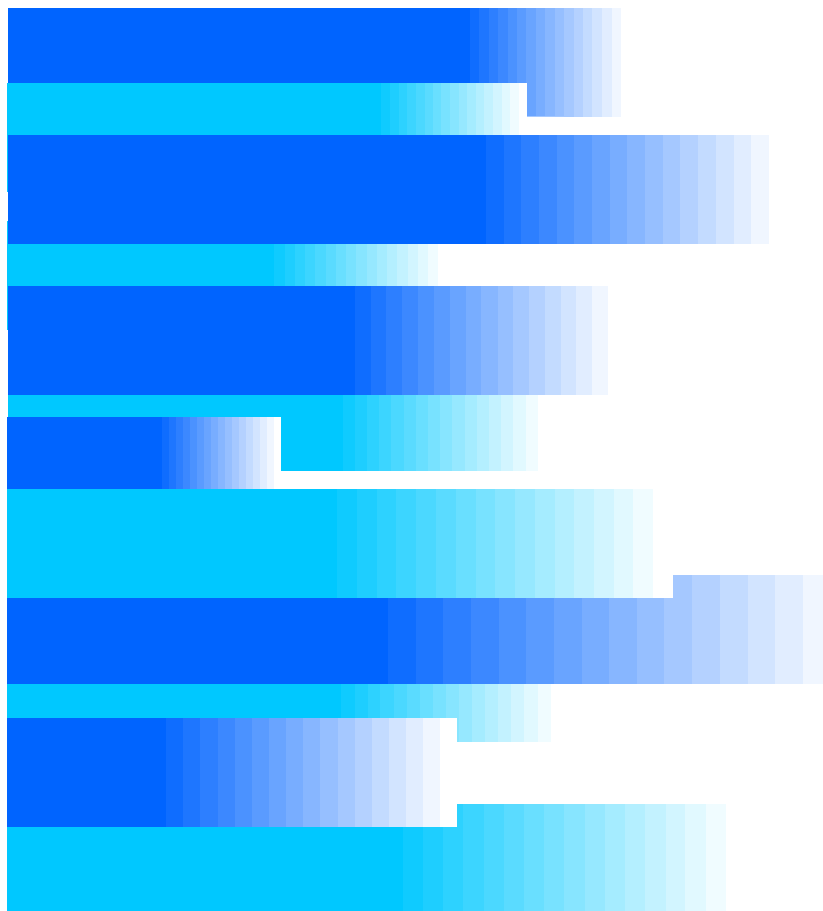



Operating Instructions

Front-End Application

Model No. **AG-JJLFE20P**



Exporting from the Front-End Application and Streaming are not available at present. Upgrading is scheduled for the future.

In this manual, each explanation for Exporting from the Front-End Application and Streaming is enclosed in a colored frame, like .

This manual includes the information for the AG-CPD10CRUP/AG-CPD15P, but this application does not support that at present.

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Contents

Overview 4

Operating Environment 6

Installing/Uninstalling..... 7

Installing 7

Preparations 7

Installing the Front-End application 7

Remote updating 8

Uninstalling 9

Procedures for Windows XP 9

Procedures for Windows Vista 9

Description of the Screen Displays ... 10

Main Screen 10

Toolbar 11

Video Display Section 14

Live Operation Section 15

Playback Section 18

Property Section 20

Info tab 20

Officers tab 21

Status tab 21

Snapshot tab 22

Bookmark tab (only in Archive mode) 22

Classify/Case tab (only in Archive mode) 23

Upload Screen 24

Export Screen 25

DVD Burn Screen 26

Restore Screen (Provided Only with the

AG-CPD15P and AG-CPD10CRUP) 27

Config Screen 28

Admin Password screen 28

Allocation (Video/Audio) screen 29

Camera1 screen 31

Date/Time screen 33

File Transfer screen 34

Network screen 35

Operation screen 38

Embedded OSD screen 39

Radar/GPS screen 40

Rec/Play screen 42

Registration screen 45

Service screen 47

Triggers screen 48

Operations 49

Startup and Termination 49

Starting up 49

Restarting 50

Terminating 50

Switching and Adjusting Display Mode 51

Switching Full/Simple Operation mode 51

Switching the QVGA and VGA sizes 52

Switching the Main video and Sub video 53

Switching Day and Night modes 54

Adjusting image brightness 55

Viewing a Live Video 56

Zooming in live mode 56

Making a backlit image easier to view 56

Making a dark image easier to view 57

Checking audio 57

Compensating image brightness 58

Recording 59

Starting and stopping recording 59

Zooming in record mode 60

Focusing 60

Adjusting image brightness in record mode 61

Turning off the [REC] lamp of the color camera

during recording 61

Turning audio recording On or Off 62

LPR setting 62

Adding bookmarks in record mode 63

Creating a snapshot picture in record mode 64

Playback in Archive Mode 65

Playback 65

Skip playback 66

Fast rewind, fast forward, and slow playback 67

Quick replay 68

Turning playback sound On or Off 68

Creating classify information 69

Adding bookmarks in archive mode 69

Creating a snapshot picture in archive mode 70

Displaying Information 71

Meta Information (Info) 71

Officer information (Officers) 71

Status information (Status) 72

Snapshot information 72

Bookmark information 73

Classify information (Classify/Case) 73

Uploading Files 74

Automatic uploading 74

Exporting Files 75

Creating a DVD 76

Restoring a File 78

Exporting from the Front-End Application is not available at present. Upgrading is scheduled for the future.

Administrator Setup 79

Basic Operations for the Administrator Setup

Screen 79

 Opening the Administrator Setup screen..... 79

 Setting of items..... 79

Allocation (Video/Audio) 80

 Resolution/RecordRate 80

 Connection Camera 80

 Preset Settings 81

 Audio In Select 82

 Init Audio Rec after power ON (Allocation)..... 82

Camera1 83

 Camera1 83

 Init Camera1 Settings after power ON 84

Date/Time 86

File Transfer 87

 Upload 87

 Export/DVD Burn 87

 Certification 88

 Folder 88

Network 89

 Streaming 89

 Recorder (PC LAN) 89

 Recorder (USB WIRELESS LAN) 90

 Recorder (UPLOAD LAN) 91

Operation..... 92

 Synchronize Time 92

 Version Up 92

 Format 93

 Delete All Files..... 94

 Clear Officer Information 94

 Factory Default 95

 Setting Copy 95

 Setting Retrieval 96

 Service Log 96

Embedded OSD 97

 Embedded OSD 97

 Embedded OSD Item 97

Radar/GPS 98

 Radar..... 98

 GPS..... 99

 Rec Start Information 100

Rec/Play 101

 Rec 101

 GPO 102

 Auto Power OFF..... 103

 Init Settings after power ON (Rec/Play) 103

 Classify 104

 Storage Capacity Warning..... 104

Registration 105

 Meta Definition 105

User Settings..... 108

 Limited Operation 108

Service 109

Triggers 110

 Trigger 110

 Trigger1-Trigger16..... 110

Indicator Lamps and Recorder Status 112

Setup 113

Admin Password 113

Allocation (Video/Audio) setup 113

Camera1 setup..... 117

Date/Time setup 119

File Transfer setup..... 120

Network setup 121

Embedded OSD setup 122

Radar/GPS setup 123

Rec/Play setup 124

Registration setup 126

Triggers setup..... 127

Error Messages 128

Messages Common to the Memory Card Video Recorder..... 128

Messages Unique to the Front-End Application ... 134

Camera Connection and Combination of Cameras 141

Service Logs..... 142

Contents 142

Format of Service Log 145

Software License Agreement..... 146

■ Display in this manual

Display on the screen may differ from the actual product.

Exporting from the Front-End Application and Streaming are not available at present. Upgrading is scheduled for the future.

Overview

AG-JJLFE20P Front-End Application for the Memory Card Video Recorder (hereinafter called "this application") is a Windows application for controlling the AG-CPD20P/AG-CPD15P/AG-CPD10CRUP Memory Card Video Recorder.

This application enables the following operations, which are also operable with the remote control panel (sold separately).

Viewing a Live Video

Video signals from a camera connected to the Memory Card Video Recorder can be viewed on the screen. A color camera connected to the [CAMERA 1] connector of the Memory Card Video Recorder can be controlled with this application.

Recording video and audio

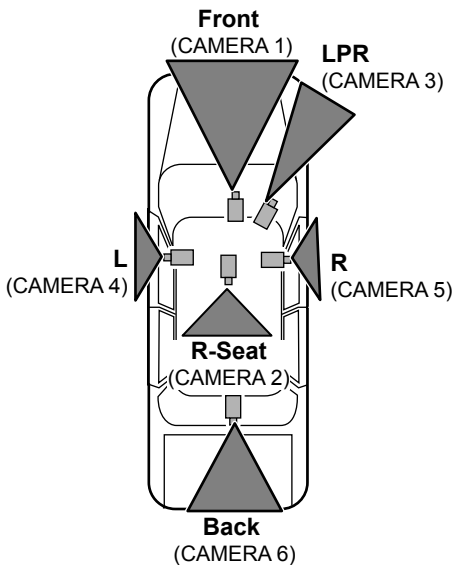
Video from the cameras and sound from the microphones connected to the Memory Card Video Recorder can be recorded in the SDHC Memory Cards loaded in the recorder.

Simultaneous display and recording of video signals from the cameras

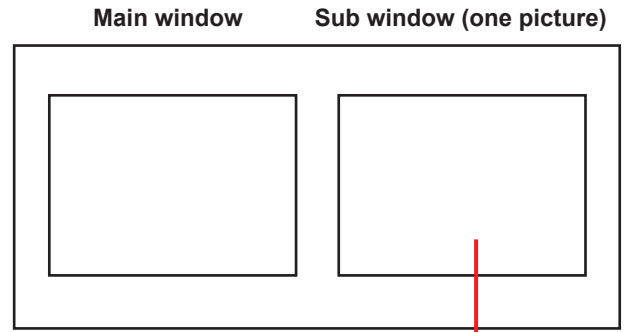
Pictures captured by the cameras connected to the Memory Card Video Recorder are displayed on a Main and/or Sub windows and are recorded. A maximum of 6 cameras can be connected to the Memory Card Video Recorder.

- **Main window:** A picture of a camera selected from among CAMERA 1, 2, and 3.
- **Sub window:** A picture or combined pictures from a camera or cameras as follows:
 - A picture from a camera selected from among CAMERA 2, and 3
 - Combined four pictures (one selected from among CAMERA 1, 2, and 3, and three from CAMERA 4, 5, and 6 in QUAD or PANORAMA size)

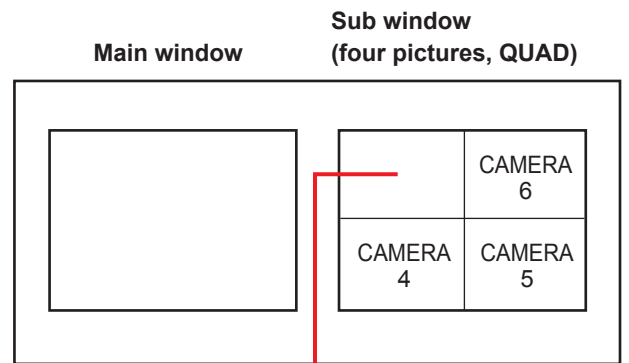
Example: When 6 cameras are connected



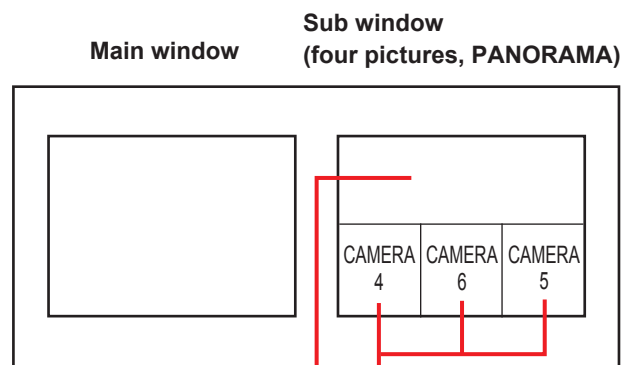
When the mirror (reversed image) function is provided with CAMERAs 4, 5, and 6, enable this function. If this function is not provided, connect the R-side camera to CAMERA 4 and the L-side camera to CAMERA 5.



Selected from among CAMERA 2, and 3



Selected from among CAMERA 1, 2, and 3



Pictures from three cameras are reduced to 1/9.

Selected from among CAMERA 2, and 3 (Upper and lower parts of a picture is cut by 1/6)

Overview (continued)

Playing back recorded video and audio

It is possible to play back video and audio recorded in the SDHC Memory Cards that are loaded in the Memory Card Video Recorder.

Uploading data for the Memory Card Video Recorder

It is possible to upload data recorded in the SDHC Memory Cards that are loaded in the Memory Card Video Recorder to the Back-End server. Meta information and bookmark information are also uploaded. Uploaded data are deleted from the SDHC Memory Cards.

Exporting data

Data recorded in the SDHC Memory Cards that are

Exporting from the Front-End Application is not available at present. Upgrading is scheduled for the future.

Creating a DVD

It is possible to export data recorded in the SDHC Memory Cards that are loaded in the Memory Card Video Recorder in DVD-Video format. Meta information can be embedded in the data to be exported. Exported data can be deleted from the SDHC Memory Cards.

Configuration for the administrator

Settings for operation of the Memory Card Video Recorder can be performed.

Operating Environment

A PC that meets the following operating environment is required for user of this application.

CPU: Intel Core Duo 1.66 GHz or more
(recommended)

RAM: 512 MB or more (for Windows Vista
Business, 1 GB or more) (recommended)

Display: 1024×768 dot or more

LAN: 1000BASE-T/100BASE-TX

OS: Windows XP Professional Service Pack 3 or
later, Windows Vista Business Service Pack 2 or
later

Add on: .Net Framework 3.5 Service Pack 1

Windows Installer3.1

Adobe Reader 8 or 9

Notes

- When live videos from the recorder is being displayed (streaming) or a stored video file is being played using this application, frames may be dropped or sound may be broken up, depending on the PC status.
- If security software is running together with this application, the operation of this application may slow down or the connection with the recorder may be released. Such phenomena may be improved by changing the settings of Firewall of the security software.
- While copying data to a DVD using this application, never do the following operations:
 - Turning off the power of the PC and peripheral devices.
 - Running another application.
 - Starting the utility for system maintenance.
 - Connecting or disconnecting peripheral devices.
 - Moving the PC
 - Imparting vibration or shock to the PC
 - For a notebook PC, avoid supplying power with a battery (For supplying power with a battery, be sure to fully charge the battery.)
 - Changing the power setting of PC

Streaming is not available at present. Upgrading is scheduled for the future.

Installing/Uninstalling

Installing

The Front-End application is installed with the following procedures. For installing the application, WindowsInstaller V3.1 and .Net Framework 3.5 Service Pack 1 must be installed on the computer.

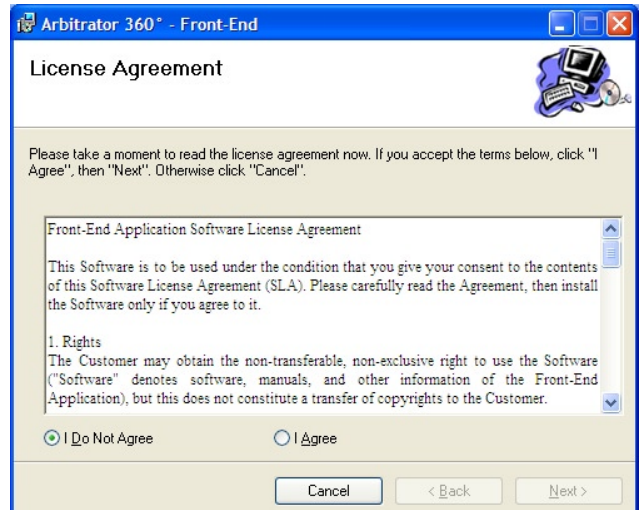
Preparations

1. **Download "WindowsInstaller V3.1" from the Microsoft download site.**
If the WindowsInstaller has been installed, update it.
2. **Install the "WindowsInstaller V3.1" by following the instructions.**
3. **Download "Microsoft .NET Framework 3.5 Service Pack 1" from the Microsoft download site.**
If .Net3.5 has been installed, update it.
4. **Install the "Microsoft .NET Framework 3.5 Service Pack 1" by following the instructions.**

Installing the Front-End application

1. Click on FESetup.msi.

The License Agreement screen appears



2. Click on "I Agree".



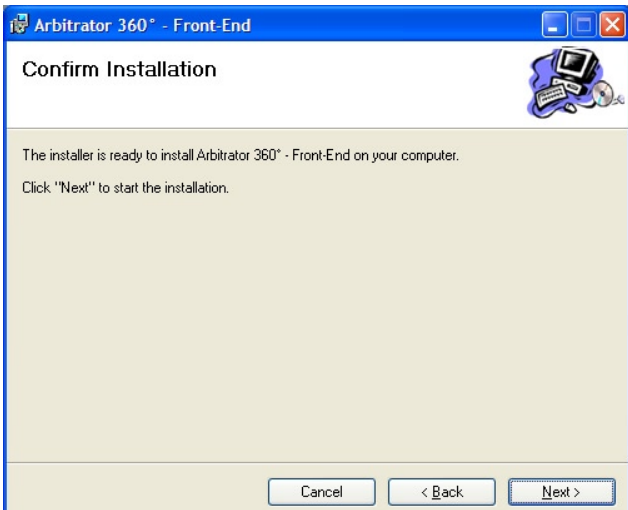
Installing/Uninstalling (continued)

3. Click on [Next].



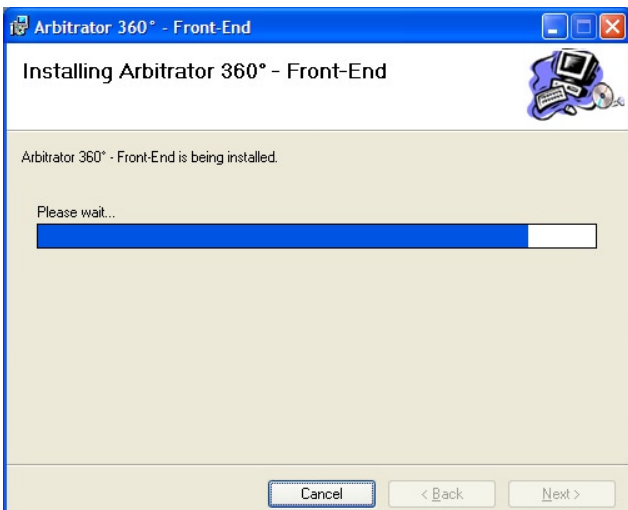
4. Click on [Next].

The confirmation screen appears.

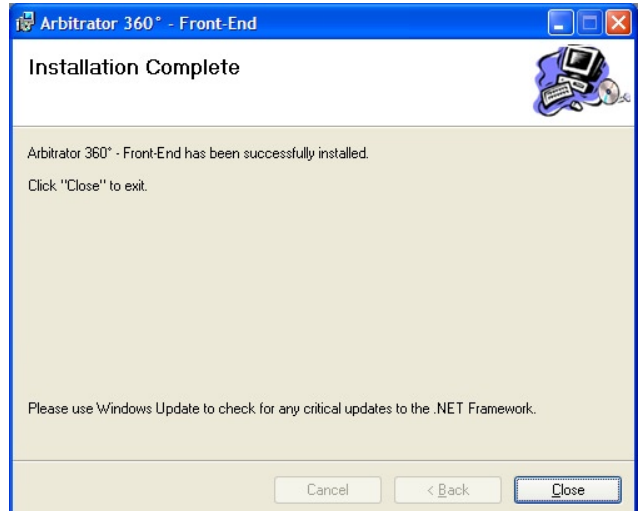


5. Click on [Next].

The file will be transferred to the following folder:
/Program Files/Panasonic/ICV/FE



When the file transfer is completed, the screen shown below appears.



6. Click on [Close].

Installation is completed, and the shortcut icon for the Front-End application will be placed on the desktop.

Remote updating

The Front-End application can be remotely updated when the following conditions are satisfied:

- A PC with the Front-End application installed is connected to the Back-End Server.
- The latest version of the Front-End application is registered with the Back-End server.
- Remote updating is set on the Back-End Administrator application.

When the Front-End application receives an update module from the Back-End Server, it is automatically updated upon being restarted.

Notes

- If the Interactive services dialog detection dialog box is displayed, select "Show me the message."
- If a dialog box prompting you to select Try Again, Continue, or Exit Installation is displayed, select Continue.
- If a message "You must restart your system for the configuration changes made to Arbitrator 360° – Back-End Client to take effect. Click Yes to restart now or No if you plan to manually restart later." is displayed, click on [Yes]. Your PC will restart. If the PC does not restart, recording on a DVD cannot be executed correctly.

Uninstalling

Uninstall the Front-End application following the procedures below.

Procedures for Windows XP

1. **Click on the [Start] button.**
2. **Select Control Panel**
3. **Double-click on Add or Remove Programs.**
The Currently installed programs window opens.
4. **Select the program to be uninstalled.**
5. **Click on the [Remove] button.**
A confirmation message appears.
6. **Click on the [Yes] button.**
Uninstalling of the selected program starts.

Procedures for Windows Vista

1. **Click on the [Start] button.**
2. **Select Control Panel**
3. **Double-click on Programs and Features.**
The Uninstall or change a program window opens.
4. **Select the program to be uninstalled.**
5. **Click on Uninstall.**
The User Account Control window opens.
6. **Click on the [Allow] button.**
The Uninstall window opens.
7. **Click on the [Uninstall] button.**
Uninstalling of the selected program starts.

Description of the Screen Displays

Main Screen

When you login the Front-End application, the Live-mode screen will appear. On this screen, you can monitor pictures captured by the cameras connected to the Memory Card Video Recorder and record the pictures. On the Archive-mode screen, you can play back the recorded pictures.

Note on first login

If the Live-mode screen does not appear upon first login of the Front-End application, check the following:

If the Windows Security Alert dialog box is displayed

1. Select "Unblock."
2. Click on [OK].

If the Live-mode screen does not appear

Check the Firewall setting and change the setting as described below.

Method 1:

1. Click on [Start].
2. Select [Control Panel].
3. Select "Windows Firewall."
4. For Windows Vista, select "Change Setting."
5. Check the Firewall setting.

If it is set to ON, check that the "Don't allow exceptions" check box is unchecked.

If checked, uncheck it.

Method 2:

1. Click on [Start].
2. Select [Control Panel].
3. Select "Windows Firewall."
4. Select the Exceptions tab.
5. Check the Front-End check box.
6. Click on [OK].

• Live mode

Toolbar
(See page 11.)

Live operation section
(See page 15.)

Video display section
(See page 14.)

Property section
(See page 20.)

• Archive mode

Toolbar
(See page 11.)

Playback section
(See page 18.)

Video display section
(See page 14.)

Property section
(See page 20.)

Description of the Screen Displays (continued)


Toolbar

The buttons on the toolbar of the Main screen can select the operation mode of the Front-End application and switch the display mode of the screen. The lamps indicate the status of the Memory Card Video Recorder.

When the AG-CPD20P is connected





- ① **Live button**
For shifting to Live mode. The Main screen is displayed.
(See "Viewing a Live Video," page 56.)
- ② **Archive button**
For shifting to Archive mode. The Main screen is displayed.
(See "Playback in Archive Mode," page 65.)
- ③ **Upload button**
For shifting to Upload mode.
(See "Upload Screen," page 24, and "Uploading Files," page 74.)
- ④ **Export button**
For shifting to Export mode.
(See "Export Screen," page 25, and "Exporting Files," page 75.)
- ⑤ **DVD Burn button**
For shifting to DVD Video Burn mode.
(See "DVD Burn Screen," page 26, and "Creating a DVD," page 76.)
- ⑥ **Config button**
For shifting to Configuration mode.
(See "Config Screen," page 28, and "Administrator Setup," page 79.)
- ⑦ **Ready lamp**
Lights when the SDHC Memory Cards loaded in the SDHC Memory Card slots are recordable.
(See "Indicator Lamps and Recorder Status," page 112.)
- ⑧ **Busy lamp**
Lights or flashes while an SDHC Memory Card is being accessed, such as during recording or playback.
(See "Indicator Lamps and Recorder Status," page 112.)



