# Integrated Software Operation Manual (Auto Tracking Function)

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# 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 PC software for Media Production Suite.
- This plugin means the Auto Tracking plugin.
- This function means the functions to be used for Auto Tracking plugin.

# About the Auto Tracking Function

#### Main features

The main features for this plugin are as follows.

#### 1. Person tracking assistance

This feature assists you to track persons in the video being recorded by PTZ remote camera.

Deep learning technology automatically enables stable tracking by detecting the human body and recognizing the face of a specified person.

#### 2. Simultaneous tracking using multiple PTZ remote cameras

A single PC can simultaneously control up to 8 PTZ remote cameras for automatically tracking the target.

#### 3. Automatic detection of the target for tracking

This feature can automatically detect and track the faces of people captured by PTZ remote cameras.

#### 4. Detailed angle settings and recall for tracking targets

This feature can set in detail the position and size of the tracking target in the camera's view for 3 types of tracking angles (Full, Full Body, Upper Body).

You can recall preset angles with a single click, and the camera will automatically adjust the pan, tilt, and zoom to maintain the set angles, even if the tracking target moves forward, backward, left, or right relative to the camera.

#### 5. Bulk monitoring / control of multiple devices

You can simultaneously monitor and manage the images and tracking states of up to four PTZ remote cameras on a single screen, and perform operations such as compensation when the tracking target is lost.

#### <NOTE>

· Since this plugin uses image processing, false detections of tracking targets may occur.

Please use this plugin in an environment where an operator can perform correction tasks for false detections.

## **Operational Requirements**

This plugin requires the following environment.

#### ■ PC

· Hardware (Required)

CPU:

When the number of cameras simultaneously operating with the Auto Tracking function is up to 4:

4 or more cores, the PassMark score of 7,000 or higher

- Recommended CPU

Intel Core i7-7700K

Intel Core i7-4770K

Intel Core i7-8750H

Intel Core i7-11800H

Intel Core i7 13700/14700

Intel Core i9 13900/14900

When the number of cameras operating with the Auto Tracking function is up to 8:

4 or more cores,

2 CPUs with a PassMark score of 7,000 or higher (Dual CPU)

Or 1 CPU with the PassMark score of 18,000 or higher

- Recommended CPU

Intel Core i7-10700K

Intel Core i7-11800H

Intel Core i7 13700/14700

Intel Core i9 13900/14900

GPU: NVIDIA GPUs with Turing, Ampere, or Ada Lovelace architecture \*3 \*4 \*5

Table of the number of cameras that can simultaneously operate Auto Tracking for each GPU model \*6

Auto Tracking	NVIDIA GPU architecture generation				
Simultaneous	Turing	Ampere	Ada Lovelace		
operation					
Number of					
cameras					
1	GeForce RTX2050 or	GeForce RTX3050 or	GeForce RTX4050 or		
	higher	higher	higher		
	Quadro RTX 4000 or	Quadro RTX A2000 or	Quadro RTX2000ada or		
	higher	higher	higher		
2	GeForce RTX2050 or	GeForce RTX3050 or	GeForce RTX4050 or		
	higher	higher	higher		
	Quadro RTX 4000 or	Quadro RTX A2000 or	Quadro RTX2000ada or		
	higher	higher	higher		
4	GeForce RTX2060 or	GeForce RTX3060 or	GeForce RTX4050 or		
	higher	higher	higher		
	Quadro RTX 4000 or	Quadro RTX A4000 or	Quadro RTX2000ada or		
	higher	higher	higher		
8	GeForce RTX2080Ti	GeForce RTX3070 or	GeForce RTX4070 or		
		higher	higher		
		Quadro RTX A4500 or	Quadro RTX4500ada or		
		higher	higher		

Memory: 16 GB or more

Display: 1920 x 1080 or higher Storage: 16 GB or more free space

#### • Software

Web browser: Microsoft Edge, Google Chrome

#### <Pre><Pre>cautions>

- \*1: Ensure that you use this plugin with the Windows OS installed to the C drive of the PC.
- \*2: The supported OS languages are Japanese, English, and Chinese only.
- \*3: To use this plugin, it is necessary to update to the latest GPU driver version compatible with the installed GPU from the official NVIDIA website.
- \*4: NVIDIA GPUs with Pascal architecture or earlier are not guaranteed to work.
- \*5: The required GPU models are the minimum specifications necessary for operating the Auto Tracking function. Especially when a large number of cameras are operating Auto Tracking simultaneously, the higher the GPU model listed in the table, the better the Auto Tracking performance.

\*6: Using two GPUs that support 4 cameras simultaneously with Auto Tracking can allow 8 cameras to operate simultaneously.

