Integrated Software Operation Manual (Auto Framing Function)

Contents

Description in this manual

About the description in this manual

• The illustrations and screenshots within this manual may differ from actual items.

• In this manual, a personal computer is described as "PC".

• "This software" means the Media Production Suite software.

• "This function" means the Auto Framing function.

About the Auto Framing Function

Description of the Function

The Auto Framing function is a function of linking with a PTZ remote camera to perform high-definition auto framing. Its main features are as described below.

1. High-definition auto framing that reproduces a composition
   This feature enables linking with a PTZ remote camera to perform auto framing while reproducing the composition set by the user with high accuracy. As a result of advanced human detection and camera control, scenes in which the framing target is moving can also be captured at a stable angle, and high-quality camera work, such as maintaining a steady headroom can be performed.

2. Detailed framing settings can be made
   This feature enables setting in detail the composition at the time of performing framing (position and size of the framing target), and also the camera moving speed and sensitivity.

3. Framing settings can be registered (Target Frame function)
   Multiple number of set compositions, and camera moving speeds and sensitivities can be stored as presets and recalled at any timing.

4. Group shots of multiple people are supported
   When there are multiple subjects in the camera image, it is possible to select multiple framing targets from among the subjects and perform framing so that all the selected targets fit in the camera image.

5. Multiple cameras can be controlled simultaneously
   Framing control can be performed simultaneously on multiple PTZ remote cameras.
   The number of PTZ remote cameras that can be used simultaneously varies depending on the PC performance.

6. Face tracking auto-focus
   Auto-focus can be tracked to the framing target face.

7. Operations interlinked with the remote camera controller can be performed
   By using this function together with the Panasonic remote camera controller, it allows for interlinked operations such as stopping framing control when the PTZ remote camera is operated by the remote camera controller and synchronizing camera selection on the GUI of this function and the remote camera controller.

<NOTE>

・ Since this function uses image processing, false detections of tracking targets may occur.

   Use this function in an environment where an operator can perform correction tasks for false detections.

Operational Requirements

This function requires the following environment.

■ PC
- ・ OS　*
  - Windows Server 2022
  - Windows 11
  - Windows 10 64bit (Version 21H2 or later)

- ・ Hardware
  - CPU: Intel Core 7th generation (Kaby Lake) or later
  - Memory: 8 GB or more
  - Display: 1920 x 1080 or higher
  - Storage: 2 GB or more free space

  - In the above environment, the auto framing operation can be performed on 4 or more cameras.

- ・ Software
  - Web browser: Microsoft Edge, Google Chrome

* Ensure that you use this feature with the Windows OS installed to the C drive of the PC.

■ Client (Browse terminal)
- ・ OS
  - Windows 11
  - Windows 10 64bit (Version 21H2 or later)
  - macOS 13 (Ventura) or later
  - iPadOS 16 or later

- ・ Hardware
  - Display: 1920 x 1080 or higher (on other than iPad)

- ・ Software
  - Web browser: Microsoft Edge, Google Chrome

■ PTZ remote camera

The following PTZ remote camera is required for using this function (as of January 2025)

・ AW-UE160/163　Firmware Version 1.99 or later

If the firmware version of the PTZ remote camera is earlier than the version specified above, it is possible to update the firmware with the Easy IP Setup Tool Plus of the Device View function.

If the PC is not connected to the Internet, download the latest firmware from the following website and use the above Easy IP Setup Tool Plus.

https://eww.pass.panasonic.co.jp/pro-av/support/content/download/JP/top.html

■ Remote camera controller

The following remote camera controllers can be linked to this function.

(As of January 2025)

・ AW-RP150
・ AW-RP60

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PC Hardware Settings

About the PC Hardware Settings

Before using this function, make the following settings on the PC on which this software is installed.
・ Network connection for PC
・ Network adaptor settings for PC

Network connection for PC

When using this plugin, it is recommended to use a wired LAN connection between the PC with the software installed and the PTZ remote camera/remote camera controller. On a wireless LAN connection, you may experience performance degradation, resulting in issues such as losing the framing target more frequently.

Network adaptor setting for PC

When using this plugin, it is recommended to turn off or disable the power-saving settings on the PC's network adapter. If you use this plugin with power-saving settings enabled, issues such as video interruptions may occur, which can affect the framing performance.

Configure the settings according to the procedure below.
1. Open "Search" from the Start menu of Windows and enter "Device Manager" in the search box.
2. Device Manager will be displayed in the search results. Click it to open the Device Manager.
   (You can also open Device Manager by right-clicking the Windows Start button and selecting Device Manager from the list)
3. Double-click the Network Adapters item in Device Manager. Expand the dropdown list of network adapters.
4. Right-click on the network adapter used by this software, then select Properties from the list to open the network adapter properties screen.
5. Click the [Advanced Setting] tab and change the settings for the following items.
   (1) Set the Power Saving Ethernet property to Off.
   (2) Set the Low Power Mode property to Disabled.
6. Click the [OK] button.

Setting the PTZ Remote Camera

Camera modes in which this function cannot be used

・ When the PTZ remote camera has the following Format settings, the Framing function Enable switch cannot be turned ON.

  ・ Format (from the camera's web interface: Setup -> Basic Config -> Format Settings)

  1080/119.88p

  1080/100p

・ When the PTZ remote camera has the following Streaming Mode settings, the Framing function Enable switch cannot be turned ON.

  Streaming Mode (from the camera's web interface: Setup -> Video over IP Settings)

  H.264(UHD)

  H.265(UHD)

  JPEG(UHD)

  RTMP (UHD)

  SRT (H.264 UHD)

  SRT (H.265 UHD)

  NDI|HX V2 (UHD)

Recommended settings

・ If the PTZ remote camera is used with User auth turned ON, the camera operation may be delayed. To improve this phenomenon, it is recommended to configure the following settings under Setup on the camera's web interface.

  User Auth -> Mode -> Wait time mode:　Mode2

・ To perform smooth pan/tilt start and stop motion, it is recommended to configure the following settings under Setup on the camera's web interface.

  Lens -> O.I.S. Mode:　O.I.S (PAN/TILT)

  Pan/Tilt -> P/T Acceleration:　Manual

    Rise S-Curve:　0

    Fall S-Curve:　0

    Rise Acceleration:　128

    Fall Acceleration:　128

Automatic setting items

This software automatically changes the following settings on the PTZ remote camera itself:

- JPEG Settings (from the camera's web interface: Setup -> Video over IP -> JPEG Settings)

  JPEG(1)

    JPEG transmission: On

    Image capture size: 1280x720

    Refresh interval: With NTSC: 30fps, With PAL: 25fps

    Image quality: fine

  JPEG(3)

    JPEG transmission: On

    Image capture size: 320x180

    Refresh interval: With NTSC: 30fps, With PAL: 25fps

    Image quality: fine

Automatic setting items when Auto Framing function is enabled

When this function is enabled, the following settings on the PTZ remote camera are automatically changed:
The following items are automatically configured to optimize the performance of this function.

- Pan/Tilt settings (from the camera's web interface: Setup -> System -> Pan/Tilt Settings)

  Pan/Tilt Speed Mode: Normal

  Speed With Zoom Position: Off

- Lens settings (from the camera's web interface: Setup -> Lens Settings)

  Zoom Mode: Opt Zoom

  Digital Extender: Off

- UHD Crop settings (from the camera's web interface: Setup -> UHD Crop Settings)

  UHD Crop -> IP OUT1(H.264/H.265):　FULL

- Tracking Data Output settings (from the camera's web interface: Setup -> Tracking Data Output Settings)

  Connection type:　　IP (UDP) On

  IP out:　　Client4 On, Client 4 Port:　10160

- Smart Picture Flip settings (from the camera's web interface: Setup -> Pan/Tilt Settings)

  Smart Picture Flip Mode:　Off

Screens

Screens used with this function

This function uses the following three screens:

- Device View Screen

  This screen is used for adding or deleting a PTZ remote camera or remote camera controller.

  For more details, please refer to the Device View Function User Manual.

- Auto Framing Screen

  This screen is used for performing the main operations of this function.

- Setting screen

  This screen is used for setting the port number for functions linked with the remote camera controller.

  For more details, please refer to the Setting Function User Manual.

Displaying the Auto Framing Screen
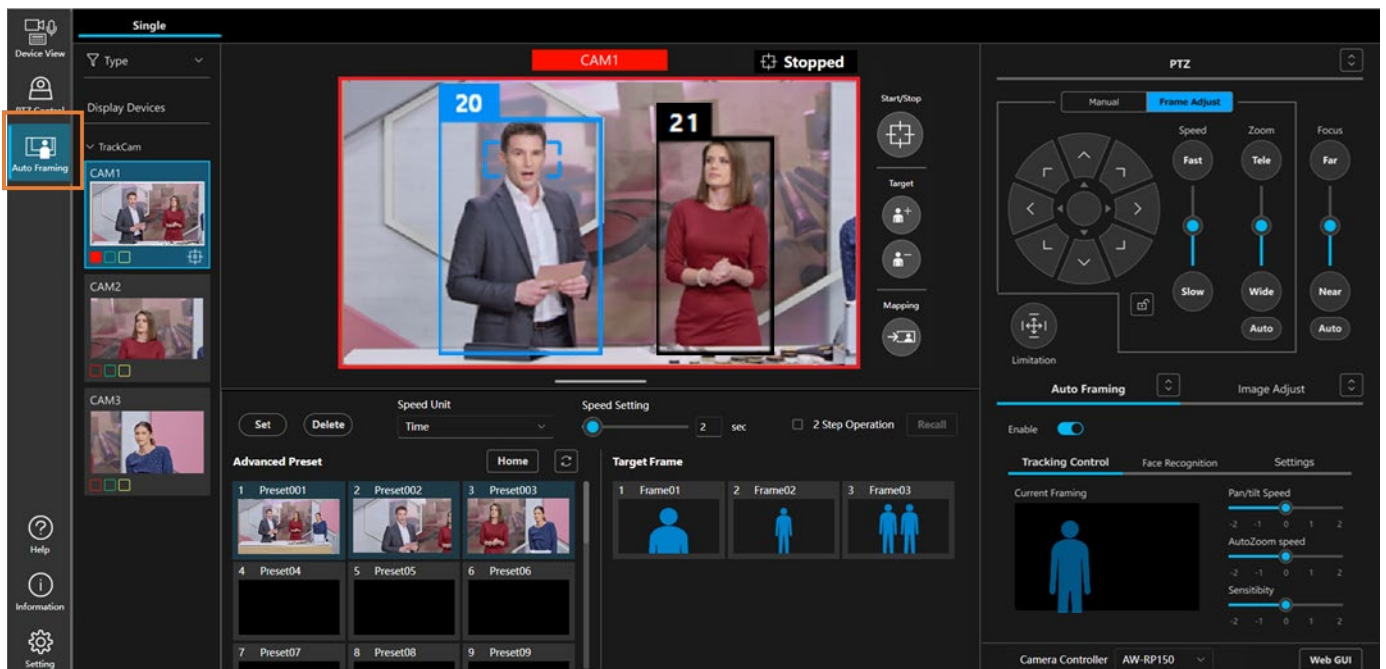
If you click the Auto Framing button on the left end of the screen, the Auto Framing Screen is displayed.

<NOTE>

- The Auto Framing button is displayed only when a PTZ remote camera supported by this function is connected. For details on PTZ remote cameras supported by this function, refer to "Operational Requirements" in this manual.

・ Do not use the "Duplicate Tab" on the browser. This could result in display problems such as the preset display not being reflected on one side. If multiple screens are required, open a new window.

# Entire Auto Framing Screen

1. Camera list display area

    This area displays a list of PTZ remote cameras registered in this software.

    If you select any PTZ remote camera, the screen display on the right side changes to the selected camera.

2. Camera image display area

    This area displays an image of the PTZ remote camera and the detection frame of the subject.

    The framing status check and some operations are also performed in this area.

3. Camera preset/Target frame area

    This area is used to manage the camera preset and the target frame (composition of auto framing).

4. PTZ operation area

    This area is used to perform the Pan/Tilt/Zoom operation of the camera, or composition adjustment during framing.

5. Auto Framing/Image Adjust area

    The settings of this function are adjusted from the Auto Framing tab, and the camera image quality is adjusted from the Image Adjust tab.

6. Remote camera controller selection/Camera web interface display area

    This area is used to perform target controller selection and to display the camera's web interface during remote camera controller linkage.

Camera list display area
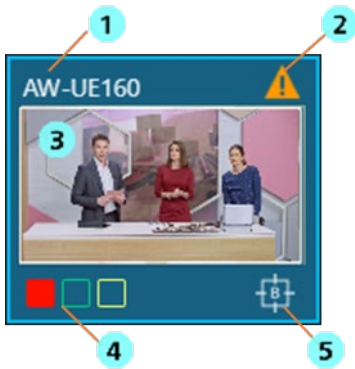
1. Camera name display

    Displays the name of the PTZ remote camera.

2. Warning display

    Displays an icon when a warning occurs in the PTZ remote camera or this software.

    Click the icon to view details of the problem.

3. Thumbnail display

    Displays a thumbnail of the image captured by the PTZ remote camera.

4. Tally lamp status display

    Displays the tally lamp status of the PTZ remote camera.

5. Auto framing status display

    Displays an icon when the PTZ remote camera is performing the auto framing operation.

