Manuals+ — User Manuals Simplified.

Canon Remote Camera Control Application User Manual

Contents

Canon

Canon Remote Camera Control Application

Introduction

This document explains Remote Camera Control Application (hereafter referred to as "this software") settings and operations. Carefully read this document before use to ensure correct use of this software.

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User Manual

This document is intended to be read on a computer screen.

Notes

1. Any unauthorized reproduction of this document is prohibited.
2. The contents of this document are subject to change without any prior notice.
3. This document has been prepared with the utmost attention to accuracy. For questions or comments, please contact a Canon sales representative.
4. Canon shall assume no liability for any outcome of using this product, notwithstanding items 2 and 3 above.

Software Screenshots
The software screenshots samples shown in this document are for illustration only. The screenshots may differ from the actual screens displayed. Descriptions use macOS 13 for sample screens.

Symbols Used in This Document

Symbol	Meaning
Important	Cautions and restrictions during operation. Make sure to read these carefully.
Note	Supplementary descriptions and reference information.

What Is Possible With the Remote Camera Control Application

This software can be used to operate Canon remote cameras (hereafter referred to as "cameras") while watching the video. This software is capable of the following:

- **Operation of registered cameras**

  Pan/Tilt/Zoom, focus operation, and video quality adjustment are available for registered cameras.

- **Simultaneous operation of multiple cameras**

  Simultaneous Pan/Tilt/Zoom and focus operation are available for multiple cameras. It is possible to reproduce

  the preset position registered to the camera.

- **Trace function**

  Registered settings such as camera movement and video quality can be applied at a later time.

- **Camera operation via keyboard or joystick**

  Cameras can be operated via keyboard or joystick. Operations can be configured according to use.

For camera operations and features, refer to the Settings Guide of each camera. Also, make sure to configure initial camera settings before using this software. Some features and settings are not supported depending on the camera you are using and the mounted lens.

Examples of System Configuration

- The following system configuration is available by combining this software with a switcher and a joystick.
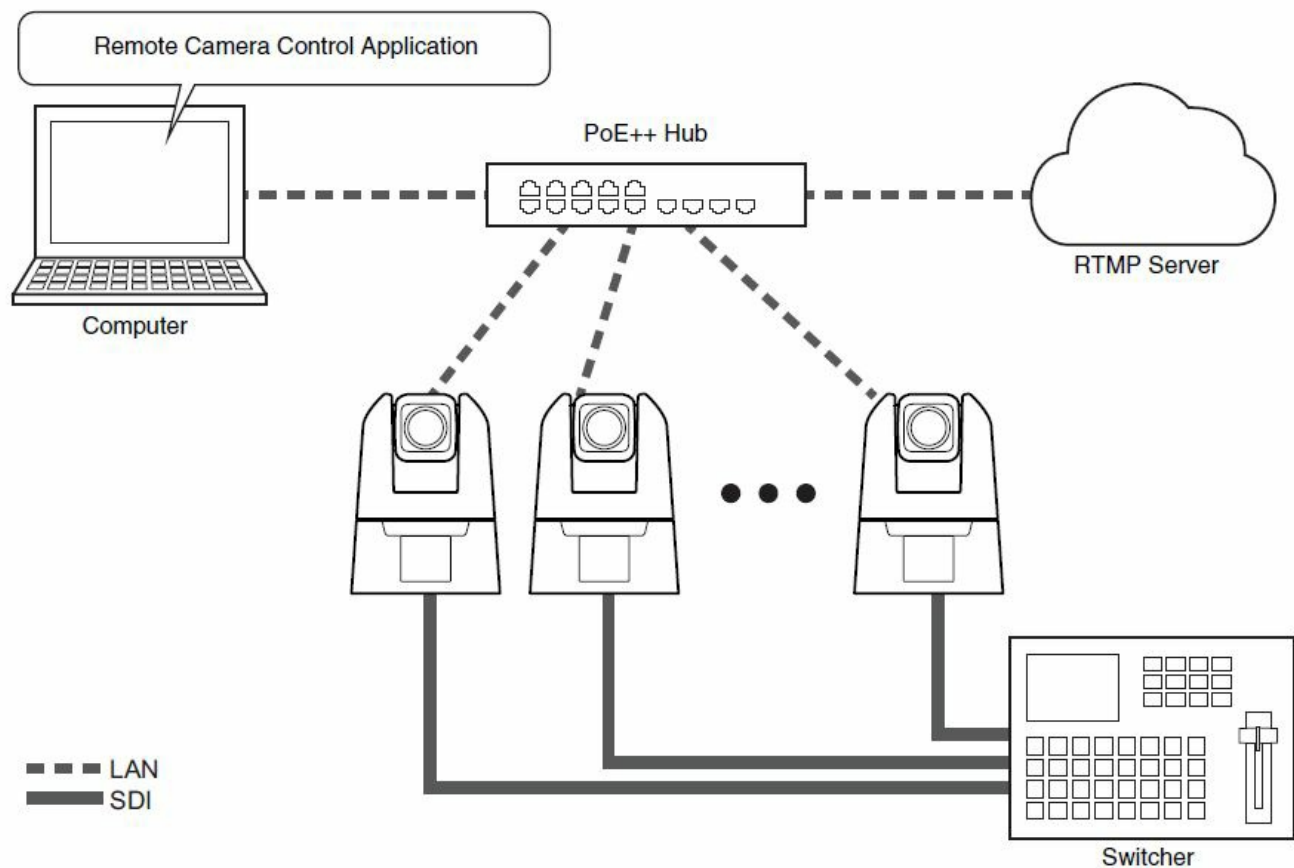
Operating Environment

- For the latest information on this product (user manuals, operating environment, etc.), please refer to the Canon website.

System Requirements

Supported Cameras
Refer to the "Remote Camera Control Application Compatible Cameras" from the website along with the User Manual. The screenshots may differ depending on the firmware version of the camera. Update the camera to the latest firmware.

Limitations

- Make sure to exit all other applications before using this software.
- Although communication via HTTP proxy is supported, this feature depends on the environmental variables and network settings of the computer on which it is running.
- HTTP proxy authentication is not supported.
- The computer will not automatically go into sleep or suspend mode while this software is communicating with a camera. It is, however, possible to manually put the computer into sleep or suspend mode during communication.
- When launching this software, sometimes the following message appears: "Remote Camera Control Application.app" is an app downloaded from the Internet. Are you sure you want to open it? Click [Open] to continue launching the software.
- If multiple IPv4 addresses (other than AutoIP) are set on the same computer when using multiple network

cards, normal communication may not be possible. If this happens, it is necessary to temporarily switch to a single IPv4 address.

- Check the Canon website for the latest operating environment information when updating the operating system.

Launching the Remote Camera Control Application

1. Download the file from the website to any folder.
2. Open the dmg file.
3. Drag & drop the Remote Camera Control Application.app file into the "Applications" folder (/Applications).
4. Open Launchpad and click "Remote Camera Control Application" to launch the application.