#### ■ Client (Browse device)

• OS

Windows 11
Windows 10 64bit (Version 21H2 or later)
macOS 13 (Ventura) or later
iPad OS 16 or later

Hardware

Display: 1920 x 1080 or higher (Other than iPad)

Software

Web browser: Microsoft Edge, Google Chrome

#### ■ Supported PTZ remote cameras

This plugin supports the following PTZ remote cameras of Panasonic.

AW-UE160, AW-UE150, AW-UE100, AW-UR100, AW-UE80, AW-UE70, AW-UN70, AW-UE50, AW-UE40, AW-HE145, AW-HE75, AW-HE70, AW-HN70, AW-HE42, AW-HE40, AW-HN40, AW-HE38, AW-HN38 (As of January 2025)

The latest supported models can be found in the pages of Auto Tracking for Media Production Suite (AW-SF100G.SF200G/SF202G/SF203G) from the following website.

https://connect.panasonic.com/en/

#### <NOTE>

• Please ensure that the firmware of the PTZ remote camera is updated to the latest version.

You can download the firmware from the following website:

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

A wired LAN connection is recommended for the network connection between the PC with this software installed and
the PTZ remote camera. When connected via wireless LAN, sufficient tracking performance may not be achieved,
experiencing frequent loss of the tracking target and other issues.

#### About the license

This plugin is a paid feature.

You can use the plugin for free during the 90-day trial period starting from the beginning of the trial, but after the trial period, you will need to purchase a key code (license) for activation.

For details, please refer to the section of 'Procedures for using the functions' in this document.

## Handling of personal information registered on this plugin

Our company does not collect, store, or share any personal information, such as individual facial photos, registered on this plugin within our organization. Any information registered on this plugin is stored only in the environment where the plugin is installed (PC, server) and is not saved elsewhere.

## Registration and trademarks

- Microsoft, Windows, and Internet Explorer are registered trademarks of Microsoft Corporation in the United States.
- Intel, Intel Core i7, and Intel Core i9 are trademarks or registered trademarks of Intel Corporation or its subsidiaries in the United States and other countries.
- Other names, company names, product names, etc., mentioned in this document are trademarks or registered trademarks of their respective companies.

Please note that TM marks are not specified in this document.

# Procedure for Using the Function

## About the Procedure for Using the Function

This function is a paid plugin.

You can use the functions for free during the 90-day trial period. However, to continue using the functions after the trial period, you need to purchase a paid license (key code) and perform activation.

The procedure for starting the free trial and activating the license is performed by the Information function of this software. With the Information function, you can:

- · Start the free trial of this function
- · Activate/deactivate the license for this function
- · Check the license status for this function
- · Install this function
- · Update this function

## Starting the Free Trial

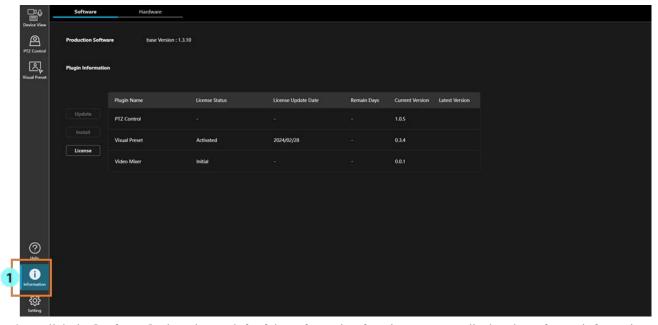
After registering for starting the trial, you can use the Auto Tracking function for 90 days for free.

Start the trial according to the procedure below.

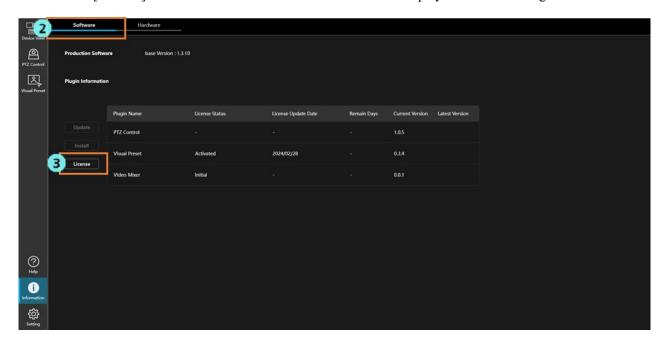
\*The PC must be connected to the Internet.

Approximately 2GB of data is to be downloaded, so it is recommended to perform the procedure in an environment with good connection status.

1. Click the [Information] button in the function selection area on the left of the screen to display the Information function screen.



- 2. Click the [Software] tab at the top left of the Information function screen to display the software information screen.
- 3. Click the [License] button on the software information screen to display the license management screen.

