Panasonic

Instruction manual

Wearable Camera LiveCast
AG-SWN7A/AG-SWN7W

Content

Introduction

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  – Recording of videos complying with the AVC standard ("AVC videos")
  – Playback of AVC videos recorded by the user for personal and non-profitable purposes
  – Playback of AVC videos obtained from a third party who has acquired a license

See the website of the American company MPEG LA, LLC for more details (http://www.mpegla.com/).

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This application incorporates the following software:
- Wearable Camera LiveCast (Windows® version)
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This software is based in part on the work of the Independent JPEG Group.

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https://panasonic.biz/cns/sav/
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Copyright

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About this manual

- This manual describes how to use the Android and Windows versions of the Wearable Camera LiveCast ("LiveCast") taking the screens of a tablet (Android) as an example. The button positions and other elements differ on a tablet (Windows) but the way the application is used is the same.
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- Panasonic Corporation will offer no compensation for image, video or audio content not recorded in case of problems with the tablet (Android or Windows), the microSD card, or the USB camera.
- In this document, pages to be referred are indicated with (→00).
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Terms in this manual

- In this manual, the USB cameras connected to the tablet (Android or Windows) to which LiveCast has been installed are referred to as "camera".
- In this manual, the tablets (Android or Windows) are referred to as "tablet" when no more precise term is required.
- In this manual, the Wearable Camera Liveviewer[1] that has been installed on a computer (Windows) or a tablet (Android) and for which device registration has been performed is referred to as "Viewer"[2].

  [1] AG-NAMS7W or AG-NAMS7A (Panasonic Corporation)

  [2] Some functions are not available on tablets (Android). When the application must be referred to precisely for clarity, the terms "Viewer (Windows)" or "Viewer (Android)" will be used.

Usage precautions

- Do not do the following when this application is running. Otherwise, troubles (data corruption, etc.) may occur.
  - Turning off or restarting the tablet
  - Changing the user or logging out
  - Disconnecting from the network
  - Using another piece of software (especially video recording or encoding software that uses lots of CPU resources and a large amount of memory)
- If this application cannot operate due to insufficient system resources, close the other software applications and then restart this application.
- If videos are transferred using 4G, LTE, or other cellular networks, expensive communication fees may be charged depending on your contract.
- Make a test in advance to verify that the video being filmed can be transferred.
- Videos may not be transferred correctly if the communication environment is poor.

Notice regarding security

When using this application, you may encounter the following troubles.
- Leaking of the user's private information via this application
- Illegal operation of this application by malicious third parties
- Interference with or stopping of this application by malicious third parties

Take the necessary security measures on the tablet.
- Limit the number of users that can log in and set up passwords.
- Use passwords that are hard to guess.
- Change the passwords periodically.
- Panasonic Corporation and its affiliate companies will not directly inquire as to a customer's password. Do not give your password in answers to any such direct inquiries.
- To prevent leakage of information when repairing, maintaining, disposing of, or giving the tablet, delete the browsing history of the browsers and the passwords that have been saved.

Caution regarding security when using a wireless LAN product

The wireless LAN will communicate information between computers and mobile devices and the wireless access points using radio waves instead of a LAN cable. It also allows easy LAN connection as long as the device is within the range of the radio waves. However, radio waves can reach anywhere in their range regardless of obstacles (walls, etc.), so they may cause the following problems if the settings regarding security are not configured.
- Interception of communication content
  Malicious third parties may intercept the radio waves, and private information such as ID, passwords, credit card numbers, or the content of emails may be intercepted.
- Unauthorized invasion
  Malicious third parties may access a private or corporate network without authorization and steal private or classified information (leakage of information), release fraud information by impersonating a specific person (spoofing), rewrite and distribute the intercepted content (falsification), or destroy data or systems by spreading computer viruses (destruction), etc.

The wireless LAN adapter and the wireless access point have security mechanisms to deal with these problems. Therefore, using these mechanisms on the wireless LAN product before using the application will decrease the possibility that these problems occur.

Security settings may not be set up on the wireless LAN equipment at the time of purchase. To reduce the possibility that security problems occur, make sure to set up all the security settings on the wireless LAN equipment in accordance with the operating instructions of each wireless LAN device before using it. Note that the security mechanisms may be broken by special methods depending on the specifications of the wireless LAN.

It is recommended to fully understand the risks if the security settings are not set up and to set up these security settings under the judgment and responsibility of the user before using the application.

Initial setup

When the application is launched for the first time after installing the LiveCast to the tablet, you will need to perform the initial setup to be able to use the LiveCast.

Preparation

- Connect the tablet to a network.
- Set the location information on the tablet to on.
- Obtain the following information from the P2 Cast administrator.
  - P2 Cast hostname
  - ID of the user who will log in to P2 Cast
  - Password of the login user
  - Nickname of the LiveCast

1 Tap on the home screen of the tablet.
  - Read the terms of use that are displayed.
  - No terms of use or access authorization screen are displayed with tablets (Windows). Go to step **4**.

2 Tap [Agree].
  - Four access authorization screens are displayed (internal camera, microphone, location information, and storage).