- ⑨ **Upload/Streaming lamp**
The Upload lamp lights while data are being uploaded or exported.
The Steaming lamp lights during streaming.

(See "Indicator Lamps and Recorder Status," page 112.)

Exporting from the Front-End Application and Streaming are not available at present. Upgrading is scheduled for the future.

Description of the Screen Displays (continued)



⑩ **QVGA/VGA switch button** ( )
 Select to display the video at the size of either QVGA or VGA.
 (See "Switching the QVGA and VGA sizes," page 52.)

⑪ **Main/Sub video switch button** ( )
 During 1-screen mode, select to display either main video or sub video.
 (See "Switching the Main video and Sub video," page 53.)



Note

This button is enabled in simple operation mode or VGA mode when main and sub videos are available.

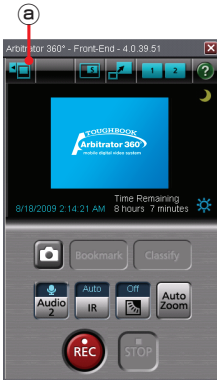
⑭ **Help button**
 When this button is clicked, the mouse pointer will be turned to "→+?". Clicking on a button or input field with this pointer will display the description of the clicked button/input field.

Note

If you use Acrobat 9 or 8, the description may not be displayed correctly when you click on a button or input field.

⑫ **Full/Simple Operation mode switch button (only in Live mode)** ( )
 Switches the display mode between Full Operation mode and Simple Operation mode.
 (See "Switching Full/Simple Operation mode," page 51.)

• **Simple Operation mode**

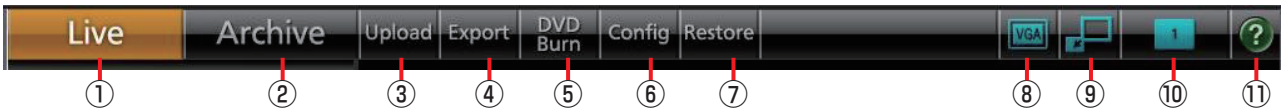




① **Camera1 control panel display button** ( )
 The same operation buttons as those on the Camera1 tab are displayed.
 (See "Camera1 tab," page 16.)



⑬ **Preset switch button**
 Select a display pattern from among Presets 1, 2, and 3.
 (See "Switching the Main video and Sub video," page 53, and "Preset Settings," page 81.)

Description of the Screen Displays (continued)

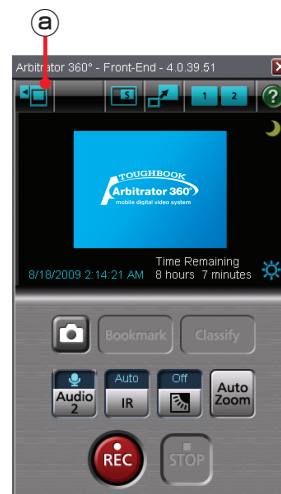
When the AG-CPD15P or AG-CPD10CRUP is connected





- ① **Live button**
For shifting to Live mode. The Main screen is displayed.
(See "Viewing a Live Video," page 56.)
- ② **Archive button**
For shifting to Archive mode. The Main screen is displayed.
(See "Playback in Archive Mode," page 65.)
- ③ **Upload button**
For shifting to Upload mode.
(See "Upload Screen," page 24, and "Uploading Files," page 74.)
- ④ **Export button**
For shifting to Export mode.
(See "Export Screen," page 25, and "Exporting Files," page 75.)
- ⑤ **DVD Burn button**
For shifting to DVD Video Burn mode.
(See "DVD Burn Screen," page 26, and "Creating a DVD," page 76.)
- ⑥ **Config button**
For shifting to Configuration mode.
(See "Config Screen," page 28, and "Administrator Setup," page 79.)
- ⑦ **Restore button**
For restoring a file.
(See "Restoring a File," page 78.)
- ⑧ **QVGA/VGA switch button ( )**
Select to display the video at the size of either QVGA or VGA.
(See "Switching the QVGA and VGA sizes," page 52.)

- ⑨ **Full/Simple Operation mode switch button (only in Live mode) ( )**
Switches the display mode between Full Operation mode and Simple Operation mode.
(See "Switching Full/Simple Operation mode," page 51.)

• Simple Operation mode

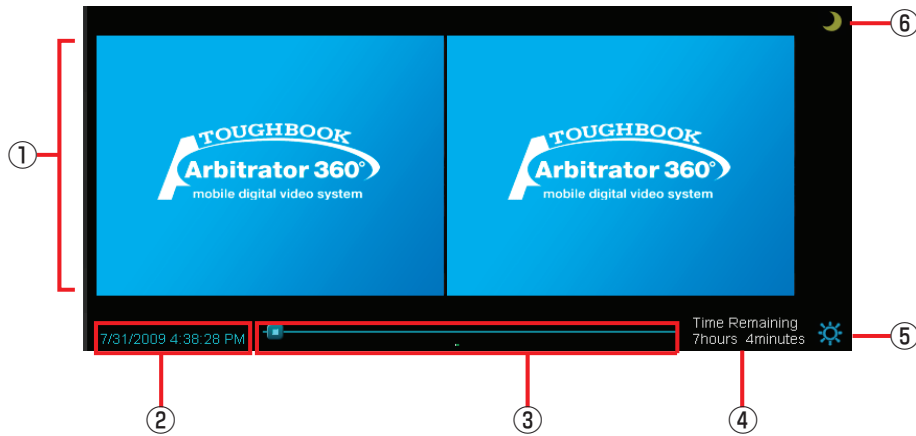


- ⑨ **Camera1 control panel display button ( )**
The same operation buttons as those on the Camera1 tab are displayed.
(See "Camera1 tab," page 16.)
- ⑩ **Camera switching button**
When the QVGA-size video display is selected, select a camera to be displayed. Each click on this button will toggle CAM1 and CAM2.
- ⑪ **Help button**
When this button is clicked, the mouse pointer will be turned to "→+?". Clicking on a button or input field with this pointer will display the description of the clicked button/input field.

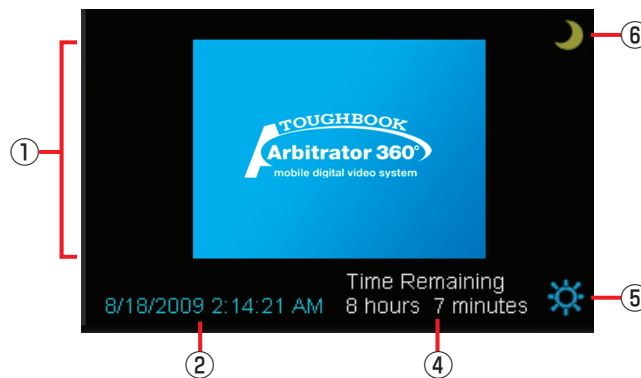
Video Display Section

In this section, you can monitor pictures captured by the cameras connected to the Memory Card Video Recorder and play back the recorded pictures.

Full operation mode



Simple operation mode



① **Video display section**

When 1 VGA-size video is displayed, the video is displayed at the center. When 2 videos are displayed, the Main video is displayed on the left and the Sub video is displayed on the right. (See "Switching and Adjusting Display Mode," page 51.)

② **Date and time indication**

During Live mode: The current date and time are displayed.

During Archive mode: The date and time of the current playback location is displayed.

③ **Seek bar (only in Archive mode)**

It is displayed only in Archive mode. The current playback location is displayed. Sliding the switch will change a playback location. Clicking on the left side of the switch will move the playback location backward by 1/20 of the content length, and clicking on the right side will move the playback location forward by 1/20 of the content length.

The locations of the classify information and bookmark are displayed on the bar.

④ **Time Remaining indication**

The remaining video recordable duration on the SDHC Memory Cards loaded in the Memory Card Video Recorder is displayed. If the current recordable duration becomes shorter than the preset value, the indication turns red, and a beep sounds every 30 seconds.

⑤ **Brightness adjustment button/indication**

The brightness of the video display is adjusted.

When the  button is clicked, the current brightness level is displayed. Clicking on the [] button makes the video display brighter, and clicking on the [] button makes it darker. (See "Adjusting image brightness," page 55.)

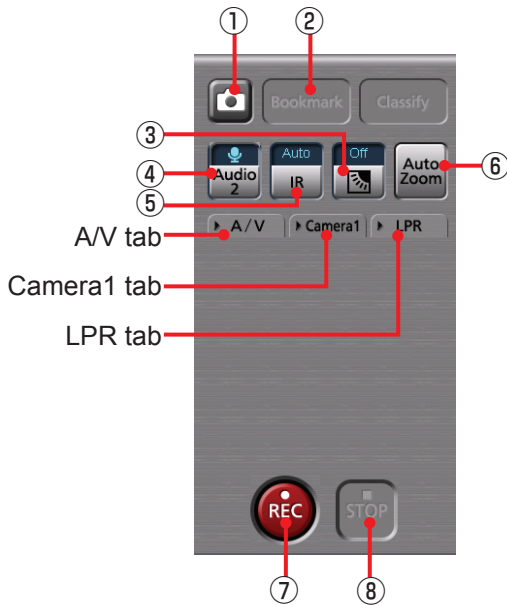
⑥ **Day/Night switch button**

The screen image is switched between Day mode and Night mode. The entire screen will become darker in Night mode.

(See "Switching Day and Night modes," page 54, and "Day/Night View," page 86.)

Live Operation Section

In this section, you can control the pictures in the live mode.



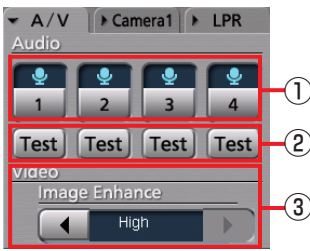
- ① **Snapshot button**
A snapshot picture of a current-time live video will be stored as a .BMP file. Meta information will also be recorded with the snapshot picture if this button is clicked during recording.
(See "Creating a snapshot picture in record mode," page 64.)
- ② **Bookmark button**
Click on this button during recording to create a current-time bookmark.
(See "Adding bookmarks in record mode," page 63.)
- ③ **Backlight compensation button/indication**
Turns the backlight compensation On or Off. The current setting is indicated on the button.
(See "Making a backlit image easier to view," page 56.)
- ④ **Audio 2 button/indication**
Select whether the audio channel 2 input signal is to be recorded or not. The current setting is indicated on the button.
 - : The selected audio channel signal is recorded.
 - : The audio channel 2 signal is not recorded.
 (See "Turning audio recording On or Off," page 62.)

- ⑤ **IR button/indication**
Switches IR mode of the camera. Each time this button is clicked, On, Off, and Auto is cyclically selected. The current setting is indicated on the button.
 - On:** Sets IR mode to ON.
 - Off:** Sets IR mode to Off.
 - Auto:** Automatically changes IR mode depending on ambient brightness.
(See "Making a dark image easier to view," page 57.)
- ⑥ **Auto Zoom button**
Controls the automatic zooming function of the camera. Zoom-in, pause, and zoom-out operation will be automatically performed. The zoom ratio and pause time can be set. If other camera operation is performed during an auto zoom operation, auto zoom will be canceled.
(See "Zooming in live mode," page 56, and "Camera1," page 83.)
- ⑦ **REC button**
Click to start recording live video and audio. "REC" is indicated on the display during recording and a red frame appears around the video. A signal tone sounds every 30 seconds.
(See "Starting and stopping recording," page 59.)
- ⑧ **STOP button**
Click to stop recording live video and audio.
(See "Starting and stopping recording," page 59.)
When the setting of Force Classify on the Rec/Play screen in Administrator Setup is FORCE or ENABLE, the Classify Input screen is displayed.
(See "Setting the classify information," page 59, and "Classify," page 104.)

Description of the Screen Displays (continued)

A/V tab

This is a panel for audio and video control.



① **Recording audio switch buttons/indications**

Switch whether the selected audio channel is to be recorded or not. The current setting is indicated on the button.

: The selected audio channel signal is recorded.

: The selected audio channel signal is not recorded.

(See "Turning audio recording On or Off," page 62.)

② **Test buttons**

While a button is held pressed, the corresponding audio channel signal will be output from the PC. (See "Checking audio," page 57.)

③ **Video Image Enhance button**

For adjusting the brightness of a dark video image on the Main screen.

Click on the or button to change the setting. The current setting is indicated at the center.

Off: No video image enhancing

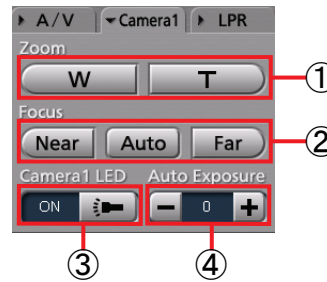
Low: Low video image enhancing

High: High video image enhancing

(See "Compensating image brightness," page 58)

Camera1 tab

This is a panel for operating the color camera. The Camera1 tab cannot be selected if no color camera is connected to the Memory Card Video Recorder.



① **Zoom buttons**

For adjusting zooming.

W: For zooming out

T: For zooming in

(See "Zooming in record mode," page 60.)

② **Focus buttons**

For adjusting focus.

Near: For focusing on a object nearby

Auto: For automatic focusing

Far: For focusing on a distant object

(See "Focusing," page 60.)

③ **Camera1 LED button/indication**

Turns the [REC] lamp of the color camera On or Off. The current setting is indicated on the left of the button.

(See "Turning Off the [REC] lamp of the color camera during recording," page 61.)

④ **Auto Exposure button/indication**

For adjusting the exposure. The current setting value is indicated at the center.

-: Each click on this button decreases the exposure value by 1. The value can be decreased to -2.

+: Each click on this button increases the exposure value by 1. The value can be increased up to 2.

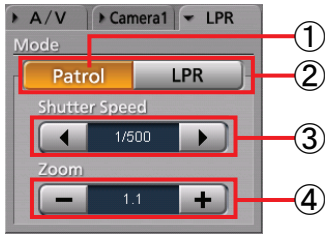
(See "Adjusting image brightness in record mode," page 61.)

Description of the Screen Displays (continued)

LPR tab

The LPR tab is displayed when Init LPR Mode is set to ENABLE on the Camera1 screen in Administrator Setup.

(See "Init LPR Mode," page 85.)



(See "LPR setting," page 62.)

① Patrol button

For setting the Memory Card Video Recorder to Patrol mode. The values for Shutter Speed and Zoom are set for Patrol mode.

② LPR button

For setting the Memory Card Video Recorder to LPR mode. The values for Shutter Speed and Zoom are set for LPR mode.

③ Shutter Speed buttons/indication

Set the shutter speed. The current setting value is indicated at the center.

[◀] or [▶] button increases/decreases the

shutter speed. Each click on one of these buttons changes the setting value, as shown below:

In Patrol mode: Auto, 1/100, 1/500, 1/1000

In LPR mode: Auto, 1/500, 1/1000

(See "Setting the shutter speed," page 62.)

④ Zoom buttons/indications

Set the zoom. The current setting value is indicated at the center.

Clicking on the [-] or [+] button increases/decreases the zoom value. The adjustable range is from 1.0 to 22.0. The magnitude of changes varies depending on the zoom magnification, as shown below:

The zoom range x1.0 to x3.0: increase and decrease by x0.1

The zoom range x3.0 to x5.0: increase and decrease by x0.2

The zoom range x5.0 to x10.0: increase and decrease by x0.5

The zoom range x10.0 to x22.0: increase and decrease by x1.0

(See "Setting the zoom" page 63.)

Playback Section



- ① **Snapshot button**
A snapshot picture will be created and stored as a BMP file in the folder that is set in Administrator Setup.
If this button is clicked during playback, the playback pauses and a snapshot picture is created. The playback location for a snapshot picture is recorded as meta information. The Snapshot tab is displayed in the Property section. This button is disabled during Fast Forward or Fast Rewind mode.

(See "Snapshot tab," page 22, and "Creating a snapshot picture in archive mode," page 70.)

- ② **Bookmark button**
For creating a new bookmark.
If this button is clicked during playback, the playback pauses and a bookmark is created. The Bookmark tab is displayed in the Property section. This button is disabled during Fast Forward or Fast Rewind mode.
(See "Adding bookmarks in archive mode," page 69.)

- ③ **Classify button**
For creating a new classify information item.
If this button is clicked during playback, the playback pauses and a classify information item is created. The Classify tab is displayed in the Property section. This button is disabled during Fast Forward or Fast Rewind mode, or if any classify tag is registered.
(See "Classify/case tab," page 23, and "Creating classify information," page 69.)

Audio tab

This is a panel for audio control.

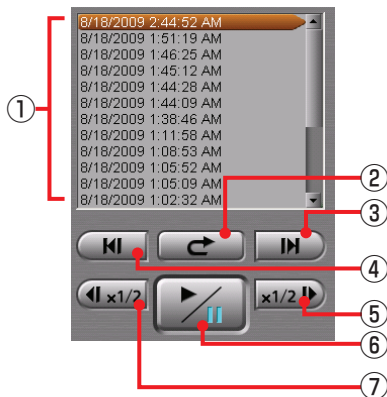






- ① **Audio mute buttons/indications**
Select whether the playback sound of the selected audio channel is On or OFF. The current setting is indicated on the button.
 - 🔊: Audio mute Off (Playback sound On)
 - 🔇: Audio mute On (Playback sound Off)
 If no sound is recorded on a channel, the button corresponding to the channel is disabled. Mute status is memorized in the Front-End Application, and will be restored when the Front-End Application restarts.
(See "Turning playback sound On or Off," page 68.)

Description of the Screen Displays (continued)

Playback Section

This panel controls playback of video signals recorded on the SDHC Memory Cards.
(See "Playback," page 65.)



- ⑥   **(Playback/Pause) button/ indication**
Each click on this button will toggle playback and pause modes. The current status is indicated on the button.
At the end of the file, playback pauses.
- ⑦   **(Fast rewind/Slow reverse playback) button**
If this button is clicked during playback, fast rewind playback will start.
If this button is clicked during pause, slow reverse playback will start.
Each time this button is clicked, fast rewind or slow reverse playback speed changes.
At the beginning of the file, playback pauses.

① **File list**

For displaying a list of video files recorded on the SDHC Memory Cards that are loaded in the Memory Card Video Recorder.
Double-clicking on a filename will start playback of the file from the beginning.

②  **(Quick replay) button**

Playback from a location 7 seconds before the button is clicked starts. If this button is clicked within 7 seconds from the beginning of a file, playback starts from the beginning of the file.

③   **(Skip forward/Frame forward) button**

If you click on this button during playback, fast forward, or fast rewind mode, playback from the beginning of the next file on the file list will start.
If this button is clicked during pause, an image one frame after the current frame will be displayed.

④   **(Skip back/Frame rewind) button**

If this button is clicked within 5 seconds from the beginning of a file, playback will start from the beginning of the previous file on the file list. If this button is clicked after 5 seconds from the beginning of a file, playback will start from the beginning of that file.

If this button is clicked during fast forward or fast rewind mode, playback from the beginning of the previous file on the file list will start.

If this button is clicked during pause, an image one frame before the current frame will be displayed.

⑤   **(Fast forward/Slow playback) button**

If this button is clicked during playback, fast forward playback will start.

If this button is clicked during pause, slow playback will start.

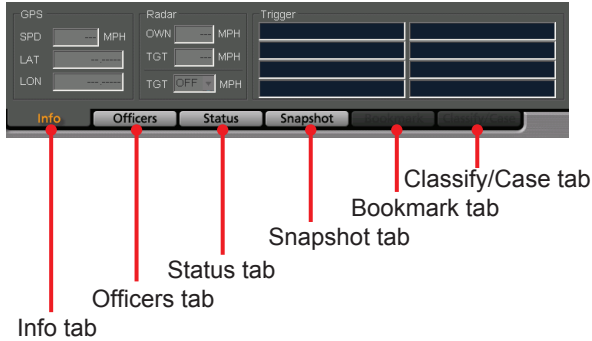
Each time this button is clicked, fast forward or slow playback speed changes.

At the end of the file, playback pauses.

Description of the Screen Displays (continued)

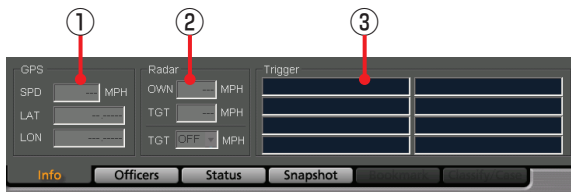
Property Section

You can check the information for the pictures in the live mode, or for the recorded pictures. Click on a tab, and the corresponding page will be displayed.



Info tab

Meta information is displayed.
(See "Meta information," page 71.)



① GPS information

The following information obtained from the GPS will be displayed.
In Live mode, the displayed data are updated at intervals that are set on the Radar/GPS screen in Administrator Setup.
In Archive mode, the displayed data are updated according to data sent from the Memory Card Video Recorder.

SPD: Vehicle speed

LAT: Latitude. 00.000000N denotes north latitude, and 00.000000S denotes south latitude.

LON: Longitude. 000.000000W denotes west longitude, and 000.000000E denotes east longitude.

Note

If the AG-CPD15P Memory Card Video Recorder is used, the GPS information in Live mode may not be displayed until the vehicle moves.

② Radar information

The following information obtained from the radar gun will be displayed.
In Archive mode, the displayed data are updated, according to data sent from the Memory Card Video Recorder.

OWN: Speed of your vehicle

TGT: Speed of the target vehicle

TGT (setting): Speed of a target vehicle that has been set in the Memory Card Video Recorder. If the TGT value exceeds this setting value, a trigger event will be generated.

Notes

- TGT (setting) is displayed only when Trigger 15 or Trigger 16 is set to TGT(REC), TGT(P1REC), TGT(P2REC), or TGT(P3REC) are set to TGT on the Triggers screen in Administrator Setup. (See "Triggers," page 110.)
- TGT (setting) is not displayed if Connection of Radar is set to OFF on the Radar/GPS screen. (See "GPS," page 99.)

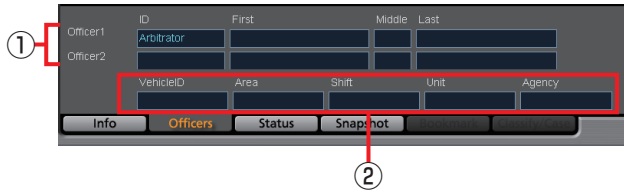
③ Trigger information

The GPI input status is displayed when Trigger is set to ON and the trigger name is specified on the Trigger screen in Administrator Setup.
If the number of connected GPI is up to 8, the status is displayed in 4 lines and 2 rows. If the number of connected GPI is more than 8, the status is displayed in 4 lines and 4 rows. The GPI channel number and trigger name are displayed like "GPI channel number : trigger name" in each cell.

Description of the Screen Displays (continued)

Officers tab

Officer information is displayed.
In Live mode, the setting data of the Memory Card Video Recorder are displayed.
In Archive mode, the meta file data embedded in the currently selected video signal are displayed.
(See "Officer information," page 71.)



- ① **Officer1, Officer2 information**
Data for Officers 1 and 2 are displayed.

ID: Officer ID
First: First name
Middle: Middle name
Last: Last name

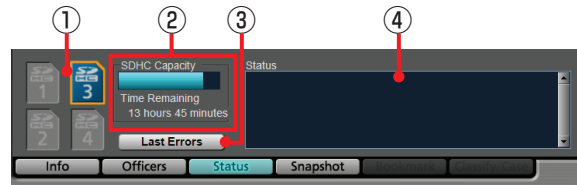
- ② **Shift information**
Vehicle ID: Vehicle ID
Area: Area
Shift: Shiftwork pattern
Unit: Unit
Agency: Police agency

Note

The name of each field is the default setting for Field1 to Field5. The field name can be changed upon installation of the Back-End server.

Status tab

The status of the SDHC Memory Cards loaded in the Memory Card Video Recorder is displayed.
(See "Status information," page 72.)



- ① **SDHC indication**
The status of the SDHC Memory Cards loaded in the Memory Card Video Recorder is displayed.
In Live mode, the status of the memory card to be used for recording is displayed.
In Archive mode, the status of the memory card in which the video signal being played back is stored is displayed.
- ② **SDHC Capacity indication**
The remaining duration of the SDHC Memory Cards loaded in the Memory Card Video Recorder is displayed with a bar indication. The remaining recordable time with the current setting will be displayed in Time Remaining.
Just after an SDHC memory card is inserted, the bar indicates full capacity for about 1 minute.
- ③ **Last Errors button**
For displaying the most recent error data.
- ④ **Status indication**
In Live mode, an error code and a message for registering Snapshot, Bookmark, and Classify are displayed.
In Archive mode, the recording date and time of the video file selected in the file list, the playback duration, and a message for registering Snapshot, Bookmark, and Classify are displayed.