Main Screen
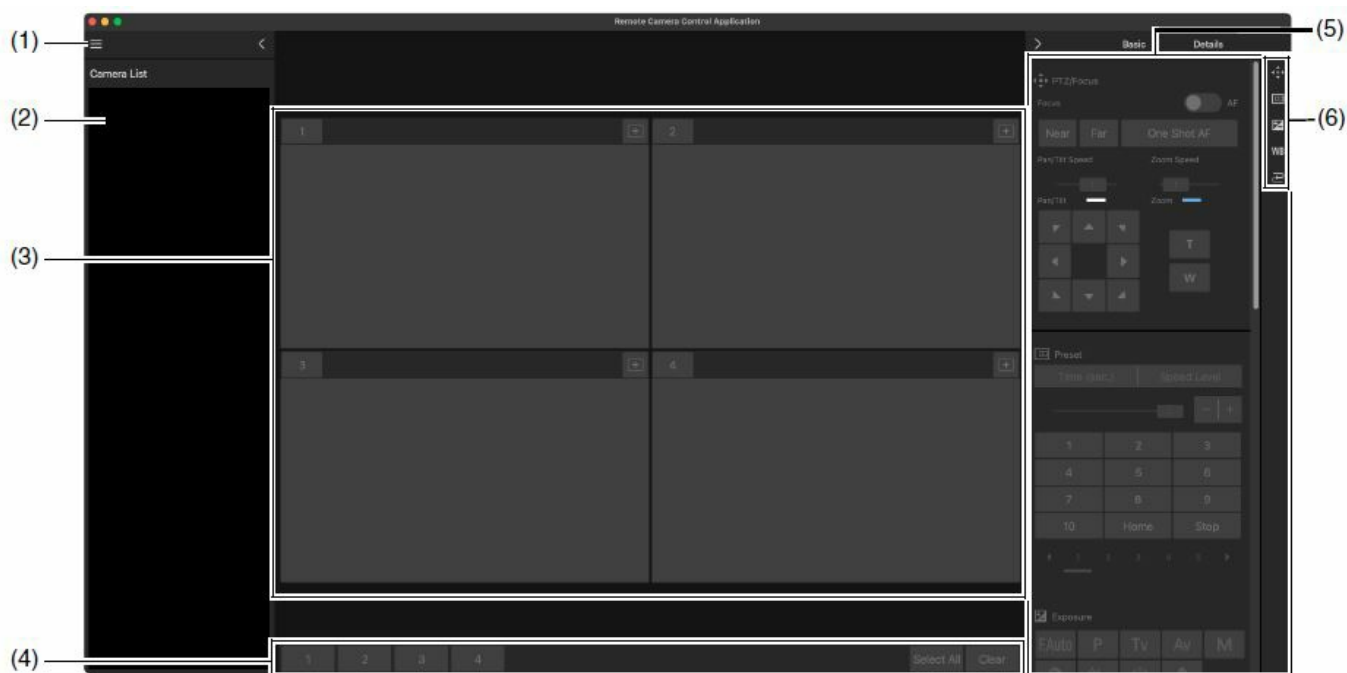
Menu button
Displays the menu.

[Camera List] Displays the camera name and thumbnail when a camera is registered. Click to hide the list and to show it.

Video display area
Displays the video of the camera selected in [Camera List]. The number of video display areas can be changed.

Camera selection buttons
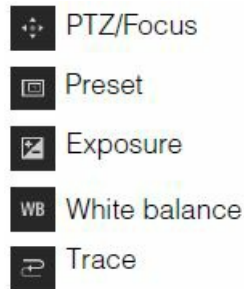Selects the camera to operate.

Camera operation area
Pan/Tilt/Zoom operation, focus operation, and video quality adjustment etc., are available. Able to change the operation tab by clicking [Basic] or [Details]. Click to hide the area and to show it.
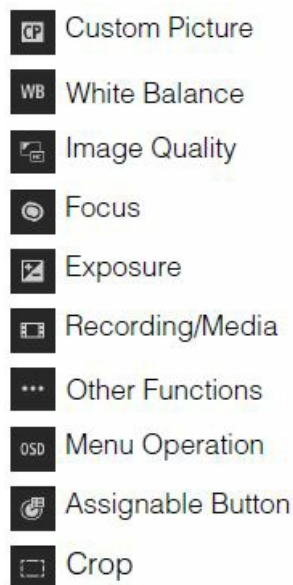
Display item selection buttons
Items displayed in the camera operation area can be selected. An orange line appears on displayed item buttons. Item details are as follows:

[Basic]

PTZ/Focus

Preset

Exposure

WB White balance

Trace

[Details]

CP Custom Picture

WB White Balance

Image Quality

Focus

Exposure

Recording/Media

Other Functions

OSD Menu Operation

Assignable Button

Crop

Note
From the OS menu, select [Enter Full Screen] to hide the title bar, macOS menu bar, and Dock. To exit full screen, select [Exit Full Screen] from the OS menu.

Registering Cameras

Before registering the camera in this software, perform initial settings such as user settings and network connection. The camera can be registered even in standby. Cameras are searched for on the network and displayed in a list in the [Search Camera] dialog. Directly entering all items without searching makes it possible to directly specify a camera to register. Registering Cameras

1. Click the menu and select [Camera Management].
2. In the [Camera Management] dialog, click [Add].

3. In the [Add Camera] dialog, click [Search Camera].

Cameras are searched for on the network and displayed in a list in the [Search Camera] dialog. Directly entering all items without searching makes it possible to directly specify a camera to register.

4. Select a camera to register, then click [OK].
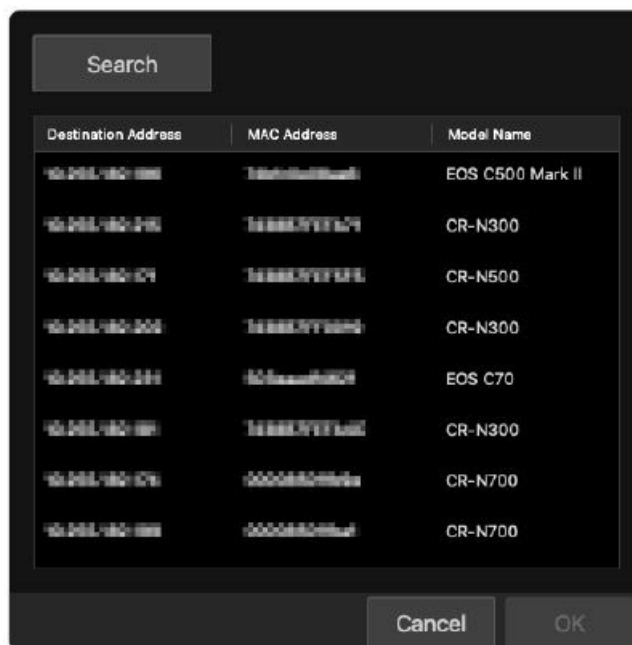
Note

- To search for a camera again, click [Search].
- Cameras that have already been registered will not be displayed.

