video being captured from a camera registered with Remote Monitoring.

(5) Live video from a camera connected to a recorder registered with Remote Monitoring

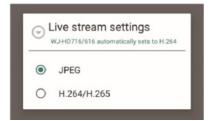
Live video being captured from a camera connected to a recorder registered with Remote monitoring and sent via a recorder.

2.2.3 Live stream settings

Streams that can be set vary depending on the live video type. Refer to "2.2.2" Live video type" for further information.



Setting for live video from an independent camera



Setting for live video from a camera connected to a recorder (via recorder)

1 Tap [Live Setting].

2 Tap [Live stream settings].

3 Set live streams.

The following streams can be set.

- Live video from an independent camera: JPEG,
 Stream(1) to (4)
- Live video from a camera connected to a recorder (via recorder): JPEG, H.264/H.265
- Live video from a camera connected to a recorder (camera direct): JPEG only

2.2.4 Frame rate setting

Set the frame rate for live video.

Tap [Live Setting] on the "Device Registration" screen. (2.2.3 Live stream settings)



1 Tap [Frame Rate Setting].



● When "H.264/H.265" or "Stream(1) - (4)" is set for "Live stream settings", the content of "Frame Rate Setting" cannot be changed. When the frame rate setting cannot be changed, videos will be distributed at the framerate set on the device.



2 Set the frame rate.

Select a frame rate from the following.

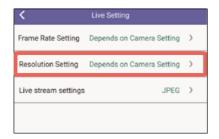
Depends on Camera Setting*/ $0.5 \text{ fps}/\ 1.0 \text{ fps}/\ 2.0 \text{ fps}/\ 5.0 \text{ fps}$

* Videos will be received at the frame rate set on the camera.

2.2.5 Resolution setting

Set the resolution of live video.

Tap [Live Setting] on the "Device Registration" screen. (2.2.3 Live stream settings)



1 Tap [Resolution Setting].



● When "H.264/H.265" or "Stream(1) - (4)" is set for "Live stream settings", the content of "Resolution Setting" cannot be changed. When "Resolution Setting" cannot be changed, videos will be distributed at the resolution set on the device.



2 Configure the resolution setting.

Select a resolution from the following.

Depends on Camera Setting*/ 320/640/1280

* Videos will be received at the resolution set on the camera.

3 Operations

3.1 Check live video

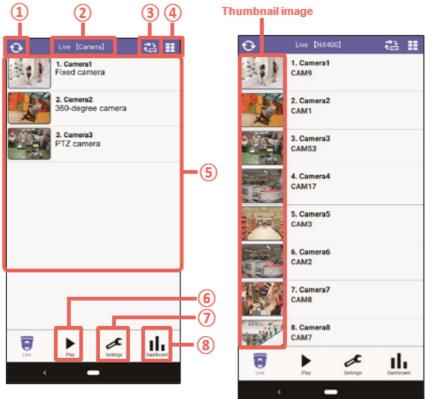
Check live video from an independent camera, a camera connected to a recorder, or a camera using Remote Monitoring.

To check live video, switch between the camera list screen and the live screen.



• The number of access users will be restricted if checking live video using this app. Refer to "Specifications" for further information about the maximum number of concurrent access users.

3.1.1 Camera list screen (Live)



List screen of independent cameras

List screen of cameras connected to a recorder



- The functions that can be operated with this app will vary based on the permissions configured by Remote Monitoring.
- When creating a folder with Remote Monitoring, it is possible to select a camera from the folder selection screen. (3.14 Select a camera from the folder selection screen (Linking to Remote Monitoring))
- In case of Remote Monitoring, displayed cameras can be switched through operating page turning function. (3.14.3 Switch Displayed Page in the camera list screen)

① ② (Update)

The thumbnail image* will be updated to the latest.

* Thumbnail image: Image on the left side of the camera name in the camera list.

2 Title

Video type (Live/Play) and a registered device name will be displayed.

However, in case of an independent camera, only "Camera" will be displayed instead of the

registered device name.

In case of "Remote Monitoring", the Web Service name will be displayed. (2.2.1 Setting item list)

③ 😂 (Switch between Camera/Recorder)

Switches between the list screen of independent cameras and the list screen of cameras connected to a recorder. When registering a web service, it is possible to select it.

4 III (Switch to a multi display)

Switches from the camera list display to a multi display.

⑤ Camera list

The connected cameras will be displayed in a list form.

When a camera in the list is tapped, the live screen of the selected camera will be displayed. (3.1.2 Live screen)

⑥ ▶ (play)

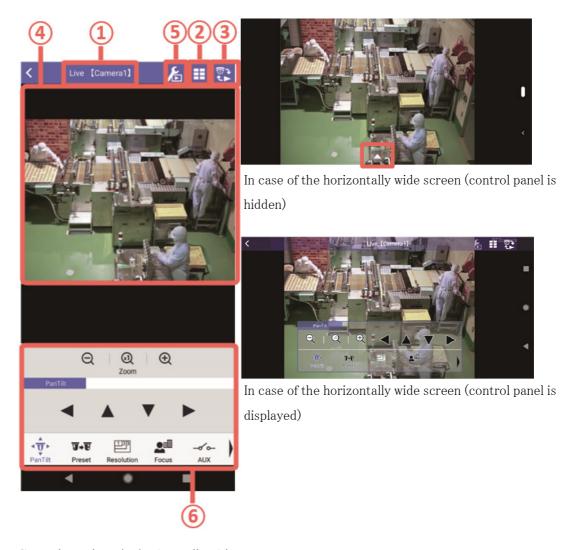
The screen will be switched to the camera list screen of playback. (3.5 Play recorded video)

The "Settings" screen will be displayed. (4.1 Configure each setting)

(Dashboard)

The "Dashboard" screen will be displayed. (3.8 Download playback video)

3.1.2 Live screen



Control panel on the horizontally wide screen

When the \triangle mark at the lower center of the screen is tapped, the control panel will be displayed. When the control panel is being displayed, tapping a point outside the control panel will hide the control panel.

① Title

Video type (Live/Play) and a camera number will be displayed.

② III (Switch to a multi display)

The screen will be switched to a multi display (6 Screens/ 8 Screens/ 9 Screens/ 16 Screens). Refer to "3.3 Switch to a multi display" for further information about the multi display.



• Refer to "4.4.4 Set a multi display [Multi Display Setting]" for the setting of number of screens for the multi display.

③ 🕃 (Switch between live/playback)

The screen will be switched to the playback screen. (3.5.2 Playback screen)

4 Live video display

Live video from the camera selected on the camera list screen will be displayed. When the screen is flicked, videos will be switched and displayed in order of the list.

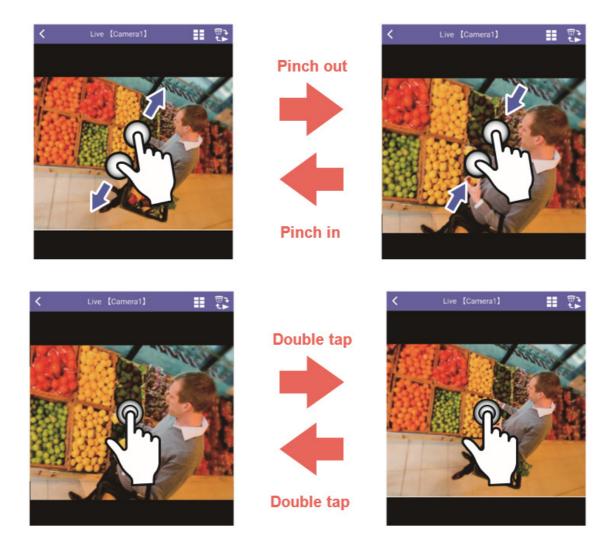


(Camera setting)

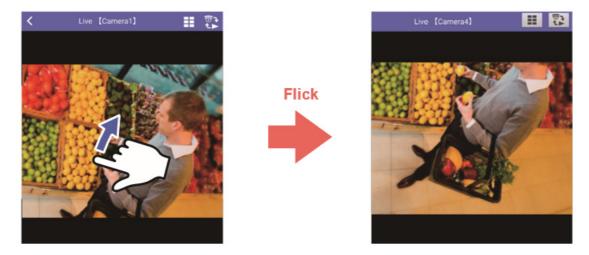
Switches to the camera setting screen. When the camera in use supports the camera setting from this app, this button will be displayed.

On-screen operation of fixed camera/PTZ camera

Pinch out or double tap the screen to enlarge the displayed image. During the enlarged display, pinch in the screen to reduce it and double tap the screen to return to the original size. However, double tap does not work on PTZ cameras to enlarge images. (Only pinch out works to enlarge images.)

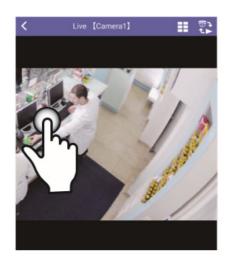


 By flicking the screen during the enlarged display, the direction of video can be changed while keeping the enlarged display.

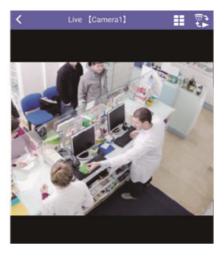


• When a point inside the screen is tapped, the direction of the camera will move to locate the

tapped point to the center of the screen (PTZ camera only).









When a 360-degree camera is in use, the dewarp function is available. Refer to "3.10 Operate the dewarp function" for further information about the dewarp function.

6 Camera control panel

Live video can be controlled using the pan/tilt/zoom functions.

Refer to "3.2 Control live video" for further information.

The following functions are also available.

- Dashboard function (3.11 Display the dashboard)
 This function enables you to check the person count information of each camera.
- AUX control (3.2 Control live video)
 This function switches the state of the device connected to the AUX connector of the camera between OPEN and CLOSE.

3.1.3 Image/audio of live video

Available video and audio format are different depending on the live video type.

Referto "2.2.2 Live video type" for further information about the live video type.



▶ For further information about Remote monitoring specifications, refer to "Specifications" → "Specifications/ Operating Environment/Restrictions" on our website below.

https://i-pro.com/products_and_solutions/en/RemoteMonitoring/en/html/ RemoteMonitoring_webguide_en/index.html

To use the audio function

Configuration of the audio setting is also required on the connected device side. Check the following settings.

Check the following settings.

In case of camera

- Select "On" for "Audio" "Audio reception" of this app. (4.5 Perform the setting relating to audio [Audio])
- Either of "Mic Input", "Interactive(Half-duplex)" or "Interactive(Full-duplex)" is set for "Audio transmission mode" of the camera.

In case of recorder

- Select "On" for "Audio" "Audio reception" of this app. (4.5 Perform the setting relating to audio [Audio])
- Check if the settings of the recorder ("REC & event" "Recording setup" "Audio") and the settings of the camera "Audio input encoding format" are satisfying the contents (conditions) described below.

Viewable video

- Live video from an independent camera: JPEG, Stream(1) to (4)
- Live video from a camera connected to a recorder (via recorder): JPEG, H.264/H.265
- Live video from a camera connected to a recorder (camera direct): JPEG only

Supported video and audio

Live type	Video	Audio	
		G.726	AAC
Live video from an independent camera	MJPEG	0	_
	H.264	\circ	\circ
	H.265*1	0	0
Live video from a camera connected to a recorder	MJPEG	_	_
(via recorder)	H.264	0	0
	H.265*2	0	0
Live video from a camera connected to a recorder	MJPEG	0	_
(camera direct)	H.264	<u> </u>	<u> </u>
	H.265	_	_

Live video from a camera connected to a recorder H.264 — Oregistered with Remote monitoring H.265 — O

- *1: When live video is from an independent encoder, H.265 video is unavailable to view.
- *2: When live video is from WJ-ND400 or NV series recorder, H.265 video is unavailable to view.



■ Live video from a camera connected to WJ-HD716/HD616 can be viewed only when video is transmitted via recorder. Available audio is G.726 only.

3.2 Control live video

Perform PanTilt/Zoom/Preset/Resolution/Focus operation.

