About using tablet terminal

1. Live display on tablet device
The procedure for displaying live images on a tablet terminal is explained below.

1.1 About symbols
In this manual, the models that can be used with the following symbols are shown for functions whose usage is restricted depending on the model.
It is a function that can be used with the following models.
For functions that do not use this symbol, all models are compatible.
【Box / Dome】:
WV-S1131(PJ), WV-S1132(RF)(EG), WV-S1112, WV-S1111, WV-S1511LN, WV-S1531LN(PJ),
WV-S1531LNS, WV-S1531LTN, WV-S2110, WV-S2130, WV-S2111L, WV-S2231L, WV-S2211L,
WV-S2131(L)(LPJ)(LRF)(LEG), WV-S2250L, WV-S2511LN, WV-S2531LN, WV-S2531LNT

【S113x】: WV-S1131(PJ)

【S111x】: WV-S1112, WV-S1111

【Compact Dome】:
WV-S3532LM, WV-S3531L, WV-S3512LM, WV-S3511L, WV-S3131L, WV-S3111L

【PTZ】:
WV-S6530N, WV-S6131, WV-S6130, WV-S6111, WV-X6531NS, WV-X6531N(PJ)(RF)(EG),
WV-X6511N, WV-S6532LN, WV-X6533LN

【5M Box/Dome】: WV-S1550L, WV-S2550L

【4K Box/Dome】: WV-S1570L, WV-S2270L, WV-S2570L

【5M 360-degree】: WV-S4550L(M)(PJ), WV-S4150

【9M360-degree】: WV-X4571L(M), WV-X4171

* For multi-sensor camera WV-X8570N / WV-S8530N, refer to the Operating Instructions.
1.2 Live screen

Enter "http://IP address/" or "http://host name registered in DDNS server/" on the tablet terminal and connect it to this camera.

→ The live image of this camera is displayed.

Note

- In order to see the image of this camera from the tablet terminal, you need network setting to connect to the Internet in advance.
- Depending on the model, the same screen as the PC may be displayed. In that case, enter "http://IP address/live/tab.html" or "http://host name registered in DDNS server/live/tab.html" to connect.

① Setup Menu
By pressing "Setup menu", the setting screen will be displayed.

② Swipe operation permission 【PTZ】
If you check "Swipe operation permit", you can zoom in by swipe.
1.3 Setup screen

1.3.1 【Box/Dome】【5M Box/Dome】【4K Box/Dome】

① Super dynamic(SD)
Select “On” or “Off” to determine whether or not to activate the super dynamic function. It cannot be set when “image capture mode” is "2 mega pixel [16:9] (60 fps mode)” or "1.3 mega pixel [16:9] (60 fps mode)”. 【Box/Dome】
- On: The super dynamic function will work.
- Off: The super dynamic function will not work
- Default: On

Note
- When using this camera in an environment above 40°C, the effect of super dynamic function may be reduced. 【Box/Dome】

② Light control mode
Select the light control mode from the following.
- Outdoor scene:
  Depending on the brightness level (illuminance), the iris will automatically be controlled together with the shutter speed adjustment to control light. When shooting a bright subject such as outdoor, etc., select this parameter. Be aware that flicker may occur when a subject is under fluorescent lighting.
- Indoor scene (50 Hz) / Indoor scene (60 Hz):
  The shutter speed will automatically be adjusted to prevent flicker caused by fluorescent light. Select 50 Hz or 60 Hz corresponding to the location where the camera is in use.
  ELC【S113x】【S111x】: Uses shutter speed adjustment to control light.