Camera image display area
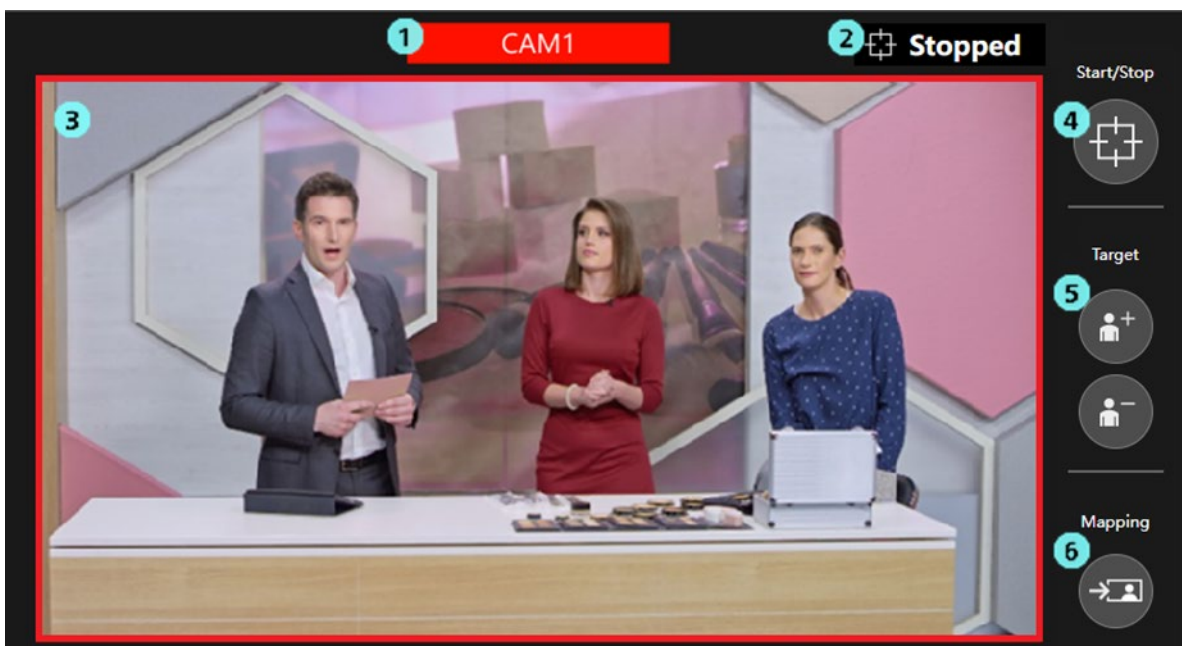
1. Camera name display

    Displays the name of the PTZ remote camera.

    If the tally lamp of the camera is ON, the display is in the color of the tally lamp.

    ＊ If multiple tally lamps are ON at the same time, the display is performed in the priority order of red > green > yellow.

2. Framing status display

   Displays the operation status of framing.

   For details, refer to "Checking the Framing Status" in this manual.

3. Camera image display

   Displays the image captured by the PTZ remote camera.

   If the red tally lamp of the camera is ON, a red frame is displayed around the camera image.

4. Toggle button for starting/stopping the framing operation

   Press the button to toggle between starting or stopping the framing operation.

   For details, refer to "Starting/Stopping the Framing Operation" in this manual.

5. Button for adding/deleting a framing target

   Use this button for adding or deleting a framing target.

   For details, refer to "Taking a Group Shot of Multiple Human Targets" in this manual.

6. Mapping button

   Press this button to reflect the position and size of the framing target at the time of pressing the button in the current framing settings.

   For details, refer to "Configuring the Framing Settings (Composition and Camera Moving Speed/Sensitivity Settings)" in this manual.

Camera preset/Target frame area
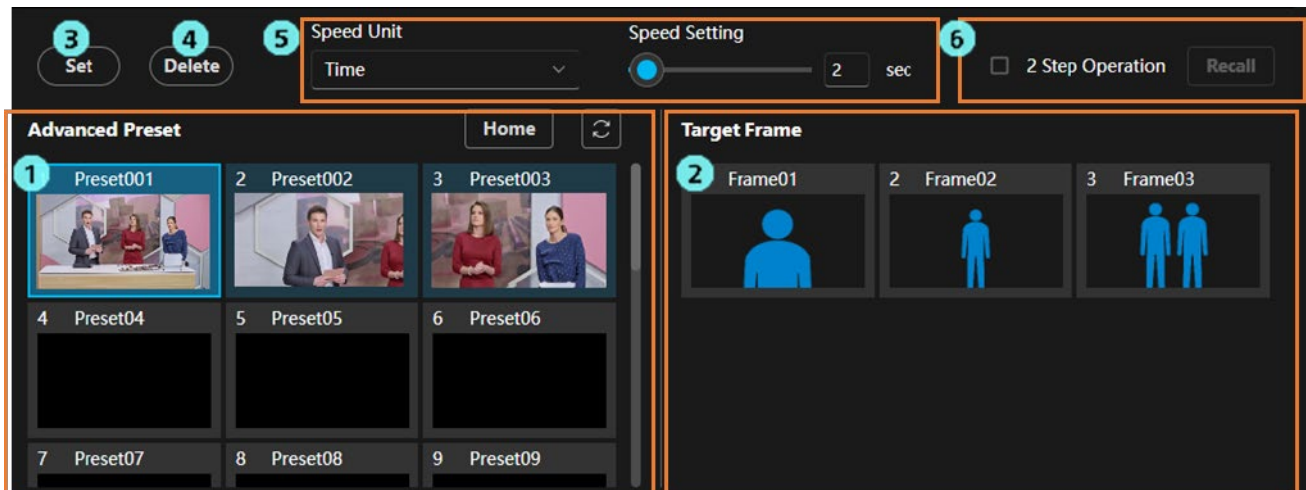
1. Camera preset display

   Displays the presets of the PTZ remote camera.

   If a preset is registered with this function, the framing settings at that time are linked with the preset and saved. The composition of the saved framing settings is displayed as a human silhouette on the thumbnail of the preset.

   For details, refer to "Performing the Camera Preset Operation" in this manual.

   <NOTE>

      ・ Up to 20 presets are displayed with this function.

2. Target Frame display

   Displays the framing settings (Target Frame) registered as the preset.

   For details, refer to "Performing the Preset Operation for Framing Settings" in this manual.

3. Preset registration button

   Use this button to register a camera preset or target frame.

4. Delete preset button

   Use this button to delete a camera preset or target frame.

5. Camera moving speed setting area

   Set the camera moving speed when the camera preset or target frame is recalled.

6. 2-step recall operation area

   Use this button to perform 2-step recall of the camera preset or target frame.

PTZ operation area
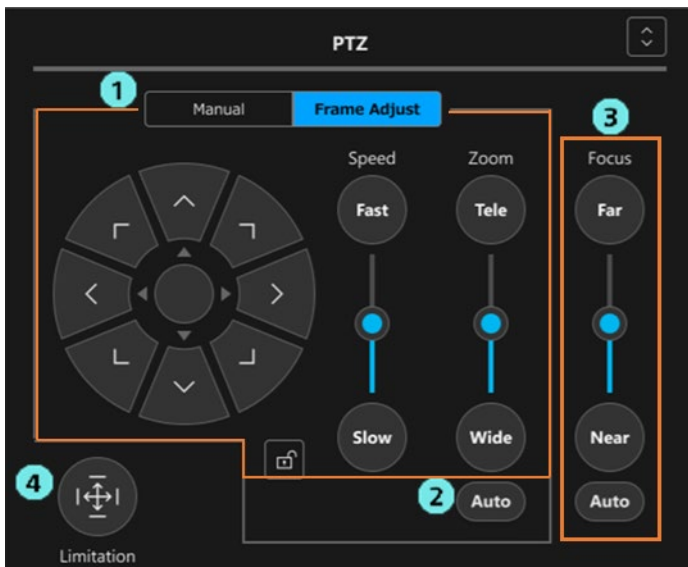
1. PTZ operation area

   When the Manual tab has been selected, operation is performed in the manual operation mode of the camera, and when the Frame Adjust tab has been selected, operation is performed in the composition adjustment mode during framing.

   For details, refer to "Operating the Camera Manually" and "Configuring the Framing Settings (Composition and Camera Moving Speed/Sensitivity Settings)" in this manual.

2. Auto Zoom ON/OFF button

   Set whether to automatically perform Zoom control at the time of framing.

   For details, refer to "Starting/Stopping the Framing Operation" in this manual.

3. Focus operation area

   This area is used to perform camera focus adjustment and switch ON/OFF Auto Focus.

4. Pan/Tilt Limitation operation area

   This area is used for setting the camera movable range.

Auto Framing/Image Adjust area

This area is composed of two screens of the Auto Framing tab and Image Adjust tab.

The operation of the Image Adjust tab screen is similar to the PTZ Control function. Therefore, the operation of the Auto Framing tab screen is described here.
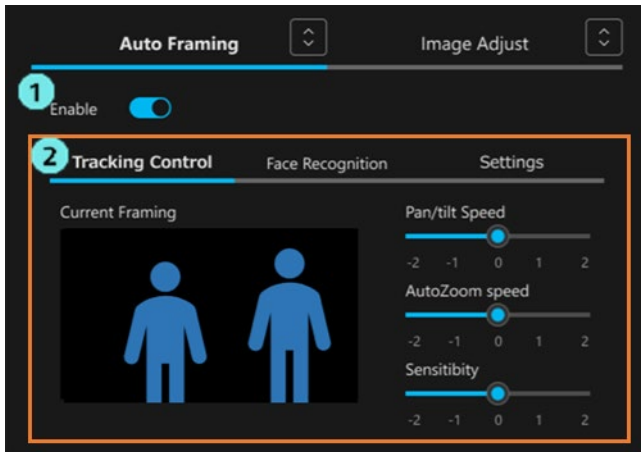
1. Auto framing function Enable switch

   This switch is used to enable the auto framing function of the PTZ remote camera.

   For details, refer to "Switching ON/OFF the Auto Framing Function" in this manual.

2. Framing operation setting area

   This area is composed of the three tabs of Tracking Control / Face Recognition / Settings.

   ・ Tracking Control tab

      This tab is used to adjust the composition display and the camera speed and sensitivity during framing.

      For details, refer to "Configuring the Framing Settings (Composition and Camera Moving Speed/Sensitivity Settings)" in this manual.

   ・ Face Recognition tab

      This tab is for function enhancement in future and does not operate in the current version.

   ・ Settings tab

      This tab is used to configure the Auto Start Area/Mask Area settings during framing and to make detailed settings.

      For more information, refer to "Configuring the Auto Start Area", "Configuring the Mask Area", and "Configuring Detailed Settings" in this manual.

Remote camera controller selection/Camera web interface display area

1. Remote camera controller selection box

   When linking with a remote camera controller, select the target remote camera controller.

   For details, refer to "Configuring the Settings for Remote Camera Controller Linkage" in this manual.

2. Camera web interface display button

Press this button to view the web interface of the PTZ remote camera on your PC's web browser.

Auto Framing Operation

Registering the PTZ Remote Camera

To use this function, you must register the PTZ remote camera on the Device View function screen of this software. For details on the registration procedure, refer to "Registering a Device" in the operation manual of the Device View function.

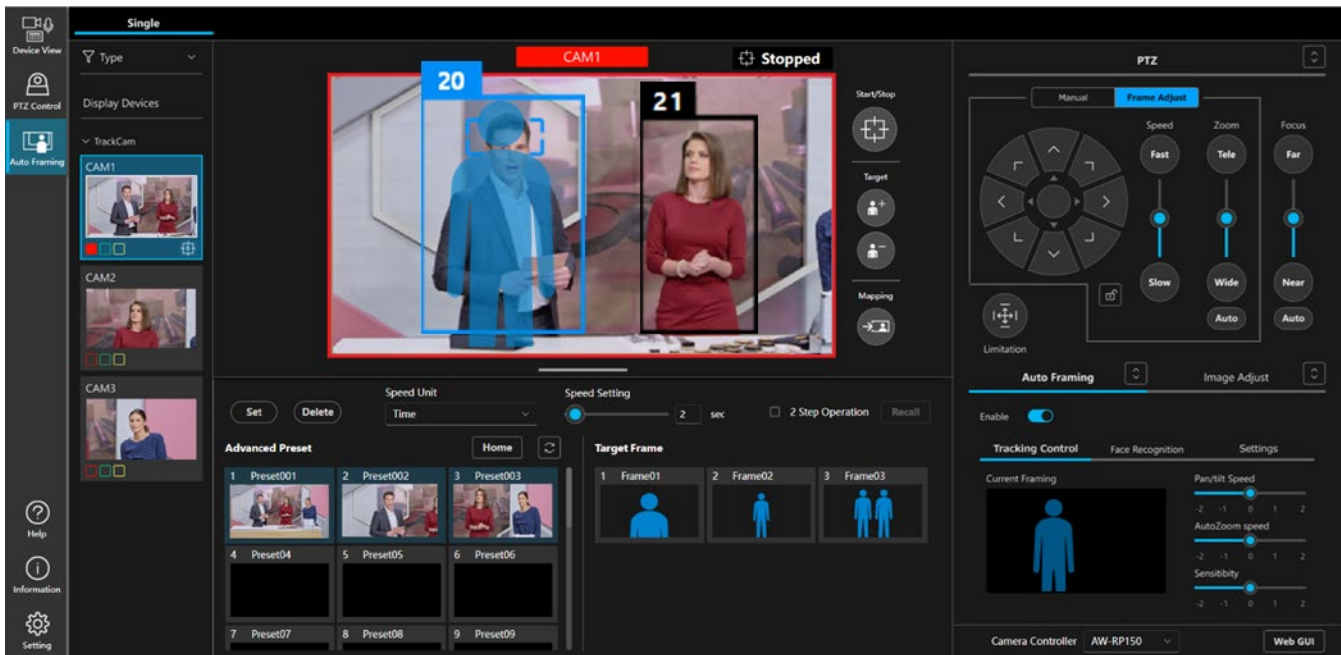## Switching ON/OFF the Auto Framing Function

When using this function, you must turn ON the auto framing function of the PTZ remote camera.

Turn ON the auto framing function according to the procedure below.

1. In the camera list display area, select the PTZ remote camera that supports this function.
2. The Auto Framing area on the right side of the screen will be enabled. Click the Enable switch to turn it on.

If the auto framing function is turned ON, the composition of the current framing settings will be displayed as human silhouettes in the camera image display and the Current Framing field at the bottom right of the screen. When a person is detected in the camera image, a human body frame is displayed around the detected person, and if the conditions are satisfied, the framing target is set. If the button for starting/stopping the framing operation is enabled, camera control is started so as to match the framing target with the position and size of the human silhouette.

If you click the Enable button again when the auto framing function Enable switch is ON, the function turns OFF.

<NOTE>

- If a PTZ remote camera that does not support this function is selected in the camera list display area, the Auto Framing area will not be enabled, and it will not be possible to turn the auto framing function ON. In such a case, only manual PTZ operation/Preset operation and Image Adjust operation can be performed.

Framing Target Automatic Selection Conditions

If the start conditions given below are satisfied when the framing Enable switch is ON, the framing target is set.
The framing target person is displayed within a blue or light blue frame.

Start conditions

- When the Auto Start Area is set to OFF

    When a person is detected in the camera image, that person is set as the framing target.
- When the Auto Start Area is set to ON

    When a person is detected within the Auto Start Area, that person is set as the framing target.