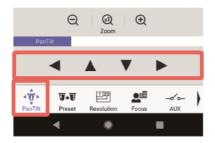
Perform operation by tapping each button on the camera control panel (On-screen operation of fixed camera/PTZ camera).



- When a fixed camera is use, "AUX", "Resolution", "Save" and "Dashboard" will be displayed.
- In case of 360-degree camera on which "Fisheye" is set for the image capture mode, only "Resolution" and "Save/Snapshot" are available.

Pan/Tilt

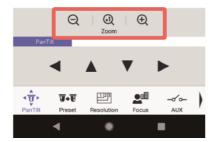
Adjust the camera direction up, down, left and right.



- : Adjust the camera direction left
- ▲ : Adjust the camera direction up
- ▼ : Adjust the camera direction down
- ▶ : Adjust the camera direction right

Zoom

Zoom in, display in the original size and zoom out video from a camera.



Q: Reduce video (Zoom out)

②: Display video in the original size (x1)

⊕ : Enlarge video (Zoom in)

Preset

Move the camera direction to the preset position set on the camera in advance.

Refer to the operating instructions of the camera for further information about preset position.



Configuration of the preset position of the camera is not available on this app.



HOME: Move the camera direction to the home position

P1: Move the camera direction to preset position 1

P2: Move the camera direction to preset position 2

P3: Move the camera direction to preset position 3

Resolution

Change the resolution of video from a camera.



: Change the resolution to 320

: Change the resolution to 640

: Change the resolution to 1280



- When an independent camera is in use and "Stream(1) (4)" is set for "Stream", "Resolution" will not be displayed.
- When a camera connected to a recorder is in use and "H.264/ H.265" is set for "Stream", "Resolution" will not be displayed.
- When "Resolution" is not displayed, video will be displayed at the resolution

set on the device side.

Focus

Adjust focus of video from a camera.



AF: Activate the auto focus function and automatically adjust focus based on a subject located in the center of the screen

2 : Adjust focus to the "Near" side

: Adjust focus to the "Far" side

AUX

Control the AUX connector of the camera from this app.

This function switches the state of the device connected to the AUX connector of the camera between OPEN and CLOSE.



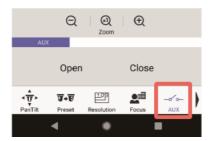
- AUX control is available only with the following cameras. (2.2.2 Live video type)
 - · Independent camera
 - · Camera connected to a recorder
- · Live video from a camera connected to a recorder registered with Remote Monitoring(via recorder)

When the camera in use is other than the above, the [AUX] button will not be displayed on the camera control panel.

- The name of the [Open] button and the [Close] button can be changed. Refer to "4.4.7 Set the AUX title [AUX title]" for how to change the name.
- When controlling AUX, be sure to use it only for the purpose where the status can be checked with live video.

(Example: Control the lighting of the place where the camera is installed.)

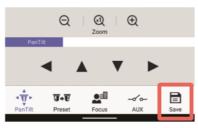
Perform operation by tapping the [AUX] button on the camera controlpanel (AUX control).



[Open]: The status of the AUX connector will be open.

[Close]: The status of the AUX connector will be closed.

Save/Snapshot



Camera control panel when a camera connected to a recorder is in use

Live video being displayed can be saved in the SD memory card on the camera and saving as still image (snapshot) is also available.

Refer to "3.4 Save live video" for how to operate.

When a camera connected to a recorder is in use, (Save) will be displayed instead of (Snapshot) on the camera control panel.

3.3 Switch to a multi display

The screen displaying videos from cameras can be switched to 6 Screens/ 8 Screens/ 9 Screens/ 16 Screens.

Camera images on multi displays are displayed at 1 fps. However, the actual frame rate vary depending on the network environment and the used smartphone/tablet.

6 Screen display

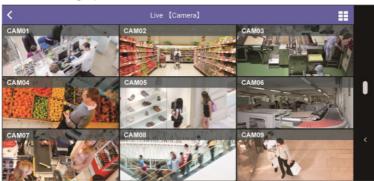
8 Screen display





This is an example of vertical screen display. Multi-screen display is also available in horizontal screen display.

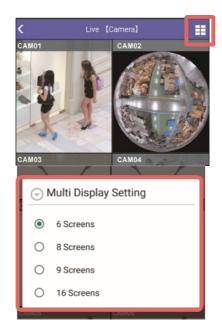
9 Screen display



16 Screen display



This is an example of horizontal screen display. Multi-screen display is also available in vertical screen display.



- 1 Tap III (Switch to a multi display).
- ⇒ The multi display setting screen will be displayed.
- 2 Tap a number of screens to be displayed.



- The setting that determines the number of screens can be made by performing the procedure described in "4.4.4 Set a multi display [Multi Display Setting]"
- Refer to "4.4.5 Set a multi display image [Multi Display Image Setting]" for the settings of image display (Aspect Ratio/ Scaling/ Cropping) for each camera image on multi displays.

3.4 Save live video

Live video from a camera can be saved in the SD memory card on the camera and saving as still image (snapshot) is also available.



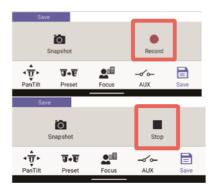
- Manual saving of images in an SD memory card using this app is available only for images from an independent camera.
- To save live video, it is necessary that the manual recording function of the connected camera is enabled. Check the following statuses and settings of the camera.
 - · The camera supports use of SD memory card
 - · An SD memory card is being inserted in the camera
 - · The setting of the camera is configured to allow to use SD memory card
 - · The save mode of the camera is set to "Manual".
- When "JPEG" is set for "Recording format" on the camera, manual saving

using this app is unavailable.

3.4.1 Save live video in an SD memory card

Save live video in an SD memory card.

Tap (Save) on the camera control panel. (Save/Snapshot)



- 1 Tap (Record)
- ⇒ Recording of the currently displayed live video will start.
- 2 Tap (Stop)
- \Rightarrow The recording will stop.

3.4.2 Save still image [Snapshot]

Capture live video with the snapshot function (a still image) and save it on the smartphone.

Operation is different between an independent camera and a camera connected to a recorder.

The saved still image can be checked on the following apps.

- Android OS: "Gallery" app
- iOS:"Photo" app

In case of an independent camera

Tap (Save) on the camera control panel. (Save/Snapshot)



- 1 Tap 🔯 (Snapshot).
- \Rightarrow The displayed video will be saved as a still image.

In case of a camera connected to a recorder

Tap (Save) on the camera control panel. (Save/Snapshot)



- 1 Tap (Snapshot) on the camera control panel.
- \Rightarrow The displayed video will be saved as a still image.

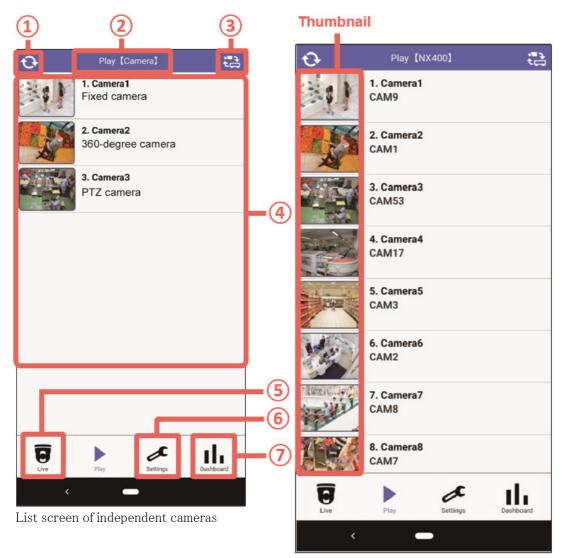
3.5 Play recorded video

Play videos recorded in the SD memory card (SD recording) on the camera or videos recorded in a recorder (recorder recording). To play recorded video, switch between the camera list screen and the playback screen.



- When using this app to play recorded video, no audio will be output. It is necessary to download recorded video to hear audio.
- The number of access users will be restricted if playing recorded video using this app. Refer to "Specifications" for further information about the maximum concurrent access users.

3.5.1 Camera list screen (Play)



List screen of cameras connected to a recorder



- The functions that can be operated with this app will vary based on the permissions configured by Remote Monitoring
- When creating a folder with Remote Monitoring, it is possible to select a camera from the folder selection screen. (3.14 Select a camera from the folder selection screen (Linking to Remote Monitoring))
- In case of Remote Monitoring, displayed cameras can be switched through operating page turning function. (3.14.3 Switch Displayed Page in the camera list screen)

① ② (Update)

The thumbnail image* will be updated to the latest.

* Thumbnail image: Image on the left side of the camera name in the camera list.

2 Title

Video type (Live/Play) and a registered device name will be displayed.

However, in case of an independent camera, only "Camera" will be displayed instead of the registered device name.

In case of "Remote Monitoring", the Web Service name will be displayed. (Registration of device information)

③ 😂 (Switch between Camera/Recorder)

Switches between the list screen of independent cameras and the list screen of cameras connected to a recorder. When registering a web service, it is possible to select it.

4 Camera list

The connected cameras will be displayed in a list form. When a camera in the list is tapped, the playback screen (3.5.2 Playback screen) or the event screen (3.7.2 Event search and play) of the selected camera will be displayed.



● The screen to be displayed when a camera is selected by tapping can be selected from the playback screen or the event screen. Refer to "4.8 Perform the initial setting of the playback screen [Advanced Setting]" for further information.

⑤ **(Live)**

The screen will be switched to the camera list screen (3.1.1 Camera list screen (Live)) of live.

The "Settings" screen (4.1 Configure each setting) will be displayed.

(Dashboard)

The "Dashboard" screen (3.11 Display the dashboard) will be displayed.

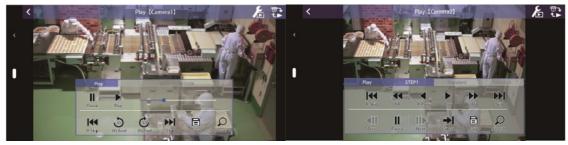
3.5.2 Playback screen



SD recording playback screen

Recorder recording playback

screen



SD recording playback screen (horizontally wide Recorderrecording playback screen screen) (horizontally wide screen)

Control panel on the horizontally wide screen

When any part in the screen is tapped, the control panel will be displayed.

When the control panel is being displayed, tapping a point outside the control panel will hide the control panel.

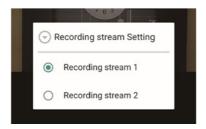
① Title

Video type(Live/Play) and a camera number will be displayed.

② 🔏 (Switch stream) *SD recording playback screen

This will be displayed when the camera has multiple recording streams.

When this button is tapped, the following window will be displayed and a stream for playback can be selected.





- Kase (Switch stream) will not be displayed in the following cases.
 - · When playing recorded video in a recorder
 - When the camera has no multiple recording streams

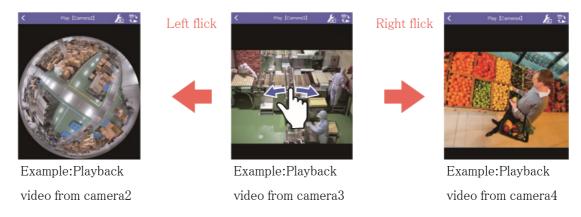
There are three playback modes and re-encoding to fit to the screen size/rate supported by the smartphone is available. Refer to "3.9 Switch the settings for playback" for information about the playback mode and how to configure it.

4 Switch between live/playback)

The screen will be switched to the live screen (3.1.2 Live screen).

⑤ Playback video display

Recorded video from the camera selected on the camera list screen will be displayed. When the screen is flicked, playback videos of cameras will be switched and displayed in order of the list.





When a 360-degree camera is in use, the dewarp function is available. Refer to "3.10 Operate the dewarp function" for further information about the dewarp function.

6 Playback control panel

Operations of recorded video including pausing and skipping during playback of recorded video can be performed on this panel.

The buttons to be displayed on the playback control panel are different between SD recording playback and recorder recording playback. Refer to "3.6 Control playback video" for further information.