Fix shutter【Box/Dome】:
– When “2 mega pixel [16:9](60fps mode)” or “1.3 mega pixel [16:9](60fps mode)” is selected for [Image capture mode]:
1/60 Fix, 1/100 Fix, 1/120 Fix, 1/250 Fix, 1/500 Fix, 1/1000 Fix, 1/2000 Fix,
1/4000 Fix, 1/10000 Fix
– When “2 mega pixel [16:9](30fps mode)”, “1.3 mega pixel [16:9](30fps mode),
“3 mega pixel [4:3](30fps mode)”, or “1.3 mega pixel [4:3](30fps mode)” is selected
for [Image capture mode]:
1/30 Fix, 3/120 Fix, 2/100 Fix, 2/120 Fix, 1/100 Fix, 1/120 Fix, 1/250 Fix, 1/500 Fix,
1/1000 Fix, 1/2000 Fix, 1/4000 Fix, 1/10000 Fix

Fix shutter [5M Box/Dome] [4K Box/Dome]:
1/30 Fix, 3/120 Fix, 2/100 Fix, 2/120 Fix, 1/100 Fix, 1/120Fix, 1/250 Fix,
1/500 Fix, 1/1000 Fix, 1/2000 Fix, 1/4000 Fix, 1/10000 Fix

Default: Outdoor scene

Note
• When a faster shutter speed is selected (up to 1/10000), it is possible to capture a fast
moving object with less blur.
• When a faster shutter speed is selected, the sensitivity will become lower.
• When “On” is selected for [Super Dynamic(SD)], “Fix shutter” and “ELC” are not
available. To configure “Fix shutter” and “ELC”, set [Super Dynamic(SD)] to “Off”.

3 Image rotation
Sets whether or not to rotate the image
0°(Off): Do not rotate the image
90°: Rotate the image 90 degrees
180°(Upside-down): Flip the image upside down
270°: Rotate the image 270 degrees

Default: 0°(Off)

IMPORTANT
• The position shifts if the image rotation setting is changed when the following area settings are
configured. Therefore, configure the settings for each area after configuring the image rotation.
  – Mask area
  – Privacy zone
  – VMD area
  – VIQS area
  – Overlay image [Box/Dome]
• If “90 °” or “270 °” is selected for [Image rotation], depending on the [Character size] setting and the number of characters used, characters displayed on the screen may be
cut off.
• When [Image rotation] is set to “90 °”, “270 °”, the position that can be set in
[Date/time position] and [Camera title position] is restricted to “Upper left” and
"Lower left".
### Note
- When [Image capture mode] is "4:3 mode", "90 °" and "270 °" cannot be set.
- The analog output of the MONITOR OUT terminal also rotates according to the setting angle of [Image rotation].

#### 4K Box/Dome
- When [Image capture mode] is "16:9(30fps) mode", "90 °" and "270 °" cannot be set.

##### Manual zoom adjustment
Adjust the zoom manually.
- : Adjust the zoom (magnification) up to 1.0 time in the "Wide" side.
- 

  - : Make the zoom (magnification) 1.0 times.
- 

  - : Adjust the zoom (magnification) to the "Tele" side.

### Note
- The camera switches between optical zoom and extra optical zoom depending on the zoom ratio.
- The supported optical and extra optical zoom ratios vary depending on the model and the selected image capture mode.
- For details of the zoom function of each model, refer to the operating Instructions.

#### 5M Box/Dome
- The camera switches between optical zoom and extra optical zoom depending on the zoom ratio.
  - Up to 3.1 times : optical zoom
  - Up to 9.3 times : optical zoom + extra optical zoom

#### 4K Box/Dome
- The camera switches between optical zoom and extra optical zoom depending on the zoom ratio.
  - Up to 2 times : optical zoom
  - Up to 6 times : optical zoom + extra optical zoom
- When [Image capture mode] is "16:9(30fps) mode", “EX optical zoom” cannot be use.

### IMPORTANT
- If extra optical zoom is configured after configuring settings for the mask area, privacy zone, VMD area and overlay image, the configured areas for those settings may move out of alignment. Therefore, perform the setting for extra optical zoom function before other settings.