3 Follow the on-screen instructions and tap [Agree].
  - After the four types of access have been allowed, the device registration screen, on which the application ID is displayed, appears.
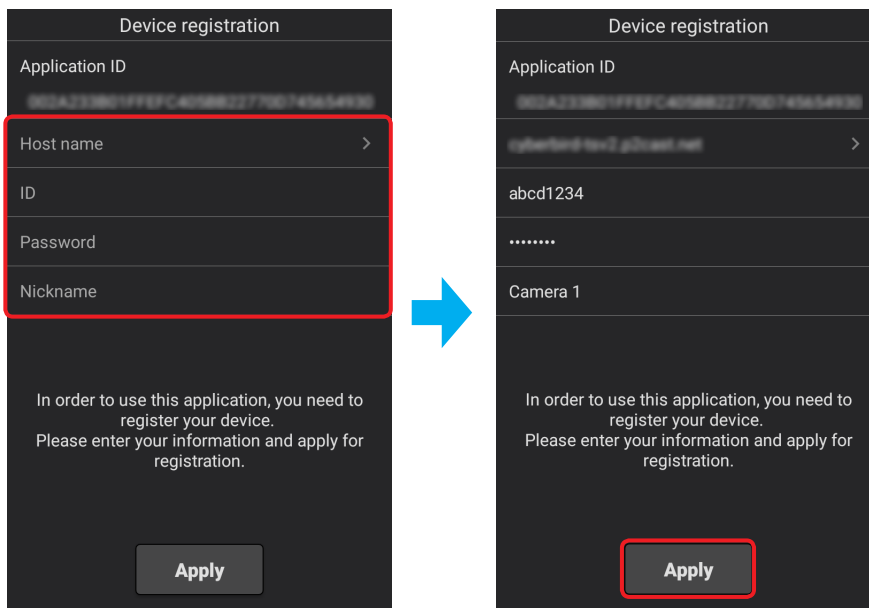   (The application ID is required to register the device to P2 Cast.)

4 Configure each setting* and tap [Apply].
  - The device registration processing screen is displayed.
  * Tap [Host name] to display a list of hostnames, then select the hostname you have obtained.
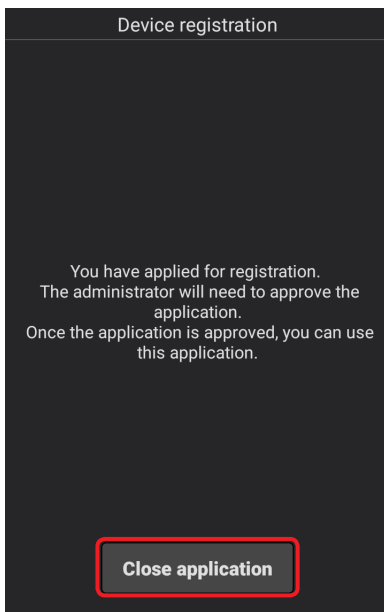   Tap [ID], [Password], and [Nickname] and enter the information you have obtained from the P2 Cast administrator.

5 **Tap [Close application].**
  - The application closes.
  - The device registration demand will have to be accepted by the P2 Cast administrator.
    The demand is accepted when a LiveCast is registered in P2 Cast.

6 **Request a device registration to the P2 Cast administrator in P2 Cast.**
  - See the P2 Cast instruction manual for the device registration procedure.
  - You can use the LiveCast after the device registration has been completed. **(→7)**
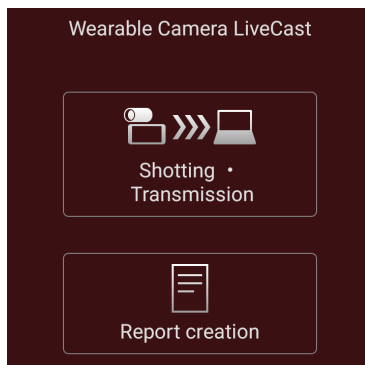
● **Note**
  - When uninstalling the LiveCast from the tablet (Android), all data is deleted, including the videos and still images that have been taken and the created reports. It is recommended to update the application when an update is available.

LiveCast Functions

After the initial setup, tap to display the function selection screen.

Tap an item to display the video transfer screen **(→9)** or the report list screen **(→17).**

Function selection screen

● **Note**
  • A deletion confirmation screen for imported* videos/still images and reports may be displayed when LiveCast is launched.
    * This is a function of the Viewer (Windows) See the instruction manual of the Viewer for more details.
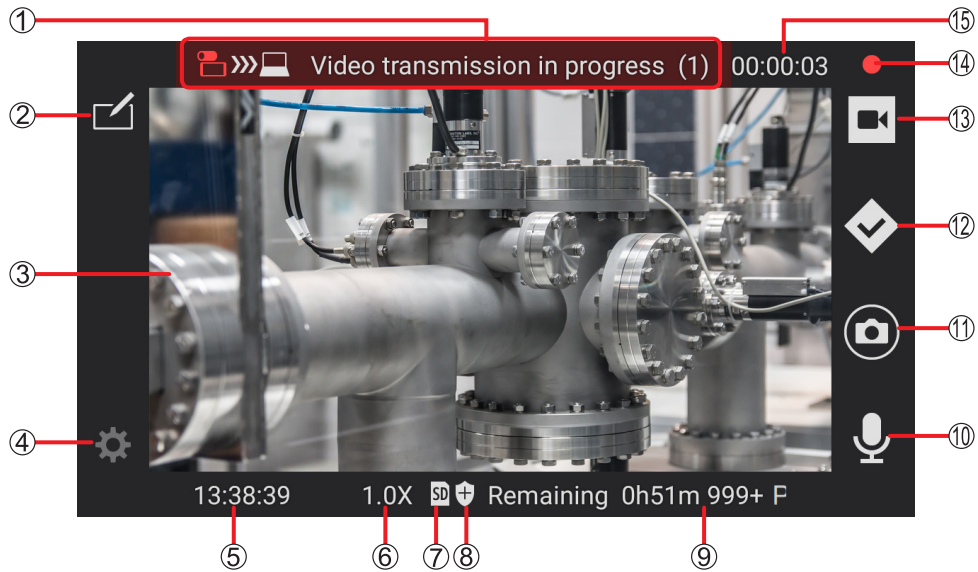
Image and video transfer