Description of the Screen Displays (continued)

Snapshot tab

The snapshots and their notes are displayed.
(See "Snapshot information," page 72.)



① Snapshot List

A list of snapshots in the selected video file is displayed. If a snapshot is selected, playback pauses at the location of the snapshot.

② Snapshot folder path

The directory of snapshot data storage location that has been set on the File Transfer screen in Administrator Setup is displayed.

③ Note

The note for the snapshot selected in the Snapshot List is displayed. The note can be edited if playback is paused at the snapshot location.

Note

The note of a snapshot cannot be edited in Live mode.

④ E-mail button

For attaching the snapshot selected in the Snapshot List to e-mail.
This button is disabled if no snapshot is selected.
The latest snapshot will be attached to e-mail during Live mode.

Note

This button functions correctly only when the internet e-mail program for Windows is registered.
For registering the internet e-mail program, refer to Windows Help.

⑤ Apply button

For updating snapshot data when the note of a snapshot is edited. This button is disabled when no note is edited.

⑥ Cancel button

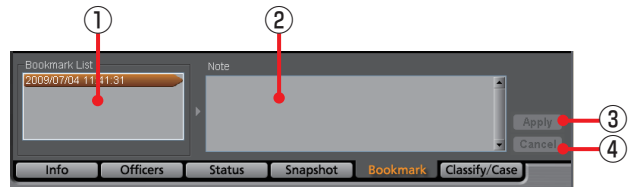
If you click on this button before clicking on the Apply button while editing a note, that editing is canceled, and the note before editing will be displayed. This button is disabled while no note is being edited.

Note

When the AG-CPD15P is used, Snapshot List and Note are displayed in gray and cannot be operated. Only the E-mail button is enabled.

Bookmark tab (only in Archive mode)

The bookmarks and their notes are displayed.
(See "Bookmark information," page 73.)



① Bookmark List

A list of bookmarks in the selected video file is displayed. If a bookmark is selected, the bookmark position is located and the unit enters playback pause mode.
When the playback position reaches a bookmark position during playback, the bookmark will be selected.

② Note

The note for the bookmark selected in the Bookmark List is displayed. The note can be edited if playback is paused at the bookmark location.

③ Apply button

For updating bookmark data when the note of a bookmark is edited. This button is disabled when no note is edited.

④ Cancel button

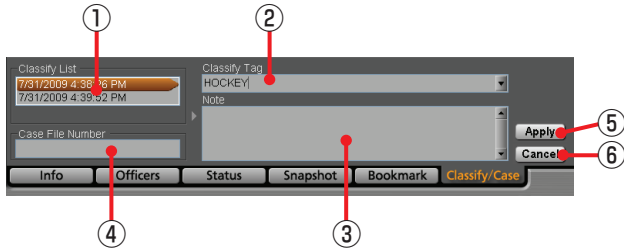
If you click on this button before clicking on the Apply button while editing a note, that editing is canceled, and the note before editing will be displayed. This button is disabled while no note is being edited.

Classify/Case tab (only in Archive mode)

The classify information is displayed.
(See "Classify information," page 73.)

Note

If the AG-CPD15P Memory Card Video Recorder is used, the Event type of the AG-CPD15P is displayed as Classify.



- ① **Classify List**
A list of classify information in the selected video file is displayed. If a classify information item is selected, that position is located and the unit enters playback pause mode.
- ② **Classify Tag**
The classify tag selected in the Classify List is displayed.
A classify tag can be edited if playback is paused at the classify information position. Select a tag from the classify tags registered on the Rec/Play screen in Administrator Setup.
- ③ **Note**
The classify information note selected in the Classify List is displayed.
A classify information note can be edited if playback is paused at the classify information position.
- ④ **Case File Number**
Enter a case file number. The input case file number will be recorded in the bookmark file.
- ⑤ **Apply button**
For updating a classify information item when its classify tag, note or Case File Number are edited. This button is disabled when neither Classify Tag nor Case File Number, nor note is edited.
- ⑥ **Cancel button**
If you click on this button before clicking on the Apply button while editing a classify tag, note, or the Case File Number, that editing is canceled and the status before editing will be restored. This button is disabled if no classify tag or note, or Case File Number has been edited.

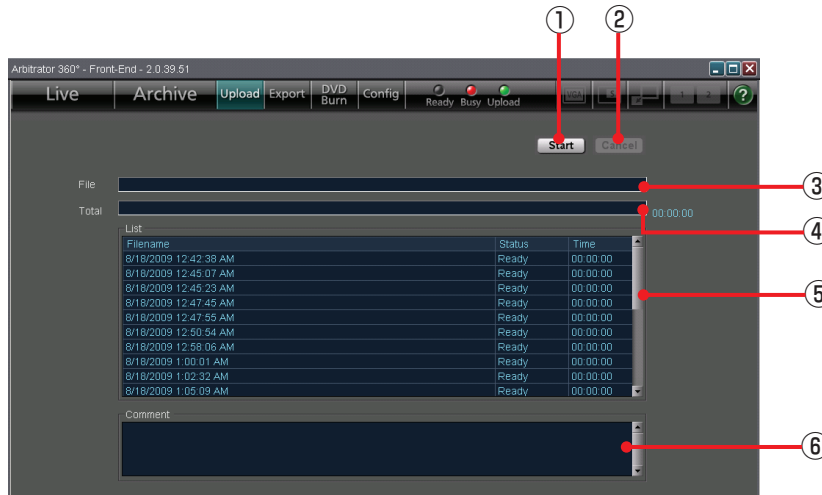
Upload Screen

When the [Upload] button of the Toolbar is clicked, the Upload screen appears.

Video data recorded in the Memory Card Video

Recorder can be uploaded to the Back-End server.

(See "Uploading Files," page 74.)



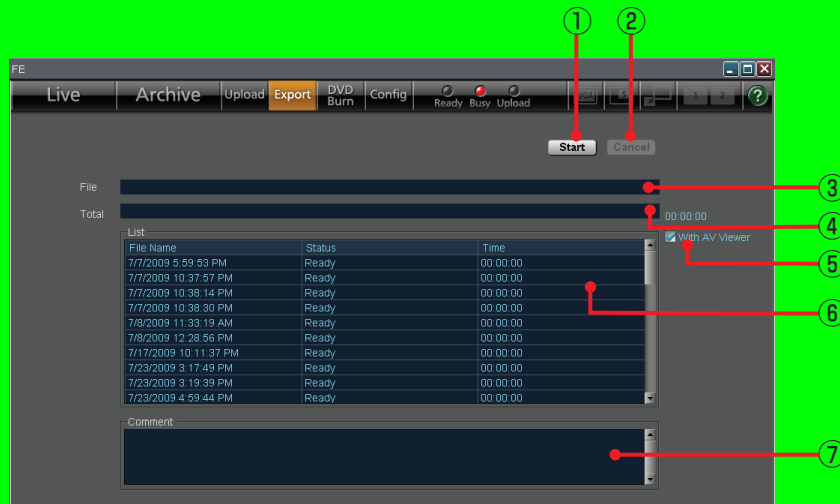
- ① **Start button**
For starting uploading.
- ② **Cancel button**
For canceling uploading.
- ③ **File bar**
Indicates the progress of current file uploading.
- ④ **Total bar**
Indicates the progress of all files to be uploaded.
An estimate time required for completion of uploading is displayed at the right of the bar.
- ⑤ **List**
A list of files to be uploaded is displayed.
FileName: Filenames of files to be uploaded
Status: Statuses of files (Ready, Transferring, Done, Error, Abort)
Time: For a file being uploaded, the time passed from the beginning of uploading is displayed.
(For a file already uploaded, the time required for uploading is displayed.)
- ⑥ **Comment**
While connecting or uploading, the current status is displayed.
If an error is generated during uploading, the filename for which the error was generated and the error content are displayed.

Export Screen

When the [Export] button of the Toolbar is clicked, the Export screen appears.

Video data recorded in the Memory Card Video Recorder can be exported to the hard disk of a PC or removable media.

(See "Exporting Files," page 75.)



① **Start button**

For starting exporting.

② **Cancel button**

For canceling exporting.

③ **File bar**

Indicates the progress of current file exporting.

④ **Total bar**

Indicates the progress of all files to be exported. An estimate time required for completion of export is displayed at the right of the bar.

⑤ **With AV Viewer**

Place a check mark when exporting the dedicated player application together.

⑥ **List**

A list of files to be exported is displayed.

FileName: Filenames of files to be exported

Status: Statuses of files (Ready, Transferring, Done, Error)

Time: For a file being exported, the time passed from the beginning of exporting is displayed. For a file already exported, the time required for exporting is displayed.

⑦ **Comment**

If an error is generated during export, the filename for which the error was generated and the error content are displayed.

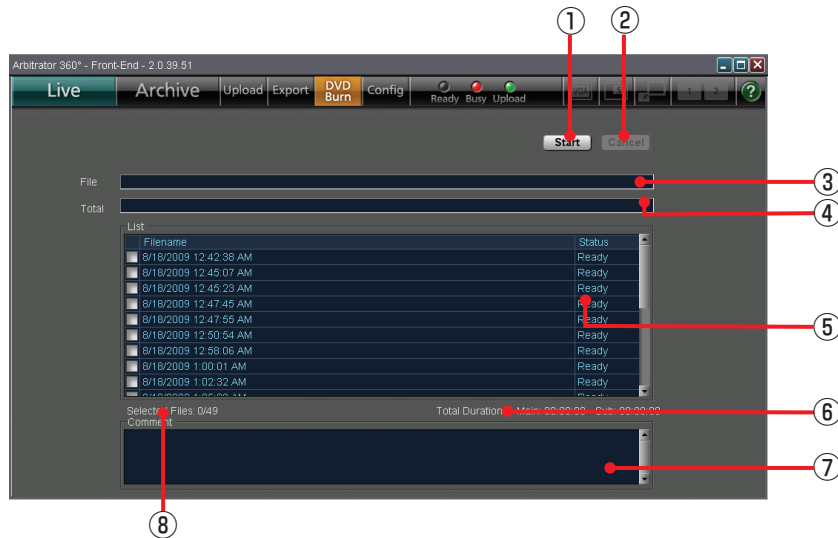
Exporting from the Front-End Application is not available at present. Upgrading is scheduled for the future.

DVD Burn Screen

When the [DVD Burn] button of the Toolbar is clicked, the DVD Burn screen appears.

Video data recorded in the Memory Card Video Recorder can be output in DVD-Video format for recording onto a DVD.

(See "Creating a DVD," page 76.)



① **Start button**

For starting outputting data for burning a DVD.

② **Cancel button**

For canceling output.

③ **File bar**

Indicates the progress of current file output.

④ **Total bar**

Indicates the progress of all files to be output. An estimate time required for completion of output is displayed at the right of the bar.

⑤ **List**

A list of files to be output is displayed. The files with a check mark in the check box will be output.

File Name: Filenames of files to be output

Status: Statuses of files (Ready, Transferring, Done, Error, Abort, Transferred, Burning, Converting, Verifying)

⑥ **Total Duration**

Total playback period of a selected file is displayed for Main video and Sub video separately.

⑦ **Comment**

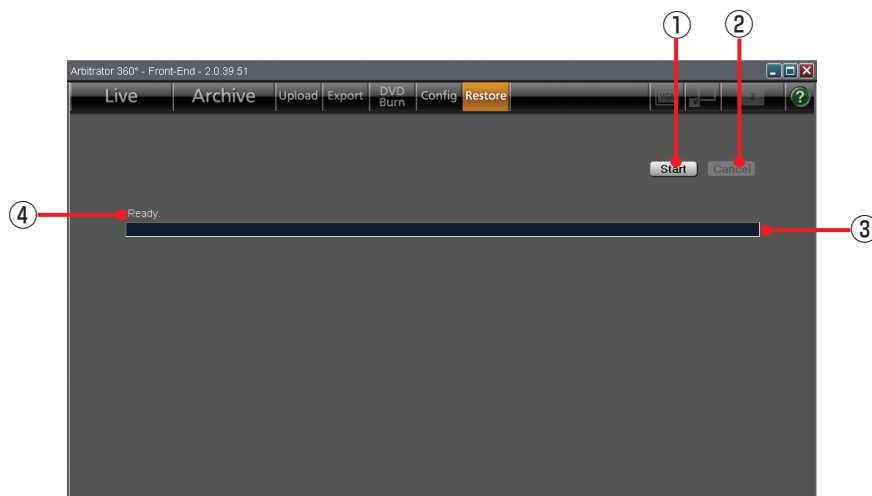
The current status is displayed.

If an error is generated during output, the filename for which the error was generated and the error content are displayed.

⑧ **Selected Files**

Total number of files checked on the List is displayed. A maximum of 49 files can be selected.

Restore Screen (Provided Only with the AG-CPD15P and AG-CPD10CRUP)



- ① **Start button**
For starting restoring.
- ② **Cancel button**
For canceling restoring.
- ③ **Progress bar**
Indicates the progress of current file restoring.
- ④ **Status indication**
Indicates the current status of restoring.
 - (Ready Restoring)
 - Completed Restoring
 - Aborted Restoring the file

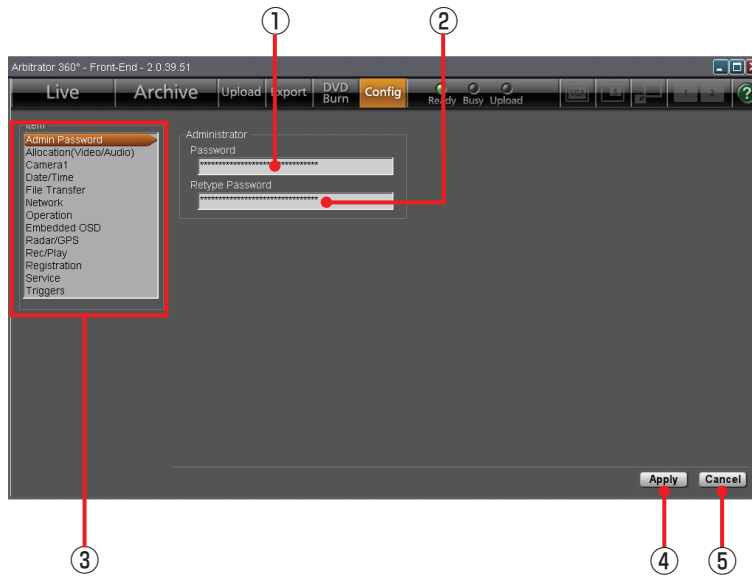
Config Screen

When the [Config] button of the Toolbar is clicked, the Config screen appears. An administrator can make settings for the configuration of the Front-End application.
(See "Administrator Setup," page 79.)

On default settings

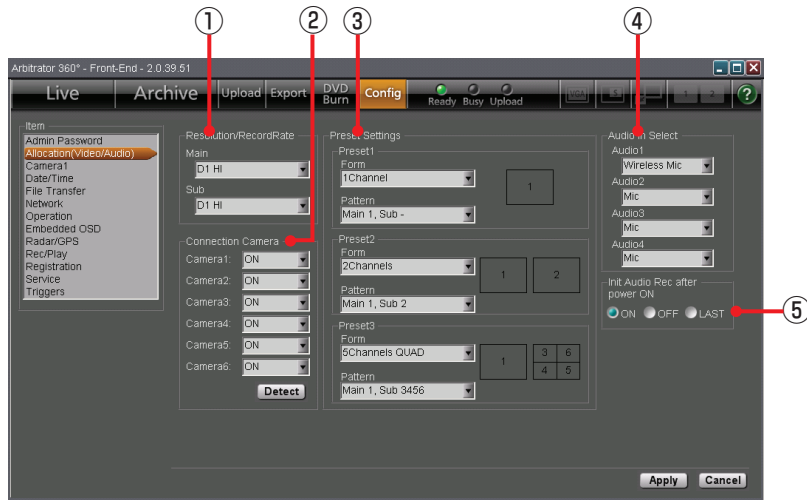
The default settings for various items are shown on the Setup list on pages 113 to 127.

Admin Password screen



- ① **Password**
For inputting an administrator password.
- ② **Retype Password**
Re-enter the same string of password input in the Password field for reconfirmation.
- ③ **Item list**
A list of the setting screens is displayed. Clicking on a screen name will display the corresponding setting screen.
- ④ **Apply button**
For changing the settings of the Memory Card Video Recorder to those set in the Config screen.
- ⑤ **Cancel button**
For canceling changes.

Allocation (Video/Audio) screen



(See "Allocation (Video/Audio)," page 80.)

① Resolution/RecordRate



① Main

The resolution and bit rate of the main video can be set.

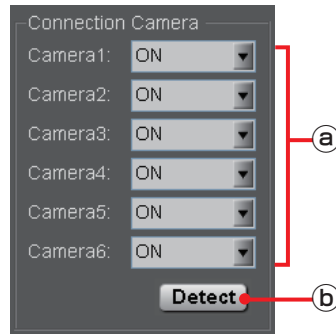
Setting values: D1 HI (720x480, high quality mode), D1 STD (720x480, standard quality mode), D1 10 (720x480, 10 frames/second), CIF (352x240, low quality mode)

② Sub

The resolution and bit rate of the sub video can be set.

Setting values: D1 HI (720x480, high quality mode), D1 STD (720x480, standard quality mode), D1 10 (720x480, 10 frames/second), CIF (352x240, low quality mode)

② Connection Camera



① Camera1, Camera2, Camera3, Camera4, Camera5, Camera6

Set if a camera is connected to each of [CAMERA 1], [2], [3], [4], [5], and [6] connectors on the Memory Card Video Recorder. If the camera is connected, set to ON, and if it is not connected, set to OFF.

② Detect button

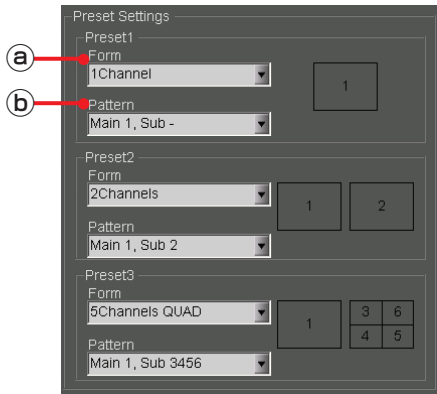
Click to automatically detect cameras connected to the Memory Card Video Recorder.

Notes

- If either of the Main or Sub Resolution/RecordRate is set to "D1 10", the other is also set to "D1 10".
- If you change the displayed configuration setting screen without clicking on [Apply] after changing settings, "Save and Apply Changes?" appears. Click on [Yes] then change the screen.

Description of the Screen Displays (continued)

③ Preset Settings



For setting the channel mode and camera connection pattern for Preset 1, Preset 2, and Preset 3.
(See "Preset Settings," page 81.)

a Form

Set the channel mode.

b Pattern

Set the camera connection pattern.

Setting values for Form and Pattern:

Form	Pattern
1Channel	Main 1, Sub -
	Main 2, Sub -
	Main 3, Sub -
2Channels	Main 1, Sub 2
	Main 1, Sub 3
	Main 2, Sub 3
4Channels QUAD	Main -, Sub 1456
	Main -, Sub 2456
	Main -, Sub 3456
4Channels PANORAMA	Main -, Sub 1456
	Main -, Sub 2456
	Main -, Sub 3456
5Channels QUAD	Main 1, Sub 2456
	Main 1, Sub 3456
	Main 2, Sub 3456
	Main 3, Sub 2456*1
5Channels PANORAMA	Main 1, Sub 2456
	Main 1, Sub 3456
	Main 2, Sub 3456
	Main 3, Sub 2456*1
None*2	

*1 This setting is enabled when the camera connected to the [CAMERA 1] connector is set to OFF.

*2 "None" is not selected for Preset1 unless all camera connections are set to OFF.

④ Audio In Select



Select the type of microphones connected to each of [AUDIO IN 1], [2], [3], and [4] connectors on the Memory Card Video Recorder or turn the microphone off.

Setting values: Mic, Wireless Mic, Off

⑤ Init Audio Rec after power ON

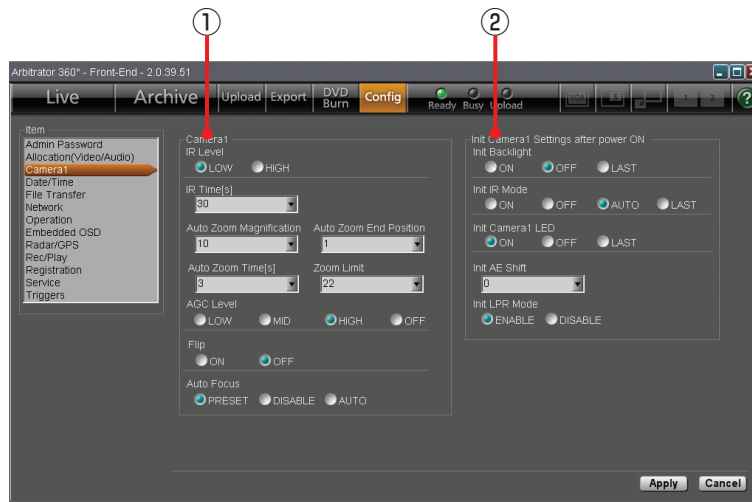


Set the audio recording status upon startup of the Memory Card Video Recorder. The setting will be applied to all four audio channels.

Setting values: ON, OFF, LAST

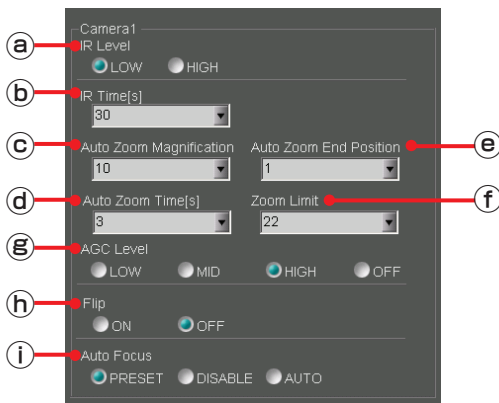
Description of the Screen Displays (continued)

Camera1 screen



(See "Camera1," page 83.)

① Camera1



a IR Level
Set the IR level after automatic switching of the IR function.

Setting values: LOW, HIGH

b IR Time[s]
Set the detection time for automatic switching of the IR function.

Setting values: 10, 30, 60, 300 seconds

c Auto Zoom Magnification
Set the maximum zoom magnification during automatic zooming.

Setting values: 1, 2, 3, 4, 5, 7, 10, 15, 22

d Auto Zoom Time[s]
Set the keeping time of the maximum zoom magnification during automatic zooming.

Setting values: 3, 5, 8 seconds

e Auto Zoom End Position
Set the automatic zooming end magnification.

Setting values: 1, 2, 3, 4, 5, 7, 10, 15, 22, LAST

f Zoom Limit
Set the maximum zoom magnification.

Setting values: 22, 220

g AGC Level
Set the level of the camera input gain control.

Setting values: LOW, MID, HIGH, OFF

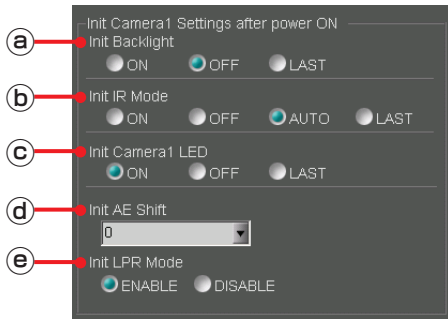
h Flip
Set if flipping of the camera output image will be performed or not.

Setting values: ON, OFF

i Auto Focus
Set a focusing method of the camera.

Setting values: PRESET, DISABLE, AUTO

② Init Camera1 Settings after power ON



The status of the color camera when it is turned on can be set.

(See "Init Camera1 Settings after power ON," page 84.)

Ⓐ Init Backlight

Set the backlight compensation function setting upon power-on of the Memory Card Video Recorder.

Setting values: ON, OFF, LAST

Ⓑ Init IR Mode

Set the IR mode upon power-on of the Memory Card Video Recorder.