##### 5 Manual focus adjustment
Adjust the focus manually.
- : Adjust the focus in the "near" direction.
- 
  - : Return focus to initial setting.
Far: Adjust the focus in the “far” direction.

**Note**

- For details of the focus function of the model, refer to the operating instructions.

### 6 Auto focus

**Execute**: When you press the button, the auto focus function works and automatically adjusts the focus to the subject in the center area of the screen.

**IMPORTANT**

- When a value with an interval longer than ject in the center area of the screen, VIQS are and the imaging mode being set.e the[Maximum shutter], if “Auto focus” is executed during slow shutter operations at night, it may take a long time to complete “Auto focus”.
- In the following locations or with the following subjects, the focus may not be able to be automatically adjusted. In this case, manually adjust the focus.
  - when the subject moves a lot
  - when there are large changes to the lighting intensity
  - when the light level is low
  - when the subject or location is extremely bright or reflective
  - when viewing through windows
  - when the dome cover is in a location where it can easily become dirty
  - locations where there is not much contrast such as a white wall
  - when there is harsh flickering
- When images in the near-infrared light area change from color to black & white, images may be out of focus due to the nature of optical properties. In this case, the focus can automatically be corrected by selecting “Auto” or “Preset” for “Adjusting method” (the focus will not automatically be adjusted according to the illumination level change once the focus is corrected).

### 7 Brightness adjustment

It can be adjusted from 0 to 255.

- Press the [+] button to make the image brighter.
- Press the [-] button to make the image darker.
- Press the [Reset] button to reset to the default brightness setting.

### 8 Close

Close the setup menu
### 1.3.2 【Compact Dome】

#### Super Dynamic(SD)
Select “On” or “Off” to determine whether or not to activate the super dynamic function. It cannot be set when [Image capture mode] is "2 mega pixel [16: 9] (60 fps mode)" or "1.3 mega pixel [16: 9] (60 fps mode)".

**On**: The super dynamic function will work.

**Off**: The super dynamic function will not work.

**Default**: On

**Note**
- When the following are observed depending on the light condition, select “Off” for [Super Dynamic(SD)].
  - When flickering appears or the color changes on the screen
  - When noise appears in the brighter area on the screen
- When using this camera in an environment above 40 °C, the effect of super dynamic function may be reduced.

#### Light control mode
Select the light control mode from the following.

**Indoor scene (50 Hz)/Indoor scene (60 Hz)**: The shutter speed will automatically be adjusted to prevent flicker caused by fluorescent light.

Select 50 Hz or 60 Hz corresponding to the location where the camera is in use.

**ELC**: Uses shutter speed adjustment to control light.

**Default**: ELC

#### Image rotation
Security System

Sets whether or not to rotate the image.

0° (Off): The image is not rotated.
90°: Rotate the image 90 degrees.
180° (Upside-down): Turns the image upside down.
270°: Rotate the image 270 degrees.
Default: 0° (Off)

**IMPORTANT**
- The position shifts if the image rotation setting is changed when the following area settings are configured. Therefore, configure the settings for each area after configuring the image rotation.
  - Mask area
  - Privacy zone
  - VMD area
  - VIQS area
  - Overlay image
- If “90 °” or “270 °” is selected for [Image rotation], depending on the [Character size] setting and the number of characters used, characters displayed on the screen may be cut off.
- When “90 °” or “270 °” is selected for [Image rotation], the position selectable with [Date/time position] and [Camera title position] is limited to “Upper left” or “Lower left”.

**Note**
- When “3 mega pixel [4:3](30fps mode)” or “1.3 mega pixel [4:3](30fps mode)” is selected for [Image capture mode], “90 °” and “270 °” cannot be selected.
- When “90 °” or “270 °” is selected for [Image rotation], [Mirror] will be fixed to “Off”.