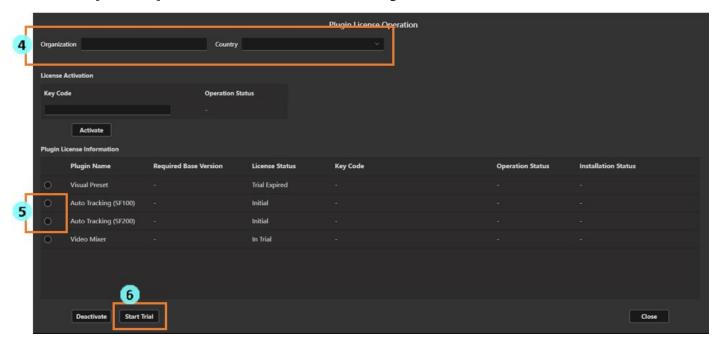


4. Enter the following information on the license management screen.

Organization: Enter the company name.

Country: Select the country.

- 5. Turn on the checkbox at the left end of the row of Auto Tracking (SF100) or Auto Tracking (SF200).
- 6. Click the [Start Trial] button at the bottom of the license management screen.



7. The trial start request will be processed, and the necessary data will be downloaded from the internet.

After the necessary data is downloaded and the process is completed, the License Status will change to [In Trial], and the feature will become available from the [PTZ Control] button in the function selection area on the left side of the screen.

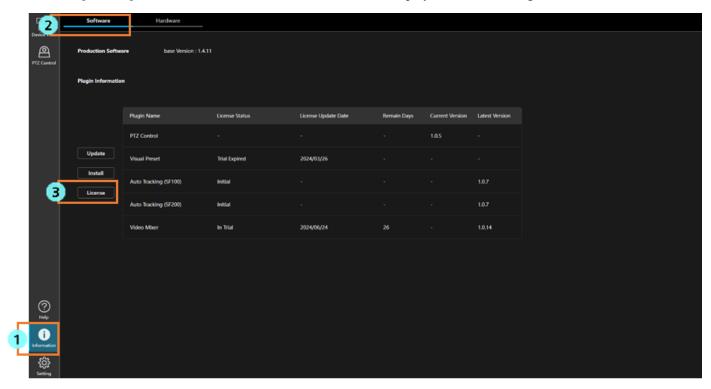
## Activating the License

By purchasing a paid license and performing activation, you can use the Auto Tracking function indefinitely. Activation is performed according to the following procedure.

\*The PC must be connected to the Internet.

If you have not signed up for the free trial, it is recommended to complete the process in an environment with a good network connection, as approximately 2GB of data will be downloaded.

- Click the [Information] button in the function selection area on the left of the screen to display the Information function screen.
- 2. Click the [Software] tab at the top left of the Information function screen to display the software information screen.
- 3. Click the [License] button on the software information screen to display the license management screen.

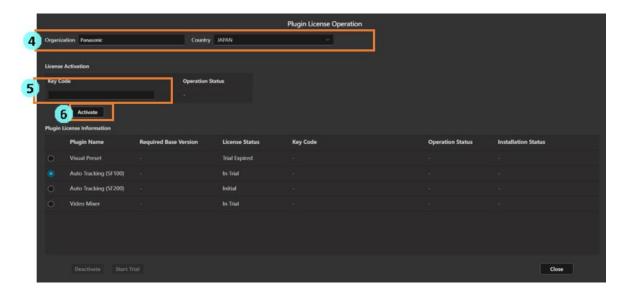


4. Enter the following information on the license management screen.

Organization: Enter the company name.

Country: Select the country.

- 5. Enter the key code of the purchased license in the Key Code field of the [License Activation] row.
- 6. Click the [Activation] button.



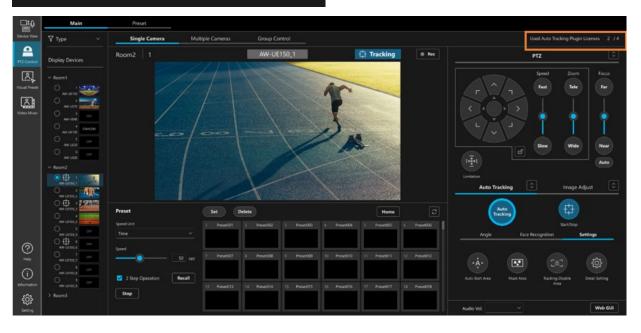
#### 7. Processing will start to activate the license.

The required data will be downloaded from the Internet if free trial is not performed.

When the process completes successfully, the License Status will change to [Activated], and the number on the right side of the Used Auto Tracking Plugin Licenses in the top right corner of the [PTZ Control] screen in the function selection area on the left side of the screen will be updated. The number on the left indicates the current number of cameras using the Auto Tracking function, and the number on the right indicates the maximum number of cameras that can use the Auto Tracking function (total number of activated licenses).

It takes a maximum of 1 minute for the request to be processed and reflected.

## Used Auto Tracking Plugin Licenses 0 / 1



If the processing does not end successfully for some reason, any of the following error messages is displayed in Operation Status.

·Error - Keycode is already used

The key code you have entered is already activated on another PC.