Setting values: ON, OFF, AUTO, LAST

Ⓒ Init Camera1 LED

Set the status of the [REC] lamp on the camera connected to the [CAMERA 1] connector on the Memory Card Video Recorder upon power-on.

Setting values: ON, OFF, LAST

Ⓓ Init AE Shift

Set the brightness of images upon power-on of the Memory Card Video Recorder.

Setting values: 2, 1, 0, -1, -2, LAST

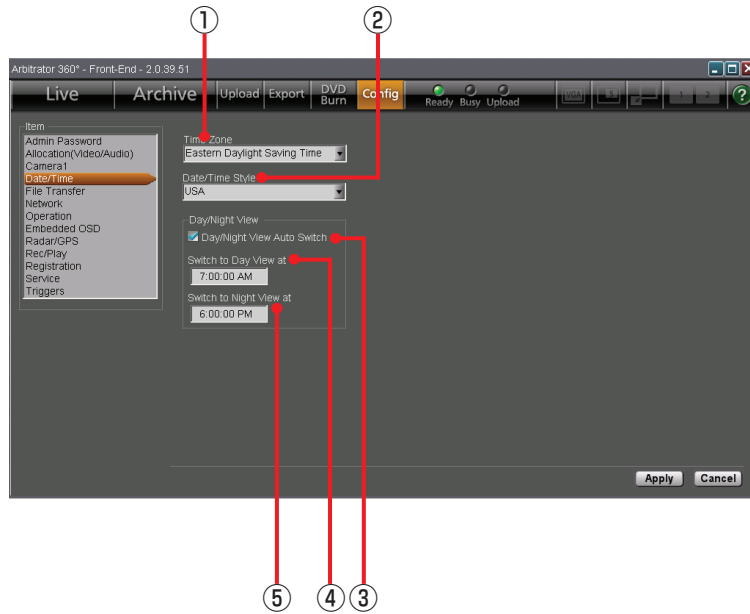
Ⓔ Init LPR Mode

Set if the LPR mode is enabled or not upon power-on of the Memory Card Video Recorder.

Setting values: ENABLE, DISABLE

Description of the Screen Displays (continued)

Date/Time screen

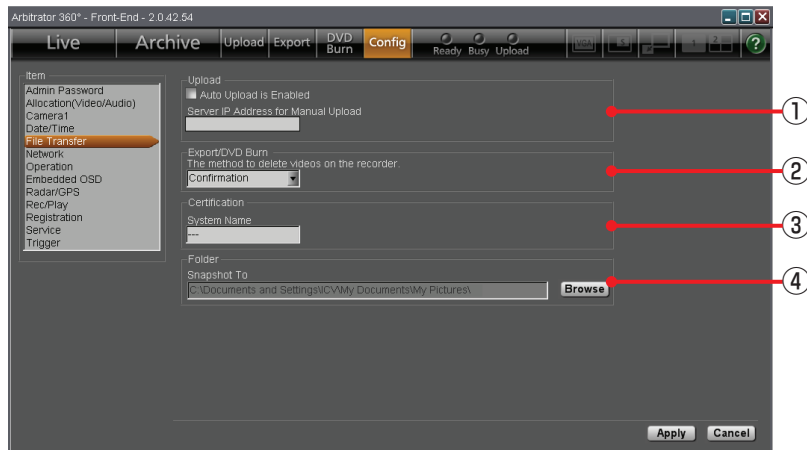


(See "Date/Time," page 86.)

- ① **Time Zone**
Set the time zone.
Setting values:
Hawaii Standard Time
Yukon Standard Time
Yukon Daylight Saving Time
Pacific Standard Time
Pacific Daylight Saving Time
Mountain Standard Time
Mountain Daylight Saving Time
Central Standard Time
Central Daylight Saving Time
Eastern Standard Time
Eastern Daylight Saving Time
Atlantic Standard Time
Atlantic Daylight Saving Time
Asia Tokyo
- ② **Date/Time Style**
Set the display pattern of date and time.
Setting values: ISO, USA
- ③ **Day/Night View Auto Switch**
Select if Day and Auto Switch Night views are automatically switched or not. When a check mark is placed in the box, Day/Night views are switched automatically.
- ④ **Switch to Day View at**
Set the time when Night mode is changed to Day mode.
Setting range: 00:00:00 AM-11:59:59 PM
- ⑤ **Switch to Night View at**
Set the time when Day mode is changed to Night mode.
Setting range: 00:00:00 AM-11:59:59 PM

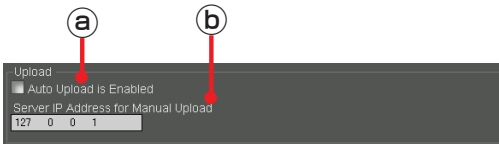
Note
Displayed time (12/24-hour system) depends on the setting on your PC.

File Transfer screen



(See "File Transfer," page 87.)

① Upload



① Auto Upload is Enabled

Automatic uploading is enabled when a check mark is placed in the box.

② Server IP Address for Manual Upload

Set the IP address of the Back-End server for manual uploading.

② Export/DVD Burn

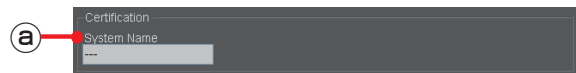


① The method to delete videos on the recorder

Select how to delete video files from the Memory Card Video Recorder after **data exporting or** DVD burning.

Setting values: Force, Confirmation

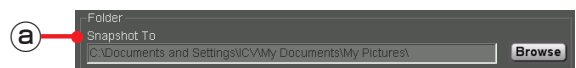
③ Certification



① System Name

Set the system name of the Memory Card Video Recorder within 50 characters. When the Recorder directly communicates with the Back-End system, the communications is enabled only when the name set here and that registered in the Back-End system are the same.

④ Folder



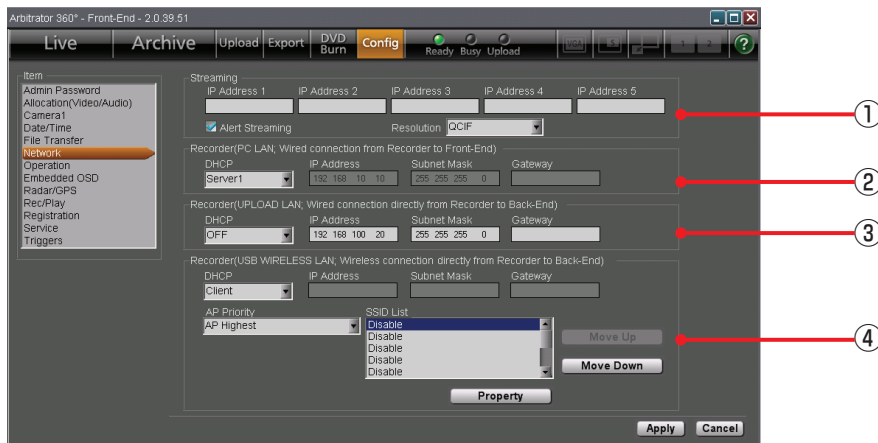
① Snapshot To

Assign a folder to which snapshot files are to be stored.

Exporting from the Front-End Application is not available at present. Upgrading is scheduled for the future.

Description of the Screen Displays (continued)

Network screen



(See "Network," page 89.)

① Streaming

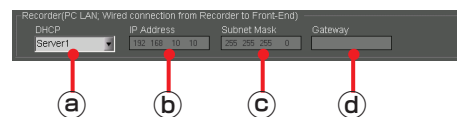
a IP Address list
Set the IP Addresses of the Back-End server for streaming. Up to 5 IP addresses can be registered. The Front-End application periodically sends packets to these IP addresses. The Back-End server recognizes the sender of the received packets as a streaming target. A Front-End application can connect with a single Back-End server at a time.

b Alert Streaming
If a check mark is placed in the box, when streaming is in progress in the Back-End application, that is displayed on the screen.

c Resolution
Set the resolution of the streaming video. The resolution is set to QCIF by default. The resolution is set to QVGA when the resolution is set to QVGA. The resolution is set to QVGA when the resolution is set to QVGA.

Streaming is not available at present. Upgrading is scheduled for the future.

② Recorder (PC LAN)



a DHCP

Set if the LAN port on the Memory Card Video Recorder that is used for connection of the Front-End application is to operate as a DHCP server or not.

Setting values: OFF, Server1, Server2, Server3, Server4

b IP Address

Set the IP address for the LAN port on the Memory Card Video Recorder that is used for connection of the Front-End application. This setting is enabled when DHCP is set to OFF.

c Subnet Mask

Set the subnet mask for the LAN port on the Memory Card Video Recorder that is used for connection of the Front-End application. This setting is enabled when DHCP is set to OFF.

d Gateway

Set the gateway for the LAN port on the Memory Card Video Recorder that is used for connection of the Front-End application.

Description of the Screen Displays (continued)

③ Recorder (UPLOAD LAN)



The settings for the wired LAN port on the Memory Card Video Recorder that is used for connection of the Back-End application can be performed.

① DHCP

Select if the IP address for the wired LAN port on the Memory Card Video Recorder will be obtained from the DHCP server or not.

Setting values: OFF, Client

② IP Address

Set the IP address. This setting is enabled when DHCP is set to OFF.

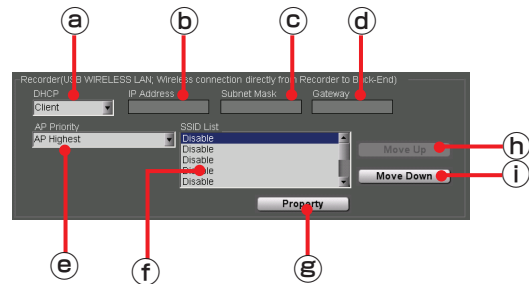
③ Subnet Mask

Set the subnet mask. This setting is enabled when DHCP is set to OFF.

④ Gateway

Set the default gateway. This setting is enabled when DHCP is set to OFF.

④ Recorder (USB WIRELESS LAN)



The settings for the USB wireless LAN port on the Memory Card Video Recorder that is used for connection of the Back-End application can be performed.

① DHCP

Select if the IP address for the USB wireless LAN port on the Memory Card Video Recorder will be obtained from the DHCP server or not.

Setting values: OFF, Client

② IP Address

Set the IP address. This setting is enabled when DHCP is set to OFF.

③ Subnet Mask

Set the subnet mask. This setting is enabled when DHCP is set to OFF.

④ Gateway

Set the default gateway. This setting is enabled when DHCP is set to OFF.

⑤ AP Priority

Set the priority of connections to the access points.

Setting values: AP Highest, Random

⑥ SSID List

For displaying the SSIDs for the access points. Up to 10 SSIDs are displayed.

⑦ Property button

For editing data of the access point selected in the SSID List. Click to display the Access Point Setting screen.

(See "Access Point Setting screen," page 37.)

⑧ Move Up button

For raising the priority of the connection order for access points.

⑨ Move Down button

For lowering the priority of the connection order for access points.

Access Point Setting screen



a Access Point

Select if the access point settings are enabled or not.

Setting values: ENABLE, DISABLE

b SSID

Set the SSID for the wireless LAN module connected to the Memory Card Video Recorder.

c Security

Set the encryption method for the wireless LAN module connected to the Memory Card Video Recorder.

Setting values: WEP, WPA/WPA2-PSK, NONE

d Network Key

Set the network key for the wireless LAN module connected to the Memory Card Video Recorder when Security is set to WEP or WPA.

e Key Index

Set the network key index for the wireless LAN module connected to the Memory Card Video Recorder when Security is set to WEP.

Setting values: 1, 2, 3, 4

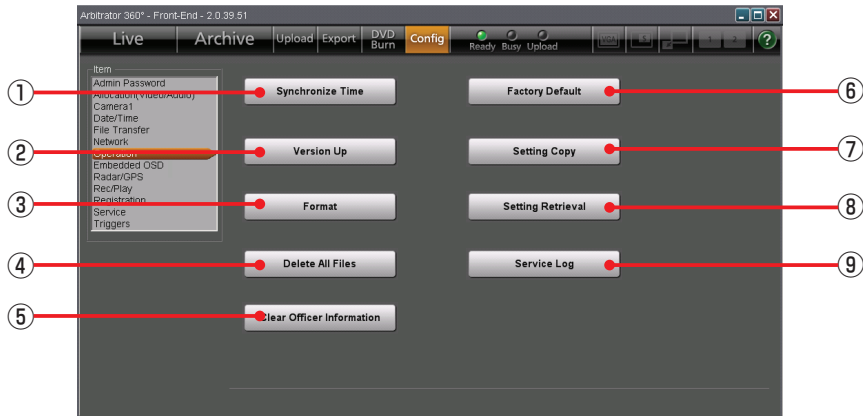
f OK button

For registering the settings to the SSID list.

g Cancel button

For canceling the settings.

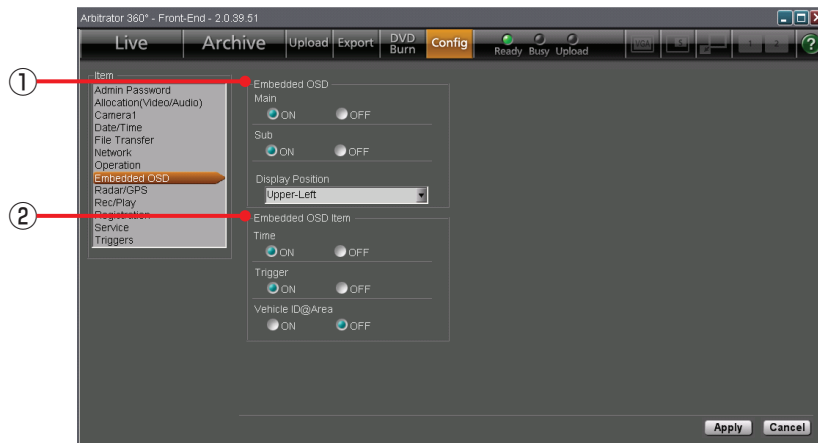
Operation screen



(See "Operation," page 92.)

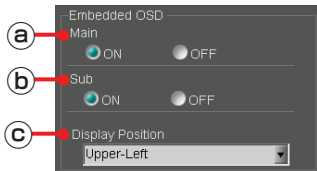
- ① **Synchronize Time button**
For synchronizing the clock of the Memory Card Video Recorder with that of the PC.
- ② **Version Up button**
For updating the firmware of the Memory Card Video Recorder.
- ③ **Format button**
For formatting all SDHC Memory Cards loaded in the Memory Card Video Recorder.
- ④ **Delete All Files button**
For deleting all video files stored in the SDHC Memory Cards loaded in the Memory Card Video Recorder.
- ⑤ **Clear Officer Information button**
For deleting the data for Officer1, Officer2, VehicleID, Area, Unit, Agency, and Shift from the Memory Card Video Recorder.
- ⑥ **Factory Default button**
For initializing the current setting data of the Memory Card Video Recorder and the Front-End application.
- ⑦ **Setting Copy button**
For exporting the current setting data of the Memory Card Video Recorder and the Front-End application to external media, such as a USB memory device.
- ⑧ **Setting Retrieval button**
For copying back the setting data that have been exported to the external media with the Setting Copy function onto the Memory Card Video Recorder and the Front-End application.
- ⑨ **Service Log button**
The operation log of the Memory Card Video Recorder can be exported to external media.

Embedded OSD screen



(See "Embedded OSD," page 97.)

① Embedded OSD



① Main

Select if the Embedded OSD is displayed on the main video or not.

Setting values: ON, OFF

② Sub

Select if the Embedded OSD is displayed on the sub video or not.

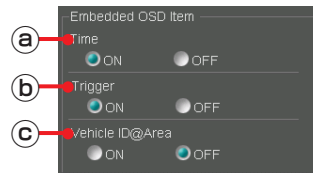
Setting values: ON, OFF

③ Display Position

Set the Embedded OSD display position.

Setting values: Upper-Left, Upper-Right, Bottom-Left, Bottom-Right

② Embedded OSD Item



① Time

Select if time is displayed as an Embedded OSD.
Setting values: ON, OFF

② Trigger

Select if trigger indications are to be displayed as Embedded OSD.

Setting values: ON, OFF

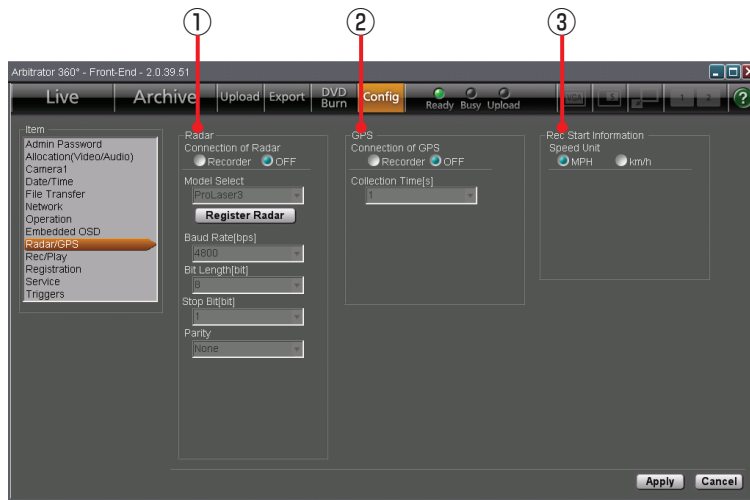
③ VehicleID@Area

Select if the vehicle ID and area are to be displayed as Embedded OSD.

Setting values: ON, OFF

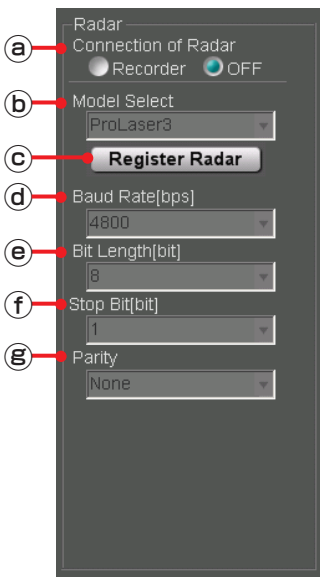
Description of the Screen Displays (continued)

Radar/GPS screen



(See "Radar/GPS," page 98.)

① Radar



Ⓐ Connection of Radar

Select if a radar gun is connected to the Memory Card Video Recorder or not.

Setting values: Recorder, OFF

Ⓑ Model Select

Select the model name of the connected radar gun from the drop-down list.

Setting values: ProLaser3, STALKER_DUAL, GOLDEN_EAGLE_II

Ⓒ Register Radar button

For registering the radar gun library that has been stored in a USB memory device to the Memory Card Video Recorder.

Ⓓ Baud Rate[bps]

The baud rate of the serial communication is displayed when a radar gun is connected.

Ⓔ Bit Length[bit]

The bit length of the serial communication is displayed when a radar gun is connected.

Ⓕ Stop Bit[bit]

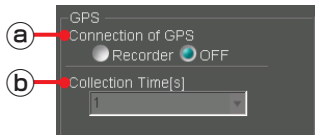
The stop bit length of the serial communication is displayed when a radar gun is connected.

Ⓖ Parity

The parity of the serial communication is displayed when a radar gun is connected.

Description of the Screen Displays (continued)

② GPS



Ⓐ Connection of GPS

Select if the GPS is connected to the Memory Card Video Recorder or not.

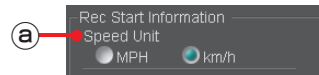
Setting values: Recorder, OFF

Ⓑ Collection Time[s]

Select an interval of collecting data from the GPS.

Setting values: 1, 2, 5, 10 seconds

③ Rec Start Information



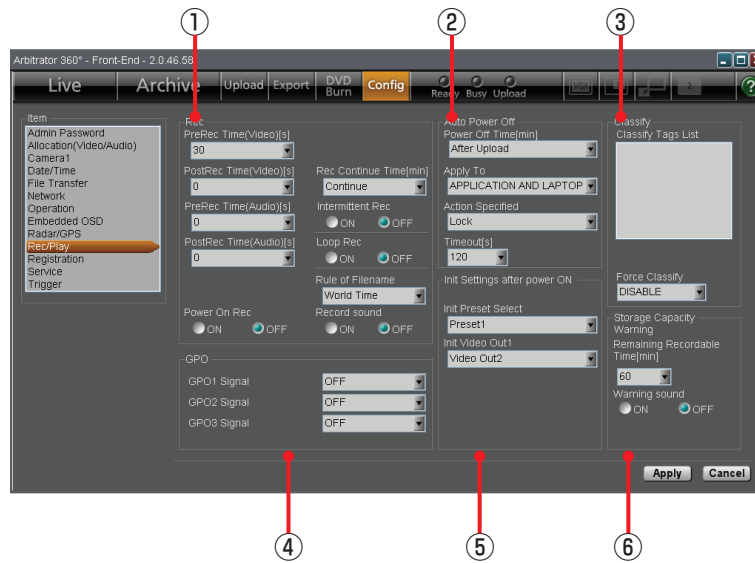
Ⓐ Speed Unit

Select the speed unit.

Setting values: MPH, km/h

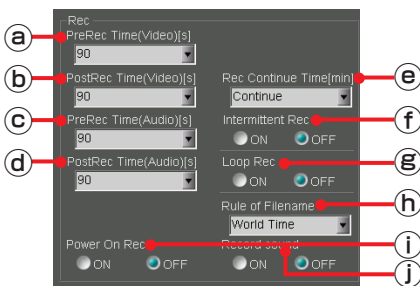
Description of the Screen Displays (continued)

Rec/Play screen



(See "Rec/Play," page 101.)

① Rec



- a PreRec Time(Video)[s]**
Select the pre-recording time for video.
Setting values: 0, 10, 20, 30, 60, 90 seconds
- b PostRec Time(Video)[s]**
Select the post-recording time for video.
Setting values: 0, 10, 20, 30, 60, 90 seconds
- c PreRec Time(Audio)[s]**
Select the pre-recording time for audio.
Setting values: 0, 3, 10, 20, 30, 60, 90 seconds
- d PostRec Time(Audio)[s]**
Select the post-recording time for audio.
Setting values: 0, 3, 10, 20, 30, 60, 90 seconds
- e Rec Continue Time[min]**
Select the recording duration.
Setting values: Continue, 1, 2, 5, 10, 15, 20, 30, 60, 90 minutes

f Intermittent Rec
Select if the intermittent recording mode is enabled or not.

Setting values: ON, OFF

g Loop Rec
Select if the loop recording mode is enabled or not.
Setting values: ON, OFF

h Rule of Filename
Select the time system to be used in the video filename that is recorded the Memory Card Video Recorder.

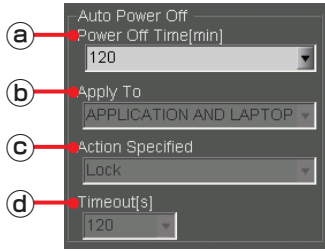
Setting values: World Time, Local Time

i Power On Rec
Select if recording is started when the Memory Card Video Recorder is turned on.
Setting values: ON, OFF

j Record sound
Select if a beep sounds every minute during recording.
Setting values: ON, OFF

Description of the Screen Displays (continued)

② Auto Power OFF



Ⓐ Power Off Time[min]

Select the time required from the ACC is turned off up to the Memory Card Video Recorder is turned off.

Setting values: 0, 10, 20, 30, 60, 90, 120, 180 minutes, After Upload

Ⓑ Apply To

When Power Off Time is set to After Upload, select which one's uploading is to be observed.

Setting values: APPLICATION ONLY, LAPTOP ONLY, APPLICATION AND LAPTOP

Ⓒ Action Specified

When Power Off Time is set to After Upload, select which action is to be taken by the subject (s) after uploading is completed.

Setting values:

Setting values depend on the setting of Apply To.
 APPLICATION ONLY: Close
 LAPTOP ONLY: Lock Stand by
 APPLICATION AND LAPTOP: Lock, Log off, Shutdown, Stand by

Ⓓ Timeout[s]

When Power Off Time is set to After Upload, select the time required from the specified action is taken till the Memory Card Video Recorder is turned off.

Setting values: 30, 60, 90, 120 seconds

Note

When the vehicle's ignition switch is set to ACC-OFF with Upload Mode on the File Transfer screen in Config setup set to MANUAL and Power Off Time on the Rec/Play screen set to AUTO, uploading will start automatically.