**4) Manual zoom adjustment**
The zoom can be adjusted manually.

 subtract : Click this button to adjust the zoom ratio to the “Wide” side until x1.0
 x1 : Click this button to set the zoom ratio to x1.0.
 add : Click this button to adjust the zoom ratio to the “Tele” side

**Note**
- The maximum zoom ratio for extra zoom varies depending on the model and the selected [Image capture mode].
- Refer to the Important Information for more information about the maximum zoom ratio.

**IMPORTANT**
- The extra zoom function may not be activated on the appropriate position if the setting for the function is performed after the settings for the VIQS area, privacy zone, VMD area or overlay image. Therefore, configure each area's settings after configuring the extra zoom settings.
- Configure mask area settings with a zoom ratio of x1.0. The mask area operates in the mask position of zoom ratio of x1.0 even after extra zoom settings.
⑤ **Brightness adjustment**  
The brightness is adjustable from 0 to 255.  
If you move the slider in the “+” direction, the image will become brighter.  
If you move the slider in the “-” direction, the image will become darker.  
Click the [Reset] button to reset to the default brightness setting.

⑥ **Close**  
Click this button to close the setup menu.
1.3.3 【PTZ】

1. **Super Dynamic(SD)**
   Select “On” or “Off” to determine whether or not to activate the super dynamic function. This is not available when [Image capture mode] is set to “2 mega pixel [16:9](60fps mode)” or “1.3 mega pixel [16:9](60fps mode)”.
   - **On**: The super dynamic function will work.
   - **Off**: The super dynamic function will not work.
   - **Default**: Off
   **Note**
   - When the camera is used in environments of 40°C or higher, the effectiveness of the super dynamic function will be reduced.

2. **Light control mode**
   Select the light control mode from the following.
   - **Outdoor scene**: Depending on the brightness level (illuminance), the iris will automatically be controlled together with the shutter speed adjustment to control light. When shooting a bright subject such as outdoor, etc., select this parameter. Be aware that flicker may occur when a subject is under fluorescent lighting.
   - **Indoor scene (50 Hz) / Indoor scene (60 Hz)**: The shutter speed will automatically be adjusted to prevent flicker caused by fluorescent light. Select 50 Hz or 60 Hz corresponding to the location where the camera is in use.
   - **Fix shutter**: When “2 mega pixel [16:9](60fps mode)” or “1.3 mega pixel [16:9](60fps mode)” is selected for [Image capture mode]:
     - 1/60 Fix, 1/100 Fix, 1/120 Fix, 1/250 Fix, 1/500 Fix, 1/1000 Fix, 1/2000 Fix, 1/4000 Fix, 1/10000 Fix.
Fix
- When "2 mega pixel [16:9](30fps mode)", "1.3 mega pixel [16:9](30fps mode)", "3 mega pixel [4:3](30fps mode)", or "1.3 mega pixel [4:3](30fps mode)" is selected for [Image capture mode]: 1/30 Fix, 3/120 Fix, 2/100 Fix, 2/120 Fix, 1/100 Fix, 1/120 Fix, 1/250 Fix, 1/500 Fix, 1/1000 Fix, 1/2000 Fix, 1/4000 Fix, 1/10000 Fix

Default: Outdoor scene

Note
• When a faster shutter speed is selected (up to 1/10000), it is possible to capture a fast moving object with less blur.
• When a faster shutter speed is selected, the sensitivity will become lower.
• When "On" is selected for [Super Dynamic(SD)], "Fix shutter" and "ELC" are not available. To configure "Fix shutter" and "ELC", set [Super Dynamic(SD)] to "Off".

3 Preset position
Set the preset position.
Move the orientation of the camera to the direction you want to register before preset registration.
To change the orientation of the camera, enable "swipe operation" and click the image position you want as the center of view angle.
The orientation of the camera moves to the position centered on the clicked position.
When zooming in, after enabling "swipe operation permit", select so as to enclose the area to be enlarged in the image.