To use the key code, you must deactivate the license on the PC on which the key code is used.

·Error - Invalid keycode

The key code you have entered is incorrect.

Check if the entered key code is correct.

•Error - Unable to communicate with server

Communication with the activation server is not established.

Check if the PC is connected to the Internet.

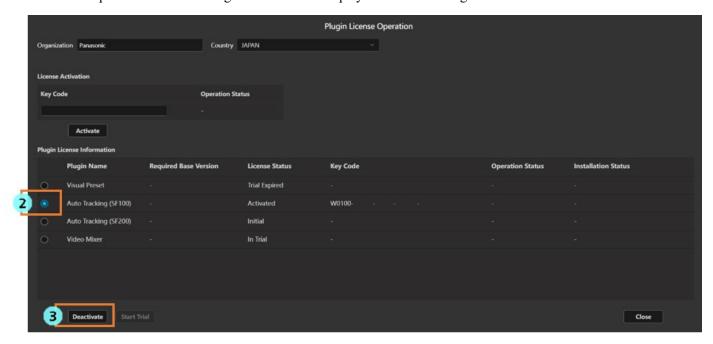
## **Deactivating the License**

If you wish to transfer a license to another PC, you must first deactivate the license on the PC on which the license is currently activated.

Deactivation is performed according to the following procedure.

#### \*The PC must be connected to the Internet.

1. Perform steps 1 to 3 of "Activating the License" to display the license management screen.



- 2. Tick the checkbox at the left end of the row for Auto Tracking (SF100 or SF200) that you want to deactivate.
- 3. Click the [Deactivate] button at the bottom of the license management screen.
- 4. Processing will start to deactivate the license. When the process completes successfully, the License Status will change to [Deactivated], and the number (total number of activated licenses) on the right side of the Used Auto Tracking Plugin Licenses in the top right corner of the [PTZ Control] screen in the function selection area on the left side of the screen will be updated.

It takes a maximum of 1 minute for the request to be processed and reflected.

If the processing does not end successfully for some reason, the following error message is displayed in Operation Status.

·Error - Unable to communicate with server

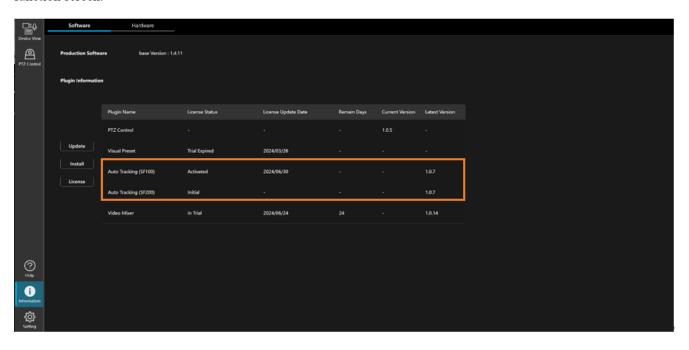
Communication with the activation server is not established.

Check if the PC is connected to the Internet.

## Checking the License Status

The license status can be checked on the Information function screen.

1. Click the [Information] button in the function selection area on the left of the screen to display the Information function screen.



2. The license status is displayed in the License Status field of the Auto Tracking row.

When the license status is "In Trial", the number of remaining days of the trial period is displayed in the Remain Days field.

Initial: Initial status (license deactivated)

Activated: Activated (license activated)

Deactivated: Deactivated (license deactivated)

In Trial: In trial (license activated)

Trial Expired: The trial period has ended (license deactivated)

Duplicated: The activation information of another PC is being used (license deactivated)

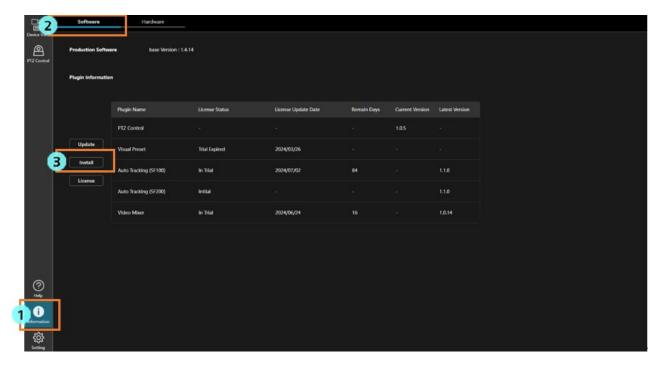
## Installation of the function

When the license status of this plugin is [In Trial] or [Activated], and the functions of this plugin are not installed on the PC, you can install the functions of this plugin by following the steps below.

\*The PC must be connected to the Internet.