3.5.3 Image/audio of playback video

Depending on the recorded video type, available video and audio format are as follows.

Recorded video type	Video	Audio	
		G.726	AAC
Recorded video in the SD memory card of an	H.264	_	_
independent camera	H.265	_	_
Recorded video of a camera connected to a recorder	H.264*1	_	_
	H.265*2	_	_
Recorded video from a camera connected to a	H.264	_	0
recorder registered with Remote monitoring	H.265	_	0

- *1: When the playback mode is set to "Mobile", images recorded in Recorder can be played as MJPEG or H.264.
- *2: When the playback mode is set to "Normal" or "Low Load", images recorded as H.265 in Recorder can be played without format changing.



● For further information about Remote monitoring specifications, refer to "Specifications" → "Specifications/ Operating Environment/ Restrictions" on our website below.

https://i-pro.com/products_and_solutions/en/RemoteMonitoring/en/html/RemoteMonitoring_webguide_en/index.html

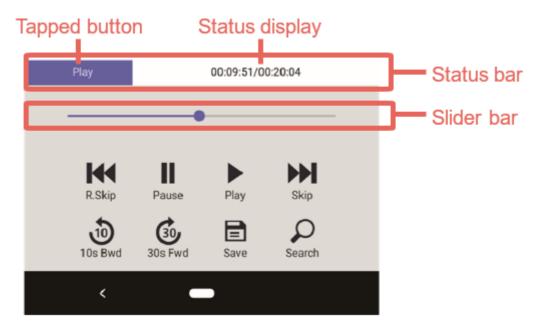
To use the audio function, configuration of the audio settings is also required on the connected device side. Refer to "To use the audio function" for further information.

3.6 Control playback video

Perform playback operation of recorded video. Perform operation by tapping each button on the playback control panel.

The buttons to be displayed on the playback control panel are different between during playback of video recorded in the SD memory card (SD recording playback) and during playback of video recorded in the recorder (recorder recording playback).

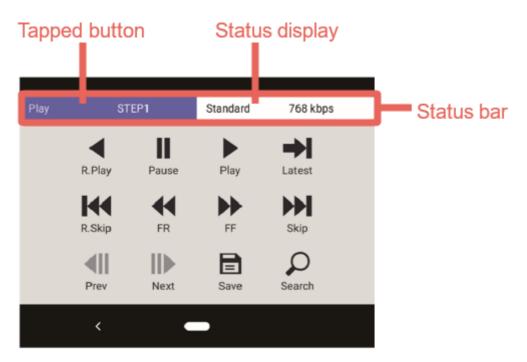
3.6.1 Playback control panel during SD recording playback

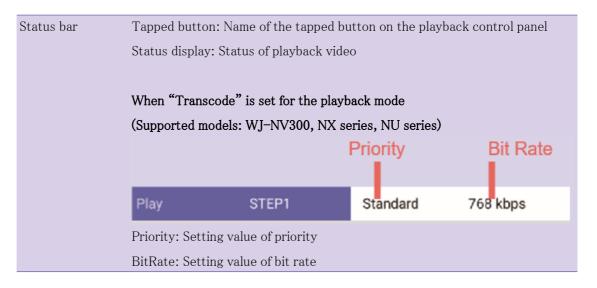


Status bar Tapped button: Name of the tapped button on the playback control panel
Status display: Current time of playback video/Total time of playback video

Slider bar	Indicate the playback position. The playback position can be changed by
	moving the slider bar.
Ⅱ (Pause)	Pause a playback.
▶ (Play)	Start a playback.
(Save)	Video being played can be saved as a video file (MP4 format) or a still image
	(snapshot) in the smartphone. Refer to "3.8 Download playback video" for
	further information including how to operate.
(Search)	Search recorded video by date, time or event. Refer to "3.7 Search and
	play" for further information including how to operate.
₭ (R.Skip)	Play the previous recorded video.
10 (10s Bwd)	Go back 10 seconds from the current playback position (time) and start
	playback.
6 (30s Fwd)	Skip ahead 30 seconds from the current playback position (time) and start
	playback.
₩ (Skip)	Skip to the next video and start playback.

3.6.2 Playback control panel during recorder recording playback







• Refer to "3.9 Switch the settings for playback" for further information about the playback mode and how to configure it.

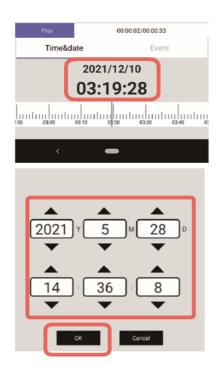
◀ (R.Play)	Play backward.
Ⅱ (Pause)	Pause a playback.
▶ (Play)	Play forward.
(Save)	Video being played can be saved as a video file (MP4 format) or a still image
	(snapshot) in the smartphone. Refer to "3.8 Download playback video" for
	how to operate.
₩ (R.Skip)	Play the previous recorded video.
◀ (FR)	Each time the button is tapped, the reverse playback speed will change.
	When ▶ (Play) or ◀ (R.Play) is tapped during fast reverse playback, the
	playback speed will return to the normal playback speed.
► (FF)	Each time the button is tapped, the playback speed will change. When
	(Play) or <a> (R.Play) is tapped during fast playback, the playback speed will
	return to the normal playback speed.
₩ (Skip)	Skip to the next video and start playback.
(Prev)	Display the previous frame and pause the playback.
	Each time this button is tapped during pausing, the previous frame will be
	displayed.
II▶ (Next)	Display the next frame and pause the playback.
	Each time this button is tapped during pausing, the next frame will be displayed.
→ (Least)	Play the latest recorded video.
(Search)	Search recorded video. Refer to "3.7 Search and play" for how to operate.

3.7 Search and play

Search recorded video by date, time or event and play.

3.7.1 Search by time&date and play

When \wp (Search) on the playback control panel is tapped, a screen to specify a date and time will be displayed. (3.6 Control playback video)



- 1 Tap a playback date and time or specify a date and time on the timeline.
- ⇒ When a playback date and time is tapped, the date and time specification screen will be displayed. Read the instructions in the right column for how to operate the timeline.
- 2 Specifytime and date and then tap [OK].
- ⇒ Video recorded on the specified time and date will be played.

When found no video recorded on the specified time and date but found video recorded after the specified time and date:

Playback will start from the oldest video among videos recorded after the specified time and date.

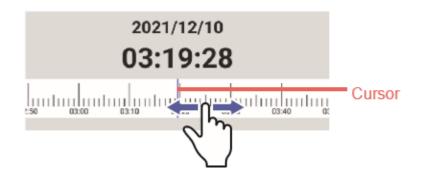
When found no video recorded on the specified time and date and later:

Playback will start from the latest video among videos recorded before the specified time and date.

Operation of the timeline

Swipe the timeline to specify the date and time.

When the desired playback date and time is moved to the cursor and the finger is released, playback will start.



When a pinch in operation is performed, the scale width of the timeline will expand.



When a pinch out operation is performed, the scale width of the timeline will contract.



The scale width changes in 5 steps (72h/24h/6h/1h/10min).

Timeline when playing recorded video from a camera using Remote monitoring

Timeline when playing recorded video from a camera using Remote monitoring is as follows.



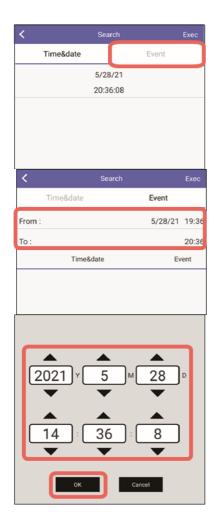
3.7.2 Event search and play

Search for recording event in the specified time and date range and play.



• The event search is available only at the time of SD recording playback. The event search is not available at the time of recorder recording playback.

When \bigcirc (Search) on the playback control panel is tapped (3.6 Control playback video), the search screen will be displayed.



- 1 Tap [Event].
- \Rightarrow The "Event" screen will be displayed.
- 2 Tap a start time and date and an end time and date to specify a time and date range in which event is to be searched.
- \Rightarrow The screen to specify time and date will be displayed.
- 3 Specify a start time and date and an end time and date and then tap [OK].



- 4 Tap a desired video to play.
- ⇒ Start a playback.
- 5 Tap a desired video to play.
- ⇒ Start a playback.

Operations (gestures) on the search result page work as follows.

(Go to the top of the page)

Display the latest page of search results (30 lists).

(Go to the last page)

Display the last page of search results (30 lists).

(Go to the previous page)

Display the previous page of search results (30 lists).

(Go to the next page)

Display the next page of search results (30 lists).

3.8 Download playback video

Download video recorded in an SD memory card on the camera (SD recording) or video recorded in a recorder (recorder recording) to the smartphone in MP4 format.

3.8.1 Restrictions on download

- Download of video recorded in a recorder (recorder recording) is available only when the recorder in use is NX series or NU series.
- Download of video recorded in an SD memory card (SD recording) is available only when the camera in use supports the download of SD recording video (Extreme series or later).
- If the resolution and the aspect ratio at the time of recording correspond to the following, download maybe unavailable.
 - Aspect ratio: 4:3, resolution: 3072x2304 or more
 - Aspect ratio: 1:1, resolution: 2192x2192 or more
 - Aspect ratio: 16:9, resolution: 3072x1728 or more
- When using an old model including iPhone6, playback of downloaded MP4 file (compression

method: H.265) is unavailable.

- Download of MJPEG video is unavailable
- When the data size of the downloaded file is too large, it may take time to save the file on the smartphone.
- When the format of audio is G.726, audio will not be output when playing the downloaded file.

3.8.2 Save destination

Android OS

Downloaded files will be saved in "/Camera" folder under "Environment.DIRECTORY_DCIM"

iOS

Downloaded files can be saved in Camera Roll or the specified folder.

3.8.3 Playback

The saved file can be played with the OS standard video player.

Also, when saving the downloaded file in the specified folder on iOS, the file can be played with a non-iOS standard video player by sharing it.

3.8.4 Download recorded video in a camera

Download video recorded in an SD memory card on the camera (SD recording) to the smartphone in MP4 format.

Tap (Save) on the playback control panel. (3.6 Control playback video)



- ⇒ Download of the video currently being played will start. "Downloading" will be displayed during the download and "Download is complete" will be displayed when the download is completed.



Do not perform any other operation including tapping the home button when a download is in progress.

Otherwise, the download may be interrupted and fail.

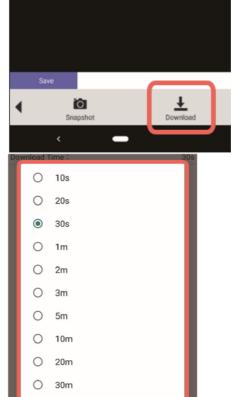


2 Tap [OK]

3.8.5 Download recorded video in a recorder

Download video recorded in a recorder (recorder recording) to the smartphone in MP4 format.

Tap (Save) on the playback control panel. (3.6 Control playback video)



- 1 Tap 👤 (Download)
- ⇒ The screen to specify a download start time and date (From) and a download time will be displayed.
- 2 Specify a download start time and date (From) and a download time

Select a download time from the following. $10s/\ 20s/\ 30s/\ 1m/\ 2m/\ 3m/\ 5m/\ 10m/\ 20m/\ 30m$ Default: 30s





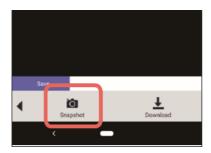
3 Tap [Execute].

- ⇒ Download of the specified recorded video will start. "Downloading" will be displayed during the download and "Download is complete" will be displayed when the download is completed.
- 4 Tap [OK].

3.8.6 Save still image [Snapshot]

Capture playback video with the snapshot function (a still image) and save it.

Tap (Save) on the playback control panel. (3.6 Control playback video)



- 1 Tap 🔯 (Snapshot).
- \Rightarrow The displayed video will be saved as a still image.

3.9 Switch the settings for playback

When WJ-NV300, NX series or NU series is in use, the following three settings are available as the setting for playback (playback mode).