<NOTE>

- If multiple persons are detected in the camera image, the person closest to the composition of the target frame will be the framing target.

    If you want to take a group shot by adding the framing target, add the framing target according to the contents in "Taking a Group Shot of Multiple Human Targets".
- If you turn ON the button for starting/stopping the framing operation, camera control is started, and the camera moves in accordance with the movement of the framing target.

Starting/Stopping the Framing Operation

Enable or disable the camera Pan/Tilt/Zoom framing control with the toggle button for starting/stopping the framing operation that is present on the side of the camera image (orange-colored frame in the figure below).

■ The button is OFF (displayed in gray)

    The camera Pan/Tilt/Zoom framing control is disabled.

    The camera does not move even if the framing target moves.

■ The button is ON (displayed in blue)

    The camera Pan/Tilt/Zoom framing control is enabled.

    Pan/Tilt control is always performed automatically, but Zoom control varies depending on the status of the Auto Zoom button on the PTZ control panel.

    ・ When the Auto Zoom button is OFF

        Only camera Pan/Tilt is controlled.

        The zoom position of the camera is fixed to the position of the zoom slider on the PTZ control panel.

    ・ When the Auto Zoom button is ON

        Camera Pan/Tilt/Zoom are all controlled.

Performing Framing for a Single Person

This section describes the operation when framing is performed in a case where the framing target is a single person.

■ **Camera image display**

The human body frame of the framing target is displayed in blue, and the human body frame of other than the framing target is displayed in black. In the figure below, the person the left side is the framing target. The rectangle displayed on the face of the framing target represents the target of face tracking auto-focus.

The control number displayed above each human body frame allows you to identify the person.If a person is lost as a result of moving out of the screen and is then redetected, a different control number may be assigned even if the person is the same.


■ **Framing settings and framing operation**

In the Current Framing field at the bottom right of the screen, a human silhouette indicating the composition of the current framing settings is displayed. When the toggle button for starting/stopping the framing operation is OFF, the human silhouette is displayed on the camera image as well.

When framing is performed for one person, basically only one human silhouette is displayed.

During framing, the camera is controlled so that the position and size of the framing target match the position and size of the human silhouette.
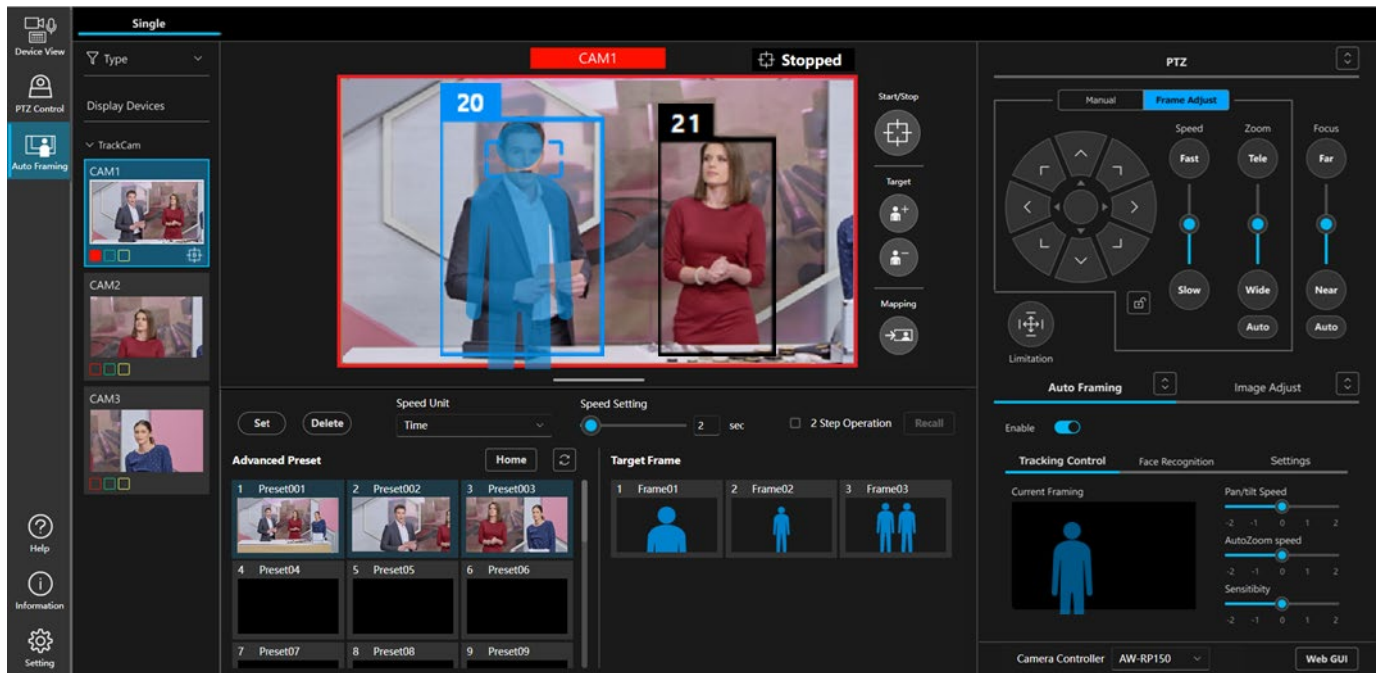
■ Focus operation when the camera auto-focus is ON

When the camera auto-focus is ON, the focus is activated so as to be set on the person who is the target of auto-focus. A small rectangle implying the auto-focus target is displayed around the face of the person who is the target of auto-focus. In the case of framing for a single human target, the person who is the framing target becomes the target of auto-focus. A person who is not the framing target cannot be set as the target of auto-focus.

■ Operation when the framing target is to be changed to another person

If you click a person other than the framing target in the camera image (a person displayed in the black human body frame), the framing target will change to the clicked person. Along with this, the auto-focus target of the camera will also change to the clicked person.

■ Operation when the framing target is lost

The operation when the framing target is lost is as described below.

1. Wait for the target to be redetected for the time period set in "Duration before judgement of lost state" in "Detail Setting".

   When the target is redetected within the time period: Framing continues with the person as the target.

   When the target is not redetected within the time period: The target is in the lost state and the processing proceeds to step 2.

2. If "Initial Position" is set in "Detail Setting", after the time period set in "Duration before recalling initial position" in "Detail Setting" elapses, the Initial Position is recalled, and the processing proceeds to step 3.

   If "Initial Position" is not set in "Detail Setting", no operation is performed, and the processing proceeds to step 3.

3. Return to the state of waiting for the framing target to be detected. If the start conditions are satisfied again, framing starts.

Taking a Group Shot of Multiple Human Targets

This section describes the operation when a framing target is added and a group shot is taken of multiple human targets.

■ Adding/deleting a framing target

Add a framing target according to the procedure below.

1. Click the + button of the Target on the right of the camera image to turn it ON.
2. If you click a person to be added in the camera image, the clicked person will be added as the framing target.

Delete the added framing target according to the procedure below.

1. Click the - button of the Target on the right of the camera image to turn it ON.
2. If you click the person to be deleted in the camera image, the clicked person will be deleted from the framing target.

<NOTE>
- A maximum of 10 persons can be set as the framing target.
- If there are two human framing targets and any one target is deleted, the operation will change to framing for a single human target.

■ Camera image display

The human body frame of the framing target is displayed in blue, and the human body frame of other than the framing
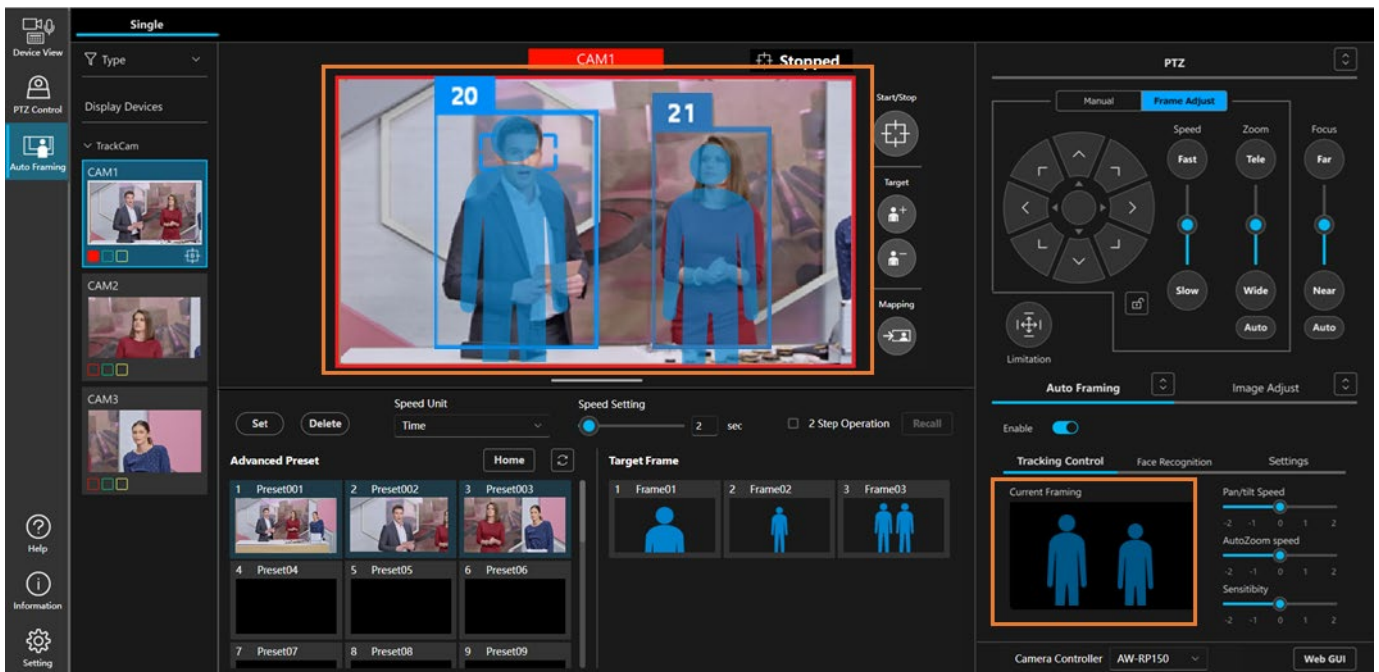
target is displayed in black.

If you click the framing target, one person will be displayed in the selected state in a bright blue frame. The selected target becomes the target of auto-focus, and also becomes the framing target when the one-shot Target Frame is recalled. The control number displayed above each human body frame allows you to identify the person.If a person is lost as a result of moving out of the screen and is then redetected, a different control number may be assigned even if the person is the same.

■ **Framing settings and framing operation**

A human silhouette indicating the current composition is displayed in the Current Framing field at the bottom right of the screen. When the toggle button for starting/stopping the framing operation is OFF, the human silhouette is displayed on the camera image as well.

In a group shot, two human silhouettes are normally displayed. During framing, the camera is controlled so that the position and size of the two persons positioned at both ends among the human framing targets match as much as possible with the position and size of the two human silhouettes.

■ **Focus operation when the camera auto-focus is ON**

When the camera auto-focus is ON, the focus is activated so as to be set on the person who is the target of auto-focus in the camera image. A small rectangle implying the auto-focus target is displayed around the face of the person who is the target of auto-focus.

■ **Operation when the auto-focus target is to be changed to another person**

If you click any person in the camera image, the target of auto-focus will change to the clicked person.At the time of a group shot, a person who is not the framing target can be set as the target of auto-focus.

■ **Operation when the framing target is lost**

The operation when any one of the persons set as the framing target is lost is as described below.

1. Wait for the target to be redetected for the time period set in "Duration before judgement of lost state" in "Detail Setting".

When the target is redetected within the time period: Framing continues.

When the target is not redetected within the time period: The target is in the lost state and the processing proceeds to step 2.

2. Delete the lost person from the framing target and continue with framing.

* If there were two human framing targets before one got lost, the operation will change to framing for a single human target.

Configuring the Framing Settings

# (Composition and Camera Moving Speed/Sensitivity Settings)

You can adjust the framing settings, including the composition (position and size of displaying the framing target) and the camera moving speed and sensitivity at the time of framing.

■ **Adjusting the composition**

This section describes the procedure of adjusting the composition by using the PTZ control panel.

The procedure is common for both framing for a single human target and taking a group shot of multiple human targets.

・ When camera control is OFF

1. Select the Tracking Control tab in the Auto Framing tab.
2. Set the Frame Adjust tab on the PTZ control panel to the selected state.
3. If you press the Pan/Tilt operation button on the PTZ control panel, the human silhouette on the camera image and in the Current Framing field at the bottom right of the screen moves.
4. By operating the zoom button/slider on the PTZ control panel, the size of the human silhouette on the camera image and in the Current Framing field at the bottom right of the screen changes.
5. Carry out steps 3 and 4 to adjust the human silhouette to the position and size at which you want to display the framing target.
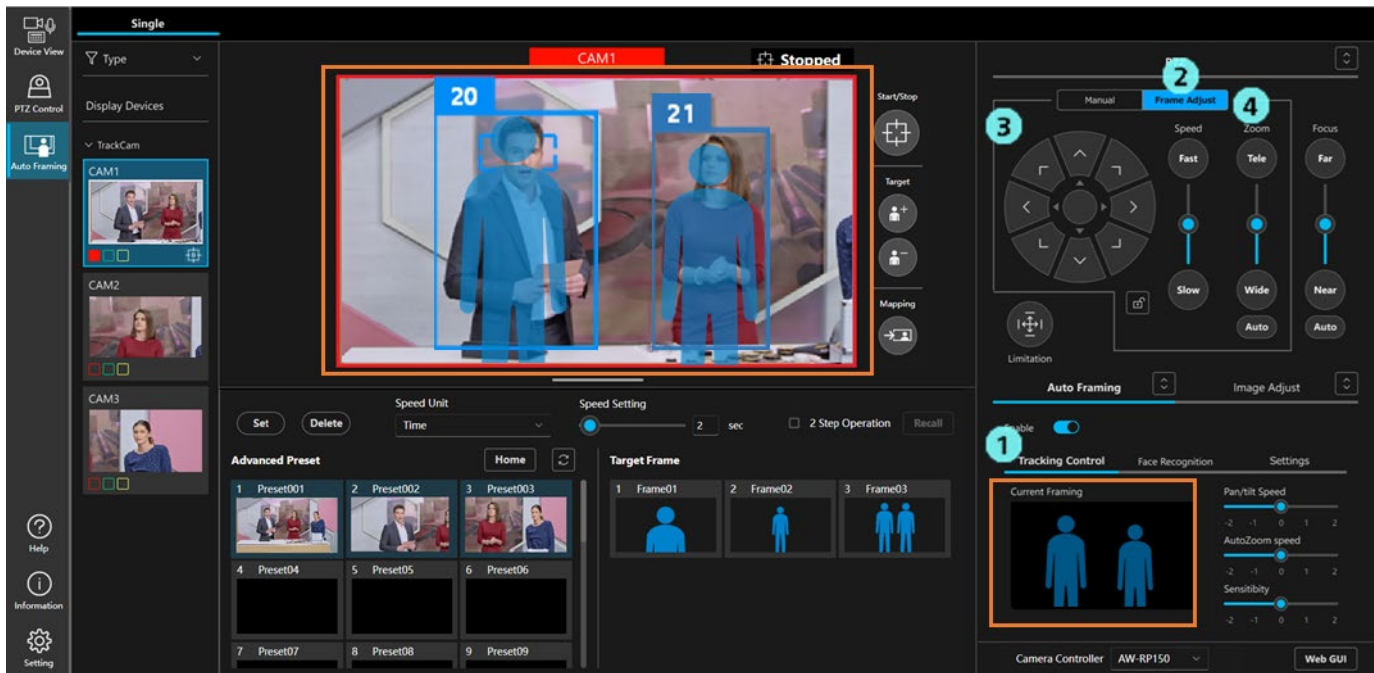
・ When camera control is ON

1. Select the Tracking Control tab in the Auto Framing tab.

2. Set the Frame Adjust tab on the PTZ control panel to the selected state.

3. If you press the Pan/Tilt operation button on the PTZ control panel, the human silhouette in the Current Framing field at the bottom right of the screen moves, and in accordance with that, the Pan/Tilt position of the camera also moves.