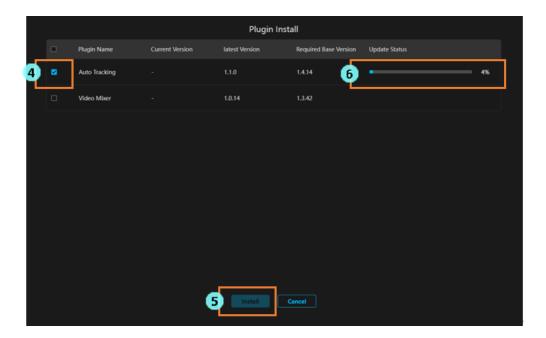
Approximately 2 GB of data is to be downloaded, so it is recommended to perform the procedure in an environment with good connection status.

- 1. Click the [Information] button in the function selection area on the left of the screen to display the Information function screen.
- 2. Click the [Software] tab at the top left of the Information function screen to display the software information screen.
- 3. Click the [Install] button on the software information screen to display the install management screen.



- 4. Tick the checkbox at the left end of the Auto Tracking row.
- 5. Click the [Install] button at the bottom of the installation management screen.
- 6. The necessary data will be downloaded from the internet.

After the necessary data is downloaded and the process is completed, the function will become available from the [PTZ Control] button in the function selection area on the left side of the screen.



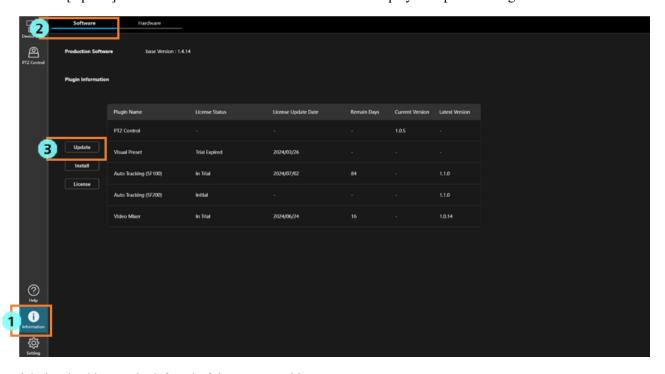
## Update of the function

When the license status of this plugin is [In Trial] or [Activated], and the functions of this plugin are installed on the PC but a newer version is available, you can update the functions of this plugin by following the steps below.

\*The PC must be connected to the Internet.

Approximately 2 GB of data is to be downloaded, so it is recommended to perform the procedure in an environment with good connection status.

- Click the [Information] button in the function selection area on the left of the screen to display the Information function screen.
- 2. Click the [Software] tab at the top left of the Information function screen to display the software information screen.
- 3. Click the [Update] button on the software information screen to display the update management screen.



4. Tick the checkbox at the left end of the Auto Tracking row.

- 5. Click the [Update] button at the bottom of the update management screen.
- 6. The necessary data will be downloaded from the internet.

After the necessary data is downloaded and the process is completed, the function will become available from the [PTZ Control] button in the function selection area on the left side of the screen.



## **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
- · Power adaptor connection for PC (laptop PC only)
- PC power plan settings (laptop PC only)
- · Installation of NVIDIA GPU

#### 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. On a wireless LAN connection, you may experience performance degradation, resulting in issues such as losing the tracking 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 tracking 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.
- 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.

## Power adaptor connection for PC (laptop PC only)

If this software is installed on a laptop PC, it is recommended to use a power adapter. On a PC running on batteries instead of a power adapter, you may experience performance degradation, resulting in issues such as losing the tracking target more frequently.

#### Installation of NVIDIA GPU

When using this plugin, the NVIDIA GPU must be installed on the PC on which this software is installed.

Use the latest driver (Game Ready driver) that can be downloaded from the NVIDIA website as the driver of the NVIDIA GPU. If the driver is of an old version, this function may not work properly.

#### <NOTE>

- · For details on the recommended models of the NVIDIA GPU, refer to Operational Requirements in this document.
- To use this plugin, it is necessary to update to the latest GPU driver version compatible with the installed GPU from the official NVIDIA website.

# Automatic setting of PTZ remote cameras

## 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 \*1

JPEG(3)

JPEG transmission: On

Image capture size: 320x180

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

Image quality: fine

<NOTE>

\*1: For the following models, the Image Quality setting for JPEG(1) will be set to Normal.

AW-UE70, AW-HE75

#### Automatic setting items when Auto Tracking function is enabled

When this plugin is enabled, the following settings on the PTZ remote camera are automatically changed: The following automatic settings are designed to optimize the performance of the Auto Tracking function. \*2

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

Pan/Tilt Speed Mode: Normal \*3 Speed With Zoom Position: Off

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

Zoom Mode: Opt Zoom Digital Extender: Off • Built-in Auto Tracking function (from the camera's web interface: Auto Tracking Settings) \*4

Auto Tracking: OFF

Tracking: Stop Angle: OFF

#### <NOTE>

\*2: If there are issues with the Auto Tracking performance, please set FrameMix to OFF from the camera's web interface. The FrameMix setting has a significant impact on the camera's image quality, so it is not configured automatically.