5. Enter the following items in the [Add Camera] dialog.

1. **[Camera Name]**

   Decide on the name to be displayed on this software. Enter any name within 15 characters. The name entered here can be changed later.

2. **[Destination Address]**

   The IP address of the searched camera is automatically entered. If the IP address is changed on the Camera's Settings Page, change the destination address in the [Edit Camera] dialog.

3. **[Connect As Guest User]**

   Select this checkbox to skip entering the user name and password. On the Camera's Settings Page, the camera control and video distribution privileges must be granted to guest users.

4. **[User name], [Password]**

   Enter the user name and password for either the camera administrator or registered user. To add a

camera with a registered user, it is necessary to grant the registered user "camera control" and "video distribution" privileges on the Camera's Settings Page.

5. **[Enable SSL Communications]**

   Check the [Enable SSL Communications] checkbox to connect to the camera via HTTPS. Configure settings to enable SSL communication by the camera to be registered.

6. **[Port No.]**

   Enter the camera port number.

   - **Note**
     - The camera name set on the Camera Settings Page will remain the same even if it is changed on this software. Also, the camera name registered on this software will remain the same even if it is changed on the Settings Page.
     - To change the camera name, edit [Camera Name] in the [Edit Camera] dialog.
     - Configure camera settings such as user privileges on the Camera Settings Page. For further details, see the camera User Manual.

6. Click [Connect].

   - The camera is registered and displayed in the [Camera Management] dialog.
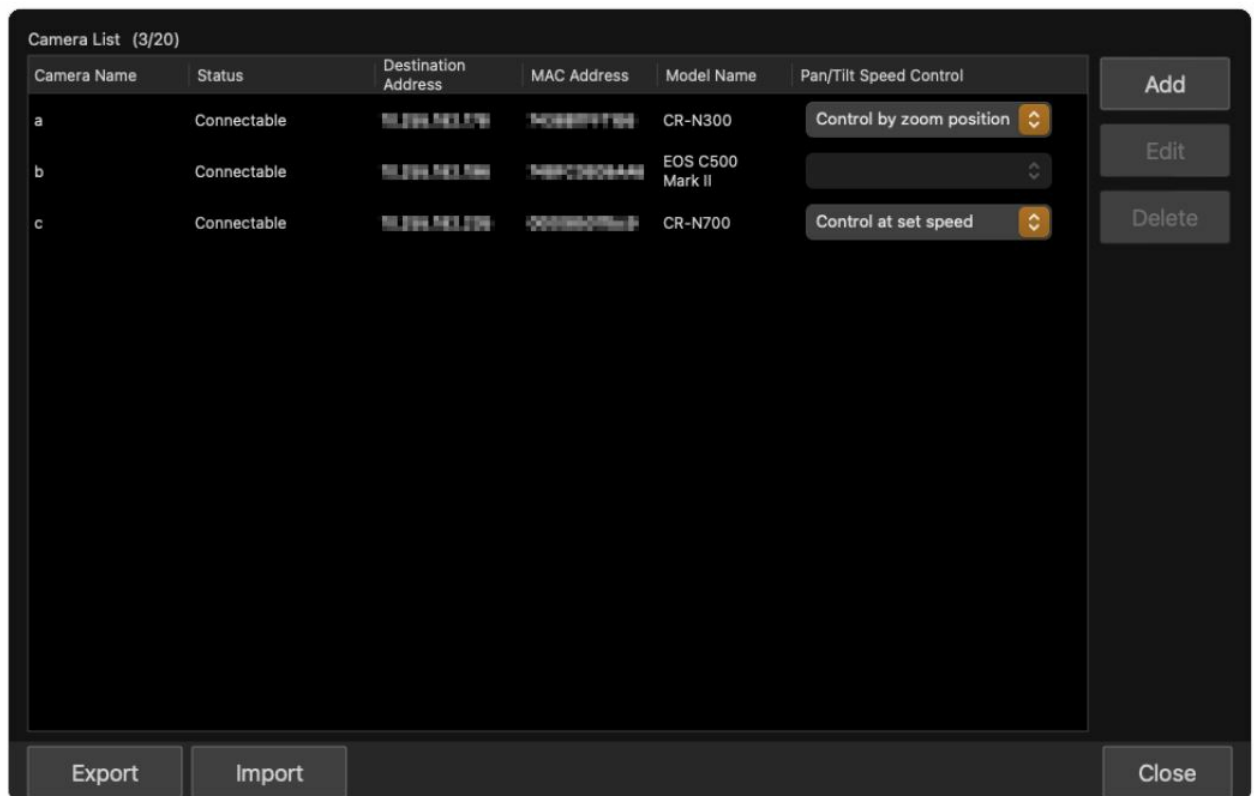
The camera status is displayed as follows in [Status]:

- **[Connectable]:** Camera connected
- **[Not connectable]:** Camera disconnected
- **[Standby]:** Camera on standby
- **[Switching to Standby]:** Camera entering standby
- **[Startup in progress]:** Camera switching from standby to startup
- **No display:** Loading from import file

  By [Pan/Tilt Speed Control], the control method for the pan/tilt speed of the supported camera can be changed. [Control by zoom position]: The pan/tilt speed changes according to the zoom position. The pan/tilt speed slows down at the telephoto and gets faster at the wide angle. [Control at set speed]: The

pan/tilt speed is the specified value regardless of the zoom position.

Note

- By clicking the title, it is possible to sort the registered cameras by the clicked item. **up** and **down** are displayed for the item name used for sorting.
- Click [Export] or [Import] in the [Camera Management] to export or import the registered camera list. For details, refer to "Exporting or Importing the Settings".

Camera List

Registered cameras are displayed in the camera list.
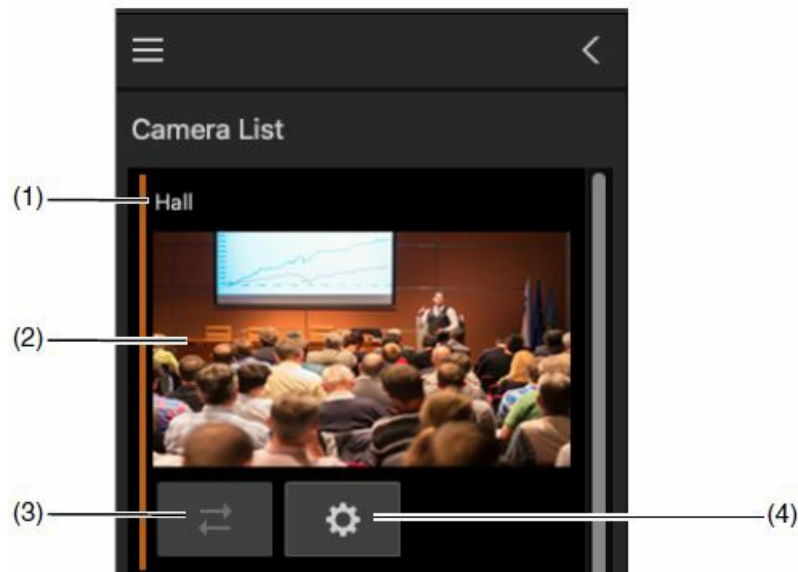
1. **Camera name**

   Displays registered camera name.