You can use the following functions on the image and video transfer screen **(→8)**.
  • Video transfer   : Transfers videos from the camera over the network. **(→9)**
                                     The transferred videos can be displayed on the Viewer.
  • Video filming/still image capture : Filmed videos and captured still images can be saved in the tablet. **(→10)**
                                     (Videos cannot be saved when only transferred.)
  • Still image sharing (sketch share) : Still images can be shared with the Viewer. **(→11)**
  • Settings   : You can configure shooting settings and other settings of the camera. **(→14)**

Image and video transfer screen

Example: Screen when a video is being filmed during a transfer

① **Video transfer status display (→9)**

     :Waiting for video transmission

     :Video transmission in progress (the icon turns red and an animation is displayed.
         The number in brackets is the number of Viewers receiving the video.)

② **Sketch share button (→11)**

③ **Camera image**

④ **Settings button (→14)**

⑤ **Timestamp:** The current time

⑥ **Magnification ratio**

     You can change the magnification ratio (x1.0 to x5.0) by pinching in or out.

⑦ **Video save destination (→14)**

     : saved to the microSD card, : saved to the internal storage

⑧ **Scrambling setting (→14)**

     : the signal is scrambled before being saved, no icon: the signal is not scrambled.

⑨ **Video: Remaining available time for filming.** (h for hours and m for minutes) /

     Still image: Remaining number of still images that can be taken ([999+] is displayed when more than 1000 images can
             be taken)**.**

⑩ **Microphone button**

     : the sound is sent, : the sound is not sent

⑪ **Still image capture button (→10)**

⑫ **Mark button (→10)**

⑬ **Video filming button (→10)**

⑭ **Filming status display (→10)**

     ● (red): filming, ● (black): filming is paused

⑮ **Filmed time** (example: 01:23:34 means 1 hour 23 minutes and 34 seconds)

Video transfer

You can operate the Viewer to send the videos from the cameras from the LiveCast and display them in the Viewer.
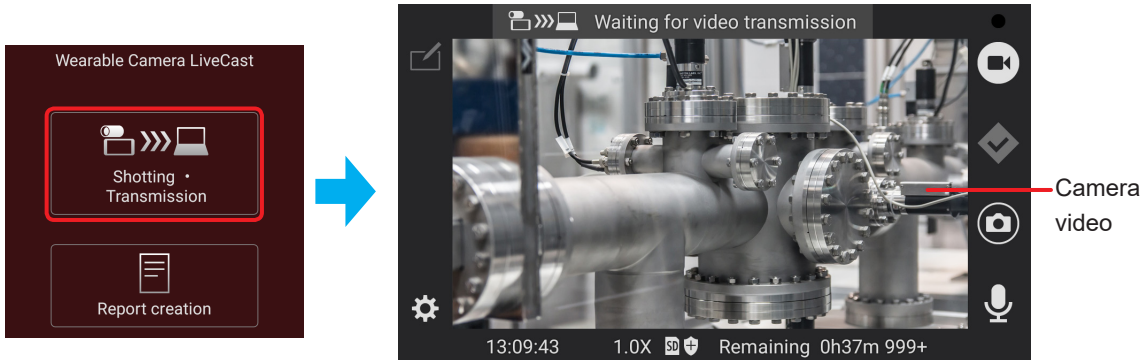
Preparation

- Connect the USB camera to the tablet.
  A confirmation screen to allow access to the USB camera is displayed. Tap [OK].

1 **Tap [Shooting • Transmission] on the function selection screen.**
- The video transfer status changes to "Waiting for video transmission" and the video from the camera is displayed.

Video transfer screen in Ready status

2 **(Operation on the Viewer)**
Click or tap the thumbnail of the video you want to display.
- See the instruction manual of the Viewer for the more detailed procedure.
- The video transfer status changes to "Video transmission in progress" and the video from the camera is displayed on the Viewer.

● **Note**
- To end the video transfer, tap ◁ (return button) twice* to close the application.

  * On a tablet (Windows), tap ✕.

- The video from the camera will continue to be transferred even if the LiveCast runs in the background and the tablet is in sleep mode. The battery of the tablet will be consumed even in sleep mode.

Video filming/still image capture

You can capture videos and still images from the camera and save them to the internal storage of the tablet or a microSD card.
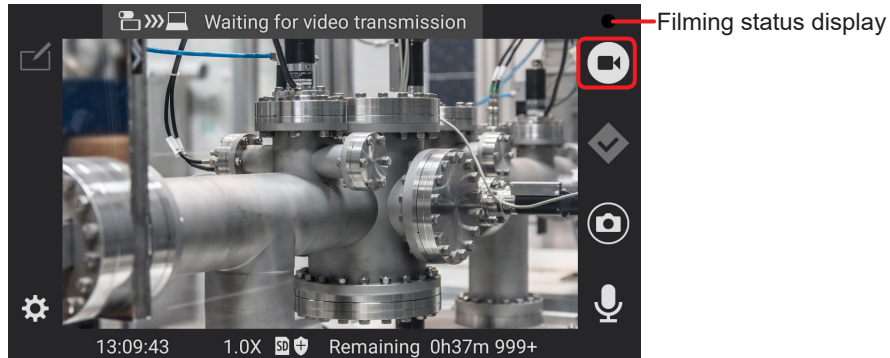
Preparation

- Display the video transfer screen in the Ready or Transferring status. **(→9)**

■ **Video filming**

1 Tap 📹 **to start filming the video.**

- The icon changes to ◼️, the filming time is displayed, and the filming status changes to ● (red).