4. By adjusting the zoom button/slider on the PTZ control panel, the size of the human silhouette in the Current Framing box at the bottom right of the screen changes, and the camera's zoom position also moves accordingly.

5. Carry out steps 3 and 4 to adjust the position and size of the framing target.

■**Apply the current framing target as a composition**

The position and size of the framing target in the camera image can be applied as a composition.

1. Press the Mapping button on the right of the camera image while the framing target is being displayed in the camera image.

2. When the Mapping button is pressed, a composition is created based on the position and size of the framing target at that point, and it is displayed as a human silhouette in the Current Framing box in the lower right of the screen.

   * When taking a group shot, the composition is created based on the positions and sizes of the two people at the ends of the framing target.
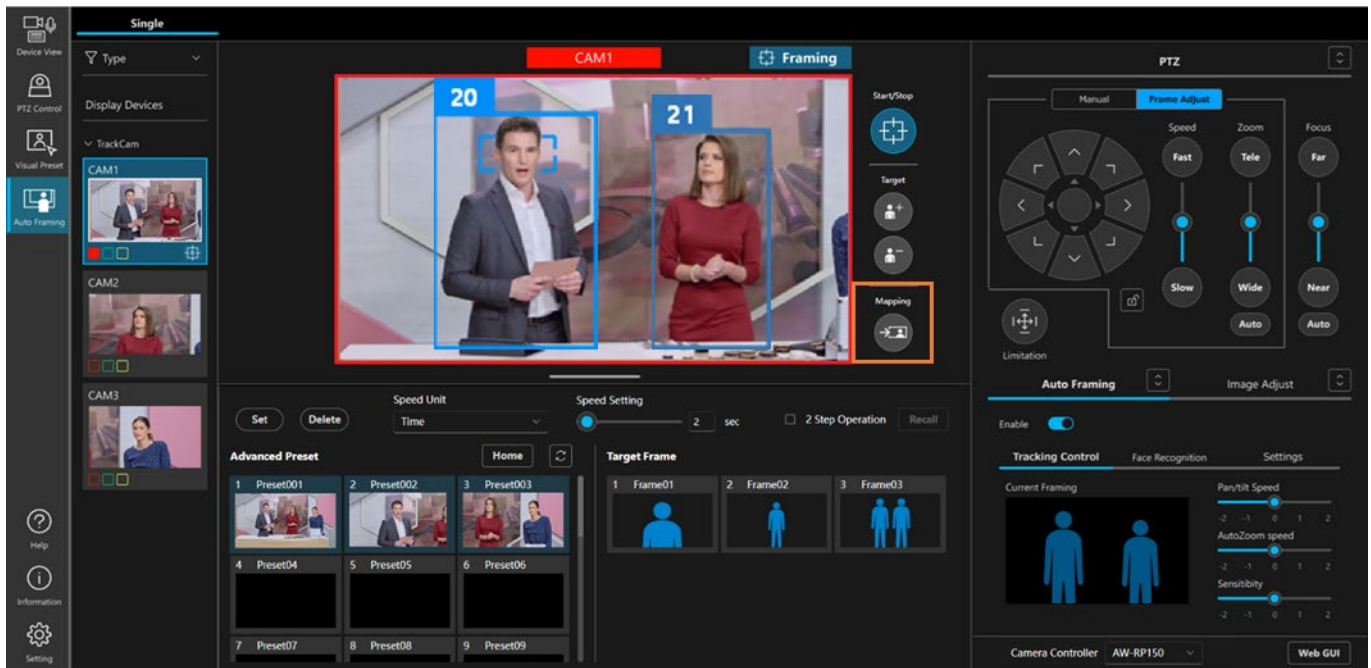
■Adjust the moving speed and sensitivity of the camera

The moving speed and sensitivity of the camera can be adjusted while framing is activated.

1. Select the Tracking Control tab in the Auto Framing tab.

2. Adjust Pan/Tilt speed of the camera with the slider.

   -2 (slow) to 0 (standard) to 2 (high)

3. Adjust the zoom speed of the camera using the Auto Zoom Speed slider.

   -2 (slow) to 0 (standard) to 2 (high)

4. Adjust the sensitivity of the camera (how much the camera reacts to the movement of the subject being targeted for framing) using the Sensitivity slider.

   -2 (low) to 0 (standard) to 2 (high)
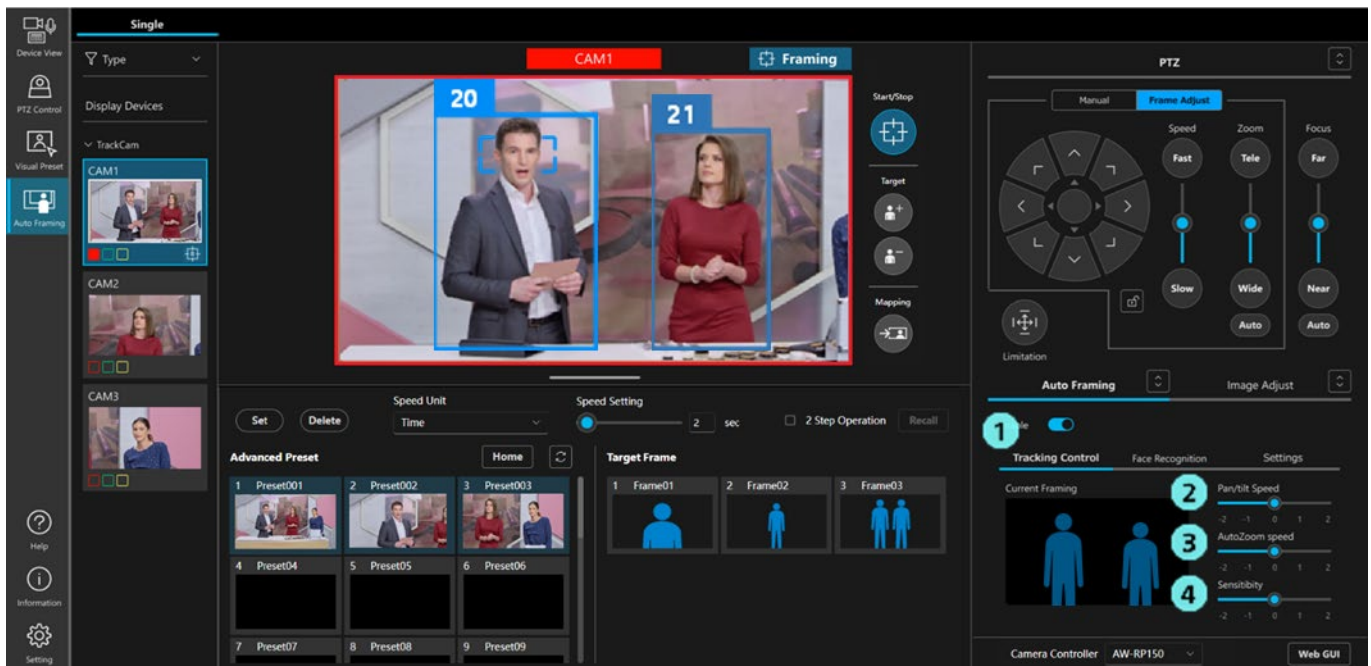
Registration and recall operations of the target frame

The framing setting can be registered as a target frame and recalled at any time.

Up to three target frames can be registered.

Settings saved in the target frame are:

- ・ Composition information displayed in the Current Framing box
- ・ Moving speed of the camera (Pan/Tilt Speed, Auto Zoom Speed)
- ・ Sensitivity of the camera (Sensitivity)
- ・ Preset Speed setting (Speed Unit and Speed Setting)
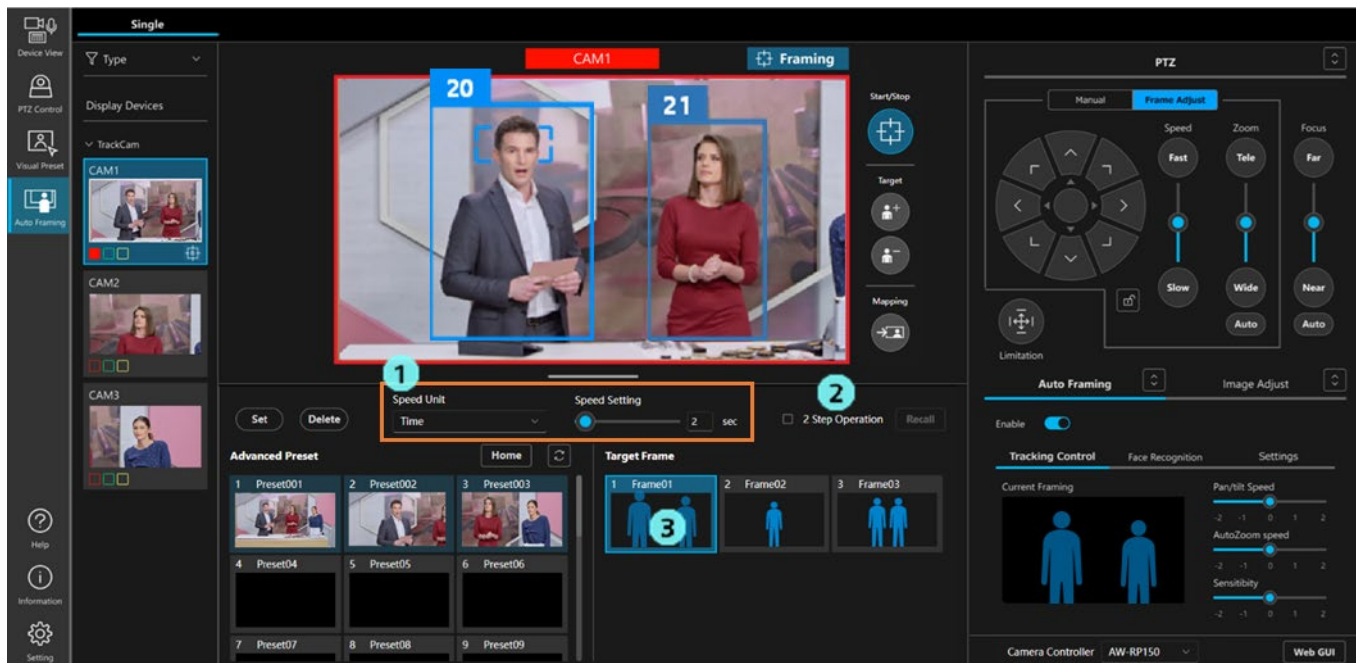
■**Register a target frame**

1. Press the Set button in the Preset area to turn it on.
2. Click the thumbnail of any target frame in the Target Frame box, then the framing settings at that time will be registered.
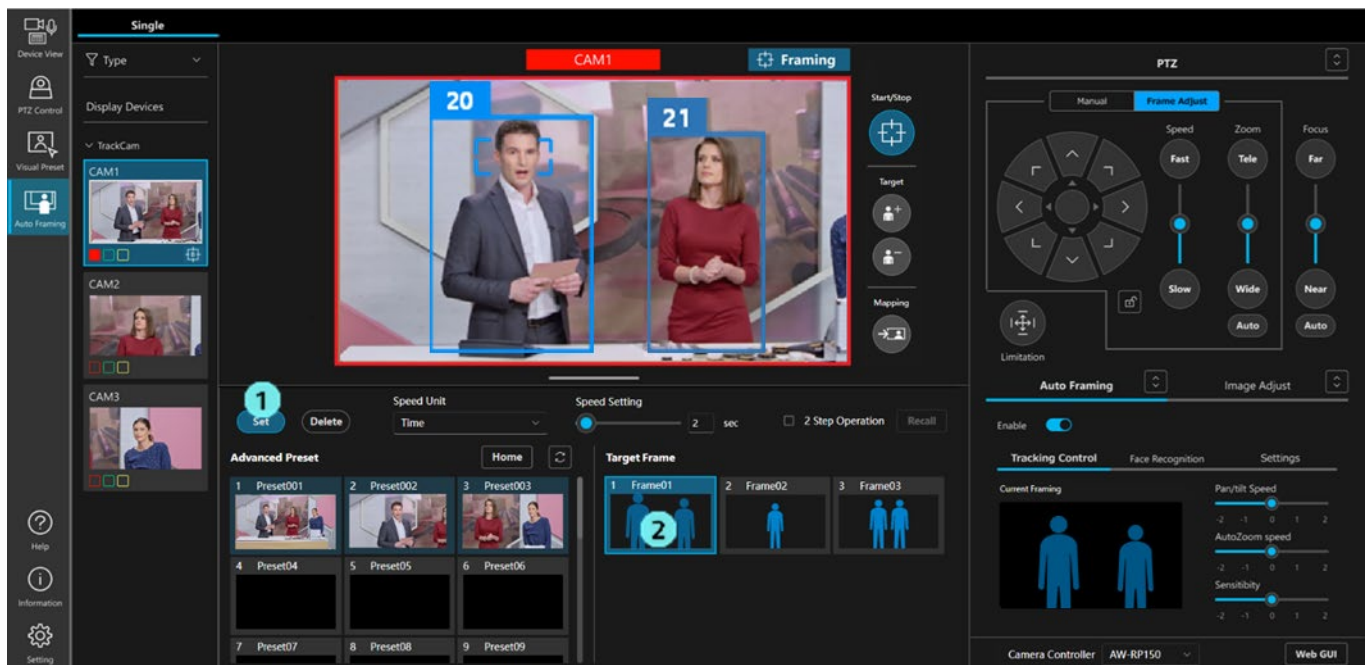