2. **Status display area**

   The following is displayed depending in camera status:

   - **Video displayed:** Camera connected, power on

   - **displayed:** Camera connected, in standby

   - **displayed:** Camera disconnected

3. **Reconnect button**

   Reconnects to the camera. This is available when the camera is not connected.

4. **Settings Page display button**

   This launches a web browser and displays the Camera's Settings Page. An administrator account user name and password are required to display the Settings Page.

Editing Camera Information
Select a camera whose information to edit in [Camera List] and click [Edit]. Edit the camera information in the [Edit Camera] dialog, then click [Connect].

Removing Cameras

Select a camera to remove from in [Camera List] and click [Remove] to remove the selected camera.

Displaying Camera Video in the Video Display Area

- Click a camera in the camera list to display its video in the video display area.
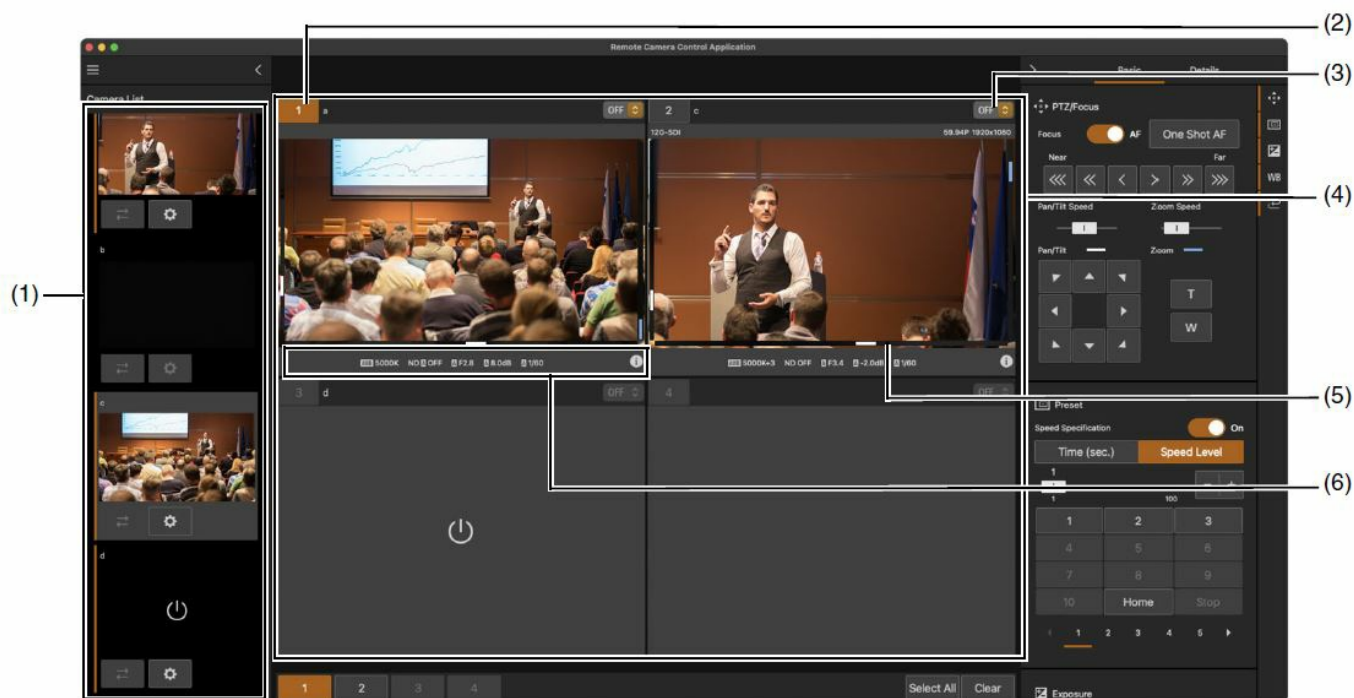
1. **[Camera List]**

   Click the displayed camera to show/hide the video in the video display area. Cameras whose video is shown in the video display area are indicated with an orange line.

2. **Camera number**

   The camera number for the video display area is displayed. The camera number is assigned according to the video display area layout in the display order, starting with 1. For details, refer to "Changing the Video Display Area Layout".

3. **Operation Selection Button**

   By clicking the button on the upper right of the image display of each camera, it is possible to switch the operation when the video is clicked.

   ⊞ : Moves camera angle so that the clicked position is in the center of the screen.

   ⬚ : Displays and controls the crop frame. For details, refer to "[Crop Settings]" (P. 29).

   ◎ : Focus is adjusted to the clicked position. For further details, refer to "[PTZ/Focus]" (P. 17).

   🔬 : The Focus Guide is displayed at the clicked position. For details, refer to "[Focus Guide]" (P. 19).

   OFF : Disables operation when the video is clicked.

4. **Video display area**

   Displays camera video. The pan/tilt position is displayed at the left and bottom edges of the image, and the zoom

   position is displayed at the right edge.

   - ⏻ : The camera is on standby.

- : Not connected to the camera.

5. Tally lamp display

   The camera tally lamp status is displayed by color of box. In the case of PGM, it is displayed by a red box,

   PVW by a

   green box and PGM+PVW by an amber box.

6. Shooting information view

   The settings of each camera are displayed.

Changing the Video Display Area Layout

Click the menu and select [Video Layout] to change the video display area layout (number of displayed cameras or video size). For example, if [1+5] is clicked, one large video and five small videos are displayed. Cameras are assigned numbers in the video display area in the display order.

Selecting Cameras to Operate

Select cameras to operate from this software.

Turning On the Camera
All cameras can be turned on or put into standby simultaneously using this software.

- **Turning on the cameras**

  Click the menu and select [Camera Power] > [All On]. All cameras on standby in the video display area are

  turned on.

- **Setting cameras to standby**

  Click the menu and select [Camera Power] > [All Standby]. All cameras in the video display area are set to standby.