Transcode

Smooth video playback is achieved since video is played after re-encoding it in order to fit to the screen size/rate supported by the smartphone.

When "Transcode" is set, it is necessary to select "Priority" and "Bit Rate".

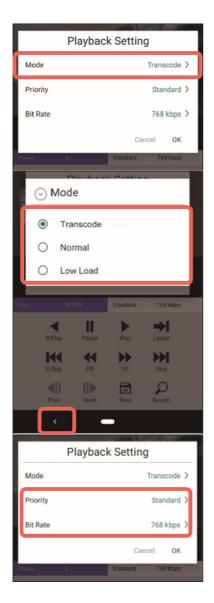
Normal

Playback will be performed according to the recording settings (resolution, frame rate) of the recorder.

Low Load

Playback will be performed with low load by playing I-frames only.

Tap 🔏 (Playback Setting) on the playback screen. (3.5.2 Playback screen)



1 Tap [Mode].

The "Mode" screen will be displayed.

2 Tap a desired playback mode to be configured.

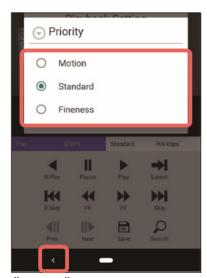
When setting to "Transcode", perform the procedures of step 4 and subsequent.

3 Tap (Back)

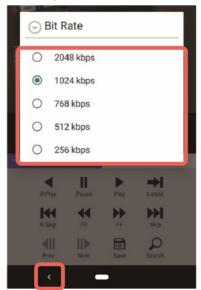
 \Rightarrow The display returns to the "Playback Setting" screen.

4 Tap [Priority] / [Bit Rate].

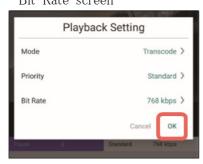
 \Rightarrow The setting screen will be displayed.



"Priority"screen



"Bit Rate"screen



Priority

Select from the following.

- 5 Configure the settings of "Priority" and "Bit Rate".

 Refer to the right side for further information about

 "Priority" and "Bit rate".
- 6 Tap (Back)
- \Rightarrow The display returns to the "Playback Setting" screen.

- 7 When completed the settings, tap [OK].
- \Rightarrow The settings will be applied.

Motion When "Motion" is set, movement of subject is prioritized and the framerate is set higher than the resolution.

Standard	When "Standard" is set, movement of subject and the frame rate are set to
(default)	standard.
Fineness	When "Fineness" is set, quality of subject is prioritized and the resolution is set
	higher than the frame rate.

Bit Rate

Select from the following.

2048 kbps/ 1024 kbps/ 768 kbps/ 512 kbps/ 256 kbps

Default: 768 kbps

3.10 Operate the dewarp function

The dewarp function is a function that rotates an image, crops an image out and displays in PTZ display by applying the 3D technology of fisheye image of 360-degree camera.

This dewarp function is available on this app when displaying live video from 360-degree camera (image capture mode: fisheye) or recoded video.



- The dewarp function is available only with a 360-degree camera (image capture mode: fisheye).
- The dewarp function is not available when displaying videos on a multi display.

3.10.1 Switch to the PTZ display

Double tap (or pinch out) a point (center) to be displayed in the PTZ display.



Fisheye display









Fisheye display

Pinch out

PTZ display



3.10.2 Rotate a fisheye image

Swipe in a desired direction to rotate so as to draw a circle.



Swipe so as to draw a circle





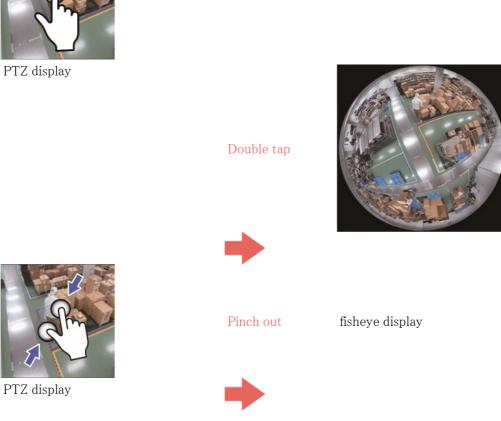
3.10.3 Return to the fisheye display from the PTZ display

Double tap the screen. Video will be displayed in the fisheye display while keeping the top and bottom positions.

When trying to display an area larger than a certain size by pinching in on the screen, video will

automatically be displayed in the fisheye display.





3.11 Display the dashboard

The dashboard function is a function that can check the person count information including the number of visiting and staying persons with graphs when the extension software is installed on the camera in use.



- This function is available only on "independent cameras".
- To use this function, it is necessary to install the extension software on the camera and configure the required settings (line setting, area setting, etc.).
- Refer to the following about the extension software.
 - · The extension software list supported by this app: https://i-pro.com/ products_and_solutions/en/surveillance/products/nvrsystem/i-pro-mobile-app

• Further information such as the extension software setting: https://i-pro.com/products_and_solutions/en/surveillance/documentation-database

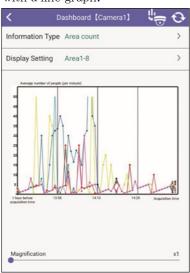
Line count

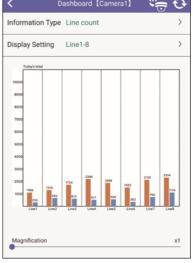
There are two types of the person count information that can be checked.

Area count

The number of persons who stays in the set area The number of persons who passes the set line can be checked. The average number of persons can be checked. The total number of persons per minute of the latest 1 hour will be displayed who passed each line on the day will be with a line graph.

displayed with a bar graph.

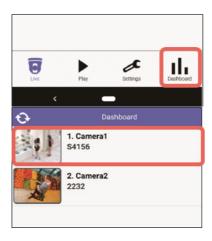




Vertical axis: Average number of persons (every Vertical axis: Total number of persons minute)

Horizontal axis: Line

Horizontal axis: Acquisition time



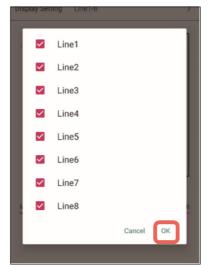
- 1 Tap II (dashboard) at the bottom of this app screen.
- \Rightarrow A list of selectable cameras is displayed.

2 Tap a camera.

⇒ The "Dashboard" screen of the selected camera will be displayed.



In case of area count



In case of line count

3 Tap [Information type].

 \Rightarrow The information type selection screen will be displayed.

4 Select either of area count or line count.

 \Rightarrow The display returns to the "Dashboard" screen.

5 Tap [Display Setting].

 \Rightarrow The display setting selection screen will be displayed.

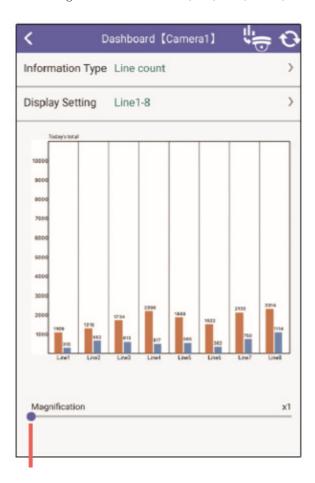
6 Select an area or a line by which the number of persons is to be checked and tap [OK].

 \Rightarrow The person count information of the selected area or line will be displayed with a graph.

3.11.1 Magnification display

Magnification of the number of persons shown with the vertical axis can be changed by moving the slide bar at the bottom of the screen.

Available magnification factors: x1/x4/x10/x200/x500/Max.



Slide bar

Buttons on the title bar



(Switch between Camera/Dashboard)

Switches between the independent camera live screen and the dashboard screen.

(Update)

The dashboard screen will be updated to the latest.

3.12 Display the dashboard (Remote Monitoring)

When cameras are configured to support the dashboard function in Remote Monitoring, the person count information of the area or line for the camera can be reviewed in graphs.

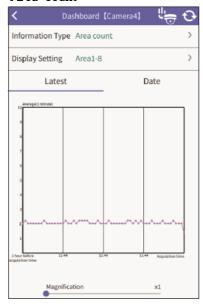
In Remote Monitoring, it is possible to specify and check the range (period) of the person count information. There are two types of range specifications.

Latest: average number of persons per minute of the latest 1 hour (area count) total number of persons in the latest 1 hour (linecount)

Date: average number of persons per hour of the specified date (area count) total number of persons in the specified date (line count)

The following screens are examples of area count and line count.

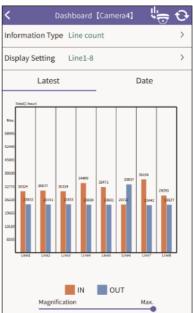
Area count



The legend below the graph shows the correspondence between the graph colors and area names for Areas 1 to 8.

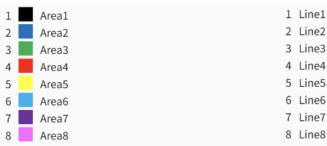
Area names can be set in the camera browser.

Line count



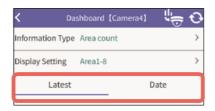
The legend below the graph shows the correspondence between the graph color and line name for each of Lines 1 to 8.

Line names can be set in the camera browser.



3.12.1 Specify a range of the person count information

Select a camera and display the "Dashboard" screen (3.11 Display the dashboard).



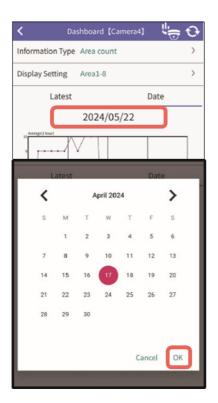
1 Tap [Latest] or [Date].

When [Latest] is tapped

The person count information of the area or line for the latest 1 hour will be displayed with a graph.

When [Date] is tapped

- \Rightarrow The date of the current graph will be displayed. Go to step 2.
- 2 Tap the date.
- ⇒ The screen to specify date will be displayed.



- 3 Specify date and then tap [OK].
- ⇒ The person count information of the area or line for selected date will be displayed with a graph.

3.13 Alarm notification function

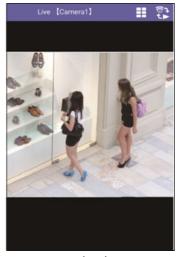
Reception of alarms from cameras and recorders on this app will become available by making the setting relating to alarm notification in advance.

Alarm notifications will appear in a pop-up display on the smartphone/tablet. It is possible to check live video from the camera on which the alarm occurred by tapping the pop-up display.*





* The above screen is an example.



Alarm video (live) from a camera



How to operate the content of the pop-up display or the thumbnail image may differ depending on the mobile device in use.



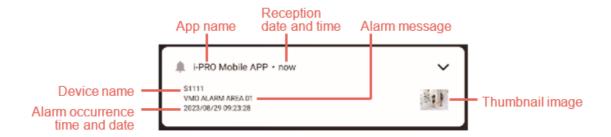
• In case of Remote Monitoring, the reception of alarms will be available after completing the web service settings (4.3.1 Select web service).

3.13.1 Alarm information (pop-up display)

The following alarm information will appear in a pop-up display when an alarm notification is received.



• The following screen is an example. Depending on the mobile model used, the content of the pop-up display may differ from the actual one.



* The above screen is an example.

App name	App name "i-PRO Mobile APP" will be displayed.
Reception	Date and time when each alarm has been received will be displayed.
date and time	
Device name	Name of the device (camera/recorder) from which the alarm notification is sent will
	be displayed.
	When the device information is not acquired, the IP address of the device will be
	displayed.
Alarm	Displays the message of the alarm notification.
message	
Alarm	Date and time when an alarm is detected with the device (camera/recorder) will be
occurrence	displayed.
time and date	
Thumbnail	A thumbnail image will be displayed. For the thumbnail image setting (display/
image	hideand more), refer to the website. Refer to the "Important" (3.13 Alarm
	notification function) for the URL of the website.
	A thumbnail image can also be displayed enlarged/reduced.(3.13.2 Display a
	thumbnail image enlarged/reduced)

3.13.2 Display a thumbnail image enlarged/reduced

When there is a thumbnail image in a pop-up display, the thumbnail image can be displayed enlarged (open)/reduced (close).