However, setting FrameMix to OFF can maximize the performance of the Auto Tracking function.

\*3: For the following models, the Pan/Tilt Speed Mode will be set to Quick.

AW-UE150, AW-HE145

\*4: The following models do not support the Built-In Auto Tracking function, so there is no Auto Tracking item on the camera's web interface and it cannot be set.

AW-UE160, AW-UE150, AW-UE100, AW-UR100, AW-UE70, AW-UN70, AW-HE145, AW-HE75, AW-HE70, AW-HN70, AW-HE42, AW-HE40, AW-HN40, AW-HE38, AW-HN38 (As of January 2025)

## Screens

#### Screens

This plugin uses the following four screens:

· Device View Screen

This screen is used for adding and removing devices, including PTZ remote cameras.

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

· PTZ Control Screen

This is the main screen for operating, monitoring, and managing the Auto Tracking features of the plugin.

On this screen, you can start/stop Auto Tracking, set angles, configure face recognition, and perform various detailed settings. For more details, please refer to the PTZ Control Function User Manual.

· Information Screen

This screen is used for license management and installation of the plugin.

For more details, please refer to the "<u>Procedures for Using Functions</u>" section of this document and the Information Function User Manual.

· Setting screen

This screen is used for setting up face recognition data and configuring the GPU used by the plugin.

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

## **Auto Tracking control**

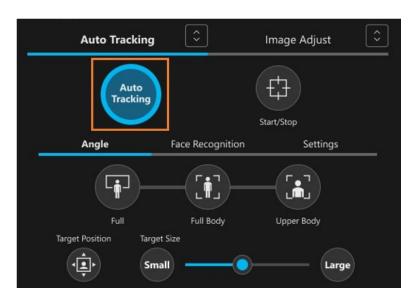
## Registering the PTZ Camera

To use the functions of this plugin, you must register the Panasonic 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.

The following sections describe operations for the Single Camera Screen within the PTZ Control Screen, but similar operations can also be performed in the Multiple Cameras mode.

## **Enabling / disabling Auto Tracking function**



After registering the PTZ remote camera, navigate to the Single Camera Screen in the PTZ Control Screen.

Left-clicking the [Auto Tracking] button in the [Auto Tracking] tab enables/disables the Auto Tracking function for the displayed PTZ camera. \*1 \*2

By enabling the Auto Tracking function, a person frame is displayed if the person is detected in the camera view.

Each time the Auto Tracking feature is enabled for a PTZ remote camera, one Auto Tracking license will be consumed and the display in the top right corner of the PTZ Control Screen will be updated.

Used Auto Tracking Plugin Licenses 0 / 1

#### <NOTE>

\*1 If the tracking type item is set to "Built-In" in the window that is displayed by clicking the [Detail Setting] button on the [Setting] tab, or if the number of licenses in use exceeds the total number of activated licenses for this plugin, the Built-In Auto Tracking feature will be enabled.

If the Built-In Auto Tracking function is enabled, the license for this plugin is not used.

\*2: The models with the Built-In Auto Tracking function are below:

AW-UE40/50/80

For other models, if the number of licenses in use exceeds the total number of activated licenses for this plugin, left-clicking the [Auto Tracking] button will display an error message, and the Auto Tracking feature cannot be enabled.

## Maximum number of simultaneous cameras for Auto Tracking function

This plugin can connect to multiple PTZ remote cameras and perform tracking operations for each of them. However, there is a limit to the number of cameras that can operate simultaneously.

The maximum number of simultaneously operating cameras is determined by whichever is smaller of the A and B below.

- A: The maximum number of simultaneously operating cameras for this plugin: 8 is the upper limit.
- B: The limit imposed by the license: The following number is the upper limit depending on the license.

For AW-SF100 during the trial period: 1 camera

For AW-SF200 during the trial period: 7 cameras

When AW-SF100/200/202/203 have been activated:

The number of the devices allowed by the activated license

If you attempt to operate this function beyond these limits, an error message will be displayed. In such cases, please click the [Auto Tracking] button of the currently operating cameras to disable the function.

#### <NOTE>

• The license usage status is displayed in the top right corner of the PTZ Control screen, either on the Single Camera or Multiple Cameras Screen, in the format "Used Auto Tracking Plugin Licenses: X / X".

The number on the left indicates the current number of cameras using the Auto Tracking function, and the number on the right indicates the maximum number of cameras that can use the Auto Tracking function (total number of activated licenses).

## Setting the tracking target and start tracking

The tracking target can be automatically detected, and tracking can begin accordingly.

Once the tracking process starts, only the frame color of the tracking target's body will change to blue. The frame color for non-tracking targets will remain black.

#### · When setting the tracking target automatically

The following triggers are available for setting the tracking target automatically:

- 1. Detecting a person within the camera's view.
- 2. Using the facial recognition feature to detect the face of a designated person.