■Recall the registered target frame

There are two ways to recall the registered target frame:

- ・ Click the thumbnail to recall it immediately
- ・ Click the thumbnail to select, then click the Recall button to recall it

- ・ Procedure for immediate recall by clicking a thumbnail
    1. Set the moving speed of camera after recalling a preset using the Speed Unit and Speed Setting in the Preset area
    2. Turn off the check box of 2 Step Operation in the Preset area.
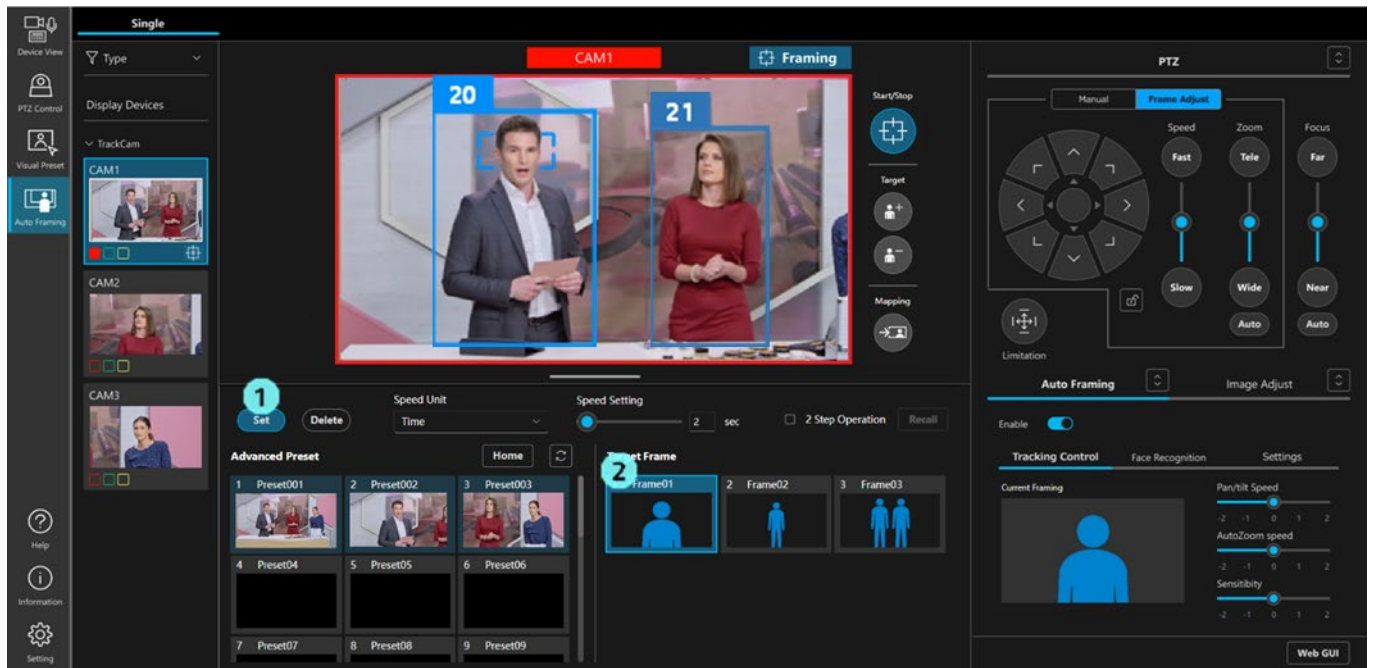   3. Click any thumbnail in the Target Frame box to recall the settings.

- Click the thumbnail to select, then click the Recall button to recall it
    1. Turn on the check box of 2 Step Operation in the Preset area.
    2. Click any thumbnail in the Target Frame box to activate it.
    3. Set the camera's moving speed in the Speed Unit and Speed Setting in the Preset area.
    4. Click the Recall button in the Preset area to recall the settings.
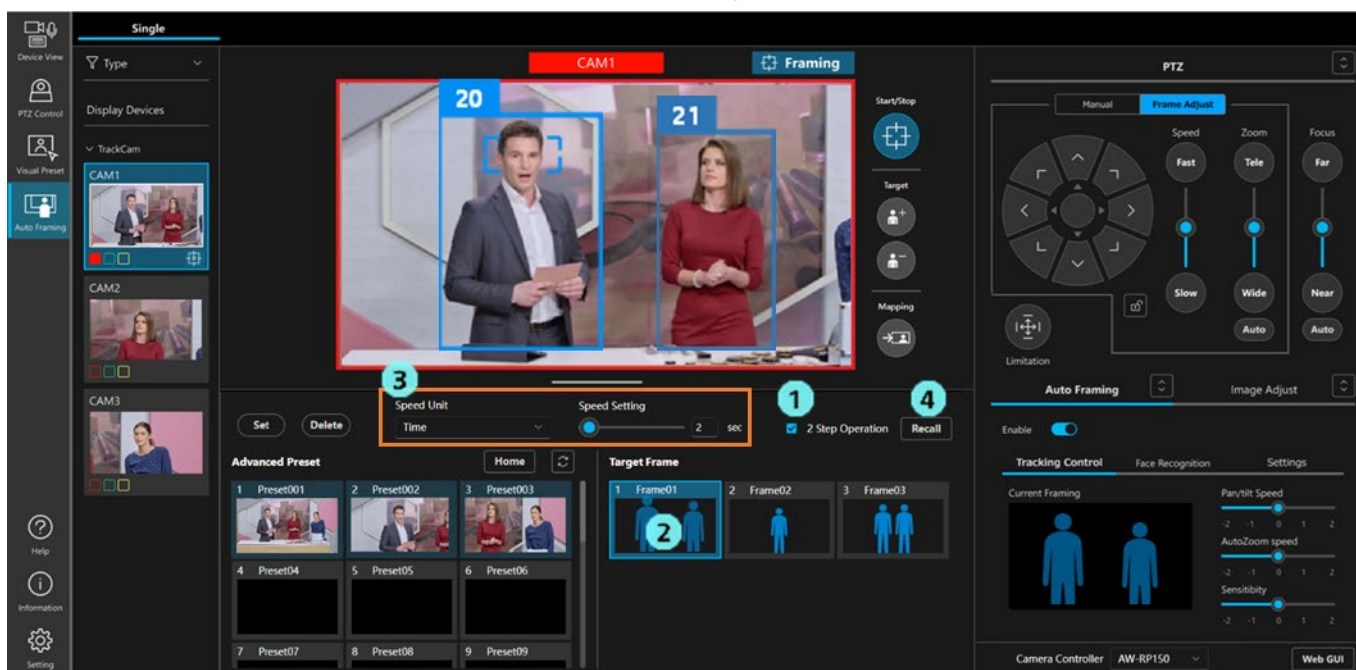
■Change the name of the target frame
1. Press the Set button in the Preset area to turn it on.
2. Click the name field in the Target Frame box to edit and change the name.

■Delete the target frame

1. Click the Delete button in the Preset area to turn it on.
2. Click any thumbnail in the Target Frame box to delete the target frame.
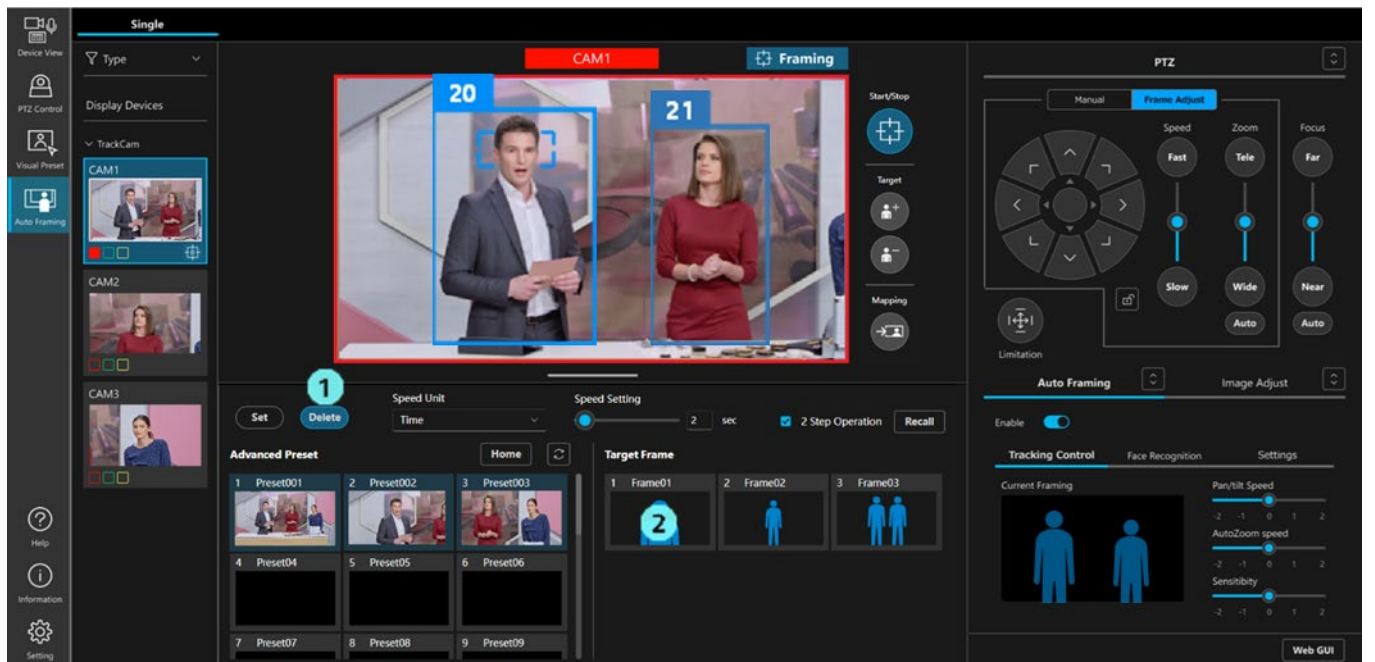
Set the Auto Start Area

By setting the Auto Start Area, when a human body frame is detected within the area, the condition will change to select the framing target.

· Only one area can be set.

・ The position of the area is saved by linking to the camera's Pan/Tilt/Zoom position at the time of setting. Therefore, if the camera's Pan/Tilt/Zoom position is moved after setting, the position and size of the area will also change accordingly.

■How to set an Auto Start Area

1. Select the Setting tab in the Auto Framing tab.
2. Click the Auto Start Area button to turn it on.

    If the Initial position is set in the Detail Setting, the camera will move to the Initial position automatically. If the Initial position is not set, the camera will not move.

3. Click on the camera image and drag it to display a frame indicating the area. Once dragging is finished, the setting is complete.
4. After setting the framing area, framing operations start if a body frame is detected within the area.
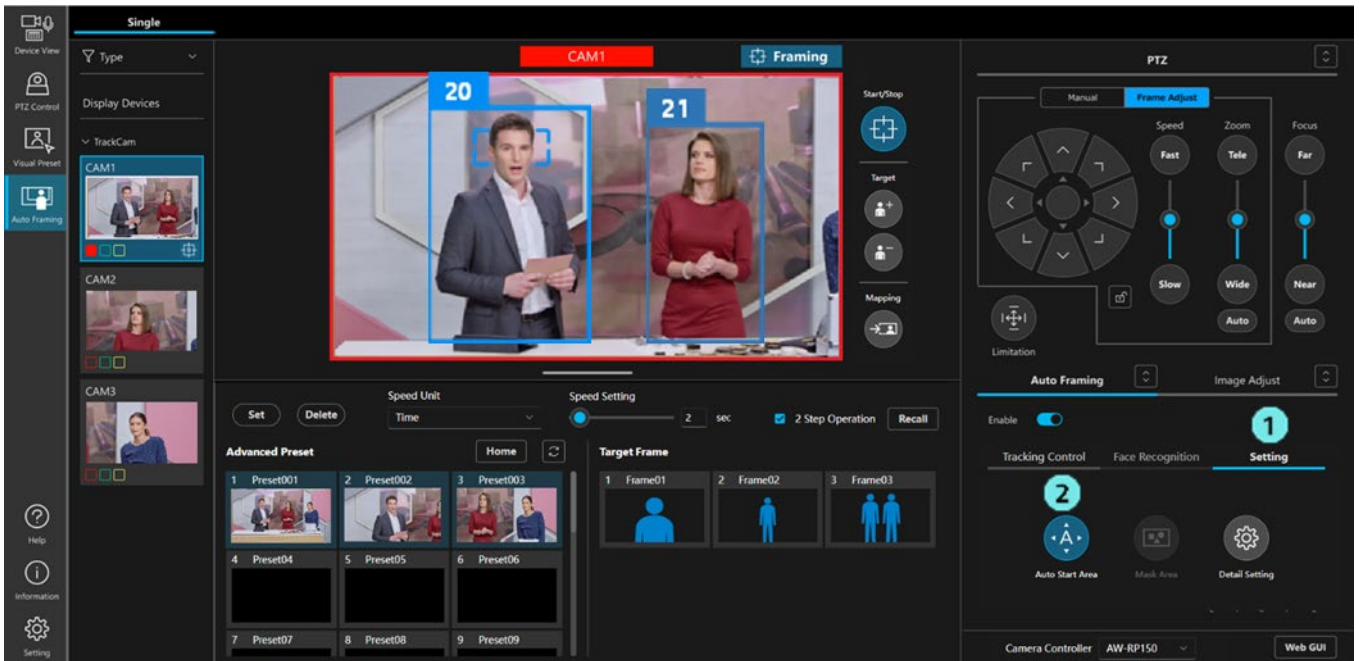
■How to cancel the Auto Start Area

1. In the same way as when setting, click the Auto Start Area button to turn it on.
2. Click the X button in the top right corner of the display to cancel the area setting.