③ Classify



Ⓐ Classify Tag List

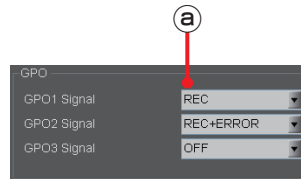
The names of the registered classify tags are displayed. Up to 50 classify tags can be registered.

Ⓑ Force Classify

Set if the user is forced to add classify information at the end of recording.

Setting values: DISABLE, ENABLE, FORCE

④ GPO



Ⓐ GPO1 Signal, GPO2 Signal, GPO3 Signal

Select if the recording and recording error statuses are output to GPO 1, 2, and 3.

Setting values:

GPO1 Signal, GPO2 Signal: OFF, REC, ERROR, REC+ERROR

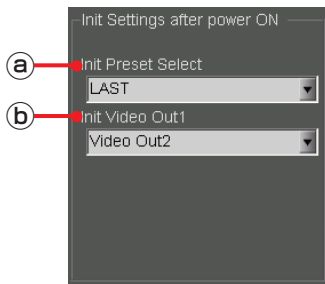
GPO3 Signal: OFF, REC

Note

The functions of GPO1, GPO2, and GPO3 can be changed with settings. GPO4 always outputs the power status of the recorder, and has no setting.

Description of the Screen Displays (continued)

⑤ Init Settings after power ON



Ⓐ Init Preset Select

Select a preset applied when the Memory Card Video Recorder is turned on.

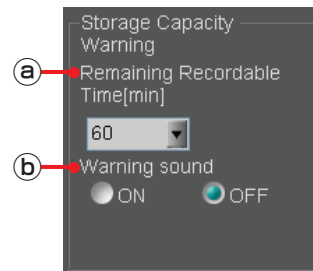
Setting values: Preset1, Preset2, Preset3, LAST

Ⓑ Init Video Out1

Select a signal to be output from the [VIDEO OUT 1] connector of the Memory Card Video Recorder when it is turned on.

Setting values: CAM1, CAM3, Video Out2, LAST

⑥ Storage Capacity Warning



Ⓐ Remaining Recordable Time[min]

A warning sounds when the remaining recordable time becomes shorter than the value set here.

Setting values: 30, 60, 90 (minutes)

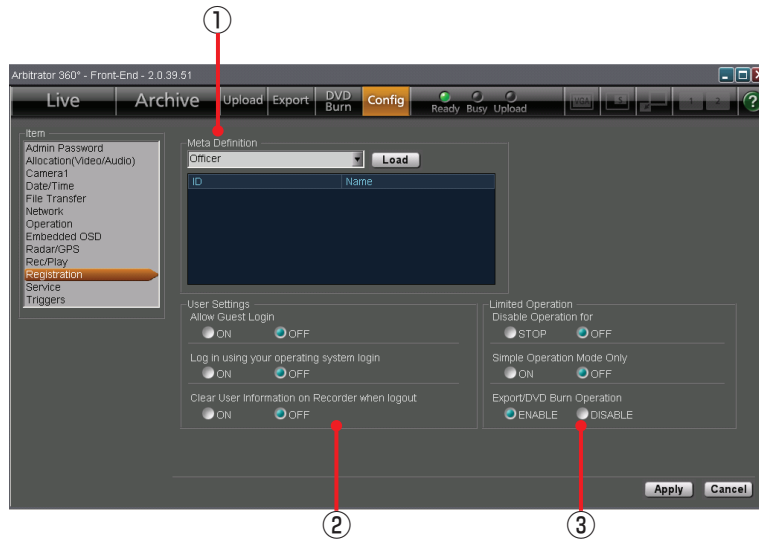
Ⓑ Warning sound

Select if a short beep is to sound twice every 30 seconds when the remaining recordable time becomes shorter than the set value.

Setting values: ON, OFF

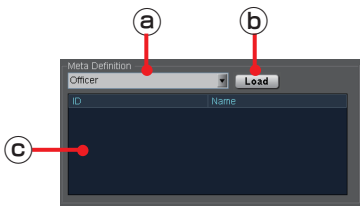
Description of the Screen Displays (continued)

Registration screen



(See "Registration," page 105.)

① Meta Definition



① Meta Definition

Select the type of meta definition to be registered to the Memory Card Video Recorder.

Setting values: Administrator, Officer, Classify, Agency, Unit, Shift, Area, VehicleID

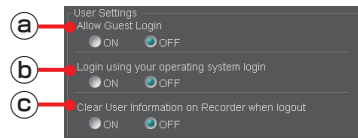
② Load button

For loading data specified at Meta Definition from the USB memory device and registering the data to the Memory Card Video Recorder.

③ Meta Definition list

The meta definition data loaded from the USB memory device are displayed on this list.

② User Settings



① Allow Guest Login

Select if login of a user who has not been registered in the Back-End server or the Memory Card Video Recorder is permitted or not.

Setting values: ON, OFF

② Login using your operating system login

When set to ON, if the current login user name to the PC is the same as that to the Front-End application, the login screen with the password entered will be displayed.

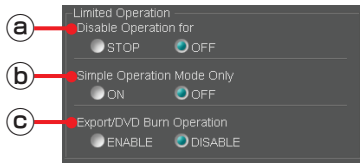
Setting values: ON, OFF

③ Clear User Information on Recorder when logout

Select if the user information of the Memory Card Video Recorder is deleted upon logoff.

Setting values: ON, OFF

③ Limited Operation



Ⓐ **Disable Operation for**

Set the operation prohibited by a user.

Setting values: STOP, OFF

Ⓑ **Simple Operation Mode Only**

When set to ON, a user can use only Simple Operation mode.

Regardless of this setting, the administrator can use both Simple Operation mode and Full Operation mode.

The default setting is OFF.

Setting values: ON, OFF

Ⓒ **Export/DVD Burn Operation**

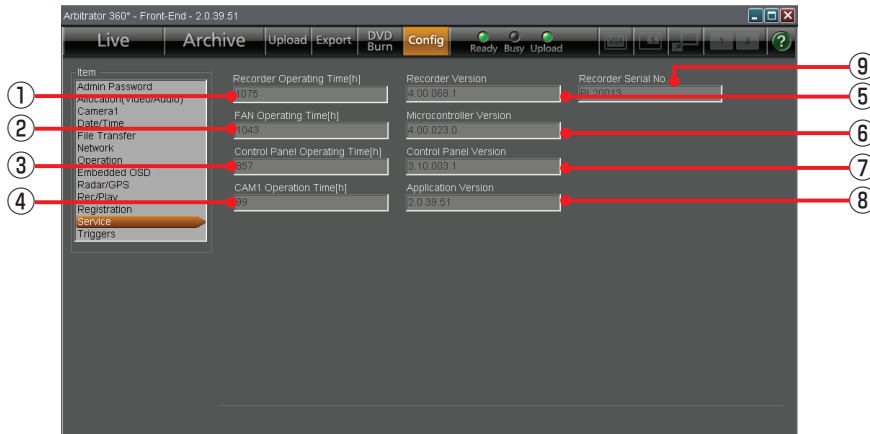
Set if **export and** DVD burn is permitted by a user.

Setting values: ENABLE, DISABLE

Exporting from the Front-End Application is not available at present. Upgrading is scheduled for the future.

Description of the Screen Displays (continued)

Service screen



(See "Service," page 109.)

- ① **Recorder Operating Time[h]**
The total operation time of the Memory Card Video Recorder is displayed.
- ② **FAN Operating Time[h]**
The total operation time of the fan is displayed.
- ③ **Control Panel Operating Time[h]**
The total operation time of the Remote Control Panel is displayed.
- ④ **CAM1 Operation Time[h]**
The total operation time of the color camera is displayed.
- ⑤ **Recorder Version**
The version of the firmware for the Memory Card Video Recorder is displayed.
- ⑥ **Microcontroller Version**
The version of the Microcontroller is displayed.
- ⑦ **Control Panel Version**
The version of the remote control panel is displayed.
- ⑧ **Application Version**
The version of the Front-End application is displayed.

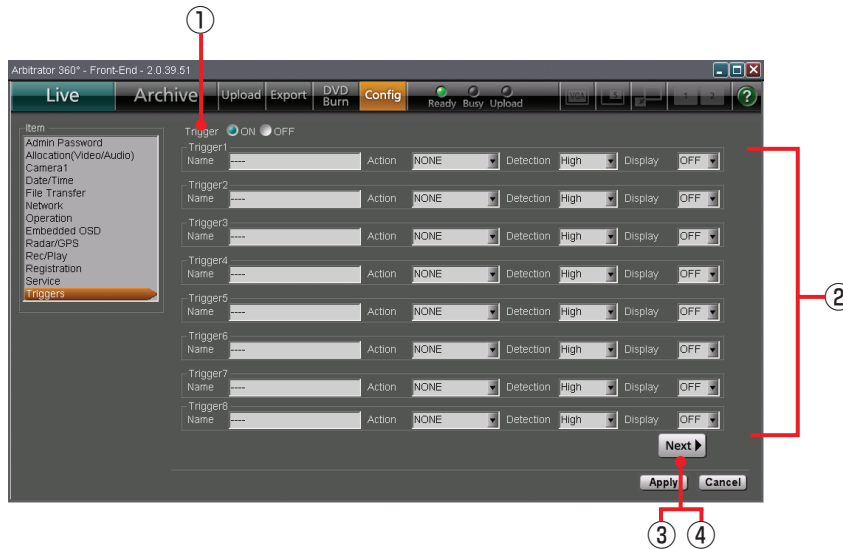
- ⑨ **Recorder Serial No.**
The serial number of the Memory Card Video Recorder is displayed.

Note

When the AG-CPD15P or AG-CPD10CRUP Memory Card Video Recorder is used, the BIOS Creation Date is displayed to show the date and time when BIOS was created.

Description of the Screen Displays (continued)

Triggers screen



(See "Triggers," page 110.)

① **Trigger**

Set if the GPI trigger function is used or not.

Setting values: ON, OFF

② **Trigger1- Trigger16**



Ⓐ **Name**

Specify the name of a GPI trigger with up to 15 characters.

Ⓑ **Action**

Select the action of a GPI trigger.

Setting values:

<Trigger 1-16>
 NONE, REC, STOP, AUTOZOOM, CAM1LED,
 Preset1, Preset2, Preset3, Preset1Rec,
 Preset2Rec, Preset3Rec, AUDIO2ON,
 AUDIO2MUTE

<Trigger 15-16>
 TGT(REC), TGT(P1REC), TGT(P2REC),
 TGT(P3REC), OWN(REC), OWN(P1REC),
 OWN(P2REC), OWN(P3REC)

Ⓒ **Detection**

Select the condition for a GPI trigger to action.

Setting values:

<Trigger 1-16>
 Low, High, Both, Level High, Level Low
 <Trigger 15-16>
 OFF, 1, 2, . . . 200

Ⓓ **Display**

Select a trigger code that is to be displayed on a video.

Setting values: A to Z, -, OFF

③ **Next button**

For displaying the Setup screens for Trigger9 to Trigger16.

④ **Prev button**

For displaying the Setup screens for Trigger1 to Trigger8.

Note

TGT and OWN can be set to either Trigger 15 or Trigger 16, but not to both of them.

Operations

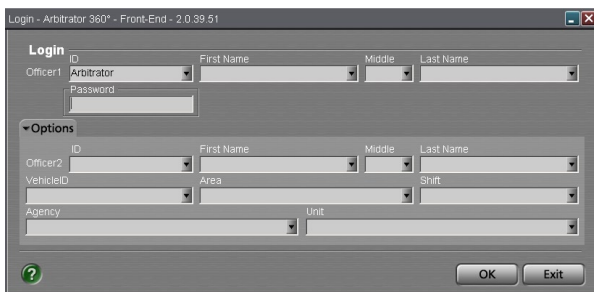
Startup and Termination

Starting up

A user named "Arbitrator" and having the password "admin" have been registered as default. When you start the Front-End Application for the first time after purchasing, the registered name is displayed in Officer1.

1. Turn on the PC and the Memory Card Video Recorder.
2. Click on the Front-End application icon on the desktop.

The Login screen is displayed.



If the meta definition data in which registered officers data are included are loaded in the Memory Card Video Recorder, the ID(s) and the name(s) will be displayed.

Note

If remote updating is being processed, the processing screen may be displayed.

3. If the meta definition data are loaded, select a user ID from the dropdown list of Officer 1. The name for Officer 1 is displayed. If the meta definition data are not loaded, enter the user ID and name.
4. Enter the password.
5. Click on [OK]. The Main screen in Live mode is displayed.

Option settings

If data for the Option items have already been registered on the list, select options from the dropdown lists. If no data have been registered on the list, enter the necessary data.

1. Set Officer 2 in the same manner as with Officer 1, if necessary.
2. Set the vehicle ID in Vehicle ID.
3. Set the area in Area.
4. Set the unit in Unit.
5. Set the police agency in Agency.
6. Set the shiftwork pattern in Shift.
7. Click on [OK].

Restarting

1. **Click on the Close button on the screen.**
The Shutdown screen is displayed.



2. **Click on [Logout].**
The Login screen is displayed.
3. **Perform the necessary settings.**
(See "Starting up," page 49.)
This software restarts, and the Main screen in Live mode will be displayed.

Terminating

1. **Click on the Close button on the screen.**
The Shutdown screen is displayed.



2. **Click on [Exit].**
This software is terminated.

Switching and Adjusting Display Mode

Switching Full/Simple Operation mode



Full Operation mode, in which all the functions are available, and Simple Operation mode, in which available functions are limited are provided. These two modes can be switched, using the Full/Simple Operation mode switch button.

Note

If "Simple Operation Mode Only" is set to ON in the Registration screen in Administrator Setup, a user cannot use Full Operation mode. (See "Limited Operation," page 108.)

Full Operation mode



Simple Operation mode



Camera control button

If you click on [Camera1] button, the Camera1 tab is displayed.



Operations (continued)

Switching the QVGA and VGA sizes



In Full Operation mode, either of the QVGA or VGA display size can be selected, using the QVGA or VGA switch button.

QVGA display



VGA display



Operations (continued)

Switching the Main video and Sub video

With the QVGA size Full Operation mode screen, either 1-screen or 2-screen display can be selected.

1-screen display



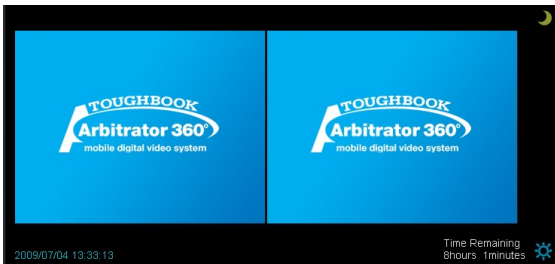
With 1-screen display, either the main or sub video is displayed. Each click on the Main/Sub video switch button changes the main and sub videos alternately.

2-screen display

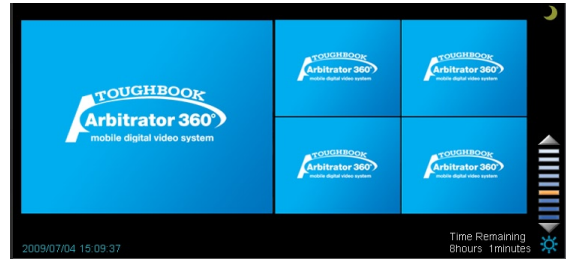


With 2-screen display, the main and sub videos are simultaneously displayed. On the sub-video screen, 1 video or 4 videos can be displayed. The 4 videos can be displayed in either QUAD or PANORAMA size. The settings for the cameras allocation and display pattern in the 2-screen display can be performed on the Allocation (Video/Audio) screen in Administrator Setup. Three display pattern settings--Preset 1, Preset 2, and Preset 3--are available. Use the Preset switch button for setting. (See "Preset Settings," page 81.)

1 sub-video display



4 sub-video display in QUAD size



4 sub-video display in PANORAMA size



Operations (continued)

Switching Day and Night modes

The screen image can be switched between Day mode and Night mode.



Automatic switching of Day/Night modes

On the Date/Time screen in Administrator Setup, place a check mark in the box for Day/Night View Auto Switch. The Day and Night modes are automatically switched at a specified time.

(See "Day/Night View," page 86.)

Click on [Day/Night].

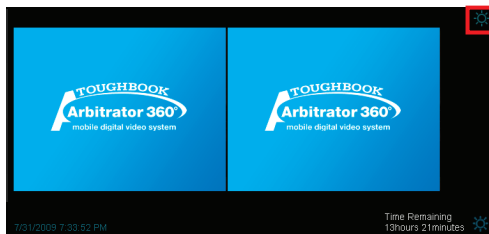
Each click on this button changes the screen between Day and Night modes.

Day mode



Night mode

The entire screen will become darker in Night mode.

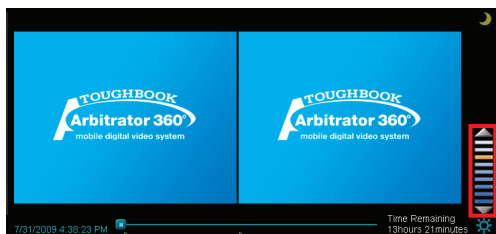


Adjusting image brightness



Click on [Brightness adjustment].

The current brightness level will be displayed. You can adjust the brightness of the entire display. Clicking on [▲] button makes the video display brighter, and clicking on [▼] button makes it darker.



Viewing a Live Video

Upon startup of this software, the Main screen is displayed in Live mode. The images currently shot by the cameras can be viewed. The display size can be switched, using the button on the toolbar. (See "Switching and Adjusting Display Mode," page 51.)



Making a backlit image easier to view



Zooming in live mode



Click on .

The darker part of a backlit image becomes easier to view.

Each time this button is clicked, "On" and "Off" are switched alternately. The current setting is displayed on the upper part of the button.

Normally, set it to "Off."

Click on **[Auto Zoom]**.

The camera zooms into the target magnification, stops for a while, then zooms out to the preset end magnification. If the camera is at a zoom position with a larger magnification than the target magnification when this button is clicked, the camera zooms out to the target magnification first.

Making a dark image easier to view



Click on [IR].

A dark video image becomes easier to view with infrared imaging. Each time this button is clicked, "Auto," "On," and "Off" are switched. The current setting is displayed on the upper part of the button. Normally, set it to "Auto."

Auto: Automatically changes IR mode depending on ambient brightness.

On: Sets IR mode to On.

Off: Sets IR mode to Off.

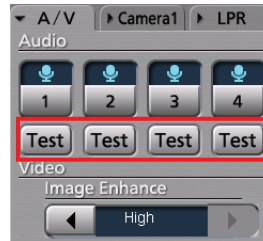
Note

You can make a video image further brighter with image enhancing. (See "Compensating image brightness," page 58.)

Checking audio

If a live video is displayed without sound, you can check sound with the following procedures.

1. Click on the A/V tab.



2. Hold [Test] pressed.

While this button is held pressed, sound of the corresponding audio channel can be heard.

Note

Depending on the audio setting, large sound may be kept output. In such a case, lower the audio volume.

For users of Windows Vista

If the [Test] button does not function smoothly, it may be improved by disabling "Press and hold".

1. Click on [Start].

2. Select Control Panel.

3. Double-click on Pen and Input Devices.

4. Select the Touch tab.

5. Select "Press and hold" in Touch action.

6. Click on [Setting].

7. Uncheck the "Enable press and hold for right-clicking".

8. Click on [OK].

Compensating image brightness

You can adjust the brightness of dark video parts in the main video.

1. Click on the A/V tab.



2. Click on [◀] or [▶] of Video Image Enhance.

Off: No video image enhancing

Low: Low video image enhancing

High: High video image enhancing

Recording

You can record not only the main video, but also the main and sub videos simultaneously. As sub videos, video signals from one camera, as well as those from 4 cameras, can be recorded in QUAD or PANORAMA size.
(See "Switching and Adjusting Display Mode," page 51.)

Starting and stopping recording



Starting recording

Click on [REC].

The [REC] lamp on the color camera will light. While recording, "REC" is indicated on the display, and a red frame appears around the video.

Note

It is possible to disable the [REC] lamp.
(See "Turning off the [REC] lamp of the color camera during recording," page 61.)

To start recording upon power-on

Recording starts upon power-on if PowerOn Rec is set to ON on the Rec/Play screen in Administrator Setup.
(See "Rec," page 101.)

To stop recording

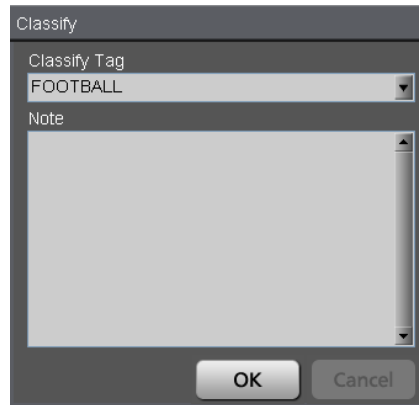
Click on [STOP].

Recording stops.

Setting the classify information

The Classify input screen is displayed when you click on the [STOP] button if the following settings are made on the Rec/Play screen in Administrator Setup and the classify tags have been registered in the Front-End application or the Memory Card Video Recorder:

- Setting of Force Classify: FORCE or ENABLE (See "Classify," page 104.)
- Setting of Loop Rec: OFF (See "Rec," page 101.)



1. Select a classify tag from the dropdown list.
2. Enter a note for classify information in the Note field.
3. Click on [OK].

To close the screen without entering classify information

You can close the Classify screen without entering classify information if Force Classify is set to ENABLE. Click on [Cancel]. Then the classify information is not entered.

Zooming in record mode



Zooming can be controlled with the [Zoom] button on the Camera1 tab.

To zoom out

Hold the [W] button pressed.

Release the button when the zoomed image of your preference is displayed.

To zoom in

Hold the [T] button pressed.

Release the button when the zoomed image of your preference is displayed.

Focusing



Focusing can be controlled with the [Focus] button on the Camera1 tab.

Automatic adjustment

Click on [Auto].

With the automatic focus function, focusing is performed automatically.

Manual adjustment

If the target is out of focus with the automatic focus function, use manual zooming.

To focus on a distant object

Hold the [Far] button pressed until the target is in focus.

To focus on a object nearby

Hold the [Near] button pressed until the target is in focus.

Adjusting image brightness in record mode



The brightness can be adjusted with the [Auto Exposure] button on the Camera1 tab. Normally, leave it set to "0."

To make an image brighter

Click on [+].

To make an image darker

Click on [-].

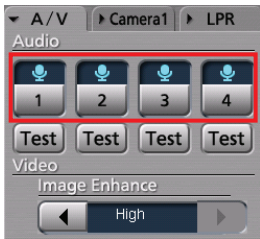
Turning off the [REC] lamp of the color camera during recording



The [REC] lamp on the color camera will be lit during recording. You can make this lamp unlit at any time. Click on the [Camera1 LED] button on the Camera1 tab to set it to "OFF." This makes the REC lamp always unlit.

To enable lighting of the REC LED, click on the Camera1 LED button to set it to "ON."

Turning audio recording On or Off



Recording of each audio channel can be turned on or off with the [1], [2], [3], and [4] buttons on the A/V tab.

Click on an audio channel button you wish to set.

The setting is displayed on the upper part of the button.

: The audio channel signal is recorded.

: The audio channel signal is not recorded.

Turning recording of the audio channel 2 On or Off



Click on [Audio 2].

Each time the button is clicked, recording of the audio channel 2 is turned On or Off. The current setting is indicated on the upper part of the button.

: The audio channel 2 signal is recorded.

: The audio channel 2 signal is not recorded.

LPR setting

The LPR tab is displayed when Init LPR Mode is set to ENABLE on the Camera1 screen in Administrator Setup.

The shutter speed and zoom can be set on the LPR tab.

(See "Init Camera1 Settings after power ON," page 84.)

Setting the shutter speed

Set a shutter speed to capture sharp video of fast-moving subjects.



1. Click on [LPR] or [Patrol].
2. Set the shutter speed using Shutter Speed [◀] or [▶].
 - Setting values in Patrol mode:** Auto, 1/100, 1/500, 1/1000
 - Setting values in LPR mode:** Auto, 1/500, 1/1000

The set value is displayed at the center display. Set the shutter speed, according to the subject.

Note

If recording is started by a recording trigger signal during License Plate Recognition mode, the shutter speed will automatically set to Auto. If recording stop conditions are met, the shutter speed will automatically return to the value set in Step 2 above.