Note
Please note the following points when registering the preset position using the tablet.
• If the image update on the tablet is slow, preset registration while setting the confirmation monitor image.
• If you resize the screen with a tablet operation, you can not change the orientation by the screen or zoom in operation.
• If you can not adjust the orientation of the camera by tablet operation, refer to the Operating Instructions "1.2.2 Monitor images on a mobile terminal (including smartphones)". Please move the direction of the camera to the direction you want to register in the method described in .

Position No.: Set the position number to be registered.

Preset ID:
Select "On" or "Off" to determine whether to enable or disable the preset ID display. This function can be applied to each preset position.
On: Displays the preset ID.
Off: Does not display the preset ID.
Default: Off
IMPORTANT

• When [Preset ID (0-9,A-Z)] or [Preset ID] is configured, it is necessary to click the [Set] button to apply them.

Note
• When “On” is selected, the entered preset ID will be displayed at the position selected for [OSD] on the [Basic] tab of the “Basic” page.

Preset ID (0-9,A-Z):
Enter the preset ID to be displayed on images. This function can be applied to each preset position.
Available number of characters: 0 - 20 characters
Available characters: 0-9, A-Z, a-z and the following marks.
! " # $ % & ' ( ) * + , - . / : ; = ?
Default: None (blank)
Note
• The entered preset ID will be displayed next to the preset position number on the pull-down menu. When “On” is selected for “Preset ID”, the preset ID will be displayed on images.

Auto focus:
Select “Auto” or “Off” to determine whether to enable or disable the auto focus function after the camera has moved to a preset position. This function can be applied to each preset position.
Auto: The auto focus function will be activated after moving to a preset position.
Off: Does not activate the auto focus function after moving to a preset position.
Default: Off

Dwell time:
Select a dwell time (duration the camera stops for at each preset position) for the preset sequence operation.
Off/ 5s/ 10s/ 15s/ 20s/ 25s/ 30s
Default: 10s

Set: Register the preset position.
Delete: Delete preset position selected by position number.

④ Zoom
Adjust the zoom manually.

- : Adjust the zoom (magnification) up to 1.0 time the "wide angle" direction.
 x1 : Make the zoom (magnification) 1.0 times.
Adjust the zoom (magnification) to the "telephoto" direction.

5 Focus
- Auto: Adjust the focus (focus) automatically.
- Near: Adjust the focus (focus) in the "near" direction.
- Far: Adjust the focus (focus) in the "far" direction.

Note
- The following subjects can not be focused with autofocus. Please adjust the focus manually.
  - Subjects that shine or reflect strong light
  - Subjects over glass with water droplets or dirt
  - When a distant subject and a nearby subject coexist
  - Subjects with no difference in brightness (e.g. white walls)
  - Horizontal subjects such as blinds
  - Inclined subject
  - Dark Subject

6 Brightness adjustment
The brightness is adjustable from 0 to 255.
If you move the slider in the “+” direction, the image will become brighter.
If you move the slider in the “-” direction, the image will become darker.
Click the [Reset] button to reset to the default brightness setting.

7 Close
Click the "Close" button to close the setting screen.
1.3.4 【5M360-degree】【9M360-degree】

【9M360-degree】

【5M360-degree】
Dynamic range mode【9M360-degree】
Select “On(Wide dynamic range)”, “On(Super Dynamic)”, or “Off” to determine whether or not to activate Wide dynamic range function or Super Dynamic function.

On(Wide dynamic range): Activates Wide dynamic range function.
Wide dynamic range function corrects the brightness in images with contrast, and enables natural images to be checked.

On(Super Dynamic): Activates Super Dynamic function.
When there is contrast in images, this setting enables more faithful images to be created than when “On(Wide dynamic range)” is used. For more information about Super Dynamic function, refer to the Operating Instructions.