■How to change the Auto Start Area

1. In the same way as when setting, click the Auto Start Area button to turn it on.
2. To reposition the area, click within the created frame and drag it.

    To readjust the size of the area, click on a corner or edge of the created frame.

<NOTE>

・ When the Auto Start Area button is turned off while the Auto Start Area is set, the area display on the camera image will disappear, but the area operation will remain enabled.

    To disable the area operation, follow the steps above to cancel the area setting.
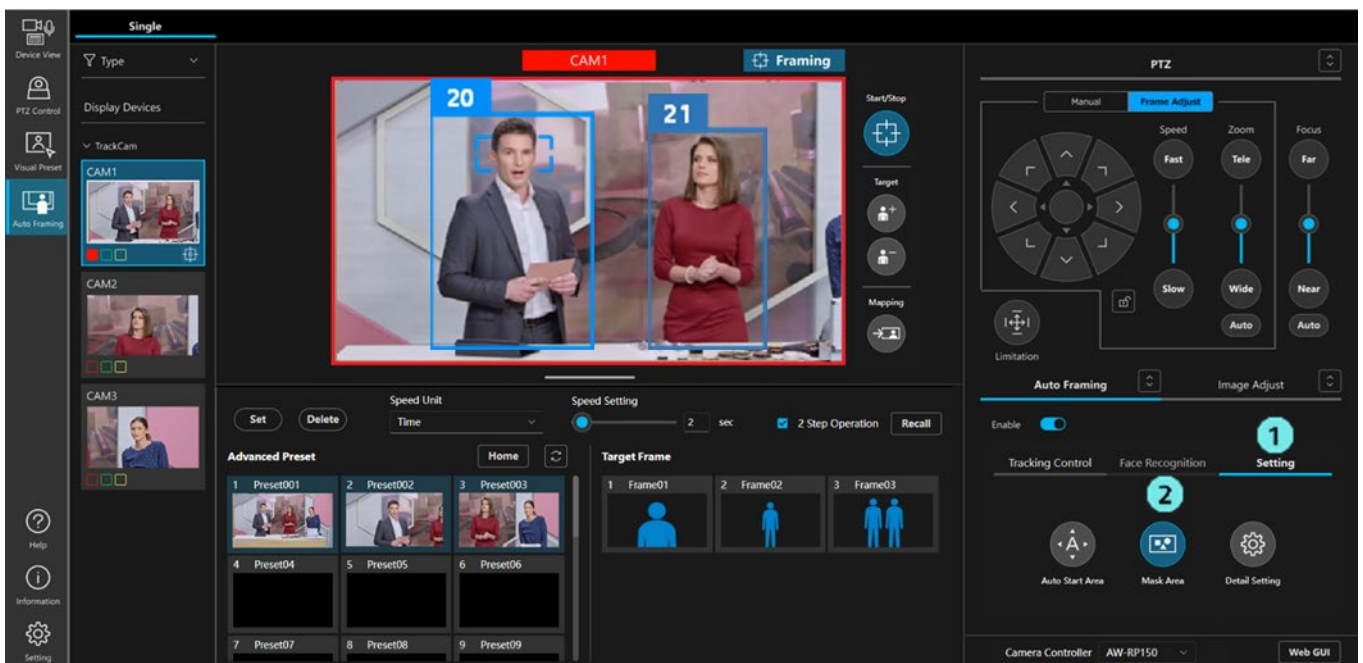
Set the Mask Area

Mask areas (areas that are not used for detection within the camera image) can be set for detecting people.

・ Up to three areas can be set.

・ The position of the area is saved by linking to the camera's Pan/Tilt/Zoom position at the time of setting. Therefore, if the camera's Pan/Tilt/Zoom position is moved after setting, the position and size of the area will also change accordingly.

■How to set a Mask Area

1. Select the Setting tab in the Auto Framing tab.
2. Click the Mask Area button to turn it on.
3. Click on the camera image and drag it to display a frame indicating the area. Once dragging is finished, the setting is complete.


■How to cancel the Mask Area

1. In the same way as when setting, click the Mask Area button to turn it on.
2. Click the X button in the top right corner of the display to cancel the area setting.

■How to change the Mask Area

1. In the same way as when setting, click the Mask Area button to turn it on.
2. To reposition the area, click within the created frame and drag it.
   To readjust the size of the area, click on a corner or edge of the created frame.

<NOTE>

・ When the Mask Area is set, the area operation will remain active even when the Mask Area button is turned off.
   To disable the area operation, follow the steps above to cancel the area setting.
・ When the Mask Area button is turned off, the button display shows whether a Mask Area is set or not.
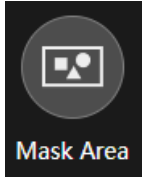
Mask area frame

Number of settings: 0
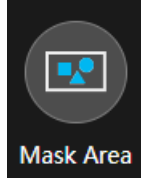
Mask area frame

Number of settings: 1 or more

Check the framing status

The framing status can be checked by the display in the top right corner of the camera image display.

Camera control is stopped	: Stopped
Waiting to detect the framing target	: Searching
Framing is in progress	: Framing
The framing target is lost	: Lost

Operate the camera manually

You can operate a camera manually by selecting the Manual tab on the PTZ control panel and controlling the Pan/Tilt button and Zoom slider.

When the camera is operated manually, framing control of the camera will be suspended. To resume framing control of the camera, turn on the start/stop toggle button for framing operation again.

Perform camera preset operation

The preset for the PTZ remote camera can be registered and recalled.

Although the layout of the buttons, etc. differs, the procedure for registering and recalling is the same as for the PTZ Control function. Please refer to Perform Camera Preset Operation in the PTZ Control Operation Manual.

When registering a camera preset using this function, the framing settings at that time will be saved, linked to the camera preset. The composition of the saved framing settings will be displayed as human silhouettes on the thumbnail of the camera preset. When recalling a camera preset, the framing setting will also be recalled. In this case, the item to be recalled from the framing settings can be set in the Detail Setting. For more information, please refer to Detail Setting.

Framing settings saved/recalled linked to the camera preset:
- Preset Speed setting (Speed Unit and Speed Setting)
- Tracking Control tab settings (Composition status of Current Framing, Pan/Tilt Speed, Auto Zoom Speed, and Sensitivity)
- Status of toggle button to start/stop framing operation
- Auto Start Area settings
- Mask Area settings

<NOTE>
- Display of presets cannot be synchronized between this function and the PTZ Control function. To reflect presets registered or deleted on one function on the other, the other function must have its preset display updated.

Configure detailed settings

Detailed settings can be made for the framing function.

Screen to make detailed settings is displayed in the following steps:
1. Select the Setting tab in the Auto Framing tab.
2. Click the Detail Setting button to display the screen of the Detailed settings.
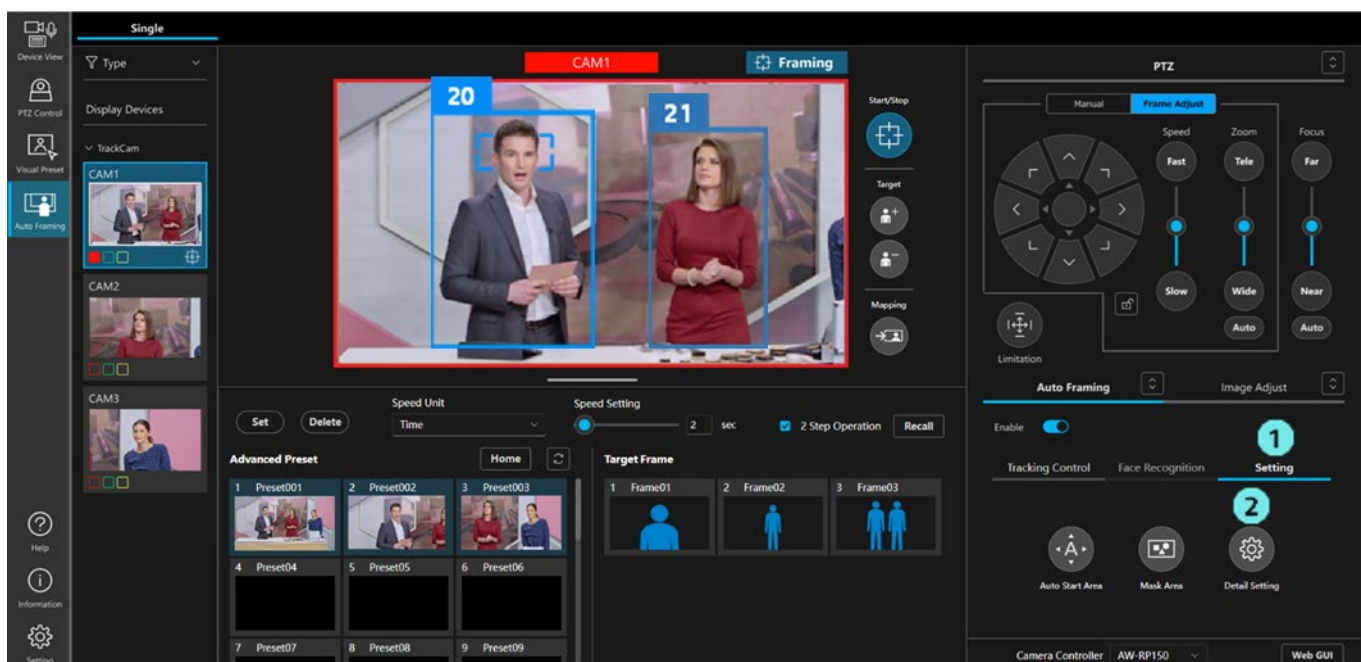
■Auto Framing Setting items

・ On Tally Lamp during framing

Set the tally lamp status of the camera from the following (default: Yellow) for the set framing target when framing is in progress (when the status display is Framing)

Off: No lighting

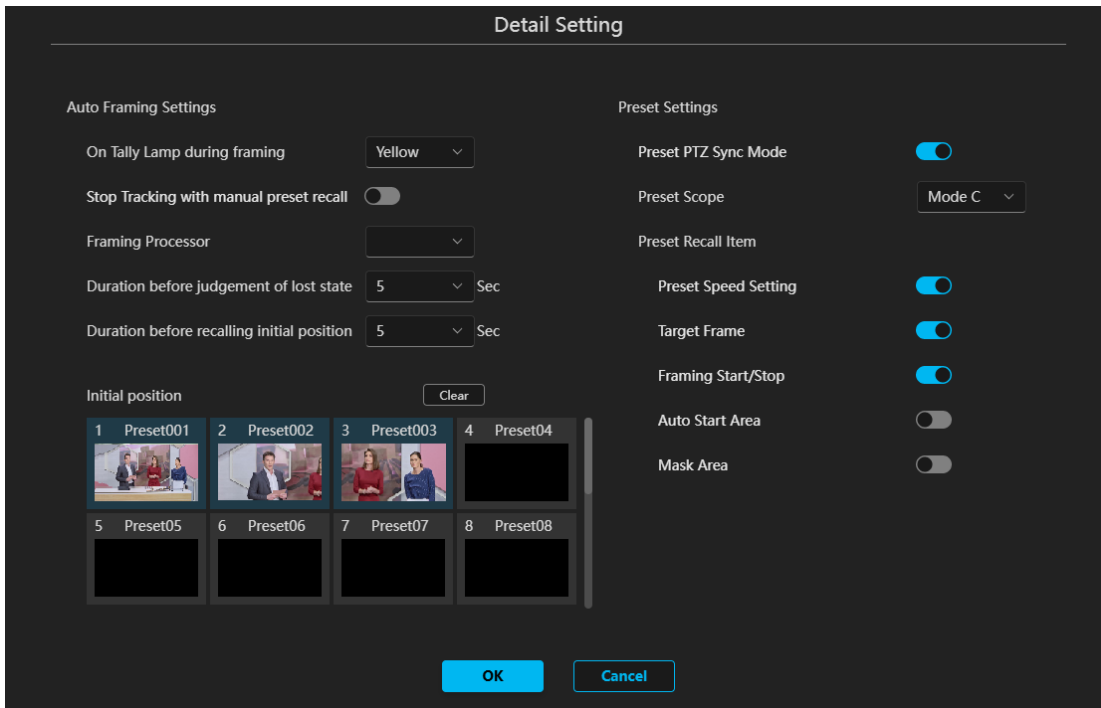Yellow: Yellow tally on

Green: Green tally on

Red: Red tally on

・ Stop Tracking with manual preset recall

Set if framing operation should be stopped when the camera preset is recalled manually (default: OFF)

OFF: Do not stop framing operation

ON: Stop framing operation

・ Framing Processor

This feature is for future function expansion. It is not supported in this version.

・ Duration before judgement of lost state

Set the time in seconds between losing the framing target and judging that the target is lost (default: 5 seconds)

・ Duration before recalling initial position

Set the time in seconds after the framing target is lost and judged as lost until the initial position is recalled (default: 5 seconds)

・ Initial position

Set the camera preset to be recalled after the framing target is lost and judged as lost (default: no setting)

By clicking any preset icon, the preset will be set as the Initial position. Clicking the Clear button will undo the setting.

■Preset Settings items

・ Preset PTZ Sync Mode

Set the ON/OFF setting for the Preset PTZ Sync Mode of the PTZ remote camera.

For information on the Preset PTZ Sync Mode, please refer to the operation manual of the PTZ remote camera.

・ Preset Scope

Set the Preset Scope of the PTZ remote camera.

For information on the Preset Scope, please refer to the operation manual of the PTZ remote camera.

・ Preset Recall Item

When a camera preset is recalled, this setting determines which linked and saved framing settings will be recalled. Only the items that are turned ON in this setting will be recalled.

- Preset Speed Setting (default: ON)

Preset Speed settings (Speed Unit, Speed Setting)

- Target Frame (default: ON)

Tracking Control tab settings (Composition status of Current Framing, Pan/Tilt Speed, Auto Zoom Speed, and Sensitivity)

- Framing Start/Stop (default: ON)

Status of toggle button to start/stop framing operation

- Auto Start Area (default: OFF)

Auto Start Area settings

- Mask Area (default: OFF)

Mask Area settings

Linking with remote camera controller

Linking with remote camera controller

You can use this function in conjunction with our remote camera controller.