Filming status display

- Adding marks

  While filming, tap ◆ to add a mark to the video at the time the icon was tapped.
  When making a report, you will be able to skip parts of the video to go directly to a scene with a mark. **(→18)**
- A mark is added automatically in the following cases.
  - When capturing still images
  - When zooming while filming*
    * When [Automatic marking of important scenes] is set to ON. **(→14)**
  - When clicking or tapping on ◆ in the Viewer

2 Tap ◼️ **to stop filming.**

- The icon returns to 📹, the filming time disappears, and the filming status changes to ● (black).

■ **Still image capture**

1 Tap 📷 **to capture a still image.**

- The captured still image is displayed for around 3 seconds at the bottom right of the screen.
- You can capture still images while filming a video.

● **Note**

- When the surrounding temperature is too high or too low, the temperature of the tablet is also affected.
  When the tablet's temperature is too high or too low, a warning message will be displayed, and this application may not operate normally. Additionally, if the tablet's temperature becomes high during video recording, video recording will be stopped and the video recording function will not be available.
  Check the temperature range for operation in the operating environment conditions of the instruction manual of your tablet.
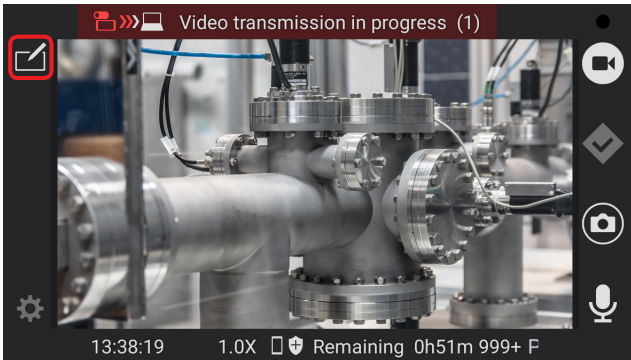
Still image sharing (sketch share)

While transferring a video, a still image displayed on the camera can be shared with a Viewer.
You are now able to draw shapes on the shared still image.

Preparation

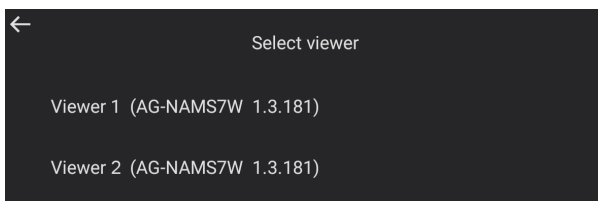• Display the video transfer screen in the Transferring status. (→9)

1 Tap 📝.

• The still image selection/capture screen is displayed.

● **Note**

• The filming will be stopped if a video is currently being filmed. (→10)
• A screen to select the Viewer to use with sketch share is displayed if the video is being transferred to multiple Viewers. The still image selection/capture screen is displayed after the selection.
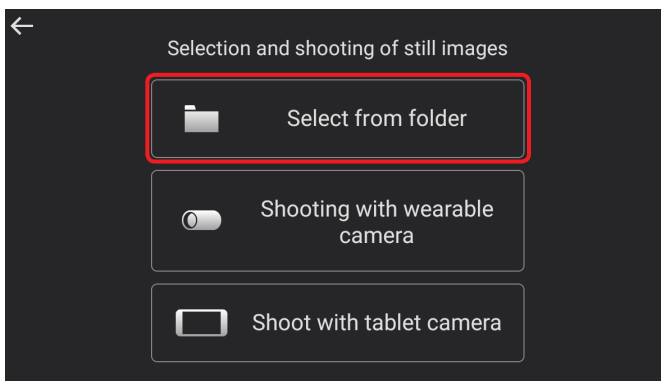

2 Tap on an option to select the still image to share.

[Select from folder] : Select a still image from a list of images already captured with the camera (on a still image selection screen).
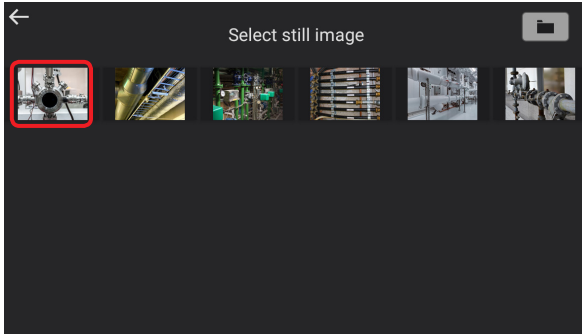[Shooting with wearable camera] : Capture a still image with the camera.
[Shoot with tablet camera] : Capture a still image with the camera at the back of the tablet.