Setting the zoom

The zoom magnification of the camera can be set in the range of $\times 1.0$ to $\times 22.0$.



1. Click on [LPR] or [Patrol].
2. Click on [-] or [+] to set the zoom value.
Clicking on [+] increases the magnification, and [-] decreases it. The magnitude of increasing/decreasing amount varies depending on the zoom magnification.
The zoom range x1.0 to x3.0: increases/decreases by x0.1
The zoom range x3.0 to x5.0: increases/decreases by x0.2
The zoom range x5.0 to x10.0: increases/decreases by x0.5
The zoom range x10.0 to x22.0: increases/decreases by x1.0
The set value is displayed at the center display.

Note

If recording is started by a recording trigger signal during License Plate Recognition mode, the zoom setting will automatically set to [Patrol]. If recording stop conditions are met, the zoom setting will automatically return to [LPR].

Adding bookmarks in record mode

A bookmark can be added to a file that is being recorded to mark it for playback.



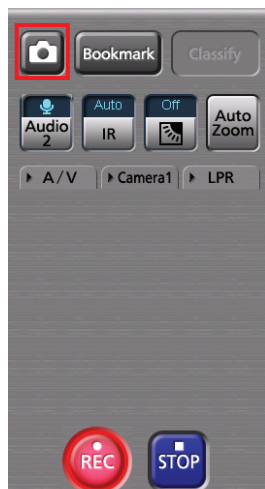
Click on [Bookmark].

A bookmark is added and stored.

Notes

- Bookmarks can be added with a minimum interval of 2 seconds.
- A bookmark cannot be entered until about 2 seconds after recording starts.
- It is possible to move the playback location to a bookmark position during playback.
- Bookmarks can also be added during playback. (See "Adding bookmarks in archive mode," page 69.)

Creating a snapshot picture in record mode



Click on .

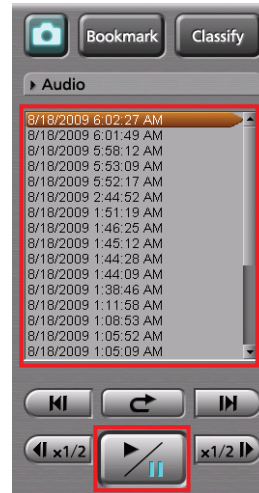
A snapshot picture at the current time will be stored in the preset location.


Playback in Archive Mode

The video signals recorded in the Memory Card Video Recorder can be played back in Archive mode. Click on [Archive] on the toolbar. The Main screen in Archive mode is displayed.



Playback



1. Select a file you wish to play back from the file list.
2. Click on  button.
Playback of the selected file starts.

You can also start playback by double-clicking on a file you wish to play back.

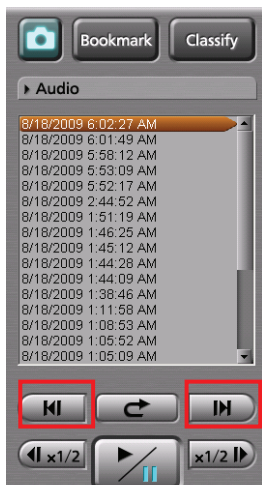
To pause playback

Click on .

Playback pauses.

Playback restarts if you click on the button again.

Skip playback



You can skip to various playback locations.

Skip forward/Frame forward playback

Click on  or .

If the button is clicked during playback, fast forward, or fast rewind

Playback from the beginning of the next file on the file list will start.

If the button is clicked during pause

An image one frame after the current frame will be displayed.

Skip back/Frame rewind playback

Click on  or .

If the button is clicked during playback

If the button is clicked within 5 seconds after playback starts, playback of the file before the currently played back one will start from the beginning.

If the button is clicked after more than 5 seconds after playback starts, playback of the current file will start from the beginning.

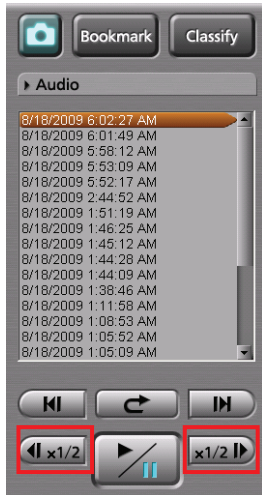
If the button is clicked during fast forward or fast rewind

Playback of the file before the currently played back one will start from the beginning.

If the button is clicked during pause

An image one frame before the current frame will be displayed.

Fast rewind, fast forward, and slow playback



You can change playback speeds.

Fast forward playback and slow playback

Click on or .

If the button is clicked during playback

Fast forward playback starts. Each time this button is clicked, fast forward playback speed changes among x2, x4, and x20.

At the end of the file, playback pauses.

If the button is clicked during pause

Slow playback starts. Each time this button is clicked, slow playback speed changes between 1/2 and 1/4.

At the end of the file, playback pauses.

Notes

- If is clicked during fast forward, normal playback starts. The indication for the fast forward button becomes [x2].
- If is clicked during slow playback, playback pauses. The indication for the slow playback button becomes [1/2].

Fast rewind playback and slow reverse playback

Click on or .

If the button is clicked during playback

Fast rewind playback starts. Each time this button is clicked, fast rewind playback speed changes among x2, x4, and x20.

At the beginning of the file, playback pauses.

If the button is clicked during pause

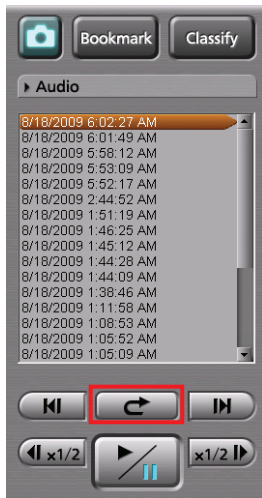
Slow reverse playback starts. Each time this button is clicked, slow reverse playback speed changes between 1/2 and 1/4.

At the beginning of the file, playback pauses.

Notes

- If is clicked during fast rewind, normal playback starts. The indication for the fast rewind button becomes [x2].
- If is clicked during slow reverse playback, playback pauses. The indication for the slow reverse playback button becomes [1/2].

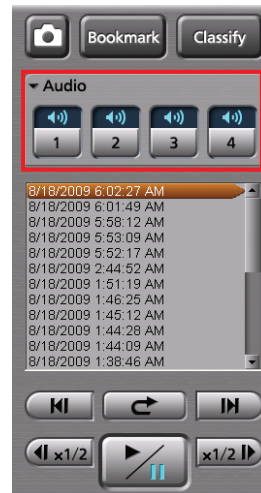
Quick replay



Click on [↺].

Playback from a location 7 seconds before the button is clicked starts. If this button is clicked within 7 seconds from the beginning of a file, playback starts from the beginning of the file.

Turning playback sound On or Off



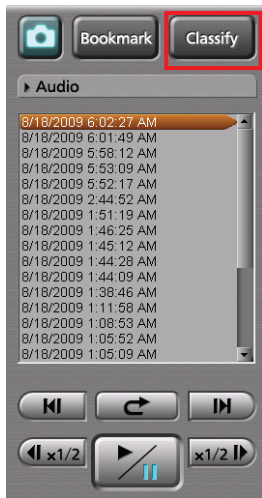
1. Click on the Audio tab to open.
2. Click on an audio channel button you wish to set.

Each time this button is clicked, On and Off are switched alternately. The current setting is displayed on the upper part of the button.

: Playback sound On

: Playback sound Off

Creating classify information



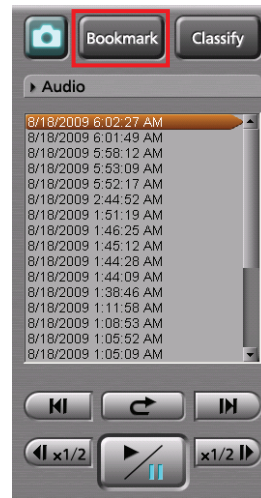
Click on [Classify] during playback.

Playback pauses, and classify information is created. The Classify tab in the Property section is displayed. (See "Classify information," page 73.)

Notes

- Classify information cannot be created during fast forward or fast rewind.
- The [Classify] button is not available if no classify tag has been registered.

Adding bookmarks in archive mode



A bookmark can be added to a file whose playback, pause, or slow playback is in progress.

Click on [Bookmark] at a location you wish to add a bookmark.

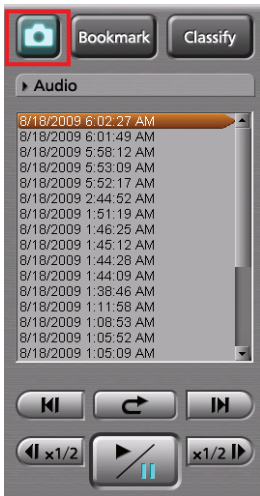
During pause, a bookmark is added to the currently paused position.

During playback or slow playback, it pauses. A bookmark is added to that position, then playback or slow playback resumes.

Notes

- Bookmarks can be added with a minimum interval of 2 seconds.
- A bookmark cannot be added during fast forward or fast rewind.
- You can edit bookmarks. (See "Bookmark information," page 73.)

Creating a snapshot picture in archive mode



Click on .

A snapshot picture at the current time will be stored in the preset location.

You can edit the note for snapshots.

(See "Snapshot information," page 72.)

Displaying Information

Meta Information (Info)

If the Info tab is clicked on the Main screen, meta information will be displayed.



GPS Information

In the GPS information section, the current location and vehicle speed data obtained from the GPS are displayed.

SPD: Vehicle speed

LAT: Latitude

LON: Longitude

Radar information

In the Radar information section, the speeds of your vehicle and target vehicle that are measured by the radar gun are displayed.

OWN: Speed of your vehicle

TGT: Speed of the target vehicle

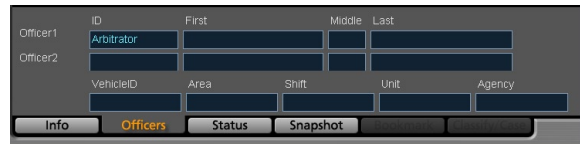
TGT (setting): A trigger is output if the speed of the target vehicle exceeds the set value.

Trigger information

In the Trigger information section, the GPI input status is displayed.

Officer information (Officers)

If the Officers tab is clicked on the Main screen, officer information that is registered in the Memory Card Video Recorder or written in the meta file will be displayed.



Officer information

The officer IDs and first, middle, and last names for Officer 1 and Officer 2 are displayed in the corresponding fields.

Shift information

Data of shiftwork pattern for officers are displayed.

Vehicle ID: Vehicle ID

Area: Area

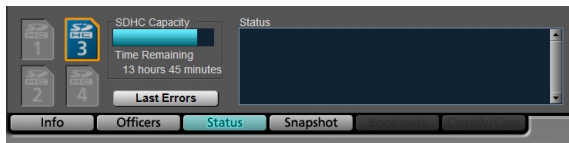
Shift: Shiftwork pattern

Unit: Unit

Agency: Police agency

Status information (Status)

If the Status tab is clicked on the Main screen, status information will be displayed.



SDHC Capacity

The remaining duration of the SDHC Memory Cards loaded in the Memory Card Video Recorder is displayed. The remaining recordable time with the current setting will be displayed in "Hour:Minute" in the Time Remaining field.

SDHC

The following statuses of the SDHC Memory Card that is currently used are displayed.

	Normal
	Full Capacity
	Unsupported
	Writing prohibited
	Unformatted
	Update card
	Card error
	Uninsertion

In Live mode:



The card to be used for next recording is enclosed with an amber frame.

In Archive mode:



The card that stores video signals being played back is enclosed with an amber frame.

Status

Data for the video file that is currently displayed are displayed.

In Live mode:

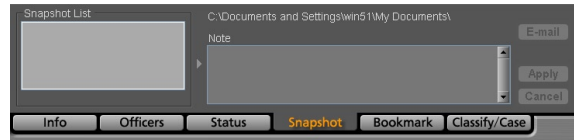
If an error is generated, its content is displayed. If the Status tab is not displayed when an error is generated, a warning mark will be added on the tab.

In Archive mode:

The recording date and time and playback duration of the selected video file are displayed.

Snapshot information

If the Snapshot tab is clicked on the Main screen, snapshot information of the selected video file will be displayed. You can display and edit an assigned snapshot.



To display a snapshot picture

Select a snapshot you wish to display from the Snapshot List. The selected snapshot is displayed in the Video Display Section in Pause mode.

Editing a note

You can edit the note for a snapshot during pause at a snapshot position.

1. **Edit the note in the Note field.**
2. **Click on [Apply].**
The note for the selected snapshot will be updated.

Canceling editing

Click on [Cancel] before clicking on [Apply].

Note

If no note is edited, the [Apply] and [Cancel] buttons are not available.

Attaching a snapshot to e-mail

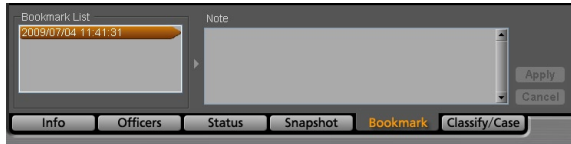
1. **Select an image file you wish to attach to e-mail from the Snapshot List.**
2. **Click on [E-Mail].**
The mailer starts.

Notes

- The [E-Mail] button is disabled if no snapshot is selected.
- The latest snapshot will be attached to e-mail during Live mode.

Bookmark information

If the Bookmark tab is clicked on the Main screen, bookmark information will be displayed. It is possible to move to a desired bookmark position or edit a note.



To move to a desired bookmark position

Select a bookmark from the Bookmark List. The unit moves to the selected bookmark position then pauses.

Editing a note

You can edit the note for a bookmark during pause at a bookmark position.

1. **Edit the note in the Note field.**
2. **Click on [Apply].**

The note will be updated with the edited information.

Canceling editing

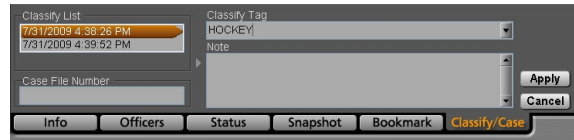
Click on [Cancel] before clicking on [Apply].

Note

If no note is edited, the [Apply] and [Cancel] buttons are not available.

Classify information (Classify/Case)

If the Classify tab is clicked on the Main screen, classify information will be displayed. It is possible to move to a desired classify information item position or edit classify information or a note.



To move to a desired classify information item position

Select a classify information item from the Classify List. The unit moves to the selected classify information item position then pauses.

Editing classify information

You can edit the classify information displayed in the Classify tag during pause at a classify information position.

1. **Enter a case file number in the Case File Number field.**
2. **Select a classify tag from the dropdown list.**
3. **Edit the note in the Note field.**
4. **Click on [Apply].**

The classify information will be updated with the edited information.

Canceling editing

Click on [Cancel] before clicking on [Apply].

Notes

- If none of Case File Number, Classify Tag, or note is edited, the [Apply] and [Cancel] buttons are not available.
- A new case file number is created in the database when a video file is uploaded to the Back-End server. If the same case file number already exists in the database, that case file will be associated with the video file.

Uploading Files

Video data recorded in the Memory Card Video Recorder can be uploaded to the Back-End server. The meta-information and bookmark information attached to the video are also uploaded. Uploaded data are erased from the Memory Card Video Recorder. Automatic uploading of video files is also possible.

Note

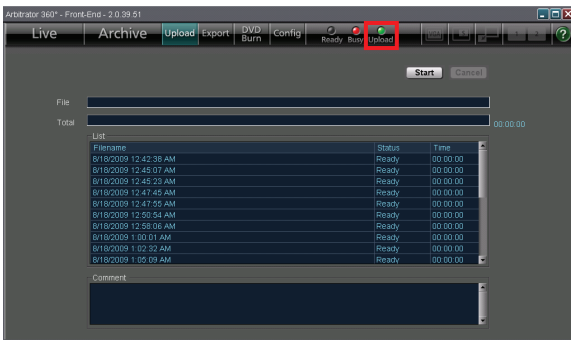
The videos stored on the Memory Card Video Recorder can be directly uploaded to the Back-End server by connecting the Back-End server and the Recorder directly. If uploading competes with that via the Front-End Application, direct uploading takes priority.

Automatic uploading

Place a check mark in the "Auto Upload is Enabled" box on the File Transfer screen in Administrator Setup. When a UDP packet from the Back-End server is received, automatic uploading starts. (See "Upload," page 87.)

1. Click on [Upload] on the toolbar.

The Upload screen is displayed.



2. Click on [Start].

Uploading starts. The progress is displayed on the File bar and Total bar.

The [Upload] lamp on the toolbar will be lit during uploading.

When uploading is completed, "It finished uploading the file." is displayed in the Comment field.

To cancel uploading

Click on [Cancel].

If an error is generated

The corresponding filename and one of the following error messages will be displayed in the Comment field.

Take necessary measures.

- Communication with the Recorder failed.
- No free space on the PC

Note

If "Communication with the Recorder failed." appears, set the correct IP address on the File Transfer screen.

Exporting Files

Video data recorded in the Memory Card Video Recorder can be exported to the hard disk of a PC or removable media. As the video data are recorded in special format, they can only be played back in the dedicated player application. The dedicated player application can be exported together with video data. You can set in Administrator Setup so that exported video data are automatically deleted from the Memory Card Video Recorder. (See "Export/DVD Burn," page 87.)

If an error is generated

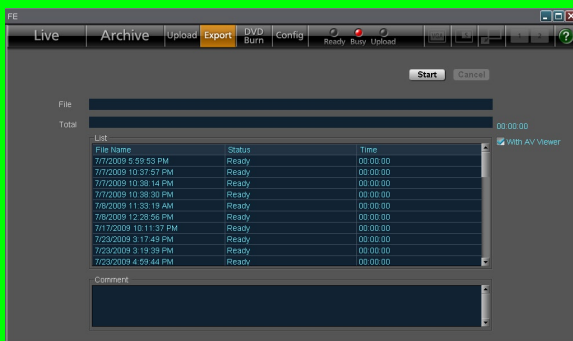
The corresponding filename and one of the following error messages will be displayed in the Comment field.

- Communication with the Recorder failed.
- No file found
- No free space on the PC

Take necessary measures.

1. Click on [Export] on the toolbar.

The Export screen is displayed.



2. To export the dedicated player application together, place a check mark in the [With AV Viewer] box.

3. Click on [Start].

The folder selection dialog box appears.

4. Select an empty folder or make a new folder, and click on [OK].

Exporting starts. The progress is displayed on the File bar and Total bar.

If the Password input screen is displayed

The Password input screen is displayed when the [Start] button is clicked in Step 3 if the current user is not the administrator and deletion of video data after export is set. Enter the password then click on [OK]. Exporting starts.

To cancel exporting

Click on [Cancel].

Exporting from the Front-End Application is not available at present. Upgrading is scheduled for the future.

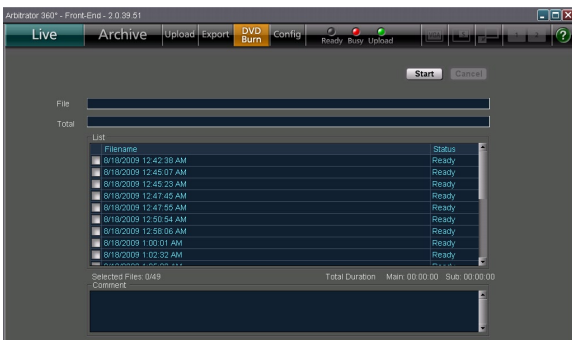
Creating a DVD

Video data recorded in the Memory Card Video Recorder can be output in DVD-Video format for recording on a DVD.

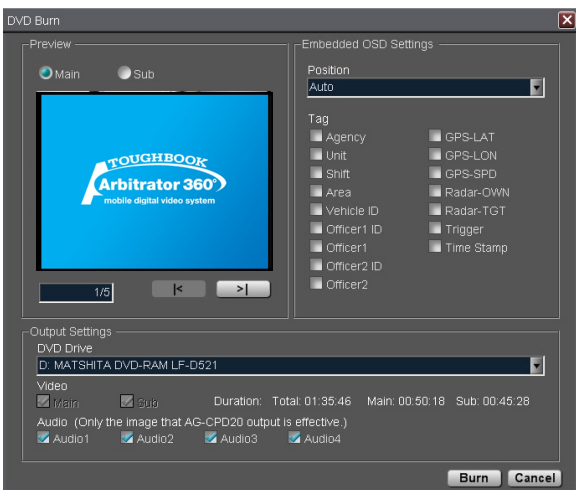
You can set in Administrator Setup so that output video data are automatically deleted from the Memory Card Video Recorder.

(See "Export/DVD Burn," page 87.)

1. Click on [DVD Burn] on the toolbar.
The DVD Burn screen is displayed.



2. Place a check mark in the box for the file(s) to be output in the List.
3. Click on [Start].
The Embedded OSD setting screen is displayed.



If the Password input screen is displayed
The Password input screen is displayed when the [Start] button is clicked in Step 3 if the current user is not the administrator and deletion of video data after output is set. Enter the password then click on [OK]. Creation of a DVD starts.

Exporting from the Front-End Application is not available at present. Upgrading is scheduled for the future.

4. Preview the video to be exported on the Preview screen.

A video file to be previewed can be selected by clicking on the [] or [] button. The top of the Main or Sub video is displayed. The tag specified by the Embedded OSD Setting is displayed as an OSD.

Note

The brightness of the preview video on the Embedded OSD setting screen is fixed independent of the Day/Night View setting on the Day/Time screen.

5. Perform the Embedded OSD, video output and audio output settings.
Position

Select the display position.

Item	Description
Auto	The Embedded OSD is displayed so that it does not overlap the position of the Embedded OSD setting of the Meta file. Default setting.
Upper left	The Embedded OSD is displayed on the upper left.
Lower left	The Embedded OSD is displayed on the lower left.

Tag

Select the tags to be set as an Embedded OSD.

DVD Drive

Set the directory path of the DVD drive.

Video

Select the video to be output. Either the main or sub video can be selected.

Main: Main video

Sub: Sub video

Duration: Total playback time of the selected video files

Audio

Select audio channels.

Notes

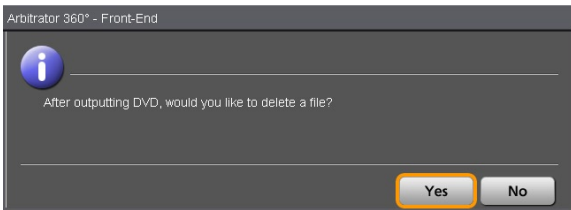
- A maximum of 13 tags can be set.
- If a Time Stamp has been embedded in the video, the Time Stamp of Tag cannot be embedded in the OSD.

6. Click on [Burn].

The Embedded OSD setting screen is closed, and the confirmation dialog box is displayed.



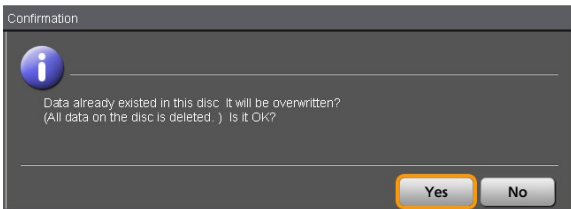
Click on [Yes] to start DVD output. The progress is displayed on the File bar and Total bar.



If confirming of data deletion has been set, the confirmation dialog box is displayed. Click on [Yes] to output.

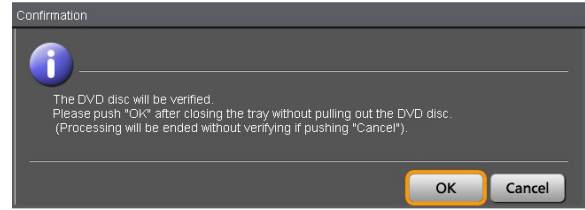
Note

If the file to be output includes main and sub videos and either of them is set to be copied to a DVD, both the main and sub videos are deleted upon DVD burn.



If videos are to be output to a rewritable disc, the confirmation dialog box is displayed. Click on [Yes] to overwrite. Copying to a DVD starts. To cancel copying, click on [No].

7. To verify the DVD disc, click on [OK].



Note

A disc may be ejected on some DVD drive. Reinsert the disc manually, and verify the disc.

To cancel outputting

Click on [Cancel].

While creating an image, output can be canceled.

Note

When writing to a DVD starts, output cannot be canceled.