Off: Stops the Super Dynamic function or Wide dynamic range function.
Default: Off

Note
• When “On(Super Dynamic)” is selected for [Dynamic range mode], the frame rate is restricted to a maximum of 15fps.
• When “On(Super Dynamic)” is selected for [Dynamic range mode], the following phenomenon may occur. Select “On(Wide dynamic range)” or “Off” in accordance with the usage environment.
  - When the visibility with backlight becomes worse depending on the brightness conditions of the surrounding area.
  - When there are afterimages in images
• When “On(Super Dynamic)” or “On(Wide dynamic range)” is selected for [Dynamic range mode], the following phenomenon may occur depending on the lighting conditions. Select “Off” in accordance with the usage environment.
  - When flickering appears or the color changes on the screen.
  - When noise appears in the brighter area on the screen.

Super dynamic (SD)【5M360-degree】
Select “On” or “Off” to determine whether or not to activate the super dynamic function. Refer to the description “Super Dynamic function” page about the super dynamic function in the Operating Instructions.

On: The super dynamic function will work.
Off: The super dynamic function will not work.
Default: On

Note
• When the following are observed depending on the light condition, select “Off” for [Super Dynamic(SD)].
  – When flickering appears or the color changes on the screen.
  – When noise appears in the brighter area on the screen.

Light control mode
Select the light control mode from the following.

**Indoor scene (50 Hz) / Indoor scene (60 Hz):**
The shutter speed will automatically be adjusted to prevent flicker caused by fluorescent light. Select 50 Hz or 60 Hz corresponding to the location where the camera is in use.

**ELC:** Uses shutter speed adjustment to control light.

**Default:** ELC

4 **Upside-down**
Select “On” or “Off” to determine whether or not to turn the image upside-down.

**Default:** Off

**IMPORTANT**
- If the [Upside-down] setting is changed when the following area settings are configured, perform the area setting again.
  - Privacy zone
  - VMD area
  - VIQS area
  - Mask area
- If the [Upside-down] setting is changed when a preset position is configured, the preset position must be configured again.

**Note**
- The upside-down function is available when <Ceiling> is selected for [Image capture mode].
- When “Fisheye” is selected for [Image capture mode], images are not turned upside-down.

5 **Manual focus adjustment**
The back focus can be adjusted manually.

- **Near**: Adjust the focus to the “near” side
- **Reset**: Reset the focus to the default. The focus of both color images and monochrome images are reset to the default values.
- **Far**: Adjust the focus to the “far” side.

6 **Auto focus**
The auto back focus function starts to automatically adjust back focus based on a subject located in the center of the screen by clicking the [Execute] button.

**IMPORTANT**
- When a value with an interval longer than “Max. 1/30s” (Max. 2/30s/ Max. 4/30s/ Max. 6/30s/ Max.10/30s/ Max. 16/30s) is selected for [Maximum shutter], if [Auto back focus] is executed during slow shutter operations at night, it may take a long time to complete [Auto back focus].
- In the following locations or with the following subjects, the auto back focus may not be able to be automatically adjusted. In this case, manually adjust the focus.
– when the subject moves a lot
– when there are large changes to the lighting intensity
– when the light level is low
– when the subject or location is extremely bright or reflective
– when viewing through windows
– when the lens is in a location where it can easily become dirty
– locations where there is not much contrast such as a white wall
– when there is harsh flickering

• When images in the near-infrared light area change from color to black & white, images may be out of focus due to the nature of optical properties. In this case, the focus can automatically be corrected by selecting “Auto” or “Preset” for [Adjusting method] (the focus will not automatically be adjusted according to the illumination level change once the focus is corrected).

⑦ Brightness adjustment

The brightness is adjustable from 0 to 255.
If you move the slider in the “+” direction, the image will become brighter.
If you move the slider in the “-” direction, the image will become darker.
Click the [Reset] button to reset to the default brightness setting.

⑧ Close

Click the "Close" button to close the setting screen.
## Revision histories

<table>
<thead>
<tr>
<th>Month, Year</th>
<th>Revised contents</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>June, 2019</td>
<td>First edition</td>
<td></td>
</tr>
</tbody>
</table>