 How to operate the content of the pop-up display or the thumbnail image may differ depending on the mobile device in use.







Reduced display (close display)

* The above screen is an example.



Enlarged display (open display)

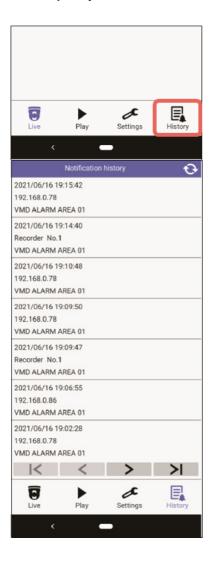
* The above screen is an example.



It is possible to check live video from the camera on which the alarm occurred by tapping the screen in a state where the thumbnail image is displayed enlarged (open display) or by tapping [Live display]. (3.13 Alarm notification function)

3.13.3 Check the alarm notification reception history

A history of up to the latest 100 received alarm notifications can be checked.



- 1 Tap 🖪 (History) at the bottom of this app screen.
- ⇒ The notification history screen will be displayed.

2 A history of up to the latest 100 alarm notifications will be displayed.

20 notifications per page (screen) will be displayed. The page operation on the notification history screen works as follows.



The content will be updated to the latest information.

(Go to the top of the page)

Display the latest page (20 lists).

(Go to the last page)

Display the last page(20 lists).

(Go to the previous page)

Display the previous page (20 lists).

(Go to the next page)

Display the next page (20 lists).

3.13.4 Play recorded video from a history of the alarm notifications

Recorded video can be played from the alarm notification history screen by selecting the alarm notifications.

Recorded video can be played from the alarm notification history screen only through the alarm notifications from Remote Monitoring.



- 1 Tap a desired notification to be displayed.
- ⇒ The playback screen will be displayed. Refer to "3.5.2 Playback screen" for the playback screen.

3.14 Select a camera from the folder selection screen (Linking to Remote Monitoring)

For folders created with Remote Monitoring, live video can be viewed and recorded images can be played with a camera selected from the folder selection screen.



- It is necessary to set a folder for this function through web browser in advance. Folders cannot be set through this app.
- It is necessary to satisfy following conditions to view the folder selection screen.
 - [Device Type] is set to "Remote Monitoring". (Registration of device information)
 - The user logging in the app is one who can select two or more folders.

 For further information about the operating instruction of web browser, refer to "Setting" -> "Folder settings" on our website below.

https://i-pro.com/products_and_solutions/en/RemoteMonitoring/en/html/RemoteMonitoring_webguide_en/index.htm

3.14.1 Select a folder

When this app is started up, the folder selection screen will be displayed.



1 Tap a desired folder name to be displayed.

For folders with other folders on lower layers:

A list of the folders on lower layers will be displayed. Tap the desired folder name.

For folders without other folders on lower layers:

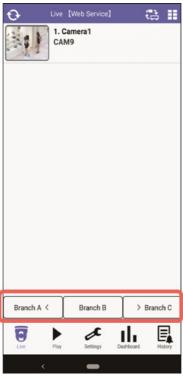
The camera list screen will be displayed.



- The folder name has been designated in web browser.
- If a folder is selected from the folder selection screen, the camera list screen of the folder is automatically displayed when the app is started up next time.

3.14.2 Change folders in camera list screen

Folder selection buttons will be displayed on the bottom of the camera list screen.



*The screen is an example.

[Branch A \leq]: The name of previous folder. When this is tapped, the camera list screen will be displayed.

- [Branch B]: The name of the folder currently displayed.

 When this is tapped, the folder selection screen will be displayed.
- [> Branch C]: The name of next folder. When this is tapped, the camera list screen will be displayed.

3.14.3 Switch Displayed Page in the camera list screen

For folders in Remote Monitoring with forty one (41) or more cameras, the page turning button is displayed on the bottom of the camera list screen.

When this button tapped, the displayed camera will be switched in the list.



• Up to one hundred sixty (160) cameras can be displayed for each folder.



(Go to the previous page)

Display the previous page.

(Go to the next page)

Display the next page.

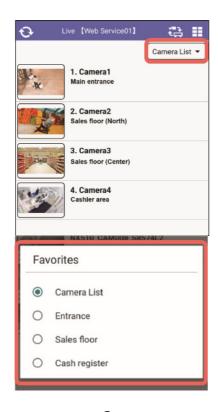
3.15 Select a camera from "Favorite" (Linking to Remote Monitoring)

For favorite groups created with Remote Monitoring, live video can be viewed and recorded video can be played in the cameras of the group by selecting the "Favorite" in this app.



- It is necessary to create favorite groups for this function through web browser in advance. It is not possible to create a favorite group in this app.
- To select a camera in a favorite group, [Device Type] needs to be set to "Remote Monitoring". (Registration of device information)
- For further information about the operating instruction of web browser, refer to "User portal screen operation" → "Favorite settings" on our website below. https://i-pro.com/products_and_solutions/en/RemoteMonitoring/en/html/ RemoteMonitoring_webguide_en/index.html

Select "Favorite" on the camera's live or playback screen.



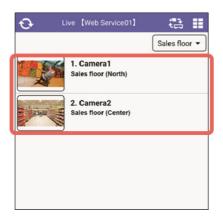
- 1 Select "Favorite" from the drop-down list
- \Rightarrow The groups registered as favorites will be displayed.

2 Select a group.

 \Rightarrow The camera list screen in the group will be displayed.



- The group name has been designated in web browser.
- If "Favorite" is selected, the camera list screen of "Favorite" is automatically displayed when the app is started up next time.



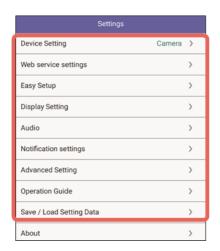
3 Tap a camera to be checked live video and recorded video.

4 Settings

4.1 Configure each setting

Perform the settings relating to devices, display and audio.

Tap (Settings) at the bottom of the camera list screen. (3.1 Check live video and 3.5 Play recorded video)



1 Tap each setting.

Device Setting

Perform the setting relating to devices to be connected with this app such as cameras and recorders.



The web service registration screen will be displayed, when "Remote Monitoring" is selected for "Device Type" of the device registration screen.
 (4.3.1 Select web service)

Web service settings

Perform the settings relating to "Remote Monitoring".(4.3.1 Select web service)

Easy Setup

Perform the initial setting of the camera that can read 2D Codes.

Display Setting

Perform the setting relating to display such as camera title, time and date, multi display and screen color. (4.4 Setting relating to display [Display Setting]) The name of the [Open] button and the [Close] button of AUX control on the camera control panel can be changed. (4.4.7 Set the AUX title [AUX title])

Audio Setting

Perform the setting for audio reception. (4.5 Perform the setting relating to audio [Audio])

Notification settings

Perform the setting relating to alarm notification. (4.6 Setting relating to alarm notification [Notification settings])

Advanced Setting

Perform the following settings.

- Setting of the Internet mode of the camera (4.7 Set the Internet mode [Advanced Setting])
- Setting of the screen to be displayed when a camera is selected on the camera list screen (playback) (initial setting of the camera list screen) (4.8 Perform the initial setting of the playback screen [Advanced Setting])
- Switching decoders used for H.264 and H.265 video display (H.264/H.265 decoder switching) (4.9 Switch decoders used for H.264 and H.265 video display [H.264/H.265 decoder switching])

Save / Load Setting data

The backup of the information set by this app can be saved in the mobile device as setting file.

The saved setting data can be loaded here.

(4.11 Save setting data [Save / LoadSetting data], 4.12 Load setting data [Save / Load Setting data])

4.2 Set devices [Device Setting]

Perform the setting relating to devices to be connected with this app such as cameras and recorders.

Refer to "2.2 Registration of device information" for how to register/add devices.

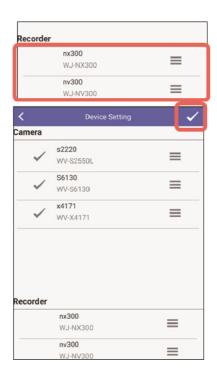
The following are descriptions of how to change the display order of devices, copy setting information of a device and change/delete registration information of a device.

4.2.1 Change the display order of devices

Tap [Device Setting] on the setting screen. (4.1 Configure each setting)



- 1 Tap 🛅 (Sort).
- ⇒ Displayed on the right side of a device name will turn to and the display order of devices will become ready to be changed.
- 2 Long tap* to drag to change the order
 * Long tap: Tap with your finger and keep the finger in contact with the screen



3 When change of the order is completed, tap < (End).

4.2.2 Change setting information of a device

Tap [Device Setting] on the setting screen. (4.1 Configure each setting)





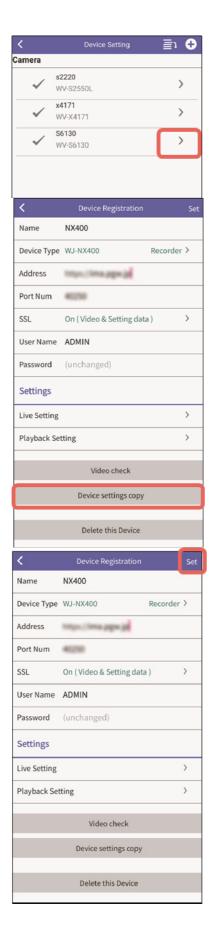


- 1 Tap on the right side of a device name whose setting information is to be changed
- ⇒ The "Device Registration" screen will be displayed. Refer to "Registration of device information" for further information about each item and for how to operate.

4.2.3 Copy setting information of a device

When registration of multiple devices is needed, additional registration of devices can simply be performed by copying the registered device setting information.

Tap [Device Setting] on the setting screen. (4.1 Configure each setting)



- 1 Tap on the right side of a device name whose setting information is to be changed.
- ⇒ The "Device Registration" screen will be displayed. Refer to "2.2 Registration of device information" for further information about each item and for how to operate.

2 Tap [Device settings copy].

⇒ The confirmation screen will be displayed. When [OK] is tapped, the setting information of the selected device is copied and the registration screen of the copied device information will be displayed.

3 Edit device information.

⇒ Refer to "Registration of device information" for further information about each item and for how to operate.

4 Tap [Set].

⇒ The confirmation screen will be displayed. When [OK] is tapped, the device information will be registered.

4.2.4 Delete a device

Tap [Device Setting] on the setting screen. (4.1 Configure each setting)



- 1 Tap on the right side of a device name to be deleted.
- ⇒ The "Device Registration" screen will be displayed.

2 Tap [Delete this device].

⇒ The confirmation screen will be displayed. When [OK] is tapped, the selected device will be deleted.

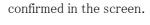
4.3 Setting relating to Remote Monitoring [Web service settings]

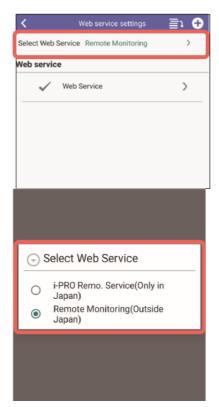
4.3.1 Select web service

Settings of web service selection can be reviewed and changed.

Tap [Web service settings] on the setting screen. (4.1 Configure each setting)

The web service settings screen will be displayed and current web service selection can be





- 1 Tap [Select Web Service].
- \Rightarrow The select web service screen will be displayed.

2 Select the desirable web service to use.

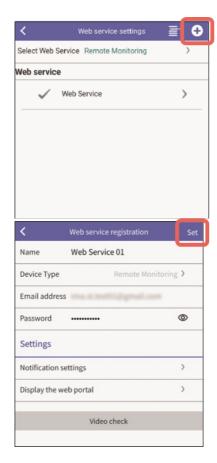


- If you use services outside Japan, confirm [Remote Monitoring (Outside Japan)]
 is selected.
- The web service account displayed in the device setting screen (4.1 Configure each setting) or the web service settings screen is the one registered in web service selected here.

4.3.2 Registration of Remote Monitoring

Register Remote Monitoring with this app.