■ **[Select from folder]**

On the still image selection screen, tap the still image you want to share.
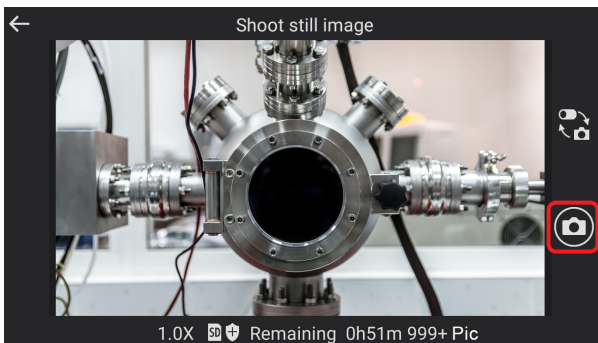

● **Note**

- The still images saved in the Pictures folder* of the tablet (Android) are displayed on the still image selection screen.
  The still image formats (extension) that can be displayed are .jpg and .png.
  * The images are in the My Pictures folder with tablets (Windows).
- Tap [■] to select a still image save folder and change the still image list.

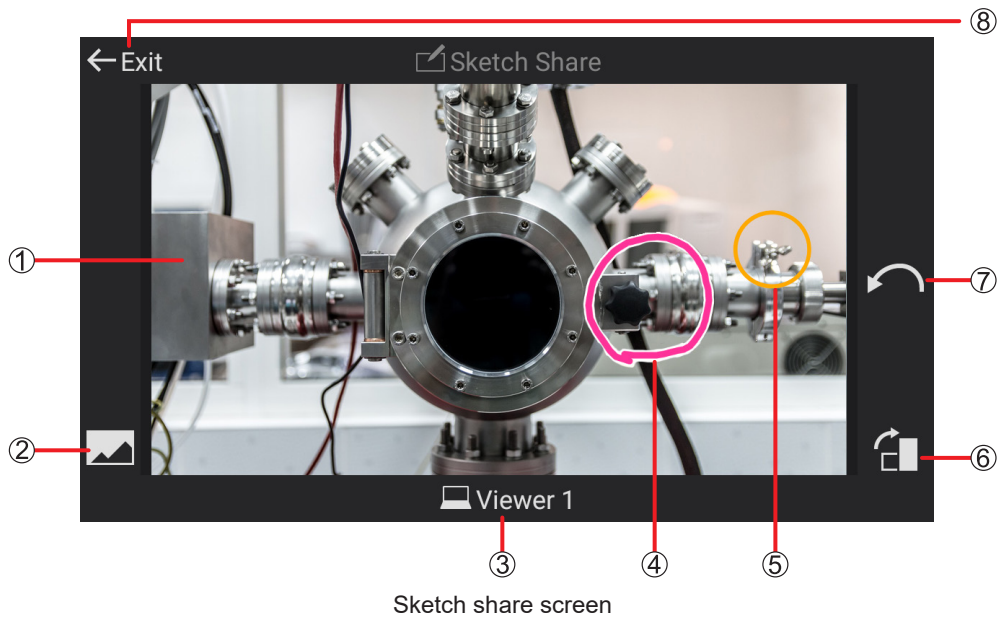■ **[Shooting with wearable camera]/[Shoot with tablet camera]**

Tap [◎] on the still image capture screen.

- Tap [◙] to switch between the wearable camera and the camera at the back of the tablet.

3 **Draw a shape on the sketch share screen.**

• The shapes appear in pink and are also displayed on the Viewer. The shapes drawn in the Viewer are displayed in orange.

Sketch share screen

① **Still image shared with the Viewer**

② **Still image selection button**
  Allows you to return to the screen in step **2 (→11)** and select or capture a different still image.

③ **Name of the Viewer used with sketch share**

④ **Shape drawn on the camera (pink)**

⑤ **Shape drawn on the Viewer (orange)**

⑥ **Still image rotation button**
  Used to change the orientation of the image.

⑦ **Sketch cancel button**
  Erases the previously drawn sketch.

⑧ **End button**

4 Tap ← Exit to end sketch share.

• The display returns to the video transfer screen.

● **Note**

• Tap ← to return to the previous screen.

• When sketch share is ended from the Viewer, a screen to confirm if you want to return to the video transfer screen is displayed.
  Tap [Yes] to close the sketch share screen.

Settings

You can configure the video filming settings, video transfer settings, and other settings.

Preparation

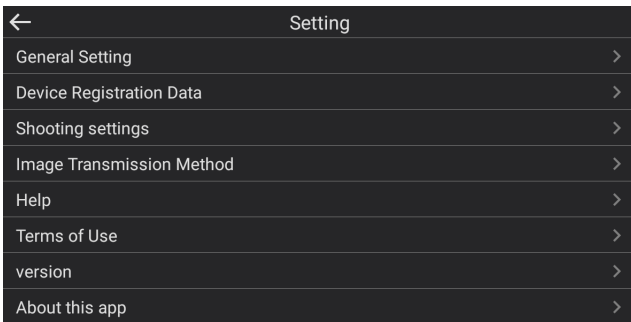- Display the video transfer screen in the Ready status. (→9)

1 Tap ⚙.
- The settings screen is displayed.

2 **Select a setting and configure the parameters.**
- [Device Registration Data], [Help], [Terms of Use], [version], and [About this app] can only be checked.

General Setting

You can configure the camera general settings, such as the video save destination and scrambling.

Tap a setting to configure it. Underlined settings are the default settings.

[Storage]: Used to configure the save destination for videos, still images, and reports (→17).
SD / Internal storage

[record scramble]: Used to scramble the recorded video and still images.
Descrambling requires a Viewer (Windows).
ON (scrambling used) / OFF (scrambling not used)

[Automatic marking of important scenes]: Set whether or not to add marks automatically to indicate important scenes when zooming while filming a video.
ON (marks are added) / OFF (marks are not added)

[Screen off]:
- Tablet (Android)   :OFF / 15 seconds / 30 seconds / 60 seconds
- Tablet (Windows) :OFF / 60 seconds

[Language]: Used to set the language of the display.
(If a message prompting you to restart the application is displayed after changing this setting, click [Restart].)
Japanese/English

Device Registration Data

Used to check the application ID, the default P2 Cast [Host name], the user [ID] and [Password] used to log in, and the LiveCast [Nickname].
See "Initial setup" (→5) for more details.