Selecting a Camera to Operate

First, click the camera number and select a camera to operate. In order to select the cameras to operate, click the camera number of the target cameras in the video display area. The selected camera number turns orange.
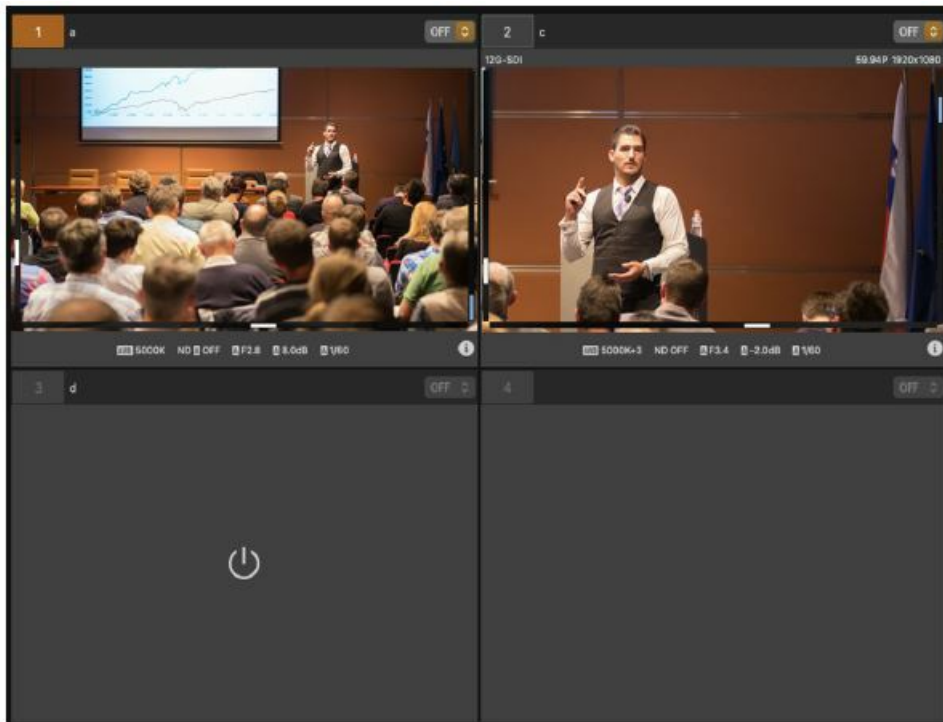
Camera Selection Buttons

The camera selection button number corresponds to the number of the camera in the video display area.

- Click [Select All] to select all cameras shown in the video display area as cameras to operate.
- Click [Clear] to deselect all cameras displayed in the video display area.

Note

The camera numbers of those not displaying the video in the video display area, on standby, or disconnected are indicated in gray.

Operating Cameras

Cameras can be operated using this software. It is also possible to operate multiple cameras simultaneously. Items that cannot be used depending on the model are indicated in gray.

Note

Detailed settings that cannot be changed in the camera operation area of this software need to be configured on the Camera's Settings Page. For details on the Settings Page, refer to the user manual of the camera.

[Basic] Tab

Pan/Tilt/Zoom as well as focus operations, preset movement, trace execution, exposure adjustment, and white

balance adjustment are available in the camera operation area. Pan/Tilt/Zoom as well as focus operations, preset movement, and trace execution can be executed simultaneously when operating multiple cameras. Exposure and white balance adjustment are only available when operating a single camera.

[PTZ/Focus]

Pan/Tilt/Zoom and focus operations of the Camera are available in this software.
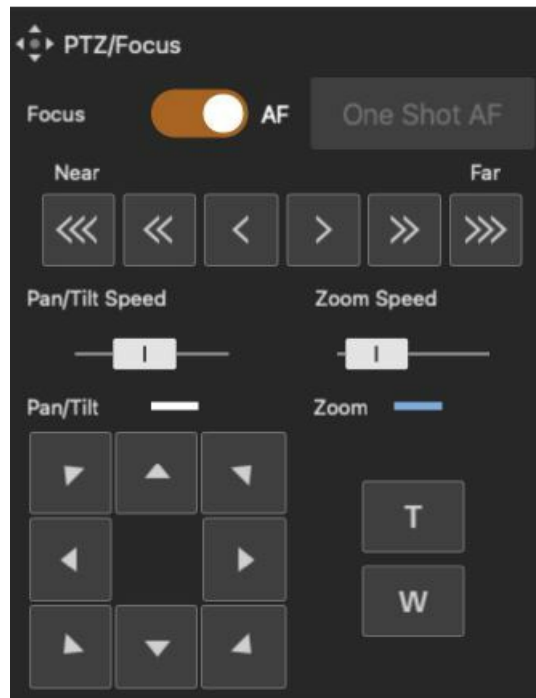
[Focus]

Changes the focus settings. Autofocus is enabled when [AF] is set for [Focus], and manual focus is enabled when [AF] is off.

[Near], [Far]

Click [<<<] [<<] [<] to set the focus position to the near end, and click [>>>] [>>] [>] to set it to the far end. [Near] [Far] can each be adjusted in each direction in three speeds [<<<] [<<] [<] or [>>>] [>>] [>]. Click the buttons to continue moving the focus position. With autofocus, the focus is automatically adjusted once the button is released.

[One Shot AF]

By clicking [One Shot AF], once the focus is adjusted by autofocus, the focus will be fixed regardless of the status before clicking. Even before clicking, if the setting is for autofocus, once [One Shot AF] is clicked, it will be on manual focus.

Note

- Depending on the model being used, autofocus or tracking may not be possible at the edges of the screen.
- If the zoom is operated after manually adjusting the focus, the focus may shift.
- When using manual focus, if the camera is left turned on, the focus may shift due to increase in the temperature of the lens and inside the camera body. Make sure to recheck the focus before beginning shooting. [Pan/Tilt Speed] Changes the pan and tilt speed. Drag the slider knob to the right to increase camera's operation speed and to the left to decrease it.

Note

- For the pan/tilt speed, either of [Control by zoom position] or [Control at set speed] can be selected. For details, refer to "Pan/Tilt Speed Control" (P. 12).

[Pan/Tilt]
Moves the angle in the direction of each arrow. Click and hold to continue and release to stop.

[Zoom Speed]
Changes the zoom speed. Drag the slider knob to the right to increase zoom speed and to the left to decrease it.

[Zoom]
Click the or button to operate the zoom. Click and hold to continue and release to stop.
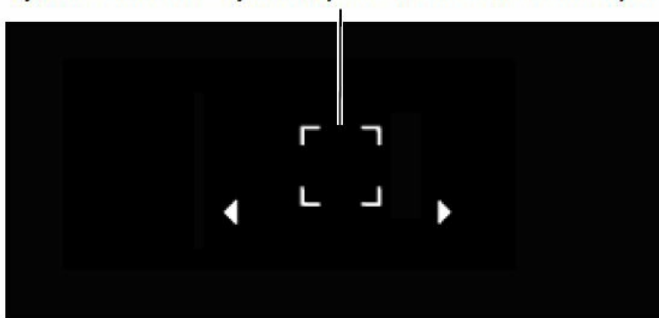
Clicking on the Screen

Autofocus

When the operation selection button is set to ⊚ , and there is a face of a person in the screen, a face frame appears and preferentially adjusts the focus to that face. When multiple people are in the screen, the main subject is automatically determined, and the following face frames are displayed. When Eye Detection is enabled, a guide frame is displayed at the eye of the face that is judged to be the main subject.