Tap [Web service settings] on the setting screen. (4.1 Configure each setting)



- ⇒ The web service registration screen will be displayed.

2 Edit registration information.

⇒ Refer to "2.2.1 Setting item list" for further information about each item.

3 Tap [Set].

⇒ The confirmation screen will be displayed. When [OK] is tapped, the web service setting information will be registered.



It is impossible to change the setting of "Device Type".

4.3.3 About two-step verification

When two-step varification is set for your account in Remote Monitoring, you will need to enter a six-digit authentication code. There are two ways to authenticate: using an authenticator app or receiving a code by e-mail.

This section explains the steps for each authentication method.



• Two-step varification settings (None/App authentication/Email authentication) cannot be set through this app. It is necessary to set in the web browser.

Use an authenticator app

When the authentication code entry screen appears, do the following.



1 Tap [Select app].

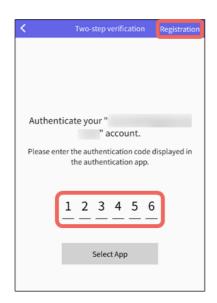
 \Rightarrow The "Select App" screen will be displayed.

2 Select an authenticator app.

 \Rightarrow A six-digit authentication code will be displayed on the screen of the selected authenticator app.



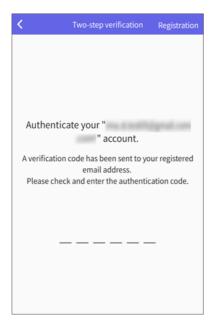
If you don't have an authenticator app, selecting it will take you to the app store's installation screen.



3 Enter the displayed authentication code and tap [Registeration].

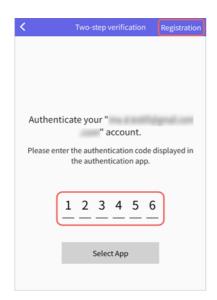
Receive the authentication code by e-mail and authenticate.

When the authentication code entry screen appears, do the following.



1 Check the six-digit authentication code sent to your e-mail address.

Check the authentication code sent to the e-mail address you set up in i-PRO Remo. Service.

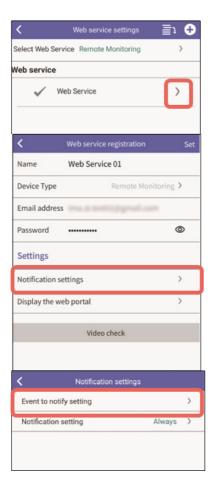


2 Enter the authentication code and tap [Registertion].

4.3.4 Select the function type of the event to be notified from Remote Monitoring

Set the function type of the event to be notified from Remote Monitoring.

Tap [Web service] on the web service setting screen. (4.3.1 Select web service)



- 1 Tap on the right side of a web service name.
- \Rightarrow The web service registration screen will be displayed.
- 2 Tap [Notification settings].
- \Rightarrow The "Notification settings" screen will be displayed.

- 3 Tap [Event to notify setting].
- \Rightarrow The "Event to notify setting" screen will be displayed.



4 Select the event to be notified.

Tap the event to be notified.

[Select all]: Selects all events.

[Unselect all]: Cancels all selections of events.

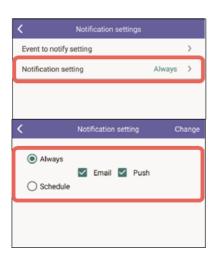
5 Tap [Change].

⇒ The confirmation screen will be displayed. When [OK] is tapped, the event to be notified will be registered.

4.3.5 Set the event schedule to be notified from Remote Monitoring

Set the event schedule to be notified from Remote Monitoring.

Tap [Notification settings] on the web service registration screen. (4.3.4 Select the function type of the event to be notified from Remote Monitoring)



1 Tap [Notification setting].

⇒ The notification setting screen will be displayed.

2 Select the notification schedule.

Always:

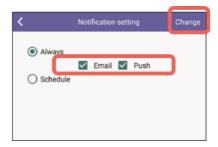
Always notified when an event occurs.

After this, go to step 3.

Schedule:

Set the notification schedule.

After this, go to step 4.



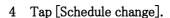
Select "Always"

3 Select the type of notification (Email/ Push) and tap [Change].

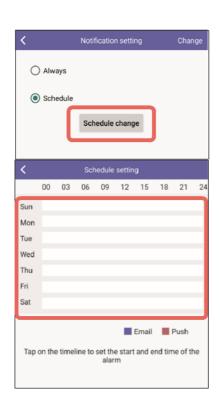
Email: Notify by e-mail of event information as it has occurred. For the settings of e-mail notification recipients and the contents of e-mail notifications, check web browser.

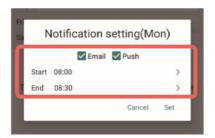
Push: The pop-up screen of the occurred event information will be displayed. Refer to "Alarm information (pop-up display)" for details on the pop-up screen.

⇒ The confirmation screen will be displayed. When [OK] is tapped, the notification schedule will be registered.
 Select "Schedule"

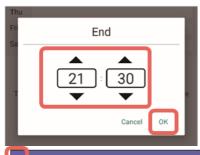


- \Rightarrow The schedule setting screen will be displayed.
- 5 Tap the time line for a day of week to be configured.
- \Rightarrow The setting screen will be displayed.











Schedule change

Schedule

6 Tap the type of notification (Email/Push).

Refer to step 3 for "Email" and "Push" notifications.

7 Tap [Start] and [End].

- \Rightarrow The time setting screen will be displayed.
- 8 Specify a start time and an end time and then tap [OK].
- $\Rightarrow\,$ The display returns to the schedule setting screen.

To set other days of the week, repeat steps 5 to 8.

9 Tap (Back)

 \Rightarrow The display returns to the notification setting screen.

10 Tap [Change].

 \Rightarrow The confirmation screen will be displayed. When [OK] is tapped, the notification schedule will be registered.

4.3.6 Registration of camera in Remote Monitoring

To use Remote Monitoring to view live video from cameras with this app, it is necessary to register the camera with Remote Monitoring.

Registration can also be done from web browser.

If you operate from the web browser, registration with this app is not necessary.

For further information about the operating instruction of web browser, refer to "Installation Guide" -> "Installation" on our website below.

 $\label{lem:https://i-pro.com/products_and_solutions/en/RemoteMonitoring/en/html/RemoteMonitoring_webguide_en/index.html$



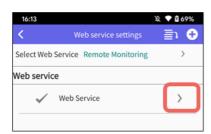
• To use the Remote Monitoring to view live video from cameras in this app, The camera must be compatible with Remote Monitoring.

For a list of supported cameras, refer to "Specifications" -> "Supported Camera Information" on our website below.

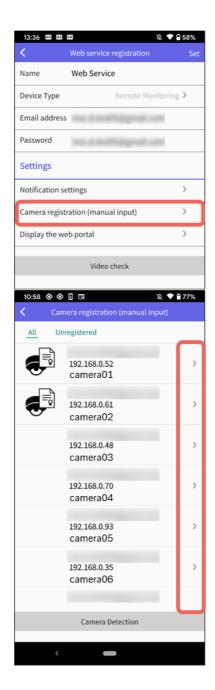
 $https://i-pro.com/products_and_solutions/en/RemoteMonitoring/en/html/\\ RemoteMonitoring_webguide_en/index.html$

- Cameras that are registered in a recorder cannot be registered from this app.
- If you want to set up cameras in separate folders, please operate from a web browser.

Tap [Web Service] on the "Web service settings" screen. (4.3.2 Registration of Remote Monitoring)



- 1 Tap > to the right of the service name to register the camera.
- \Rightarrow The web service registration screen will be displayed.



2 Tap [Camera registration (manual input)]

⇒ The system will start detecting cameras on the same network. When the detection is complete, the detected cameras will be displayed in a list.

3 Tap > to right of the camera you want to register.

 \Rightarrow The camera registration screen will be displayed.

The page operations for the detection results are as follows:

[All]

Displays all detected cameras.

[Unregistered]

Displays cameras that are not registered with the selected Web service.

[Camera Detection]

Redetects cameras.

Refer to "Camera information and icons" for details about the icons and camera information on the page.



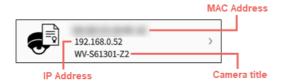
4 Enter the camera's administrator username and password.

The address, port number, and SSL communication settings are displayed for the selected camera and cannot be changed on this screen.

5 Tap [Set]

⇒A confirmation screen will appear, and when [OK] is tapped, the camera will be registered.

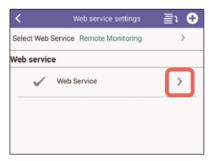
Camera information and icons



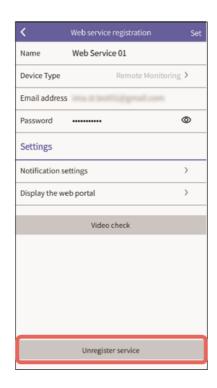
	This indicates that you are registered with the selected Web service.
No icon	This indicates that you are not registered with
	the selected Web service.

4.3.7 Cancel Remote Monitoring registration

Tap [Web service] on the web service setting screen. (4.3.2 Registration of Remote Monitoring)



- 1 Tap on the right side of a service name to be cancelled.
- \Rightarrow The web service registration screen will be displayed.



2 Tap [Unregister service].

⇒ The confirmation screen will be displayed. When [OK] is tapped, the web service will be unregistered.

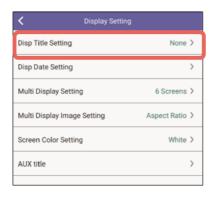
4.4 Setting relating to display [Display Setting]

Perform the setting relating to display such as camera title, time and date, multi display, screen color and AUX title.

4.4.1 Set the title display [Disp Title setting]

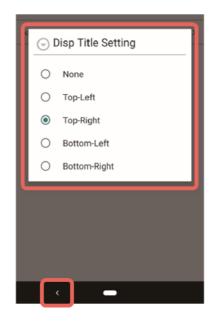
Perform the setting to determine the camera title display position on the live screen, multi display and playback screen.

Tap [Display Setting] on the setting screen. (4.1 Configure each setting)



1 Tap [Disp Title Setting].

 \Rightarrow The setting screen will be displayed.



2 Set the display position.

None: No playback time and date will be displayed.

Top-Left: A camera title will be displayed at the upper left corner of the screen.

Top-Right: A camera title will be displayed at the upper right corner of the screen.

Bottom-Left: A camera title will be displayed at the lower left corner of the screen.

Bottom-Right: A camera title will be displayed at the lower right corner of the screen.

3 Tap (Back).

 \Rightarrow The settings will be applied.

4.4.2 Set the time and date display position [Disp Date Position Setting]

Perform the setting to determine the playback time and date display position on the playback screen.



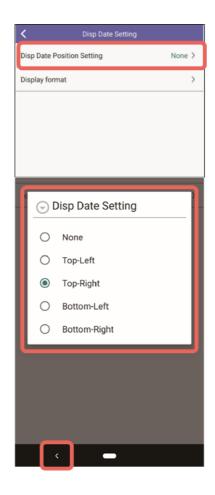
- For playback of SD recording of the camera, display of time and date is unavailable.
- Time and date will not be displayed when displaying live video (from both camera and recorder).

Tap [Display Setting] on the setting screen. (4.1 Configure each setting)



1 Tap [Disp Date Setting].

 \Rightarrow The setting screen will be displayed.



2 Tap [Disp Date Position Setting].

 \Rightarrow The setting screen will be displayed.

3 Set the display position.

None: No playback time and date will be displayed.

Top-Left: Date will be displayed at the upper left corner of the screen.

Top-Right: Date will be displayed at the upper right corner of the screen.

Bottom-Left: Date will be displayed at the lower left corner of the screen.

Bottom-Right: Date will be displayed at the lower right corner of the screen.

4 Tap (Back).

 \Rightarrow The settings will be applied.