Shooting settings

Tap a setting to configure it. Underlined settings are the default settings.

■ WAT-02U2D/WAT-03U2D

[Resolution]: Displays a list of the resolutions of the USB camera supported by the application.
- WAT-02U2D: 1920×1080 30p / 1280×720 30p
- WAT-03U2D: 1280×960 30p / 1280×720 30p

[Brightness]: Used to adjust the brightness of the image.
Adjust between -128 and 127 on the slider bar.
(Tap [Default] to return the setting to the default value of the USB camera. The default value is WAT-02U2D:0 / WAT-03U2D:10.)

[White balance]: Configure this setting when the colors do not seem natural.
Automatic (Tap ☐ and turn it into ☑ to automatically adjust the white balance.) /
Manual (Tap ☑ and remove the ✓ to adjust between 2800 and 6500 on the slider bar.)

[Backlight Correction]: Makes the screen brighter to make it easier to see when exposed to light from the back of the subject.
ON (correction on) / OFF (correction off)

■ CX-WE100

[Resolution]: Displays a list of the resolutions of the USB camera supported by the application.
1920×1080 30p / 1280×720 30p

[Maximum ISO sensitivity]: Used to set an upper limit for the ISO sensitivity.
6400 / 12800

[White balance]: Configure this setting when the colors do not seem natural.
Automatic / Sunny / Cloudy

[Shake correction]: Used to correct the movements of the image caused by vibrations and oscillations.
Maintain level / Lens optical axis center / OFF

Image Transmission Method

You can configure the transfer destination of the camera videos. Underlined settings are the default settings.
AG-NAMS7 / Other VMS (Not set)

For transfer destinations using a command authentication connection other than AG-NAMS7, tap [Other VMS (Not set)] and configure the following settings. Ask the network administrator for more details.
- [Viewer's IP address]
- [Viewer's standby port number (configurable range: 1 to 65535)]
- [Camera's standby port number (settable range: 1 to 65535)]

Help

Displays the instruction manual.

Terms of Use

Displays the software usage agreement.

version

Displays the LiveCast product number and version.

About this app

Displays the open-source license.

Report function

This function allows you to add a memo to a still image captured from a video[1] and create a report[2] (up to 100 reports can be created).

The reports are displayed in a list. You may check their content, modify the memo, change the still image, and delete them.
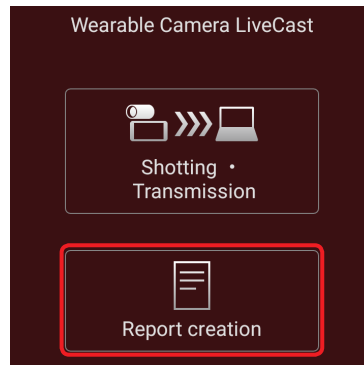
[1] The last video that has been filmed if there is no video the day the report is created.

[2] Reports can also be created for still images captured directly from the camera.
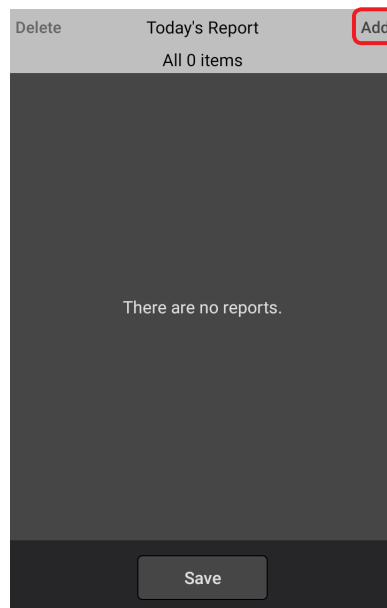
Report creation

1   Tap [Report creation] on the function selection screen.

- The report list screen is displayed.

  If no report has been created yet, "There are no reports." is displayed.

- Created reports are displayed if you tap [Report creation] within 12 hours after you saved a report **(→20)**.

2   Tap [Add].

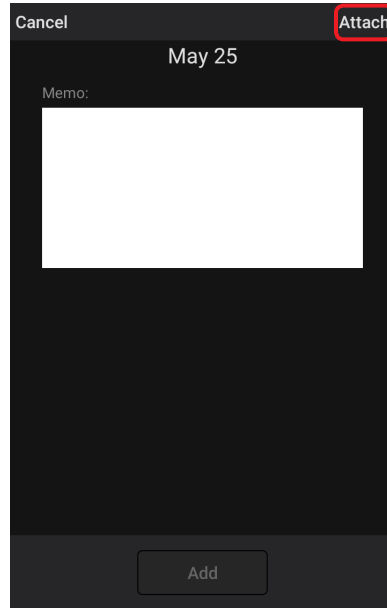- The memo entry screen is displayed. Select a still image and write a memo.

  Select still image : You can play back and display the videos and still images taken within the day (0:00-23:59) in chronological order and select the still image you want to attach to the report. **(→18)**

  Memo entry   : You can enter a text, such as comments and things to consider, for the still image that has been selected. **(→19)**

- A report can be created just by selected a still image or writing a memo.