Restoring a File

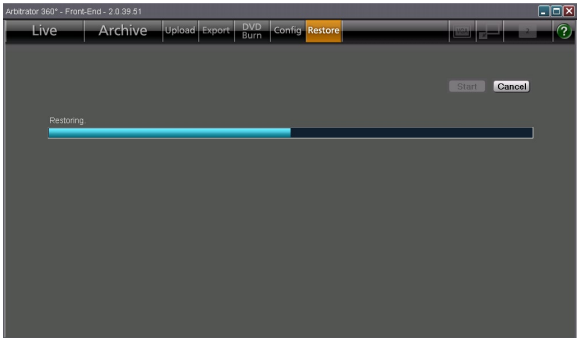
If the power for the Memory Card Video Recorder is turned off or a P2 card is removed during recording, the file on the card will be corrupted and cannot be played back. To play the corrupted file, a restoration operation is required.

Note
This function is available when the AG-CPG15P or AG-CPD10CRUP is connected.



1. Click on [Restore] on the toolbar.

The screen shown below appears.



2. Click on [Start].

Restore process begins.

Interrupt restoring

Click on [Cancel].

Restore process is interrupted, and the live screen appears.

Notes

- An interrupted restoration process can be resumed at a later time.
- Recording is still available even if there are files in need of restoration.
- A recording trigger detected during a restoration process or pressing the [REC] button will interrupt the process and start recording.
- Files that must be restored do not appear on the playback file list screen. Make sure to restoration the files beforehand.
- Since a seriously corrupted file may not be possible to restore, do not turn off the unit during P2 card access (for example, during recording) and do not remove a P2 card when the [BUSY] lamp is lit or blinking.
- The live screen reappears once the file restoration operation completes.

Administrator Setup

Basic Operations for the Administrator Setup Screen

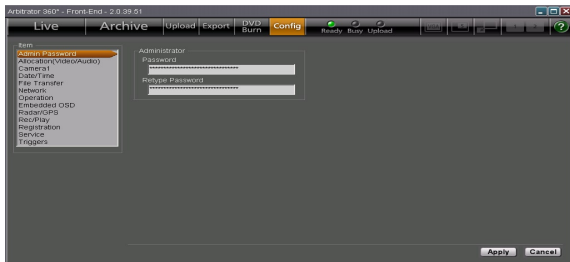
Opening the Administrator Setup screen

1. Click on **[Config]** on the toolbar of the Main screen.

The Administrator Password input screen is displayed.



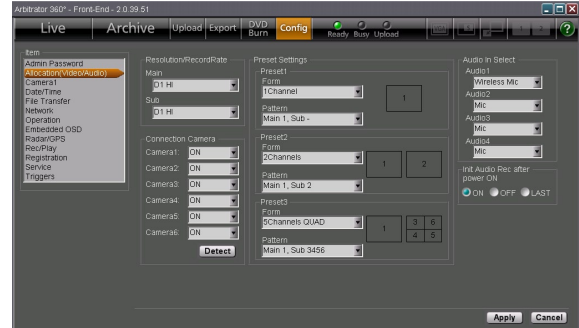
2. Enter the password in the Password input box.



3. Reenter the password in the Retype Password box.
4. Click on the item you wish to set up from the Item list on the left.
The setting screen for the selected item will be displayed.

Setting of items

1. Perform the necessary settings and selections on the displayed setting screen.



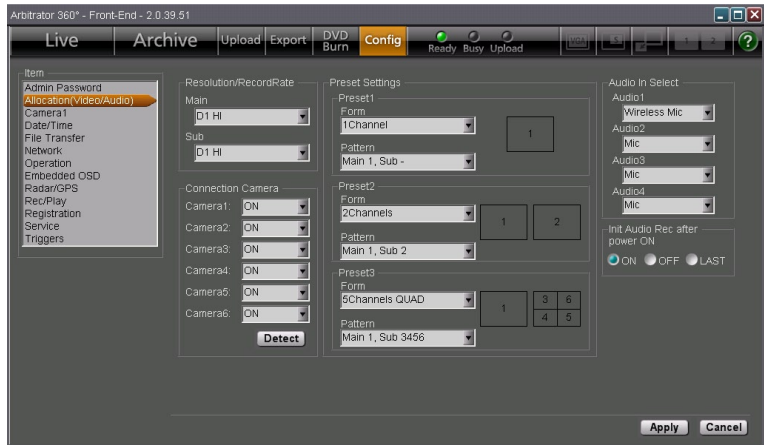
2. Click on **[Apply]**.
The changed settings will become valid.

Canceling changes

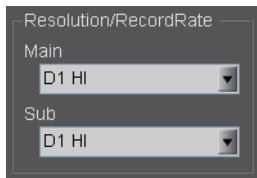
Click on **[Cancel]** before clicking on **[Apply]**.

The changes made are canceled, and the settings before making changes are restored.

Allocation (Video/Audio)



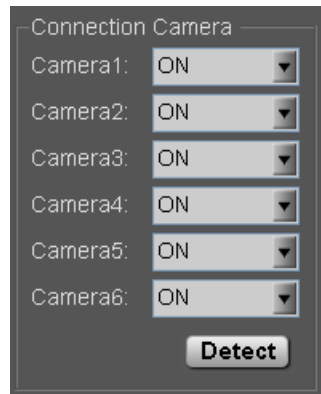
Resolution/RecordRate



Select the resolution of the screen and the recording rate.
 Select an appropriate option for the Main screen from the dropdown list for Main and one for the Sub screen from that for Sub.
 The options are as shown below:

Setting values: D1 HI, D1 STD, D1 10, CIF
 If either of the Main or Sub Resolution/RecordRate is set to "D1 10", the other is also set to "D1 10"

Connection Camera



Set if a camera is connected to each of [CAMERA 1], [2], [3], [4], [5], and [6] connectors on the Memory Card Video Recorder. If the connection is changed, the default settings will be applied to the items in Preset Settings.

ON: Connected

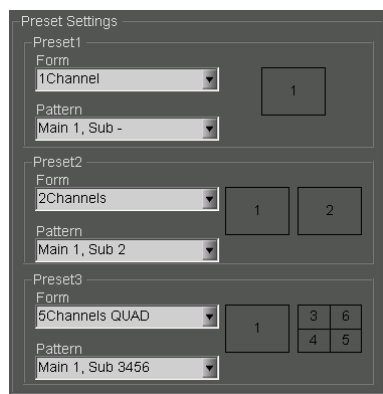
OFF: Not connected

To automatically detect camera connections
Click on [Detect].

The cameras connected to the Memory Card Video Recorder will be automatically detected. According to the detected cameras, the default settings will be applied to the items in Preset Settings.

Administrator Setup (continued)

Preset Settings



Note

- An error message will be displayed in the cases below.
- Settings are overlapped.
 - Preset3 is valid, but nothing has been set for Preset2.
 - No camera is connected.
 - A single camera is connected to [CAMERA 4], [CAMERA 5], or [CAMERA 6] connector on the Memory Card Video Recorder.

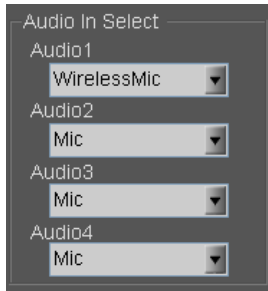
The channel mode (Form) and display pattern (Pattern) of the 6 cameras connected to the Memory Card Video Recorder can be selected. According to the connection status of cameras, selectable options are determined. (See “Camera Connection and Combination of Cameras” on page 141.)

Three Presets can be set. Presets1-3 that have been set here can be selected by the Preset switch button on the toolbar.

	Form		Pattern
Options	Numbers for cameras to be displayed		
	Main	Sub	
1Channel	1 / 2 / 3	-	Main 1, Sub- Main 2, Sub- Main 3, Sub-
2Channels	1 / 2	2 / 3	Main 1, Sub 2 Main 1, Sub 3 Main 2, Sub 3
4Channels- QUAD	-	1/2/3 6 4 5	Main -, Sub 1456 Main -, Sub 2456 Main -, Sub 3456
4Channels- PANORAMA	-	1 / 2 / 3 4 6 5	
5Channels- QUAD	1 / 2 / 3	2/3 6 4 5	Main 1, Sub 2456 Main 1, Sub 3456 Main 2, Sub 3456
5Channels- PANORAMA	1 / 2 / 3	2 / 3 4 6 5	Main 3, Sub 2456

When [Apply] is clicked, the settings are registered on the Memory Card Video Recorder.

Audio In Select



Select the audio connected to each of [AUDIO IN 1], [2], [3], and [4] connectors on the Memory Card Video Recorder.

Mic: Microphone

Wireless Mic: Wireless microphone

Off: No audio input

Init Audio Rec after power ON (Allocation)



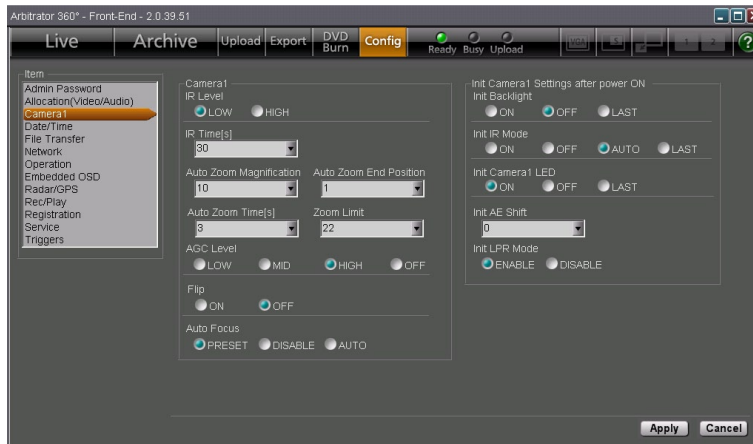
Set the audio recording status upon startup of the Memory Card Video Recorder. The setting will be applied to all four audio channels.

ON: Recording

OFF: Not recording

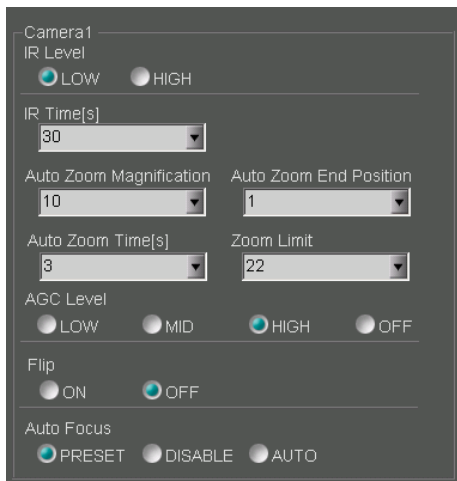
LAST: The setting upon the last power-off will be restored. If the Memory Card Video Recorder is not turned off properly, the setting data upon power-off may not be stored properly.

Camera1



Camera1

Perform the settings for the color camera that is connected to the [CAMERA 1] connector on the Memory Card Video Recorder.



IR Level

Select the automatic switching level of infrared imaging when the IR function is set to Auto.

- LOW:** Low level
- HIGH:** High level

IR time[s]

Select the time required for detecting the brightness used for automatic switching to/from infrared imaging, when the IR function is set to Auto.

- Setting values:** 10, 30, 60, 300 (seconds)

Auto Zoom Magnification

Set the maximum zoom magnification during automatic zooming.

- Setting values:** 1, 2, 3, 4, 5, 7, 10, 15, 22

Auto Zoom Time[s]

Set the keeping time of the maximum zoom magnification during automatic zooming.

- Setting values:** 3, 5, 8 (seconds)

Auto Zoom End Position

Set the automatic zooming end magnification position.

- Setting values:** 1, 2, 3, 4, 5, 7, 10, 15, 22, LAST

Zoom Limit

Set the maximum zoom magnification.

- Setting values:** 22, 220

AGC Level

Set the gain level for camera input.

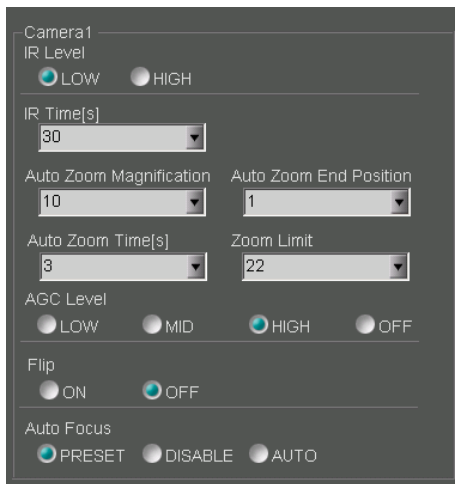
- LOW:** Low
- MID:** Middle
- HIGH:** High
- OFF:** No setting

Flip

Set if vertical flipping of the camera output image will be performed or not.

- ON:** Flipped
- OFF:** Not flipped

Administrator Setup (continued)



Auto Focus

Set the focusing method of the color camera in the following conditions:

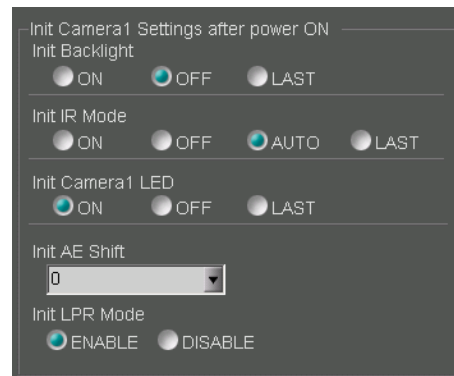
- When "Init LPR Mode" is set to "DISABLE"
- When "Init LPR Mode" is set to "ENABLE" and "LPR Mode" is set to "PATROL"
- When recording is started by a recording trigger signal with "Init LPR Mode" set to "ENABLE" and "LPR Mode" set to "LPR"

PRESET: When the zoom magnification is set to $\times 3$ or less, the camera focuses on an object at about 15 m distance from the camera. If zooming operation is performed afterward, automatic focusing will be activated.

DISABLE: The focal position is fixed at a distance of about 40 m, and automatic focus is disabled.

AUTO: Automatic focus is enabled.

Init Camera1 Settings after power ON



Perform the initial settings for the color camera that is connected to the [CAMERA 1] connector on the Memory Card Video Recorder.

Init Backlight

Set if the backlight compensation is On or Off.

ON: The function is enabled.

OFF: The function is disabled.

LAST: The setting upon the last power-off will be restored. If the Memory Card Video Recorder is not turned off properly, the setting data upon power-off may not be stored properly.

Init IR Mode

Set if the IR function is On or Off.

ON: The function is enabled.

OFF: The function is disabled.

AUTO: The function is automatically turned ON or OFF.

LAST: The setting upon the last power-off will be restored. If the Memory Card Video Recorder is not turned off properly, the setting data upon power-off may not be stored properly.

Init Camera1 LED

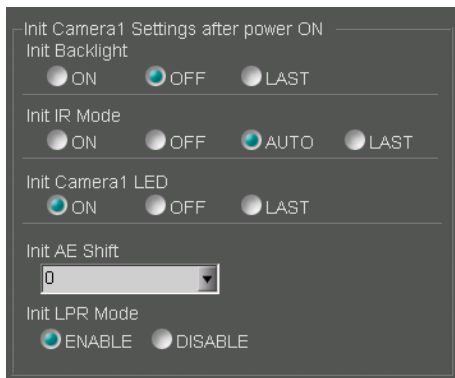
Set if the [REC] lamp of the color camera is lit or not during recording.

ON: The lamp lights.

OFF: The lamp does not light.

LAST: The setting upon the last power-off will be restored when the camera is turned on. If the Memory Card Video Recorder is not turned off properly, the setting data upon power-off may not be stored properly.

Administrator Setup (continued)



Init AE Shift

Set the brightness of images upon power-on of the color camera.

Setting values: 2, 1, 0, -1, -2, LAST (The setting upon the last power-off will be restored when the camera is turned on. If the Memory Card Video Recorder is not turned off properly, the setting data upon power-off may not be stored properly.)

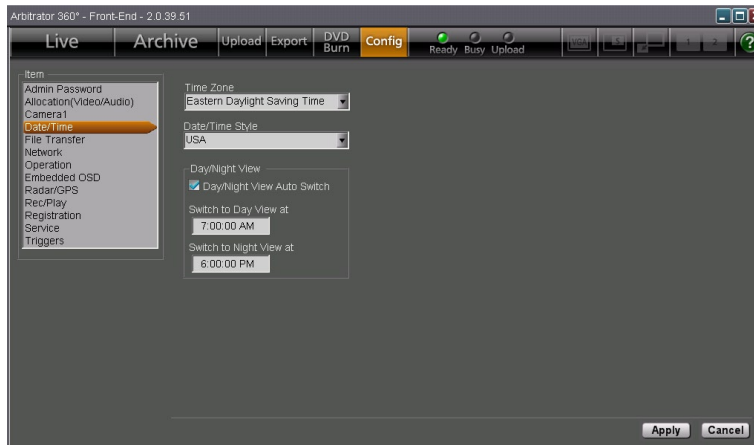
Init LPR Mode

Set if the LPR (License Plate Recognition) function is enabled or not.

ENABLE: The LPR function is enabled, and [LPR Mode] setting change by the user becomes possible. The setting upon the last power-off is stored and will be restored upon power-on of the color camera.

DISABLE: The LPR function is disabled.

Date/Time



Time Zone

Select the time zone:

- Hawaii Standard Time**
- Yukon Standard Time**
- Yukon Daylight Saving Time**
- Pacific Standard Time**
- Pacific Daylight Saving Time**
- Mountain Standard Time**
- Mountain Daylight Saving Time**
- Central Standard Time**
- Central Daylight Saving Time**
- Eastern Standard Time**
- Eastern Daylight Saving Time**
- Atlantic Standard Time**
- Atlantic Daylight Saving Time**
- Asia Tokyo**

Date/Time Style

Set the display pattern of date and time.

- ISO:** YYYY-MM-DD HH:MM:SS
- USA:** MM/DD/YYYY HH:MM:SS

Day/Night View

When the Day/Night View Auto Switch check box is checked, Day and Night modes are automatically switched.

Mode switching time setting

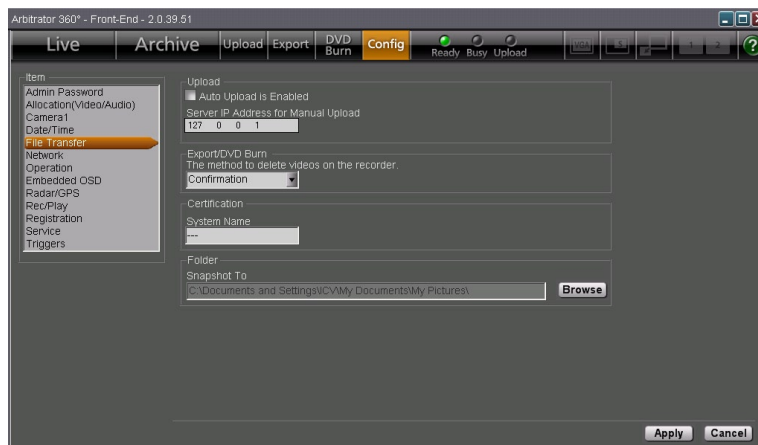
Set the Day/Night mode switching time when "Day/Night View Auto Switch" is enabled. "Switch to Day View at" specifies the time for shifting to Day mode, and "Switch to Night View at" specifies the time for shifting to Night mode.

Setting range: 00:00:00 AM-11:59:59 PM

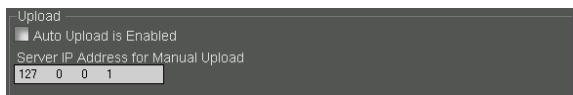
Note

Displayed time (12/24-hour system) depends on the setting of your PC.

File Transfer



Upload



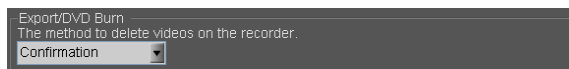
Auto Upload is Enabled

When a check mark is placed in the box, automatic uploading is enabled.
Automatic uploading is disabled as default.

Server IP Address for Manual Upload

Set the IP address for the Back-End server that is used for manual uploading.

Export/DVD Burn



The method to delete videos on the recorder

Select how to delete video files from the Memory Card Video Recorder after **data exporting or** DVD burning.


Force: Automatically deleted

Confirmation: A confirmation screen is displayed.
Files are deleted after reconfirmation.

Exporting from the Front-End Application is not available at present. Upgrading is scheduled for the future.

Administrator Setup (continued)

Certification

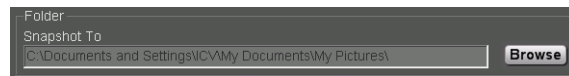


The screenshot shows a dialog box titled "Certification". It contains a label "System Name" followed by a text input field. The input field is currently empty.

System Name

Set the system name of the Memory Card Video Recorder within 50 characters. When the Recorder directly communicates with the Back-End system, the communications is enabled only when the name set here and that registered in the Back-End system are the same.

Folder

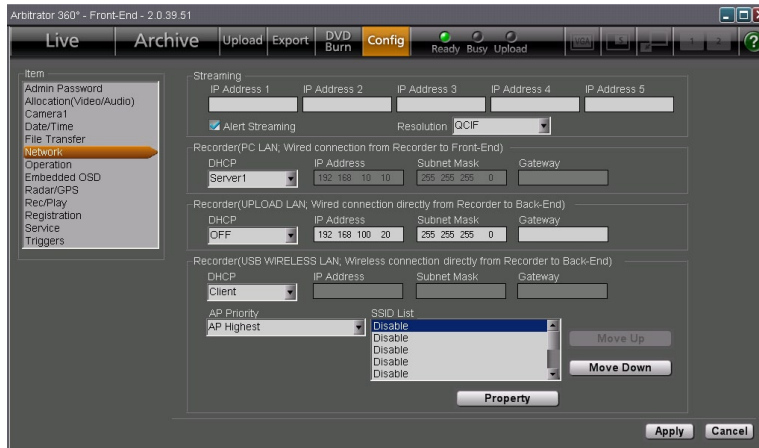


The screenshot shows a dialog box titled "Folder". It contains a label "Snapshot To" followed by a text input field containing the path "C:\Documents and Settings\IC\My Documents\My Pictures\" and a "Browse" button.

Snapshot To

Set a folder in which snapshot files are to be stored. The default setting is "My Pictures" for Windows XP and "Pictures" for Windows Vista. Use the [Refer] button to assign the folder.

Network



Streaming

Set the IP addresses for the Back-End server. Up to 5 IP addresses can be registered. The Front-End application periodically sends packets to these IP addresses. The Back-End server recognizes the sender of a packet as a streaming target.

Alert streaming

If a check mark is placed in the Alert Streaming box, when streaming is in progress in the Back-End application, that is indicated on the Front-End application screen.

F S Streaming is not available at present. Upgrading is scheduled for the future.

Recorder (PC LAN)

The Recorder (PC LAN) configuration section shows the following settings:

- DHCP:** Server1
- IP Address:** 192.168.10.10
- Subnet Mask:** 255.255.255.0
- Gateway:** (empty)

Perform the settings for the wired network between the Memory Card Video Recorder and the Front-End application.

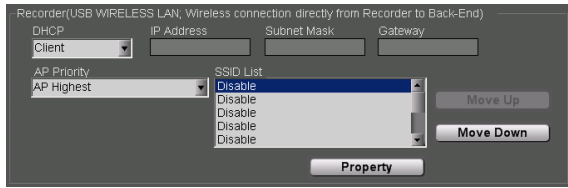
DHCP

Set if the LAN port on the Memory Card Video Recorder is to serve as a DHCP server or not. If DHCP is set to OFF, the port will not serve as a DHCP server. If the port is set as a DHCP server, the network settings are as shown below:

DHCP	IP Address	Subnet Mask	Gateway
DHCP Server1	192.168.10.10	255.255.255.0	empty
DHCP Server2	192.168.217.192	255.255.255.0	empty
DHCP Server3	172.24.217.192	255.255.255.0	empty
DHCP Server4	10.216.217.192	255.255.255.0	empty

Administrator Setup (continued)

Recorder (USB WIRELESS LAN)



Perform the settings for the USB wireless LAN port that is used for connection between the Memory Card Video Recorder and the Back-End application.

When the LAN port setting is obtained from the DHCP server: Set DHCP to Client.

When the LAN port setting is not obtained from the DHCP server: Set DHCP to OFF, and set the IP Address, Subnet Mask, and Gateway.