The following is a conceptual diagram of remote camera linking.
Normally, the remote camera controller communicates directly with the PTZ remote camera, but when linking a remote camera, this software relays the communication between the remote camera controller and the PTZ remote camera.
By relaying the camera selection, Pan/Tilt/Zoom and other operations of the remote camera controller, this software synchronizes the camera selection and coordinates the remote camera controller and framing operations.

PTZ Camera

Media Production Suite
Install PC

RP Controller

Operations enabled by linking with the remote camera controller

The following operations are available when linking with the remote camera controller.
- Synchronize camera selection between the screen of this function and the remote camera controller
- Operate the Enable switch of framing function from the remote camera controller
- Operate start/stop framing operation from the remote camera controller
- When operating the Pan/Tilt joystick or Zoom slider of the remote camera controller, stop framing operation and activate manual camera control
- When the camera preset is recalled, registered or deleted from the remote camera controller, perform these operations

in the same as when operated on the GUI screen of this function

<NOTE>

・ When the Enable switch of camera's framing is turned on, recalls, registrations, and deletions of camera preset from the remote camera controller can only be performed when the screen of this function is displayed in the web browser. These operations cannot be performed when the screen of this function is not displayed.

Example of systems and settings for linking with a remote camera controller

The following is the example of the system when linking with a remote camera controller.
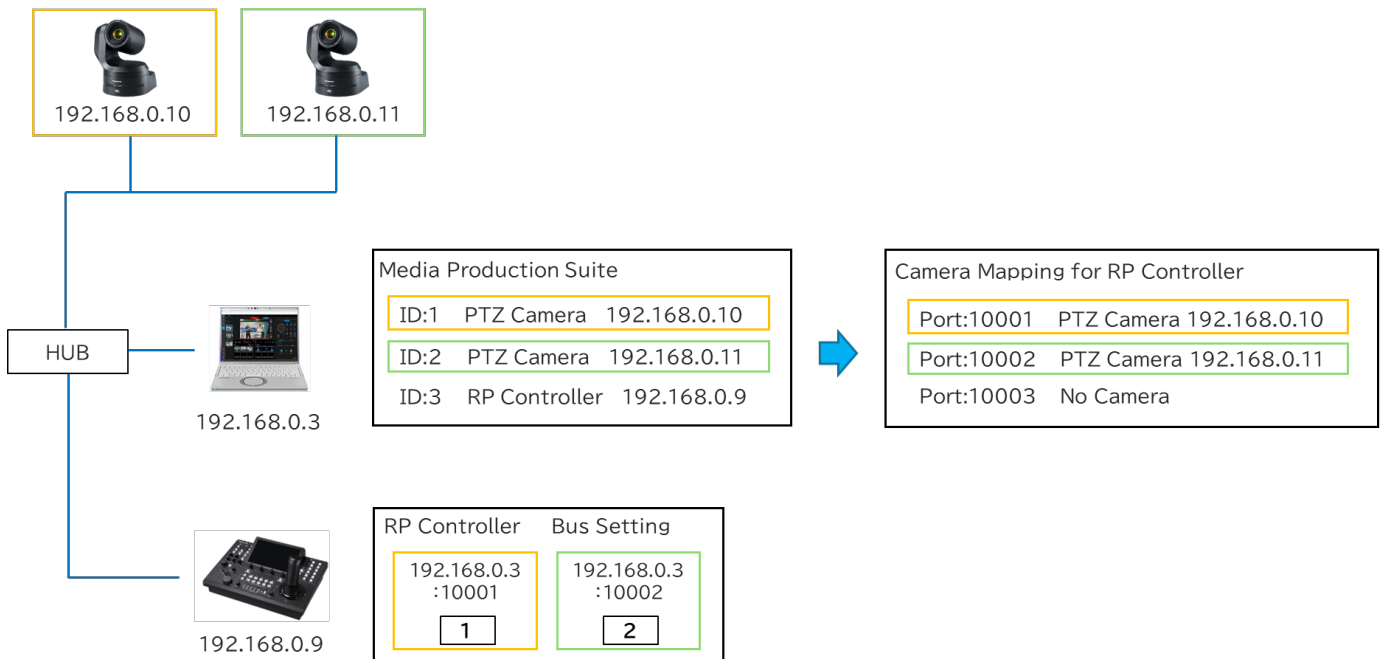
In the example of the system above, there are the following devices:

・ 2 PTZ remote cameras (IP address: 192.168.0.10, 192.168.0.11)
・ PC on which this software is installed (IP address: 192.168.0.3)
・ Remote camera controller (IP address: 192.168.0.9)

and two PTZ remote cameras and a remote camera controller are already registered on this software.

■ Camera mapping operation of this software

When a PTZ remote camera is registered with this software, mapping will be performed between the registered PTZ remote camera and a port number (default: 10001), starting from the port number for linking with the remote camera controller.

The system example above shows a mapping example when the port number for linking with the remote camera controller is set as 10001 and there are two PTZ remote cameras ID: 1 and ID: 2.

・ Port number 10001:   Mapping the camera with IP address 192.168.0.10
・ Port number 10002:   Mapping the camera with IP address 192.168.0.11

■ Remote camera controller settings

Configure the following settings for the camera selection button on the remote camera controller.

- ・ IP address: IP address of the PC on which this software is installed
- ・ Port number: The port number to which the camera selected by the camera selection button is mapped to

In case of the system example shown above, configure the settings as follows.

- ・ Camera selection button 1

    IP address: 192.168.0.3, port number: 10001 (selecting the camera with ID: 1)

- ・ Camera selection button 2

    IP address: 192.168.0.3, port number: 10002 (selecting the camera with ID: 2)

■ Operation when the camera order is changed

The following figure shows the result of changing the order of the cameras with ID: 1 and ID: 2 using this software, from the state of the system example shown above. Red text in the figure indicates the parts that have changed.
In conjunction with changing the order, the cameras mapped to the port number for linking with the remote camera controller in this software also change. Therefore, the cameras selected using the camera selection button are also switched without changing the settings on the remote camera controller.
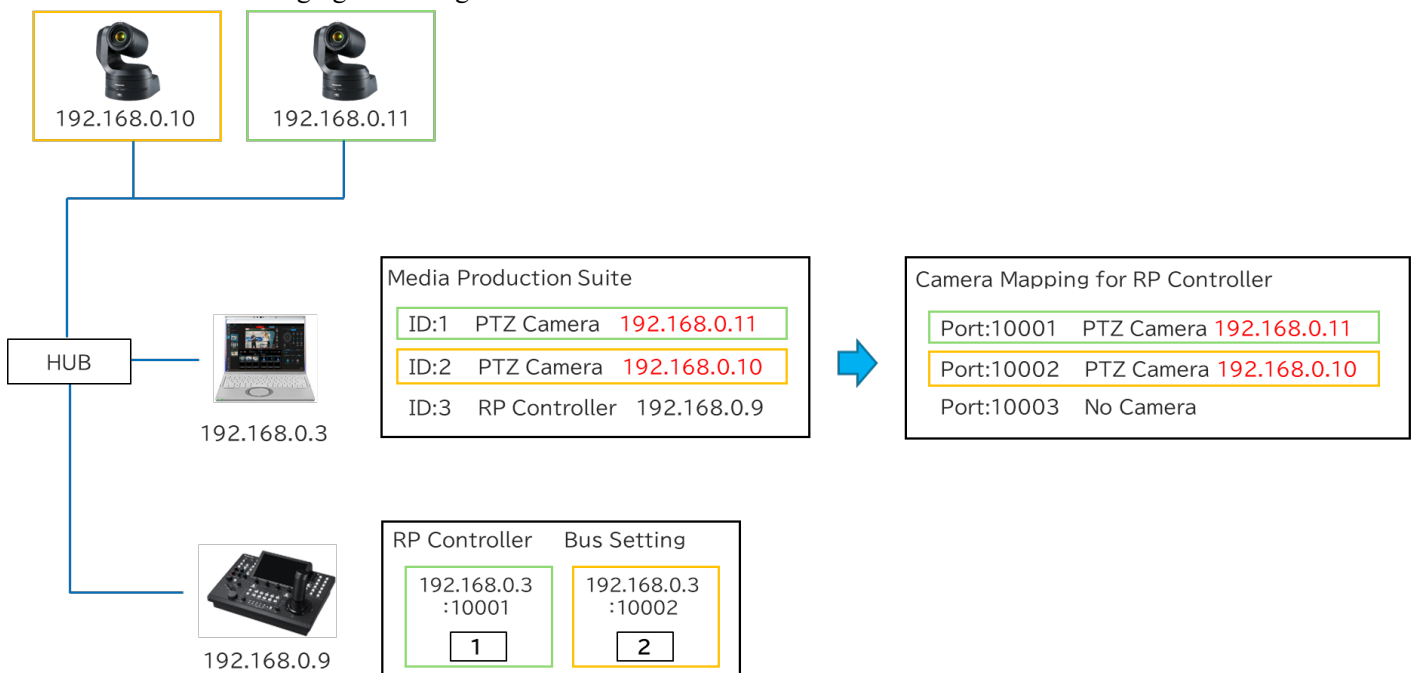
Set up to link with a remote camera controller

The following settings are required for linking with a remote camera controller.

1. Register PTZ remote camera to the first group in this software.

2. Register a remote camera controller in this software.

3. Set up a port number for linking with the remote camera controller in this software.

4. Assign cameras via the remote camera controller according to the camera mapping status of this software.

5. Assign the framing control function to the User button via the remote camera controller.

6. (In the case of synchronizing camera selection) Select the remote camera controller to be used for linking in the GUI of this function.

Below is an explanation of the setting procedure for each.

■ Register a PTZ remote camera to the first group via this software

Registering a PTZ remote camera is carried out on the Device View function screen. For details on the registration procedure, refer to "Registering a Device" in the operation manual of the Device View function.

1. Click the Device View button in the function selection area on the left side of the screen of this software to display the Device View screen.
2. Click the Add Device button in the upper right corner of the Device View screen to display the device registration screen.
3. Select the first group in the Group column of the device registration screen.
   ＊Selecting a group other than the first one may cause problems with synchronizing camera selection. Please make sure to select the first group.
4. The list of devices on the network will be displayed in the Auto Search field of the device registration screen, so check the box for the PTZ remote camera you want to register.
   Alternatively, in the Manual field of the device registration screen, select Type: PTZ Camera and manually enter the IP address and other information of the PTZ remote camera.
5. Click the OK button on the device registration screen to register the device.

■ Register a remote camera controller via this software

Registering a remote camera controller is carried out on the Device View function screen. For details on the registration procedure, refer to "Registering a Device" in the operation manual of the Device View function.

1. Click the Device View button in the function selection area on the left side of the screen of this software to display the Device View screen.
2. Click the Add Device button in the upper right corner of the Device View screen to display the device registration screen.
3. The list of devices on the network will be displayed in the Auto Search field of the device registration screen, so check the box for the remote camera controller you want to register.
   Alternatively, in the Manual field of the device registration screen, select Type: RP Controller and manually enter the IP address and other information of the remote camera controller.
4. Click the OK button on the device registration screen to register the device.

■ Set up a port number for linking with the remote camera controller via this software

The port number for linking with the remote camera controller is configured in the screen of the Setting function. The default port number is 10001. There is usually no need to modify the setting. However, if an error occurs in the camera mapping (the port number cannot be used) as described later, please modify the setting to another port number.
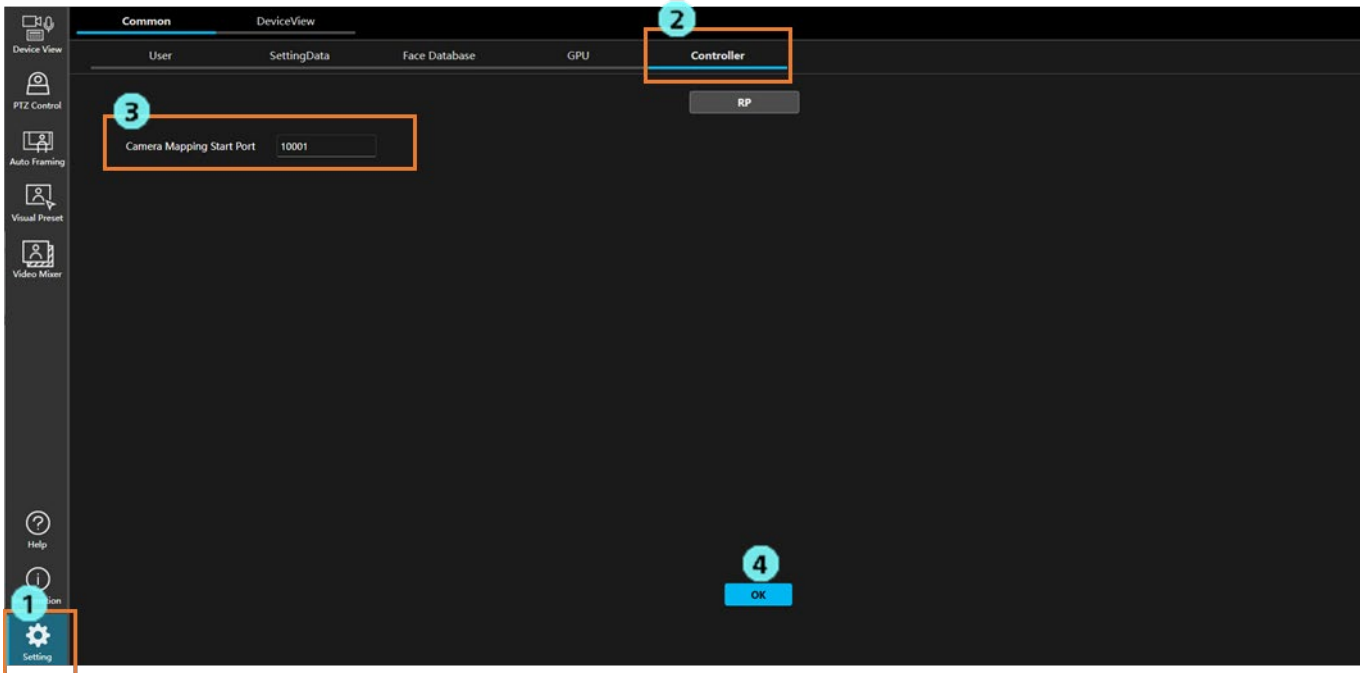
1. Click the Setting button in the function selection area on the left side of the screen of this software to display the Setting screen.
2. Select the Controller tab at the top of the Setting screen.
3. Enter a value for Camera Mapping Start Port in the range 10001 to 50001.
4. Click the OK button to save the settings.