Frame representing the main face (if even one face)   Eye detection frame: Eye of subject detected as the main subject
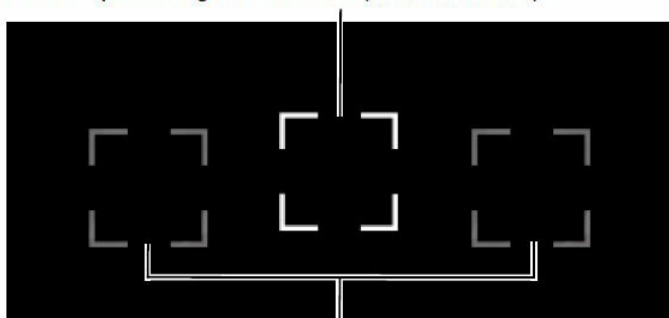
Frame representing a non-main face

When the operation selection button is set to ⊚ and there is no face of a person in the screen, the focus will be adjusted to the center of the screen. Also, clicking a subject displays a tracking frame. Even if the subject or the person moves in the screen, it is possible to continue to focus on as the main subject. By clicking the screen during tracking, tracking will be canceled.
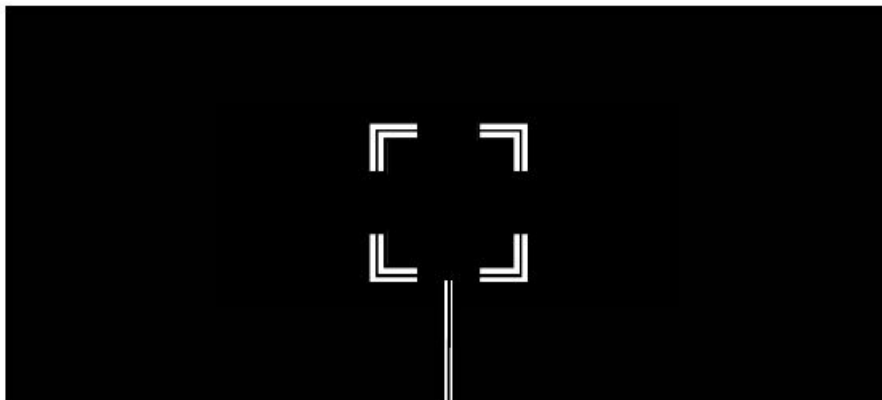
Tracking frame

Note

- The following are the main examples of failure to detect faces:
    - When the face is extremely small, large, dark, or bright relative to the entire screen
    - hen the face is facing sideways or diagonally, or when the face is upside down
    - When part of the face is hidden
- The system may accidentally track another subject with similar characteristics. In this case, select the subject again.
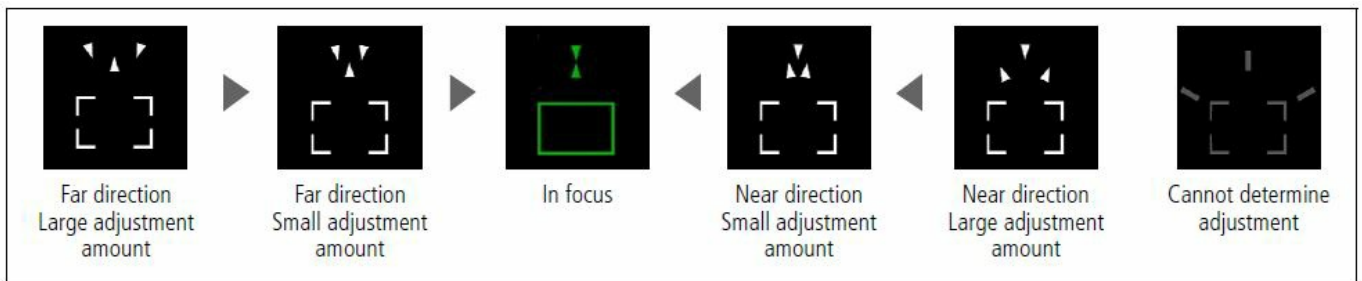
Manual Focus

When the operation selection button is set to [icon] , by clicking on the camera video, the focus will be adjusted to the clicked position with autofocus and then fixed.

[Focus Guide]
By clicking the operation selection button and selecting [Focus Guide] from the list, the Focus Guide is displayed at the position where the camera video was clicked. The adjustment direction and adjustment amount from the current focus position to the focus position are visually indicated by a guide frame. The position can be changed by clicking.

Far direction Large adjustment amount	Far direction Small adjustment amount	In focus	Near direction Small adjustment amount	Near direction Large adjustment amount	Cannot determine adjustment

The guide frame turns green when it is in focus or approaches the in-focus point.

[Preset]
It is possible to call the presets registered to the camera. Register presets on [Preset/Trace Settings]. For details, refer to "Preset Function".
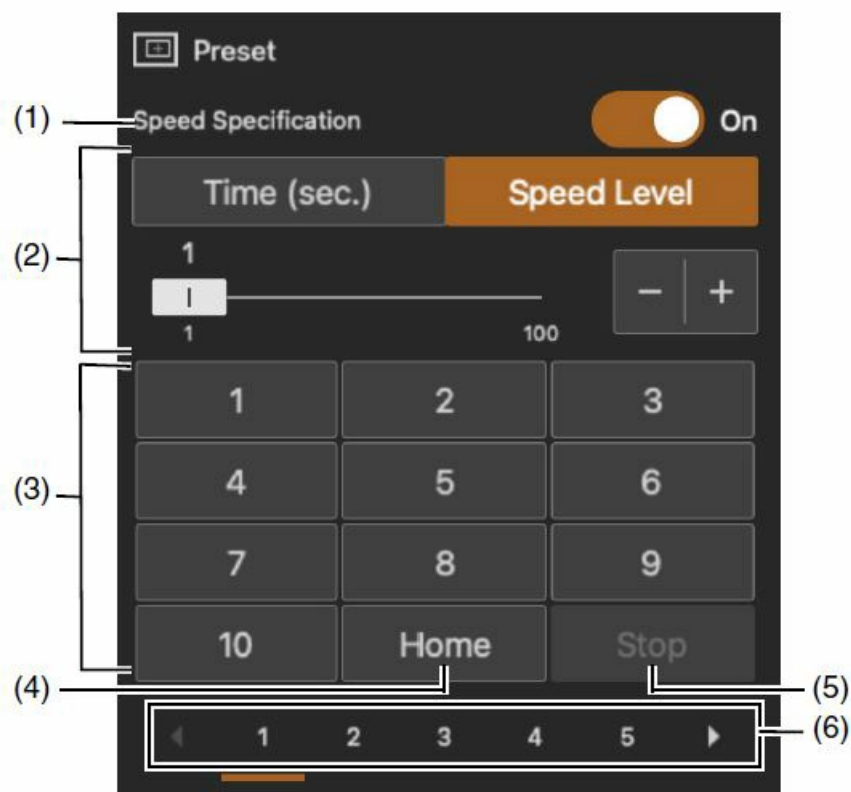
Speed designation

- **[On]:** The time or speed of moving to the pan/tilt/zoom position can be designated.