■ Still image selection

1 Tap [Attach].

- The still image selection screen is displayed.
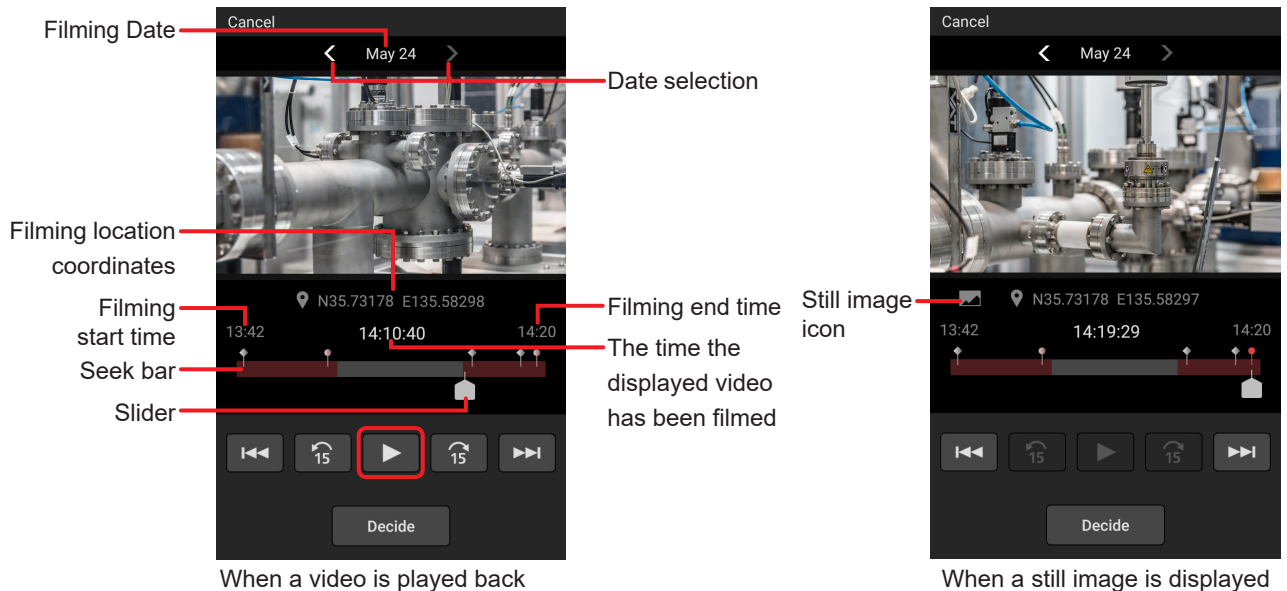

Memo entry screen

2 Tap [▶].

- Videos and still images taken the same day are displayed. The slider on the seek bar shows the time when the video being displayed has been filmed.

  Sections where a video has been filmed are shown in reddish brown on the seek bar, while sections where filming has not been performed are shown in gray.

  When the slider reaches a ◆ (gray: a mark added to an important scene) **(→10)** or a ● (pink: a still image), these symbols change to ◆ (red) and ● (red), respectively.

- To create a report for a day other than the current day, tap ◀ or ▶ to select a day, and then tap [▶].

When a video is played back
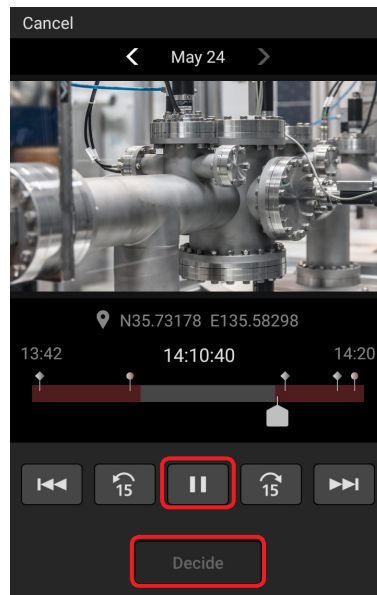

When a still image is displayed

- Operations during playback

  - ⬆ : Swipe the slider to adjust the playback position.

  - ↺15 ↻15 : Used to return 15 seconds before or go 15 seconds further within the video being played.

    - The playback is suspended when the skip destination is one of the following.
      - A still image recorded at the same time as the video
      - The end of the video
    - These buttons cannot be tapped when a still image is being displayed.

  - ⏮ ⏭ : Used to return to the previous or go to the next ◆ position, return or go to the next still image, or return to the start of the video and suspend the video.

    - Tapping ⏭ when a still image captured at the same time as the video is displayed suspends the video on the scene that directly comes after the still image.

3 **Tap** ▐▐ **and then tap [Decide]***.
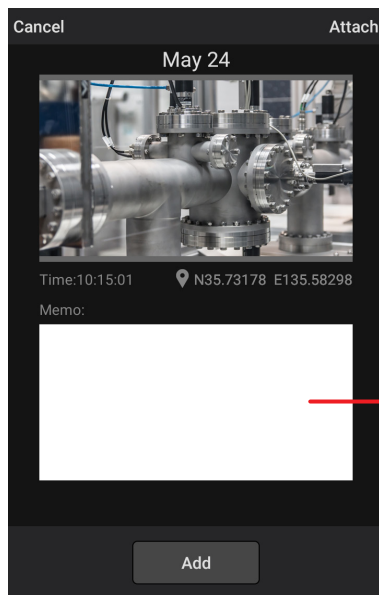 - The memo entry screen with the still image captured from the video is displayed.
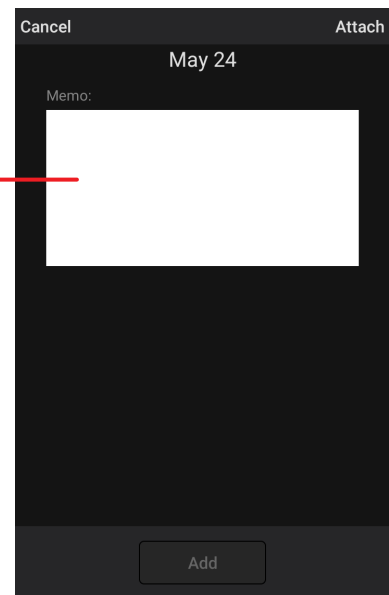 * Tap [Decide] when a still image is displayed.