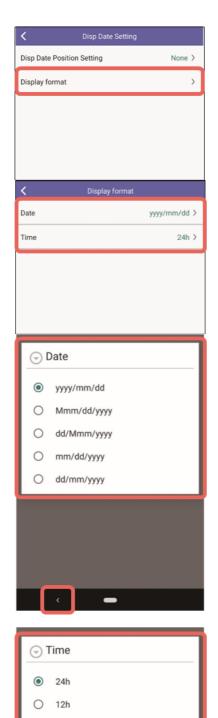
4.4.3 Set the time and date display format [Display format]

Set the display format for play time and date (year, month, day; 24h/12h) on the playback screen.



- For playback of SD recording of the camera, display of time and date is unavailable.
- Time and date will not be displayed when displaying live video (from both camera and recorder).

Tap [Disp Date Setting] on the display setting screen. (4.4.2 Set the time and date display position [Disp Date Position Setting])



1 Tap [Display format].

 \Rightarrow The setting screen will be displayed.

2 Tap [Date] or [Time].

⇒ The setting screen will be displayed.
 To select a display format for Date, go to step 3.
 To select a display format for Time, go to step 5.

To select a date display format

3 Selecta date display format.

Example: November 1, 2023
yyyy/mm/dd: 2023/11/01
Mmm/dd/yyyy: Nov/01/2023
dd/Mmm/yyyy: 01/Nov/2023
mm/dd/yyyy: 11/01/2023
dd/mm/yyyy: 01/11/2023

4 Tap (Back).

 \Rightarrow The settings will be applied.

To select a time display format

5 Selecta time display format (24h/12h).

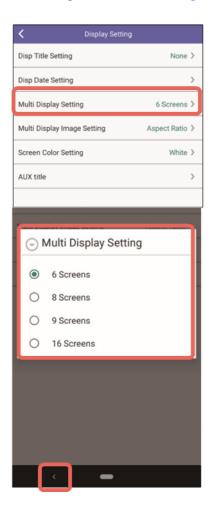
Example: at 15:00 24h: 15:00:00 12h: 03:00:00PM

6 Tap (Back).

 \Rightarrow The settings will be applied.

4.4.4 Set a multi display [Multi Display Setting]

Perform the setting to determine the number of multi display (6 Screens/ 8 Screens/ 9 Screens/ 16 Screens) to be displayed when displaying live video on a multi display. Tap [Display Setting] on the setting screen. (4.1 Configure each setting)



1 Tap [Multi Display Setting].

 \Rightarrow The setting screen will be displayed.

2 Determine the number of the multi display.

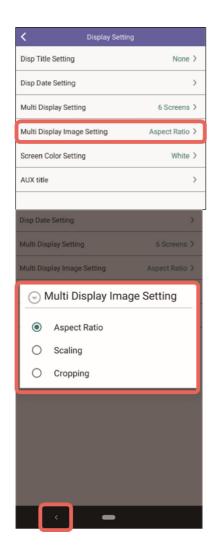
6 Screen: Videos from 6 cameras will be displayed.8 Screen: Videos from 8 cameras will be displayed.9 Screen: Videos from 9 cameras will be displayed.16 Screen: Videos from 16 cameras will be displayed.

3 Tap (Back).

 \Rightarrow The settings will be applied.

4.4.5 Set a multi display image [Multi Display Image Setting]

Perform the setting to determine the number of multi display (6 Screens/ 8 Screens/ 9 Screens/ 16 Screens) to be displayed when displaying live video on a multi display. Tap [Display Setting] on the setting screen. (4.1 Configure each setting)



1 Tap [Multi Display Image Setting].

 \Rightarrow The setting screen will be displayed.

2 Set the image display.

Aspect Ratio: The aspect ratio of the image will be

maintained. The top and bottom or left and

right sides of each area will be blank.

Scaling: The image will be zoomed in/out to fill the

entire of each area.

Cropping: The center of the camera image is

cropped and displayed according to each

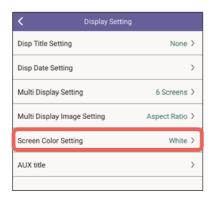
region.

3 Tap (Back).

 \Rightarrow The settings will be applied.

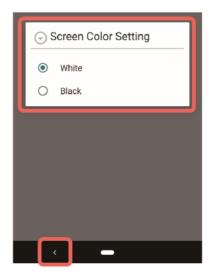
4.4.6 Set the background color of the screen [Screen Color Setting]

Perform the setting to determine the background color (white/black) of the screen. Tap [Display Setting] on the setting screen. (4.1 Configure each setting)



1 Tap [Screen Color Setting].

 \Rightarrow The setting screen will be displayed.



2 Determine the background color of the screen.

White: White will be applied as the background color. Black: Black will be applied as the background color.

- 3 Tap (Back).
- \Rightarrow The settings will be applied.

4.4.7 Set the AUX title [AUX title]

The name of the [Open] button and the [Close] button of AUX control on the camera control panel can be set.

If not set, the name set on the camera will be displayed on this app.



- The name set in the camera is available only with the following cameras. (2.2.2
 Live video type)
 - · Independent camera
- · Live video from a camera connected to a recorder registered with Remote Monitoring

Tap [Display Setting] on the setting screen. (4.1 Configure each setting)



- 1 Tap [AUX title].
- \Rightarrow The setting screen will be displayed.



2 Enter a name of the button with up to 5 characters.

Unavailable characters: " &

- 3 Tap [Set].
- \Rightarrow The entered button name will be registered.

4.5 Perform the setting relating to audio [Audio]

Select "On" or "Off" to determine to receive audio of live video from the camera.

Tap [Audio] on the setting screen. (4.1 Configure each setting)



- 1 Tap [Audio reception].
- \Rightarrow The setting screen will be displayed.
- 2 Select "On" or "Off" for audio reception.

On: Audio will be received.

Off: Audio will not be received.

- 3 Tap (Back)
- \Rightarrow The settings will be applied.

4.6 Setting relating to alarm notification [Notification settings]

4.6.1 Set the notification on/off setting

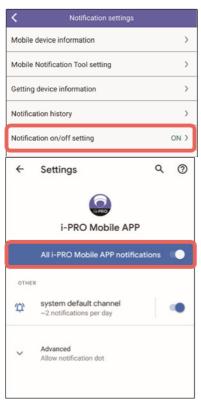
ON/OFF status of "Notification settings" in this app which is managed through the mobile device

can be confirmed or changed here.

Tap [Notification settings] on the setting screen. (4.1 Configure each setting)

The current settings are displayed in "Notification on/off settings" in the notification settings screen.

To change the setting, perform the following operation.



* The screen is an example.

- 1 Tap [Notification on/off setting].
- ⇒ The settings screen of i-PRO Mobile APP of mobile device will be displayed.
- 2. Set the notification on/off setting.

4.7 Set the Internet mode [Advanced Setting]

4.7.1 What is the Internet mode?

The Internet mode is a mode to be set when distributing H.265 (or H.264) video from the camera via the Internet mode. When this mode is set, it is possible to transmit streams without changing the setting of the broadband router from the setting used for JPEG image transmission.

To make this appreceive live video streams, it is necessary to set "On" for "Internet mode (over HTTP)" on the camera side.

4.7.2 Setting method

Determine whether to automatically set to "On" for "Internet mode (over HTTP)" even when "Off" is set for "Internet mode (over HTTP)" on the camera side.

Tap [Advanced Setting] on the setting screen. (4.1 Configure each setting)



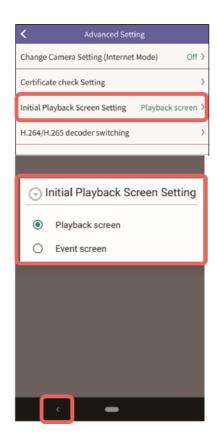
- 1 Tap [Change Camera Setting (Internet Mode)].
- \Rightarrow The setting screen will be displayed.
- 2 Select "On" or "Off" for the Internet mode.
- Off: Does not automatically set to "On", when "Off" is set for "Internet mode (over HTTP)" on the camera side.
- On: Automatically set to "On", when "Off" is set for "Internet mode (over HTTP)" on the camera side.
- 3 Tap (Back).
- \Rightarrow The settings will be applied.

4.8 Perform the initial setting of the playback screen [Advanced Setting]

Select the screen to be displayed when a camera is selected on the camera list screen (playback) (3.5.1 Camera list screen (Play)).

The screen can be selected from either of "Playback screen" or "Event screen". This setting is available only for SD recording of an independent camera.

Tap [Advanced Setting] on the setting screen. (4.1 Configure each setting)



1 Tap [Initial Playback Screen Setting].

 \Rightarrow The setting screen will be displayed.

2 Determine the screen to be displayed.

Playback screen: The playback screen (3.5.2 Playback

screen) of the selected camera will be

displayed.

Event screen: The event screen (3.7.2 Event search

and play) of the selected camera will be

displayed.

3 Tap (Back).

 \Rightarrow The settings will be applied.

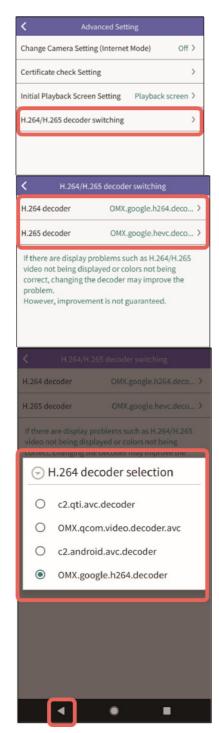
4.9 Switch decoders used for H.264 and H.265 video display [H.264/H.265 decoder switching]

Switches decoders used to display H.264 and H.265 video.

If there are display issues such as H.264/H.265 video not displaying or colors not displaying correctly, changing the decoder may improve the situation (though not necessarily).



- This function is only available on Android devices. It is not available on mobile devices other than Android.
- The available decoders vary depending on the mobile device.
- After changing the decoder, check if the live video display has actually improved. If it has not improved, select another decoder once again. If it worsens, reset to the original decoder.



- 1 Tap [H.264/H.265 decoder switching].
- \Rightarrow The H.264/H.265 decoder switching screen will be displayed.
- 2 [H.264 decoder] or [H.265 decoder].
- \Rightarrow The setting screen will be displayed.

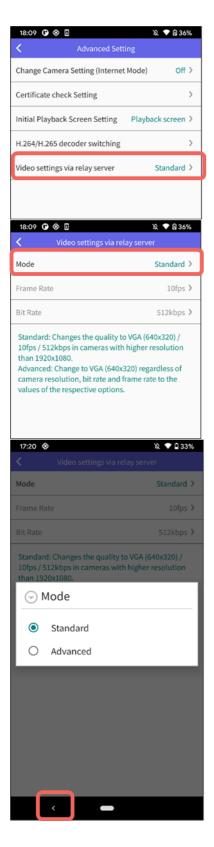
- 3 Select a decoder.
- 4 Tap (Back)
- \Rightarrow The setting will be applied.

Example: for H.264 decoder

4.10 Configure video settings when using a relay server

The video from a camera via Remote Monitoring service might not be stable as it comes via a relay

server depending on the network. In this case, changing frame rate or bit rate can improve the video.



- 1 Tap [Video settings via relay server].
- ⇒ The "Video settings via relay server" screen will be displayed.

2 Tap [Mode]

3 Select the mode

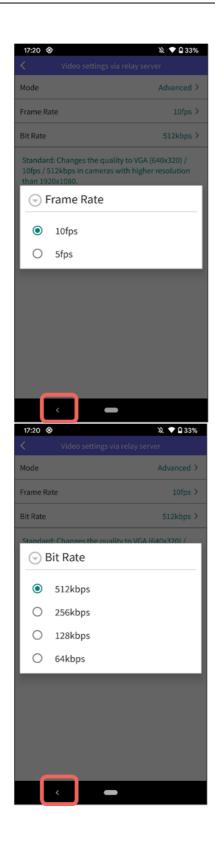
Standard: Changes the image quality to VGA $(640 \times 480)/10$ fps/512kbps when using a relay server with cameras that have a resolution higher than 1920×1080 .