Configure the settings according to the procedure below.

- · When tracking a specific person
  - 1) Click the [Select] button on the [Face Recognition] tab to open the Select Face screen.
  - 2) On the Select Face screen, select the face data of the person to be tracked and click the [OK] button to close the Select Face screen. \*1
  - 3) The tracking process will start when the designated face is detected in the camera view.
- · When detecting any persons registered in the face database as tracking targets
  - 1) Check the Auto Face Search option.
  - 2) When any registered face data is detected within the camera view, the tracking process will start. The smaller the face data ID in the Setting Face Recognition screen, the higher the detection priority.
- Using the Auto Start Area function to detect a person within a specified range
   Refer to the "Setting the Auto Start Area" section in this document for setting details.

The tracking target can be automatically detected by any of the above triggers.

In this state, setting the [Tracking Start/Stop] button to ON will enable the Pan/Tilt function of the PTZ remote camera, and the tracking operation will begin. \*2

#### · When setting the tracking target manually

The following triggers are available to manually set the tracking target:

- 1. Left-clicking on a body frame within the camera's view
- 2. Double left-clicking on a face frame within the camera's view for temporary face registration

The face data at the double left-clicked location will be set as the source for facial recognition.

This face data will not be saved. To clear the set face data, left-click the [Clear] button on the [Face Recognition] tab

The tracking target can be manually detected by any of the above triggers.

In this state, setting the [Tracking Start/Stop] button to ON will enable the Pan/Tilt function of the PTZ remote camera, and the tracking operation will begin. \*2

#### <NOTE>

- \*1: The face data settings for the facial recognition function are remembered for each camera.
- \*2: If the Auto Tracking Start checkbox (✓) is ticked in the window displayed with the [Detail Setting] button on the [Setting] tab, the PTZ remote camera's Pan/Tilt operation will automatically be enabled as soon as the tracking target is detected.

## Stopping the tracking process (Stopping Pan/Tilt operation)

To stop the tracking process, perform the following operations.

- 1. Untick the Auto Tracking Start checkbox (✓) in the Detail Setting window.
- 2. Set the [Tracking Start/Stop] button to the OFF state (gray).
- 3. The tracking process will be stopped.

## Changing the tracking target

To change the tracking target during tracking operations, follow these steps.

#### · When using the facial recognition function

- 1. Left-click the [Select] button on the [Face Recognition] tab to display the Select Face screen.
- 2. On the Select Face screen, select the face data of the new person you want to track and click the [OK] button to close the Select Face screen.
- 3. When the new tracking target's face is detected in the camera view, the tracking process for the newly detected target will begin.

#### <NOTE>

- · If the facial recognition is enabled, only the subject set as tracking target's face will be tracked.
- When a person's face is detected within the camera view, double left-click on the face to set the face data of that person as the source for facial recognition. This face data will not be saved.
- To clear the set face data, click the [Clear] button.
- The Facial recognition may not work if the face of subject is too small for the angle of view.

#### · When not using the facial recognition function

Left-click on the detected body frame within the camera view.

The body frame at the left-clicked position will become the new tracking target, and the tracking process will start.

## Detailed angle settings for tracking targets

You can freely set the position and size within the field of view for each of the following three angles: [Full], [FullBody], and [UpperBody].

#### · Setting the position of angles within the field of view

Configure the settings according to the procedure below.

- 1. Click the desired angle button ([Full], [FullBody], or [UpperBody]) within the [Angle] tab. \*1

  The zoom is adjusted with regard to the default position so that the tracking target is in the specified position below:

  If no settings have been made: initial position, if settings have been made before: previously set position
- 2. Left-click the [Target Position] button within the [Angle] tab. \*1
- 3. A black cross mark and a white frame will be drawn within the camera view.
  - The cross mark indicates the position above the head of the tracking target, and the white frame indicates the range within which the position above the head can be specified.
- 4. Left-click within the camera view to change the position of the tracking target within the field of view. The position of the tracking target is saved for each angle.

#### · Setting the size of angles within the field of view

Configure the settings according to the procedure below.

Left-click the desired angle button ([Full], [FullBody], or [UpperBody]) within the [Angle] tab. \*2
 The zoom is adjusted with regard to the default position so that the tracking target is the specified size below:
 If no settings have been made: initial size, if settings have been made before: previously set size

2. In the [Angle] tab, you can change the size of the tracking target by either clicking the [Target Size] ([Small] or [Large]) button within the [Angle] or doing drag and drop of the [Target Size] slider.

This size setting for the tracking target is saved for each angle.

#### <NOTE>

\*1: When the [Target Position] button is ON and none of the angle buttons are ON, you can left-click within the camera view to change the position of the current tracking target.

At the time, you will need to manually turn ON the [Tracking Start/Stop] button to start the tracking process.