  [Off]: The speed is designated to the speed that was saved when presets were registered.

Speed Mode
Designates the time or speed of moving to the pan/tilt/zoom position when [Speed Specification] is [On]. Click [Time (sec.)] to specify the time, or click [Speed Level] to specify the speed. Able to change the value by moving the slider knob or clicking **+** or **−** .

Preset number button
Click a preset number registered to the camera to call the corresponding preset. Numbers not registered to the camera are indicated in gray.

[Home]
Click to return the camera to the home position.

[Stop]
Click during a preset operation to stop the operation.

Switch pages
11th preset and later are displayed in the 2nd page or later. Click a number to move to the page. Click to move to one page ahead and click to move one page back.

Note

- If the pan/tilt/zoom or focus of the camera is operated while a preset is running, the preset stops. However, another preset can be called while a preset is running.
- Depending on the relationship between the pan/tilt/zoom position before the call and the registered pan/tilt/zoom position, and the [Time] setting, it may not operate within the set time.
- Camera settings other than the pan/tilt/zoom position are reflected immediately when the preset is called.

[Exposure]
Camera exposure adjustment is available. In infrared shooting, [Basic] > [Exposure] cannot be set.
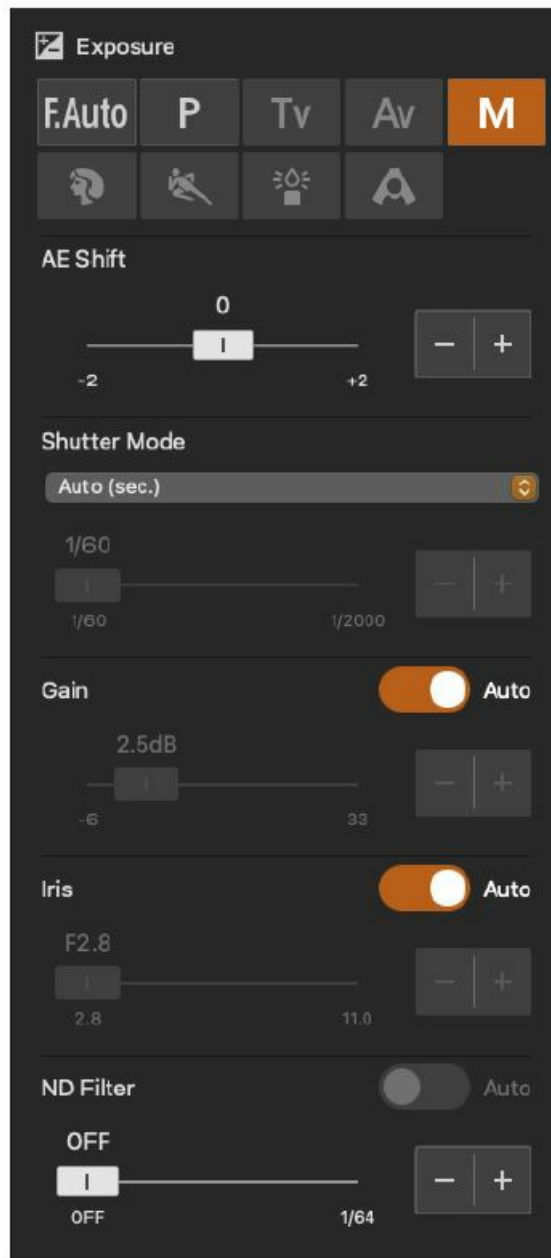
Shooting Modes
Switch shooting modes according to the shooting environment and subject.

- **F.Auto** **(Full auto)**

  The exposure (shutter speed, gain, iris, etc.) and white balance settings are adjusted automatically.

- **P** **(Program AE)**

  The exposure (shutter speed, gain, iris, etc.) settings are adjusted automatically. [AE Shift] can be set.

- **Tv** **(Shutter priority AE)**

  The shutter speed is adjusted manually. The gain and iris are adjusted automatically.

- **Av** **(Iris priority AE)**

  The iris is adjusted manually. The shutter speed and gain are adjusted automatically.

- **M** **(Manual)**

  The exposure (shutter speed, gain, iris, etc.) is adjusted manually.

- (Portrait)

  Blurs the background to make the subject stand out.

- (Sports)

  Captures fast moving subjects.

- (Low light)

  Brightly captures subjects in dark locations.

- (Spotlight)

  Captures subjects illuminated by a spotlight beautifully.

Note

- The exposure settings (iris, shutter speed, gain, etc.) are automatically adjusted for Portrait, Sports, Low Light, and Spotlight. White balance and image quality cannot be operated.
- In Portrait and Sports mode, the captured video may not appear smooth or may flicker.
- For precautions regarding shooting in Low Light, refer to "About Shooting with Slow Shutter".

[AE Shift]
When one of the [Shutter Mode], [Gain] and [Iris] is set to auto, the exposure can intentionally be compensated to capture subjects either at a brighter or darker exposure. Move the slider knob or click + or − to change the value.

Note
In infrared shooting, [AE Shift] cannot be set.

[Shutter Mode]
Adjusting the shutter speed enables to adapt to the shooting environment, making it possible to capture fast-moving subjects (sports, vehicles, etc.) clearly and brighten low-light scenes, etc. Shutter speed can be adjusted in the following modes:

[Auto (sec.)]
Automatically adjusts the shutter speed according to the brightness of the video.

[Speed (sec.)]
Sets the shutter speed to seconds. The shutter speed can also be set to a value higher than the frame rate. Move the slider knob or click **+** or **−** to change the value.

[Slow (sec.)]
Sets the shutter speed slower than the frame rate to seconds. This setting is used for shooting in low-light areas. Also, special effects such as "blurring the background" and "adding residual image effects to zoom" are available for shooting a moving subject with pan operation. Move the slider knob **+** or **−** click or to change the value. For precautions regarding shooting, refer to "About Shooting with Slow Shutter".

[Clear Scan (Hz)]
Sets the shutter speed by frequency. This is used to reduce black bands on the screen, flickering from fluorescent lighting, and to fine tune the brightness. Move the slider knob **+** or **−** click or to change the value.

[Angle (°)]
Sets the shutter speed at the open angle. Move the slider knob + or − click or to change the value.

[Off]
The reference shutter speed of each frame rate is used.

Note
When shooting in [Slow (sec.)], the focus may not work well in autofocus.

[Gain]
The amount of amplification of the video amplifier is set as either gain (dB) or ISO sensitivity. [Gain (dB)] and [ISO] are automatically switched according to the type of camera.

[Gain (db)]
The value can be changed by moving the slider knob or clicking **+ or –** . Also, this value is automatically adjusted when [Auto] is turned on.

[ISO]
The value can be changed from the available options. The value can be changed by moving the slider knob or clicking **+ or –** . Also, this value is automatically adjusted when [Auto] is turned on.

Note

- Increasing the gain may cause a slightly grainy screen. Also, irregular colors, white dots, and vertical lines may appear on the screen.
- In infrared shooting, [Gain] cannot be set.