■ **Assign cameras via the remote camera controller according to the camera mapping status in this software**

As described in "Overview of linking with remote camera controller", when registering a PTZ remote camera with this software, mapping is performed between the registered PTZ remote camera and the port number, starting from the port number for linking with the remote camera controller.

When assigning cameras to the camera selection button of the remote camera controller, the settings should be made according to the mapping of this software.

The following explains the procedure, divided into two parts.

・ Procedure for checking the mapping status of this software
・ Procedure for assigning cameras in the remote camera controller

Procedure for checking the mapping status of this software

Registering a remote camera controller is carried out on the Device View function screen.
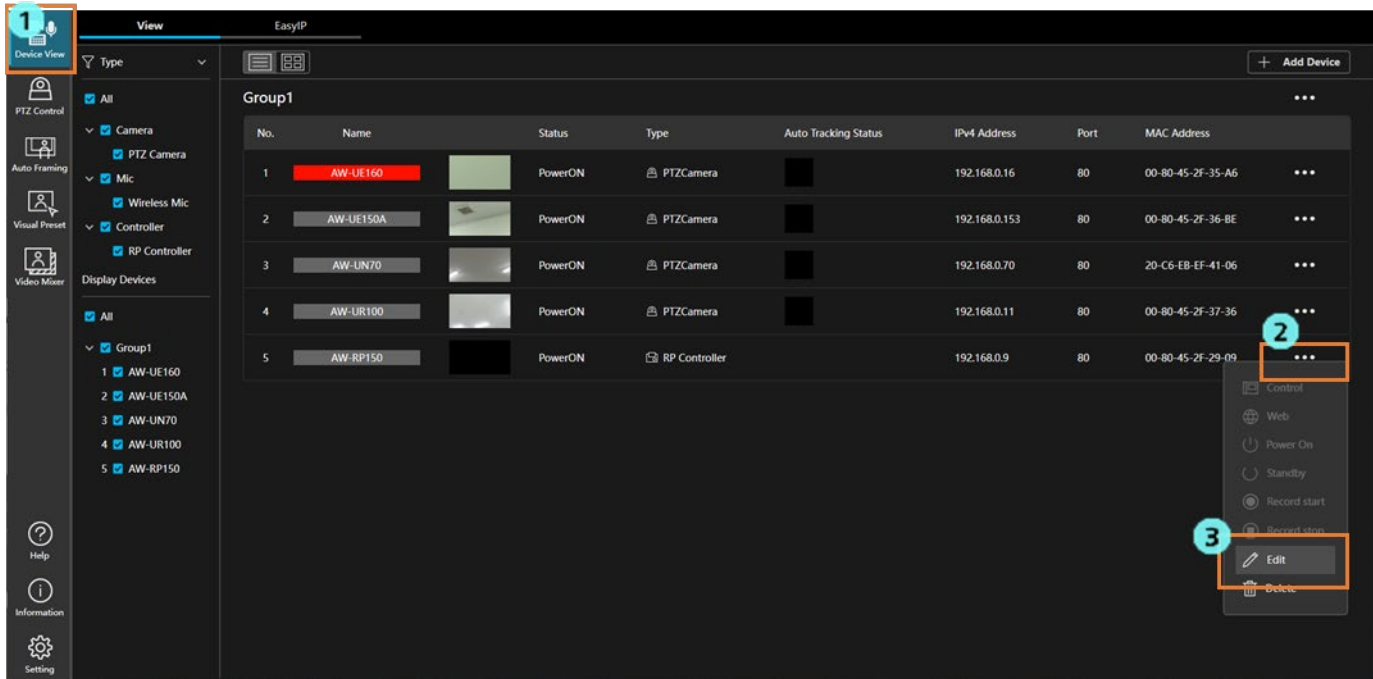
1. Click the Device View button in the function selection area on the left side of the screen of this software to display the Device View screen.

2. Click the … button on the right end of the remote camera controller (Type: RP Controller) displayed in the device list on the Device View screen to display the device menu. If multiple remote camera controllers are registered, any one of them can be selected.

3. Click Edit from the device menu displayed, and the device editing screen will be displayed.
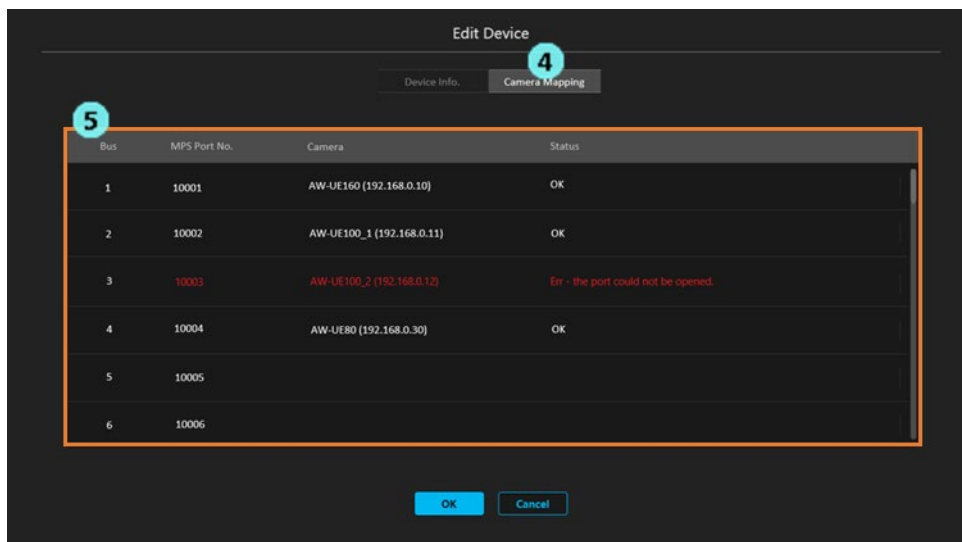
4. Select the Camera Mapping tab on the device editing screen.

5. The following details will be displayed as a camera mapping list.

> Bus: Camera selection number assigned from 1 onwards.
>
> MPS Port No.:   Port number for linking with the remote camera controller
>
> Camera: Name and IP address of the camera mapped to the port for linking with the remote camera controller
>
> Status: Mapping result (OK is displayed when normal; if there is an error, Err is displayed followed by the cause)

If the mapping results for all cameras are normal, there is no problem using the displayed mapping details to assign them to the remote camera controller.

If there are any errors in the mapping results, the selection of the camera mapped to that port will not work properly. Please change the port number to an appropriate number according to the procedure described in the previous section, "**Set up a port number for linking with the remote camera controller via this software**". Mapping will be redone after changing the port number, so please reconfirm the mapping results using the procedure described above.

Procedure for assigning cameras in the remote camera controller

To ensure that the camera selection between this software and the remote camera controller is consistent, assign the camera to the camera selection button on the remote camera controller.

When assigning a camera to a camera selection button, set the IP address and port number as follows.

    IP address: IP address of the PC on which this software is installed

    Port number: Set the MPS Port No. of the Bus number that matches the number of the camera selection button in the mapping list described above.

        Example: When assigning the camera selection button 3 on the remote camera controller, select the MPS Port No. displayed in the Bus number 3 row of the mapping list.

<NOTE>

・ For operating procedures on the remote camera controller when assigning cameras, please refer to the operation manual of the remote camera controller.

・ If there are multiple camera controllers, please assign the cameras in the same way in all camera controllers.

・ If the following operations are performed in this software, the contents of the mapping list will change. Please check the contents of the mapping list again before assigning the cameras on the remote camera controller.

    - Adding, deleting, or reordering registered devices

    - Changing the port number for linking with the remote camera controller

■ Assign the framing control function to the User button via the remote camera controller

The following control functions can be assigned to the User button of the remote camera controller.

・ Operation of the Enable switch of framing function

・ Start/stop switching operation of framing

To assign a function, please configure the following settings on the remote camera controller. For details on how to configure the settings, please refer to the operation manual of the remote camera controller.

・ Set the SYSTEM ->TRACKING item as follows

    TR CONT: LAN

    TR IP: IP address of the PC on which this software is installed

    PORT: 1338

・ Set the User button in the FUNCTION->USER ASSIGN item as follows

    The User button to which to assign the Enable switch operation of the framing function: Set TR CNCT

    The User button to which to assign the start/stop operation of the framing operation: Set TRCKING

■ Recommended settings for the remote camera controller

The following settings are recommended in the remote camera controller when using this function.

For details on how to configure the settings, please refer to the operation manual of the remote camera controller.

Settings for using Preset Speed Setting with this software

・ For AW-RP150

PMEM/TMEM -> SETTING -> RCL SP MD:　CAMERA

・ For AW-RP60

MENU -> PMEM SETTING -> SETTING -> RP CTRL SPD MODE:　CAMERA

■ (In the case of synchronizing camera selection) Select the remote camera controller to be used for linking in the GUI in Auto Framing function

To synchronize the camera selection between the remote camera controller and this software, it is necessary to select the remote camera controller you want to synchronize on the GUI screen of this function.
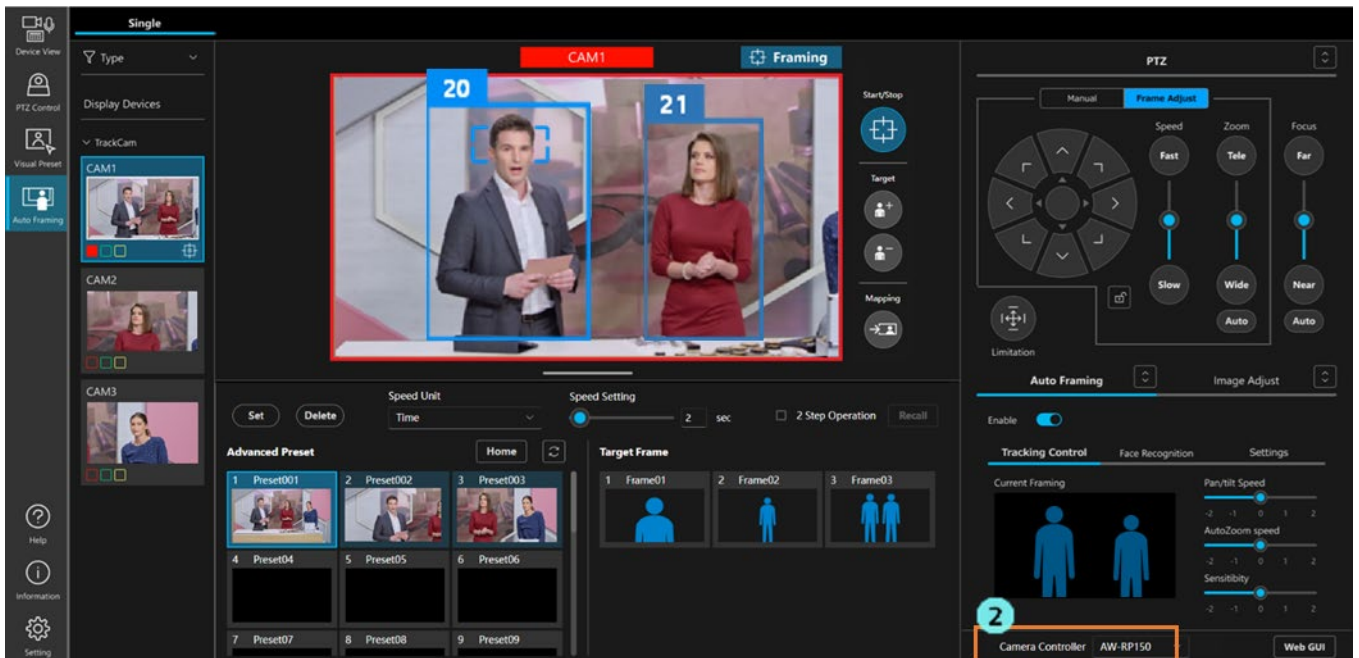
1. Display the screen of this function.
2. When you select the remote camera controller you want to synchronize from the Camera Controller list at the bottom right of the screen, the camera selection will be synchronized between the selected remote camera controller and the screen of this function.

    If a blank is selected from the list, synchronization will not be performed.

<NOTE>

・ Synchronization is performed for each screen that is open in the web browser. Therefore, if multiple web browser tabs have this function screen open, this selection process will need to be performed on each screen.

    If there are multiple camera controllers, you can change the camera controller you want to synchronize for each screen.

Feature restrictions by role

List of feature restrictions by role

Among the roles of Administrator/Super User/User, the User account has restrictions on the use of certain features.

Features indicated with a circle (○) in the table below are available for use.

		Administrator	Super User	User
Accessible camera		All	All	Only permitted camera
Auto Framing operation	Auto Framing function ON/OFF	○	○	○
	Start/stop framing operation	○	○	○
	Add/delete target	○	○	○
	Mapping button operation	○	○	○
	Framing settings - Adjustment using Pan/Tilt/Zoom control panel	○	○	○
	Framing settings - Auto Zoom settings	○	○	○
	Framing settings - Pan/Tilt Speed adjustment	○	○	○
	Framing settings - Auto Zoom Speed adjustment	○	○	○
	Framing settings - Sensitivity adjustment	○	○	○
	Register/delete target frame	○	○	
	Recall target frame	○	○	○
	Name setting of Target Frame	○	○	
	Speed setting of Target Frame	○	○	○
	Auto Start Area settings	○	○	○
	Mark Area settings	○	○	○
	Configure detailed settings	○	○	
PTZ operation	Pan/Tilt operation	○	○	○
	Zoom operation	○	○	○
	Pan/Tilt Limitation	○	○	
Preset operation	Preset registration/deletion	○	○	○
	Preset recall	○	○	○
	Preset display update	○	○	○
	Preset name setting	○	○	○
	Preset Speed setting	○	○	○
	Recall Home position	○	○	○

	Focus	○	○	○
	Iris	○	○	○
Focus/Image quality adjustment	Gain	○	○	
	White Balance	○	○	
	AWB/ABB	○	○	
	Shutter	○	○	
	ND Filter	○	○	
Other operations	Select remote camera controller to link with	○	○	○
	Display web interface of the camera	○	○	○