\*2: To configure angle settings, there must be a person present within the field of view.

## Angle recall for tracking targets

By left-clicking one of the three angle buttons: [Full], [FullBody], or [UpperBody] in the [Angle] tab, you can recall a previously set angle for the tracking target. This will apply the pre-configured angle settings (target position and size) as described in the "Detailed Angle Settings for the Tracking Targets" section of this document.

At the time, the [Tracking Start/Stop] button will automatically turn ON, and the PTZ remote camera will automatically adjust the Pan/Tilt/Zoom functions to maintain the set angle settings (target position and size).

Even if the tracking target moves forward, backward, or side-to-side, the camera will continue to maintain the set angle settings (the position and size of the tracking targets).

## Setting the auto start area

You can automatically set the tracking target and the area where the Pan/Tilt function is enabled automatically.

When a body frame is detected within the configured area, it will be set as the tracking target, and tracking will begin.

Configure the settings according to the procedure below.

- 1. Left-click the [Auto Start Area] button in the [Setting] tab.
- 2. If the Initial position is set in the Detail Setting window, it will automatically load the Initial position preset. If the initial position is not set, no preset will be loaded.
- 3. Left-click on the camera view and drag to create a region without gray-out. Release the mouse drag to complete the setting.
- 4. To remove the Auto Start Area frame, left-click the X button in the top right corner of the frame.

  To move the Auto Start Area frame, left-click inside the frame you have created and drag to adjust its position.

  To resize the Auto Start Area frame, left-click and drag from the corners or edges of the frame to adjust the size of the frame.
- 5. If the Initial position is set in the Detail Setting window, the camera will automatically load the Initial position preset if the tracking target is lost after tracking starts in the [Auto Start Area], and the [Auto Start Area] will be re-enabled. If the Initial position is not set, no preset will be loaded, and the [Auto Start Area] will not be re-enabled.

#### <NOTE>

• When the Auto Start Area and the facial recognition function are both enabled, tracking will start only when the subject selected as the tracking target for facial recognition enters the Auto Start Area frame. Tracking will not start if a person other than the selected subject for the facial recognition enters the Auto Start Area frame.

## Setting the mask area

You can set mask areas (regions in the camera view that are excluded from detection) for detecting the tracking targets.

Configure the settings according to the procedure below.

- 1. Left-click the [Mask Area] button in the [Setting] tab
- 2. Left-click on the camera view and drag to create a region with gray-out.

Release the mouse drag to complete the setting. You can create up to 10 mask area frames.

- 3. To remove the mask area frame, left-click the X button in the top right corner of the frame.
- 4. To move a mask area frame, left-click inside the frame and drag to adjust its position.

To resize a mask area frame, left-click on a corner or side of the frame so that you can adjust the size of the frame.

5. Turn off the [Mask Area] button to finish the setting.

If at least one mask area frame is set, the icon of the [Mask Area] button will update accordingly.



Mask Area

Mask area frame

Number set: 0

Mask area frame

Number set: 1 or more

## **Detailed settings**

You can configure detailed settings for the Auto Tracking function.

For more information, please refer to the "Configuring Detailed Features of the Auto Tracking Function" section in the PTZ Control feature operation manual.

# Auto Tracking control using peripheral devices

## Performing the Auto Tracking control using external controllers

You can perform the Auto Tracking operation using external controllers.

Please refer to the document of Media Production Suite Auto Tracking Plugin Web API Specifications from the list of interface specifications, protocol documents below for details.

Documents (panasonic.co.jp)

## Performing the Auto Tracking control using keyboards

You can perform the Auto Tracking operation using the keyboards connected to the client's PC.

For various PTZ remote camera operations besides Auto Tracking, please refer to the "Operating the Camera with a Keyboard" section.

The following is the allocation of the keys and operations.

Key	Operation	
Shift + S	Switches between Tracking	
Still + S	Start/Stop	
Shift + P	Pauses tracking while the key is	
Sniit + P	pressed	
	Returns the Target Position of the	
Shift + D	currently set angle to the initial	
	position	

# Function Restrictions by Role

## List of Function Restrictions by Role

Among the Administrator/Super User/User account roles, the User role has limited access to certain features. Functions indicated with a circle  $(\circ)$  in the table below are available for use.

		Administrator	Super User	User
Operatable camera		All	All	Only permitted camera
	Auto Tracking function ON/OFF	0	0	0
	Start/Stop tracking	0	0	0
	Configure Angle	0	0	0
	Configure Target Position	0	0	0
	Configure Target Size	0	0	0
Auto Tracking control	Select face data for face recognition	0	0	0
Auto Tracking control	Add face data	0	0	0
	Edit face data	0		
	Delete face data	0		
	Configure Auto Start Area	0	0	0
	Configure Mask Area	0	0	0
	Configure Detail Setting	0	0	
GPU control	Change GPU allocation of the plugin	0		