Advanced: Changes to the frame rate and bit rate can be made when using a relay server, regardless of the camera resolution.

If issues like image stuttering occur in Standard settings, please switch to Advanced settings.

4 Tap (Back).

 \Rightarrow The settings will be applied.



5 Select the frame rate

When "Advanced" is selected, the frame rate and bit rate can be set.

The frame rate will be changed to the set frame rate when a camera passes through a relay server.

If the standard setting results in choppy images, please use the advanced setting.

6 Tap (Back).

 \Rightarrow The settings will be applied.

7 Select the bit rate

When "Advanced" is selected, the bit rate and bit rate can be set.

The bit rate will be changed to the set bit rate when a camera passes through a relay server. If the standard setting results in choppy images, please use the advanced setting.

8 Tap (Back).

 \Rightarrow The settings will be applied.

4.11 Save setting data [Save / LoadSetting data]

Data set by this app can be saved as a file.

Data will be saved as a BIN file (Extension: bin).

4.11.1 Setting that can be saved as a file

- Device information (Camera/ Camera(Multi-directional)/ Encoder/ Recorder/ Camera (ONVIF)/ Remote Monitoring)
- Web service Setting (Remote Monitoring)
- Display Setting
- Audio
- Advanced Setting (Internet mode, certificate verification, initial playback screen setting)

4.11.2 Name of file to be saved

A file name will be given based on year, month, day, hour, day and second.

Android: isv_android_yyyymmddhhmmss.bin

iOS: isv_ios_yyyymmddhhmmss.bin

4.11.3 Operation procedure

Tap [Save / Load Setting Data] on the setting screen. (4.1 Configure each setting)



- 1 Tap [Save Setting Data].
- ⇒ The window with the password entry fields will be displayed.



2 Enter "Password" and "Password (for confirmation)" and then tap [OK].

For the password, enter 8 to 32 characters, consisting of single-byte alphanumeric characters and symbols.

⇒ The screen to specify the save destination of the file will be displayed.



The entered password will be required when loading the saved file. (4.12 Load setting data [Save / Load Setting data])

3 Select the save destination and save the file.

⇒ A message saying that the saving is complete and the file name of the saved file will be displayed.

4.12 Load setting data [Save / Load Setting data]

Load the saved setting file and restore the setting data.



- If the version of the app used to save the setting file is newer than the version of the app used to load the file, loading may fail. Update the app to the latest version.
- The password set at the time of saving the file will be required when loading the setting file. (4.11 Save setting data [Save / LoadSetting data])

Tap [Save / Load Setting Data] on the setting screen. (4.1 Configure each setting)



1 Tap [Load Setting Data].

 \Rightarrow The file selection screen will be displayed.

2 Select a file to be loaded.

 \Rightarrow The window with the password entry fields will be displayed.

3 Enter the password selected at the time of saving the file and then tap [OK].

⇒ A message saying that the loading is complete will be displayed.

4 Tap [OK].

⇒ When a message of "The setting data has been loaded." is displayed, tap [OK].

5 Others

5.1 Specifications

OS		Android OS: 10.0 or later
		iOS: 13.0 or later
Wireless Network		3G/4G/5G/LTE/Wireless LAN (Wi-Fi)
Number of register	red recorders/	Camera + encoder: max.50 ch
cameras/encoders		Recorder: max.100
Access type for liv	ve video	Camera direct, via recorder
Functions on the	Multi-screen mode	6 Screens/ 8 Screens/ 9 Screens/ 16 Screens
live page		* Split screen is not supported by WJ-HD616/HD716.
	Horizontally wide	0
	display	
	Screen switch	Flick to display the video of the next camera / previous
		camera
		Multi-screen \rightarrow 1 Screen: Tap a desired camera
		1 Screen → Multi-screen: Back button/Screen switch
		button
	Camera control	PanTilt, zoom, resolution (320, 640, 1280), focus (auto
	0 411101 40 001111 01	focus, near, far), preset (HOME, P1 - 3)
	AUX control of	
	the camera	
	Manual recording	\cap
	on camera	
	Digital zoom	(Pinch in, pinch out)
	Snapshot and save	
Function for	Multi-screen mode	
	Horizontally wide	
playback	display	
	uispiay	

	Playback control	Play, pause, reverse play, skip/reverse skip, fast forward,
		fast backward, next/previous frame, latest video playback
		(depending on the recorder setting)
	SD playback	0
	Download of	0
	recorded video	
	being played	
	Recording	Event search, Time&date search
	Digital zoom	(Pinch in, pinch out)
	Snapshot and save	\circ
Playback mode		Low load (I-frame only)/ Normal/ Transcode*3
Live Frame rate*1		Depends on Camera Setting*/0.5/ 1/ 2/ 5 fps
Live Resolution*4		Depends on Camera Setting/ $320/\ 640/\ 1280$ (Aspect
		ratio depends oncamera setting)
Video format	Live	Live video from an independent camera, live video from a
		camera connected to a recorder (via recorder): JPEG,
		H.264, H.265
		* Some format may not be supported depending on the
		camera model. Live video from a camera connected to a
		recorder (camera direct): JPEG
		Live video via WJ-HD616/HD716: H.264
		Live video from an independent encoder: MJPEG, H.264
	Playback	SD recording playback, normal playback, low load
		playback: H.264, H.265
		* When video is recorded in MJPEG/MPEG4 format,
		playback is unavailable. Transcode playback: JPEG,
		H.264, H.265
Language		Japanese/ English/ Simplified Chinese
		(The language is automatically be switched based on the
		language setting of the terminal.)
Audio		G.726 and AAC-LC supported.
		Available audio format varies depending on the live video
		type.*5
Number of charact	ers for title	16 characters

Number of access	Live (Camera	i-PRO SmartHD/ EXTREME series camera/ Encoder:
users*2 direct)		Max.14 users/ch (priority to earlier*6)
		NV series recorder/ NX series recorder/ NU series
		recorder: Max.13 users/ch (priority to earlier*6)
	Live (via recorder)	NV series recorder/ WJ-ND400/ WJ-HD616/ HD716:
		Max.1 user/ch (priority to later*7)
		NX series recorder/ NU series recorder: Max.13
		users/ch (priority to earlier*6)
	Playback	WJ-NV200: Max.4 users (priority to later*7)
(Normal	WJ-ND400: Max.16 users (priority to later*7)	
	playback/Low	WJ-NV300: Max.8 users (priority to later*7)
	load playback)	WJ-HD616/HD716: Max.8 users (priority to later*7)
() <u>p</u> S		NX series recorder/NU series recorder: Max.16 users
		(priority to later*7)
	Playback	WJ-NV300: Max.1 user (priority to earlier*6)
	(Transcode	NX series recorder/NU series recorder: Max.2 users
	playback)	(priority to earlier*6)
	SD memory card	i-PRO SmartHD/EXTREME series camera: Max.1 user
	playback	(priority to the earliest*6)

^{*1:} Available to set only when the format is JPEG.

Display performance varies depending on the use environment and terminal.

When delays occur in live video from the camera, lower the frame rate of live video.

*2: Including users accessing with PC application/browser. In case of Remote Monitoring, refer to "Specifications" -> "Specifications/Operating Environment/ Restrictions" on our website below.

https://i-pro.com/products_and_solutions/en/RemoteMonitoring/en/html/RemoteMonitoring_webguide_en/index.html

- *3: Available only when performing playback with WJ-NV300, NX series and NU series.
- *4: Available to set only when the format is JPEG. If JPEG of the specifiedre solution cannot be obtained, JPEG of the resolution specified on the camera side will be obtained.
- *5: Refer to page 12 for supported video and audio format.
- *6: "Priority to earlier" means that a terminal cannot display live video or playback video if it accesses when it already reached the maximum number of access users.
- *7: "Priority to latest" means that a terminal can display live video or playback video if it accesses when it already reached the maximum number of access users. Instead, the user who accessed first becomes unable to display live video and playback video.

6 Service Notice

What's New in Ver 12.1.0 (Released October 2024)

New Features / Improvements

- Support image quality setting function (Remote Monitoring)
- Support AUX control function (Remote Monitoring)
- Support video settings via relay server (Remote Monitoring)
- Support camera settings of Corner Camera (independent camera)

Remote Monitoring image quality setting function (Remote Monitoring)

This app allows you to adjust the image quality settings of the camera under the edge storage registered with Remote Monitoring.



- The image quality settings can be changed only for the following cameras.
- · Live video from a camera connected to a recorder registered with Remote Monitoring(via recorder)(2.2.2 Live video type)



- 1 Tap 峞
- 2 A list of image quality settings will be displayed on the control panel, and the settings for each one can be changed.

Basic adjustment	Brightness
	Maximum gain
	Sharpness level
	DNR

Super Dynamic	Super Dynamic
	Level
	BLC/HLC
	BLC level
	HLC level
Light control mode	Light control mode
	Maximum shutter
	Light control speed
Day & Night (IR)	Day & Night (IR)
Intelligent Auto	Intelligent Auto
	Face priority level (Brightness)
	Motion priority level (Shutter)
Zoom/Focus adjustment	Zoom ratio designation
	Auto focus
	Focusing at Day & Night switching
Auto backfocus	Auto backfocus

Remote Monitoring AUX control function (Remote Monitoring)

The device connected to the AUX terminal of the camera connected to a recorder registered with Remote Monitoring will be set to an open or closed state.



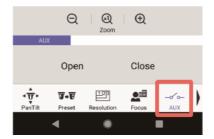
- AUX control is available only with the following cameras. (2.2.2 Live video type)
 - · Independent camera
 - · Camera connected to a recorder
- · Live video from a camera connected to a recorder registered with Remote Monitoring (New)

When the camera in use is other than the above, the [AUX] button will not be displayed on the camera control panel.

- The following settings are required to use the AUX function.
 - · Set the camera's terminal 3 setting to "AUX output".
- · Enable "Camera Control" in the authority setting of i-PRO Remo. (When controlling the AUX control of the camera under the edge storage registered to i-PRO Remo.)

- The name of the [Open] button and the [Close] button can be changed. Refer to "4.4.7 Set the AUX title [AUX title]" for how to change the name.
- When controlling AUX, be sure to use it only for the purpose where the status can be checked with live video.

(Example: Control the lighting of the place where the camera is installed.)

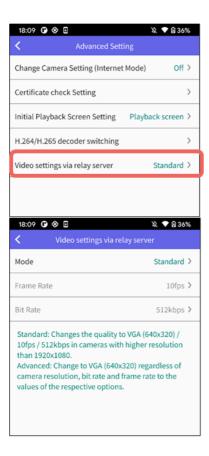


[Open]: The status of the AUX connector will be open.

[Close]: The status of the AUX connector will be closed.

Remote Monitoring Video settings via relay server (Remote Monitoring)

The video from a camera via Remote Monitoring service might not be stable as it comes via a relay server depending on the network. In this case, changing frame rate or bit rate can improve the video.



1 Tap [Video settings via relay server]

 \Rightarrow The video settings screen for when using a relay server will be displayed.

The Mode, Frame Rate, and Bit Rate can be set.

Support additional camera setting (independent camera)

The settings of the independent camera can be changed.



- Camera setting is available only with the following cameras. (2.2.2 Live video
 - · Independent camera

New supported models are below:

• Corner Camera: WV-X25580

Basic setup	Camera title
	Camera title on Screen (OSD)
	Image rotation
Date setting	Date/Time
	Set the device time to the camera - (On/Off)
	Date/time display
	Time display format - (24h/12h)
	Date/time display format (e.g. DD/MM/YYYY)
	Time zone
	Summer Time
Video settings	Image capture mode *1
	Transmission priority (360-degree fisheye
	Camera only)
Image adjust settings	Brightness
	Maximum gain
	Sharpness level
	DNR
	Light control mode
	Day and Night(IR)
	Intelligent auto
Registering the installation angle of view (i-PRO	Installation angle of view confirmation
mini only)	Angle of view registration
	Angle of view error lamp

^{*1: &}quot;Image capture mode" of multi-directional camera cannot be changed from i-PRO Mobile

APP.