[Iris]
Adjusts the iris (aperture) according to the brightness of the subject. Move the slider knob or click **+ or –** to change the value. Also, this value is automatically adjusted when [Auto] is turned on.

Note

- The aperture value that can be set differs depending on the zoom position. Reference aperture value is displayed on the screen.
- By changing the depth of field and blur the background or surroundings to make the subject stand out, set a smaller iris value, and to keep everything from close objects to far-away objects in focus, set a larger iris value.
- If the iris is narrowed down when shooting in a bright location, this can cause blurring. It is possible to prevent blurring by adjusting the shutter speed or ND filter and opening the iris.
- If a lens abnormality (lens not mounted, lens malfunction, etc.) occurs when using a camera that supports interchangeable lenses, the [Iris], [Zoom] and [Focus] features are restricted. Also, when lens switches ([Iris] [Zoom] [Focus]) are set manually, those features cannot be used.
- When [AUTO] of the iris setting is turned off, the aperture value of Auto is taken. It does not restore to the aperture value set before [AUTO].
- In infrared shooting, [Iris] is fixed open.

[ND Filter]
The ND filter allows to open the iris for a video with shallow depth of field even in a bright environment. This is also convenient for avoiding blur caused by a small iris when narrowing down the iris. Move the slider knob or click **+ or –** to change the value. Also, this value is automatically adjusted when [Auto] is turned on. The slider or [Auto] may not be available depending on the model.

Note
Changing the ND Filter settings in certain shooting conditions could generate some slight change in coloring. In this case, it is effective to set the white balance when shooting.

About Shooting with Slow Shutter
By setting the [Shooting Mode] to manual, shutter priority AE to set a slow shutter speed, or setting it to low light, it is possible to shoot the subject brightly even where the light is insufficient. However, depending on the scene or the subject, the following may occur.

- Noticeable residual image from moving subjects
- Deterioration of image quality
- White spots on the screen
- Autofocus not functioning well

[White Balance]
Camera white balance adjustment is available. In infrared shooting, [Basic] > [White Balance] cannot be set.
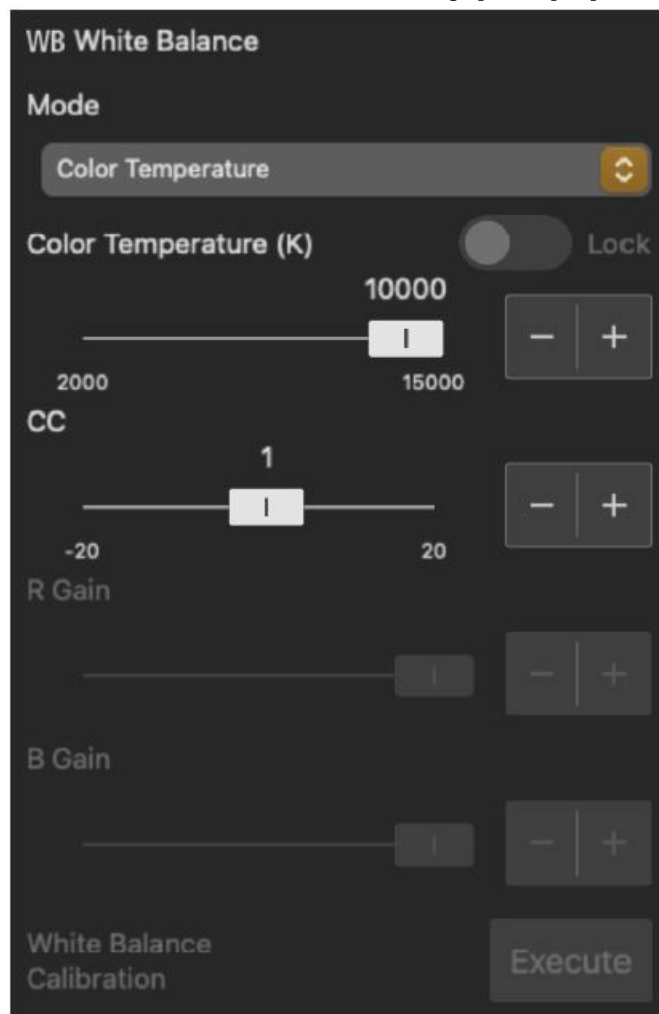
[Mode]
Sets white balance according to the color temperature of light sources such as illuminations and sunlight. Adjustment procedure is as follows:

[Auto]
Adjust the white balance so that it is always optimal. The white balance is automatically adjusted as the color temperature of the light source changes.

[Color Temperature]

Specify [Color Temperature] to adjust the white balance.

[Daylight]
Sets the white balance according to the sunlight.

[Tungsten]
Sets the white balance according to tungsten lighting. Use this setting when shooting under tungsten or tungsten colored fluorescent lighting.

[Manual]
Set [R Gain] and [B Gain] for the white balance to the desired value. Move the slider knob or click **+ or –** to change the value.

[Set A], [Set B]
Executing [White Balance Calibration] captures the reference white color in the actual shooting environment. The settings are erased when the camera is restarted or turned on/off. In order to save the settings, register as a preset in the camera's Settings Page.

[AWB Lock]
AWB operation stops temporarily when [Lock] is clicked when the mode is set to [Auto]. Clicking [Lock] again resumes AWB operation.

Note

- In infrared shooting, [White Balance] cannot be set.
- When shooting under the following conditions, if the screen color looks unnatural in [Auto], adjust the white balance using [Set A] or [SetB]:
    - Shooting in locations where lighting conditions suddenly change
    - Close-up shooting
    - Shooting a scene with only one color, such as sky, sea, or forest
    - Shooting under mercury lamps and certain fluorescent/LED lights
- If the setting is other than [Auto], and the location or brightness changes or the ND filter is switched, adjust the white balance again.

[R Gain], [B Gain]
Adjusts the white balance when [Mode] is set to [Manual]. Move the slider knob **+ or –** click or to change the value.

[Color Temperature]
When [Mode] is set to [Color Temperature], [Daylight] or [Tungsten], move the slider knob or click **+ or –** to change the value.

[CC]
Specifies the CC value (color correction value) to adjust the white balance. The value can be changed by moving the slider knob or clicking **+ or –**.

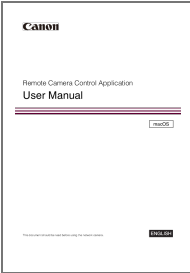**[White Balance Calibration]**
Captures the reference white color when [Mode] is set to [Set A] or [Set B]. Illuminate a gray card or white subject (white paper, etc.) with a light source and click [Execute] while the subject fills the screen.

[Trace]
The traces registered to the camera can be executed from the main screen. Simultaneous operation is available when multiple cameras are operated. For details on trace, refer to "Trace Function".

Documents / Resources

[Canon Remote Camera Control Application](#) [pdf] User Manual
Remote Camera Control Application, Remote Camera, Control Application, Application