■ Memo entry

1 **Tap the memo entry field and enter a text.**
  - Enter a text using the character entry screen that is displayed.
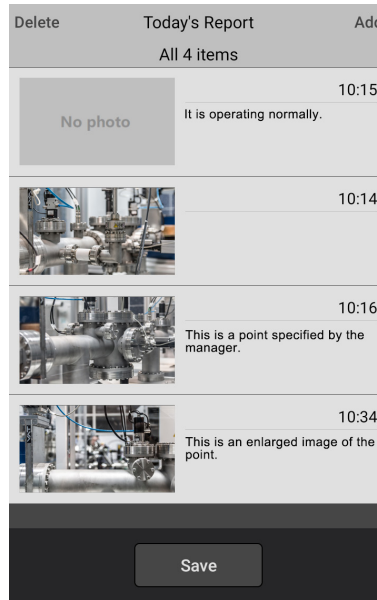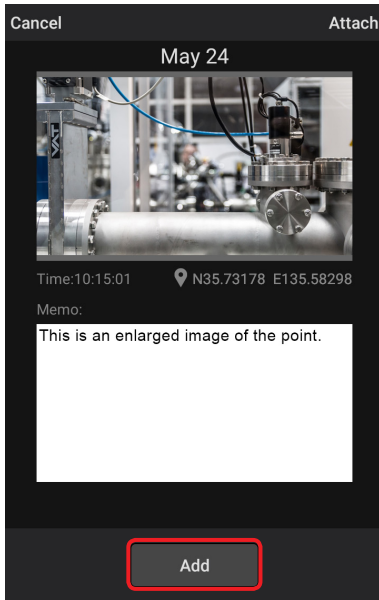

With a still image attached   Without a still image attached
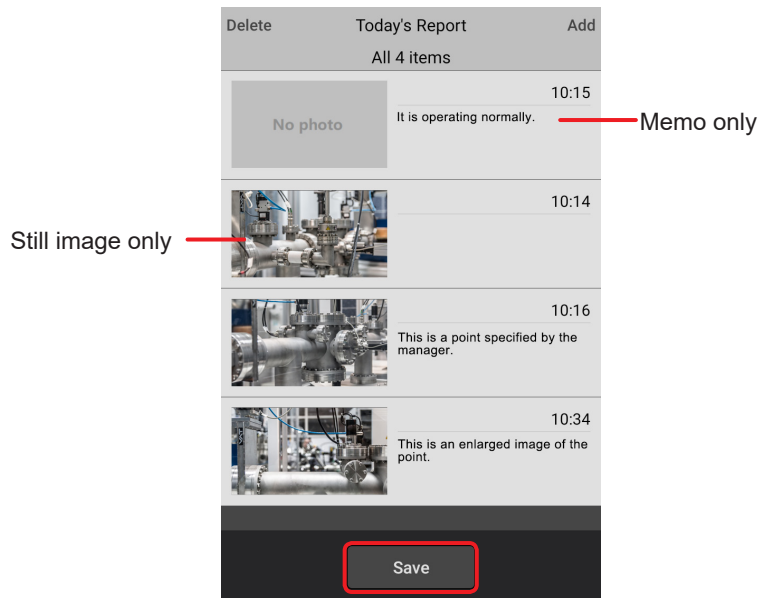
3 **Tap [Add].**
- The report is displayed in the list of reports to which still images and/or memos have been added. The list of reports is displayed in chronological order.
- The report creation time displayed corresponds to the following. Reports created on a day other than the current day show the creation date and time.
  - Reports with a still image attached :The time the selected video has been filmed
  - Report with only a memo   :The time [Add] has been tapped

Cancel	Attach
May 24	

Time:10:15:01 ⚲ N35.73178 E135.58298
Memo:
This is an enlarged image of the point.

Add

Delete	Today's Report	Add
All 4 items		

No photo — It is operating normally. — 10:15 ——— Report creation time
10:14
10:16 — This is a point specified by the manager.
10:34 — This is an enlarged image of the point.

Save

Report list screen

4 **Tap [Save].**
- The created report is saved in the report folder of the camera.

Delete	Today's Report	Add
All 4 items		

No photo — It is operating normally. — 10:15 ——— Memo only
Still image only ——— 10:14
10:16 — This is a point specified by the manager.
10:34 — This is an enlarged image of the point.

Save

● **Note**
- Tap [Cancel] to return to the previous screen.
- Tap a report to change the still image or the content of the memo.

Report deletion

Created reports can be deleted.

Preparation

- Display the report list screen. (→17)

1 **Tap [Delete], tap the report you want to delete, and then tap [Delete].**
- The report deletion screen is displayed after you tapped [Delete].