To set the connection order priority of access points

Set AP Priority, as shown below:

Follow the order in the SSID List: A connection is attempted in the order in the SSID List.

Random: A connection to an access point is attempted randomly.

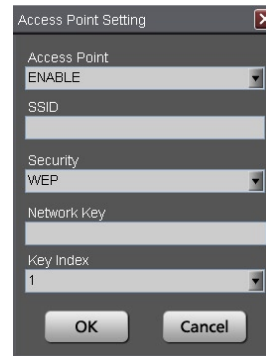
To change the order in the SSID List:

1. Select an access point whose priority order you wish to change in the SSID List.
2. For raising the priority, click on [Move Up]. For lowering the priority, click on [Move Down].

Adding an access point

1. Click on [Property].

The Access Point Setting screen is displayed.



2. Set Access Point to ENABLE.

If it is set to DISABLE, the access point setting becomes invalid.

3. Set SSID.
4. In Security, select the encryption method.
5. If Security is set to either WEP or WPA, perform a setting for Network Key.
6. If Security is set to WEP, select the Key Index from among 1, 2, 3, and 4.
7. Click on [OK].

To cancel changes to the setting

Click on [Cancel] before clicking on [OK].

Editing an access point

1. Click on [Property].

The Access Point Setting screen is displayed.

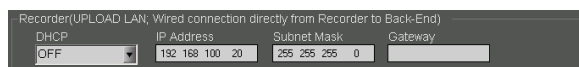
2. Edit items.
3. Click on [OK].

To cancel changes to the items

Click on [Cancel] before clicking on [OK].

Administrator Setup (continued)

Recorder (UPLOAD LAN)



Recorder(UPLOAD LAN; Wired connection directly from Recorder to Back-End)

DHCP	IP Address	Subnet Mask	Gateway
OFF	192.168.100.20	255.255.255.0	

Perform the settings for the wired LAN port that is used for connection between the Memory Card Video Recorder and the Back-End application.

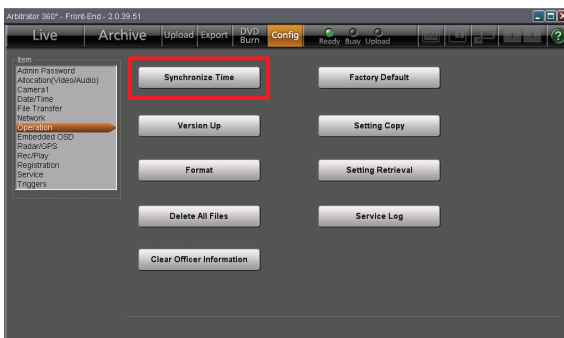
When the LAN port setting is obtained from the DHCP server: Set DHCP to Client.

When the LAN port setting is not obtained from the DHCP server: Set DHCP to OFF, and set the IP Address, Subnet Mask, and Gateway.

Operation

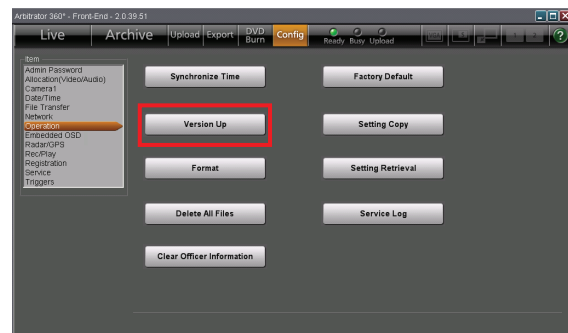


Synchronize Time



To synchronize the clock of the Memory Card Video Recorder with that of the PC, click on [Synchronize Time].

Version Up



Upgrade the firmware of the Memory Card Video Recorder, as shown in the following steps.

1. **Load the firmware of the Memory Card Video Recorder in the root directory of the USB memory device.**
2. **Connect a USB memory device.**
In a case of the AG-CPD20P or AG-CPD10CRUP: Connect a USB memory device to the PC.
In a case of the AG-CPD15P: Connect a USB memory device to the AG-CPD15P.
3. **Click on [Version Up].**
A confirmation dialog box is displayed.
4. **Click on [YES].**
The progress dialog box is displayed, and version upgrade is performed.

Administrator Setup (continued)

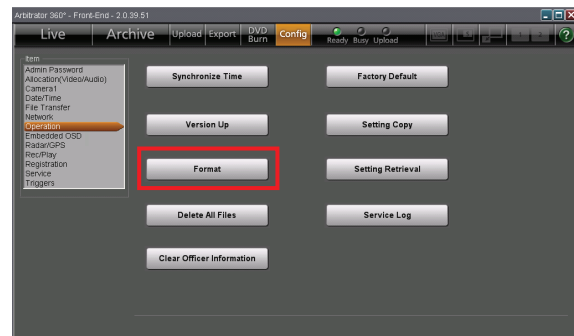
Notes

- Do not use any button of the PC and the Memory Card Video Recorder or turn them off during version upgrade.
- If version upgrade fails, an error message is displayed and version upgrade is canceled. (See "Error Messages," page 128.)
- When the AG-CPD15P is used, version upgrade cannot be performed when the following conditions exist in the root directory:
 - If a DATA folder is present
 - If multiple version upgrade files (.VUP extension) are present

To cancel version upgrade

Click on [No].

Format



Use this function to format all SDHC Memory Cards loaded in the Memory Card Video Recorder. All video and audio data files that are stored in the SDHC Memory Cards will be deleted.

1. Click on [Format].

A confirmation dialog box is displayed.

2. Click on [Yes].

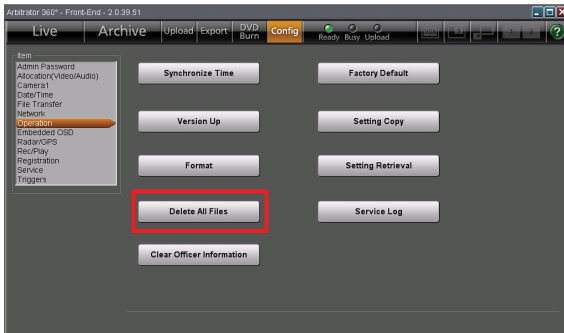
Formatting starts.

To cancel formatting

Click on [No].

Administrator Setup (continued)

Delete All Files

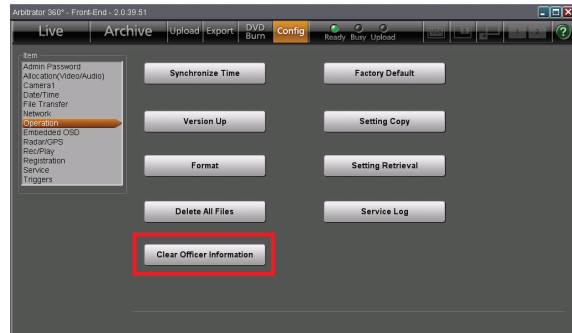


All video and audio data files that are stored in the SDHC Memory Cards will be deleted.

1. Click on **[Delete All Files]**.
A confirmation dialog box is displayed.
2. Click on **[Yes]**.
All files are deleted.

To cancel deleting
Click on [No].

Clear Officer Information



Use this function to delete the data for Officer1, Officer2, VehicleID, Area, Unit, Agency, and Shift registered in the Memory Card Video Recorder.

1. Click on **[Clear Personal Information]**.
A confirmation dialog box is displayed.
2. Click on **[Yes]**.
Personal information is cleared.

To cancel deleting
Click on [No].

Factory Default



Click on [Factory Default].

All settings of the Memory Card Video Recorder and Front-End application can be reset to their factory defaults.

Note that the recorder and application will not revert to user made settings after being reset to their factory defaults. Make sure you really want to return all settings to their factory defaults before performing the following steps.

Setting Copy



The current setting data of the Memory Card Video Recorder and the Front-End application can be copied onto external media, such as a USB memory device.

1. Connect a USB memory device.

In a case of the AG-CPD20P: Connect a USB memory device to the PC.

In a case of the AG-CPD15P: Connect a USB memory device to the AG-CPD15P.

2. Click on [Setting Copy].

3. Select the destination folder for copying.

The setting data will be copied onto the selected folder in the USB memory device.

Upon completion of copying, the dialog box closes.

To cancel copying

Click on [Cancel]. Copying is canceled, and the dialog box closes.

Note

This function is not available with the AG-CPD10CRUP.

Setting Retrieval



The setting data for the Memory Card Video Recorder and the Front-End application that have been exported to a USB memory device with the Setting Copy function can be copied back.

1. **Connect the USB memory device to the PC.**
2. **Click on [Setting Retrieval].**
3. **Select a setting file to be copied back.**

The setting data are copied from the USB memory device onto the Memory Card Video Recorder. Upon completion of setting retrieval, a completion dialog box is displayed.

Note

This function is not available with the AG-CPD15P and AG-CPD10CRUP.

Service Log



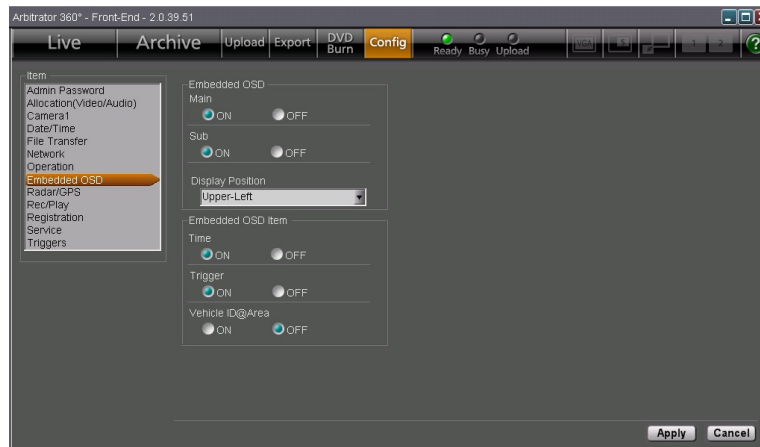
The operation log of the Memory Card Video Recorder can be exported to external media.

1. **Click on [Service Log].**
A file storage dialog box is displayed.
2. **Specify the file storage location.**
The operation log is exported.

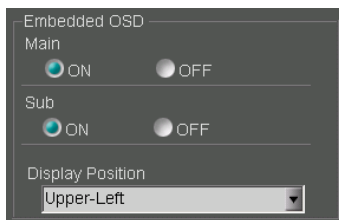
If exporting fails, an error dialog box is displayed.

For details on service log, see "Service Logs", page 142.

Embedded OSD



Embedded OSD



Main, Sub

Set if Embedded OSD is displayed on the Main screen (Main) and Sub screen (Sub).

ON: Displayed

OFF: Not displayed

Display Position

Set the Embedded OSD display position on the screen.

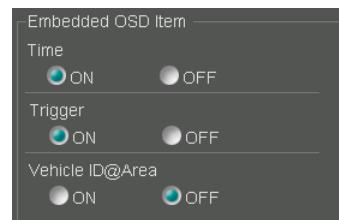
Upper-Left: At the upper left

Upper-Right: At the upper right

Bottom-Left: At the bottom left

Bottom-Right: At the bottom right

Embedded OSD Item



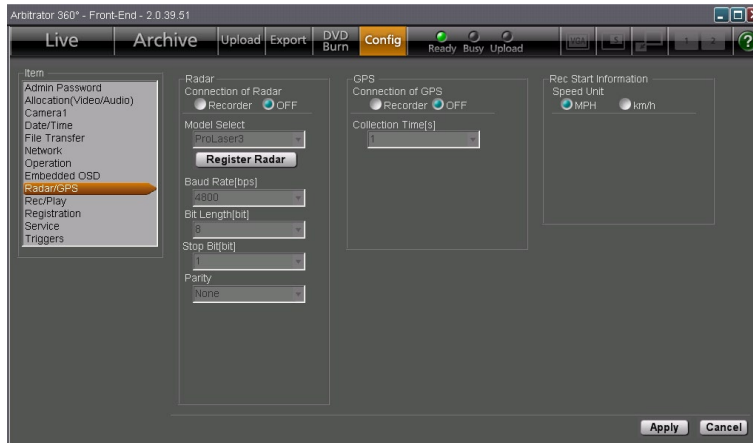
Display item setting

Set if Time, Trigger, VehicleID@Area data are displayed as Embedded OSD or not.

ON: Displayed

OFF: Not displayed

Radar/GPS



Radar



Connection of Radar

Select if a radar gun is connected to the Memory Card Video Recorder or not.

Recorder: Connected

OFF: Not connected

Model Select

Select the model of the radar gun. The radar gun model data registered in the Memory Card Video Recorder are displayed in the dropdown list.

ProLaser3: For Kustom Signals Inc.'s ProLaser3

STALKER_DUAL: For Applied Concepts, Inc.'s STALKER DUAL.

GOLDEN_EAGLE_II: For Kustom Signals Inc.'s Golden Eagle II

Registering radar

Load radar gun library data via a USB memory device then register them to the Memory Card Video Recorder.

1. **Copy the radar gun library onto a USB memory device.**
2. **Connect the USB memory device to the PC.**
3. **Click on [Register Radar].**
4. **Select the folder to be copied.**
The radar gun library data are copied from the USB memory device onto the Memory Card Video Recorder then registered. Upon completion of registration, a completion dialog box is displayed.

Note

An error dialog box will be displayed when no effective file is found on the USB memory device or registration was failed.

Administrator Setup (continued)

Specifications for serial communication

The specifications for the serial communication are displayed when a radar gun is connected.

Baud Rate[bps]

Bit Length[bit]

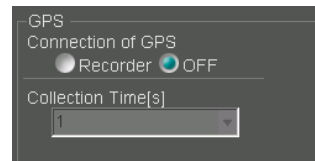
Stop Bit[bit]

Parity

Notes

- Some radar guns come with a function for setting conditions that enable correct measurement of target vehicle speed. Use this function according to the instructions in the Operating Instructions of the radar gun.
- Error messages appear when the radar gun is operating abnormally.

GPS



Connection of GPS

Select if the GPS is connected to the Memory Card Video Recorder or not.

Recorder: Connected

OFF: Not connected

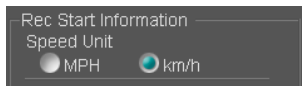
Collection Time[s]

Select an interval of collecting data from the GPS.

Setting values: 1, 2, 5, 10 (seconds)

Administrator Setup (continued)

Rec Start Information



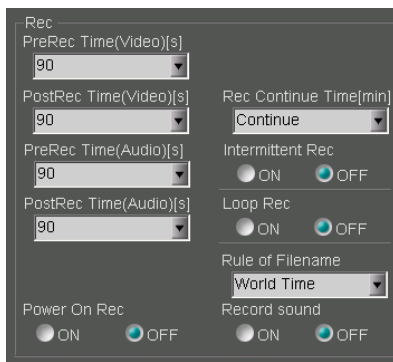
Speed Unit

Select the speed unit (MPH or km/h) to be used in a case where recording is started with the vehicle speed of your vehicle that is obtained from the GPS or the radar gun. The selected unit is displayed on the Info tab.

Rec/Play



Rec



PreRec Time

Use this function to set how much of already stored video/audio will be retained when a trigger is entered or the [REC] button is pressed.

The video prerecording time can be set in PreRec Time (Video) and the audio prerecording time, in PreRec Time (Audio). However, even if the PreRec Time (Audio) is set longer than the PreRec Time (Video), the audio recording starts at the same time when the video prerecording starts.

The prerecording time is not included in intermittent recording.

Setting values: 0, 3 (Audio only), 10, 20, 30, 60, 90 (seconds)

PostRec Time

Use this function to set the time interval recording will continue after the [STOP] button is pressed.

The video post-recording time can be set in PostRec Time (Video) and the audio post-recording time, in PostRec Time (Audio). However, even if the PostRec Time (Audio) is set longer than the PostRec Time (Video), the audio recording ends at the same time when the video post-recording ends.

The post-recording time is not included in intermittent recording.

Setting values: 0, 3 (Audio only), 10, 20, 30, 60, 90 (seconds)

Rec Continue Time

Use this function to set recording continue time for normal recording when a trigger is entered or when the [REC] button is pressed.

Setting values: Continue, 1, 2, 5, 10, 15, 20, 30, 60, 90 (minutes)

Intermittent Rec

Use this function to record one video frame per second.

ON: Intermittent recording is enabled.

OFF: Intermittent recording is disabled.

Loop Rec

Use this function to continue recording when there is no free space in the SDHC Memory Cards, by deleting the oldest files one after another.

ON: Loop recording is enabled.

OFF: Loop recording is disabled.

Note

If Loop Rec is set to ON, PreRec and PostRec do not function.

Rule of Filename

To the names of files created during recording, data of recording start date and time are attached. Select the time system to be used for filenames.

World Time: World Time

Local Time: Local time

Note

If the AG-CPD15P is connected with the Front-End application, only "World Time" can be selected.

Administrator Setup (continued)

The screenshot shows the Recorder settings menu with the following options:

- PreRec Time(Video)[s]: 90
- PostRec Time(Video)[s]: 90
- PreRec Time(Audio)[s]: 90
- PostRec Time(Audio)[s]: 90
- Rec Continue Time(min): Continue
- Intermittent Rec: OFF
- Loop Rec: OFF
- Rule of Filename: World Time
- Power On Rec: OFF
- Record sound: OFF

PowerOn Rec

Select if recording is started automatically when the Memory Card Video Recorder is turned on.

ON: Power-on recording is enabled.

OFF: Power-on recording is disabled.

Record sound

Select if a beep sounds every minute during recording.

ON: A beep sounds.

OFF: A beep does not sound.

GPO

The screenshot shows the GPO settings menu with the following options:

- GPO1 Signal: REC
- GPO2 Signal: REC+ERROR
- GPO3 Signal: OFF

Select data to be output to GPO 1, 2, and 3.

OFF: Not output

REC: Recording status data are output.

ERROR: Error status data are output.

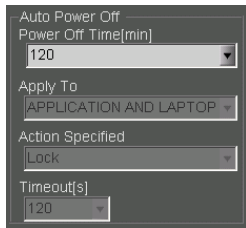
REC+ERROR: Recording and error status data are output.

Note

Selectable setting for GPO3 is OFF or REC.

Administrator Setup (continued)

Auto Power OFF



Set the status after the Memory Card Video Recorder is turned off.

Power Off Time

Select the time required from the ACC is turned off up to the Memory Card Video Recorder is turned off.

0, 10, 20, 30, 60, 90, 120, 180 (minutes): The recorder is turned off after the specified time.

After Upload: The recorder is turned off after uploading is finished.

Action after uploading is finished

When Power Off Time is set to After Upload, select which action is to be taken by the subject(s) after uploading is completed.

Apply To and Action Specified

Select which one's uploading is to be observed, and the action to be taken

APPLICATION ONLY: Close

LAPTOP ONLY: Lock, Standby

APPLICATION AND LAPTOP: Lock Log off, Shutdown, Stand by

Timeout[s]

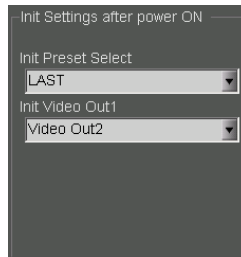
The time required from the specified action is finished until the recorder is turned off can be specified.

Setting values: 30, 60, 90, 120 (seconds)

Note

When the vehicle's ignition switch is set to ACC-OFF with Upload Mode on the File Transfer screen in Config setup set to MANUAL and Power Off Time on the Rec/Play screen set to AUTO, uploading will start automatically.

Init Settings after power ON (Rec/Play)



Set the status after the Memory Card Video Recorder is turned on.

Init Preset Select

Select a Preset setting.

Preset1, Preset2, Preset3: Either of Preset1, Preset2, Preset3

LAST: The setting upon the last power-off will be restored.

Init Video Out 1

Select which signal is to be output from the [VIDEO OUT 1] connector of the Memory Card Video Recorder as through output.

CAM1: Input signal to the [CAMERA 1] connector

CAM3: Input signal to the [CAMERA 3] connector

Video Out2: Encoded signal

LAST: The setting upon the last power-off will be restored.

Classify



Classify Tag List

A list of the registered classify tags can be displayed. Up to 50 classify tags can be registered.

Force Classify

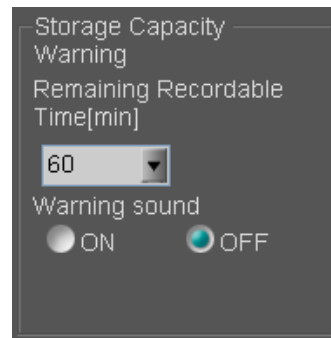
Set if classify information is added by a user upon completion of recording.

FORCE: Addition of classify information is always required.

ENABLE: Addition of classify information is permitted.

DISABLE: Addition of classify information is prohibited.

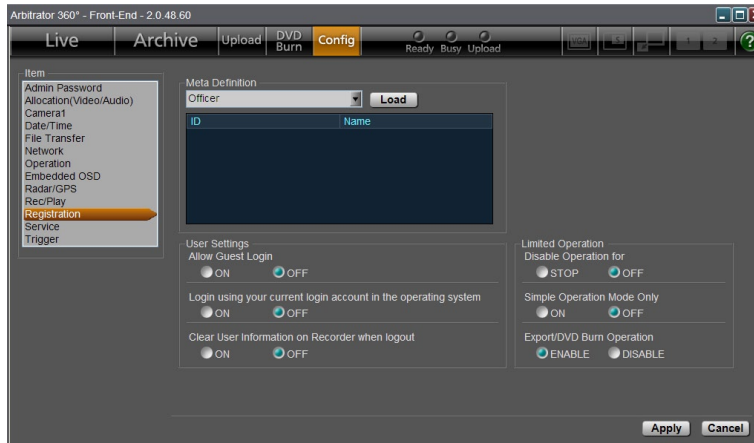
Storage Capacity Warning



If Warning sound is set to ON, a short beep is to sound twice every 30 seconds when the remaining recordable time becomes shorter than the value set by Remaining Recordable Time[min]. If the Warning sound is set to OFF, no warning sounds.

Setting values: 30, 60, 90 (minutes)

Registration



Meta Definition

Registering the meta definition

Create the setting files for Administrators, Officers, Classify tags, etc., and store them on a USB memory device. Then the stored files can be loaded from the USB memory device to the Memory Card Video Recorder as the following lists.

- Administrators list
- Officers list
- Classify tags list
- Agency list
- Unit list
- Shift list
- Area list
- VehicleID list

1. **Connect the USB memory device in which meta definitions are stored to:**
In a case of the AG-CPD20P: PC
In a case of the AG-CPD15P: AG-CPD15P
2. **Select the meta definition to be loaded from the Meta Definition dropdown list.**
3. **Click on [Load].**
The file selection dialog box appears.
4. **Select a file to be loaded.**
5. **Click on [Open].**
The specified meta definition is loaded and set for the Memory Card Video Recorder.
The loaded meta definition is displayed in the list.

Notes

- If no valid file is found on the USB memory device, the settings on the Memory Card Video Recorder will be cleared.
- Up to 50 Classify tags can be loaded, but only the first 10 tags will be registered on the Memory Card Video Recorder.
- This function is not available with the AG-CPD10CRUP.
- Meta definition is loaded soon after the [OK] button is clicked on, and clicking on the [Apply] button is not required.

File format

Filename:

Any filename may be used.

Syntax:

Officer data files may contain no more than one statement per line.
Multiple statements or definitions on one line are invalid.

Line Feed Codes:

Line feeds are coded as the hexadecimal values 0Dh 0Ah or just 0Ah.

Blank Lines:

Blank lines are ignored. Aside from the line feed code, a blank line may contain only space and tab (09h) characters.

Comment Lines:

Lines beginning with "#" (ignoring leading spaces or tabs) are considered to be comment lines. These have no special meaning to the system, but may contain notes or descriptions. Valid comment characters are those from 20h to 7Eh.

Administrator Setup (continued)

Definition Lines:

An identifier is a definition value. These lines define names and other data. Leading spaces and tabs are ignored. Identifier descriptions are shown in the following table.

Sample files

Samples for the setting files are as shown below.

Administrator file

Identifier	Max. characters	Description	Classify
FirstName	50	Specify administrator's first name	<input type="radio"/>
MiddleName	1	Specify administrator's middle initial	<input checked="" type="radio"/>
LastName	50	Specify administrator's last name	<input type="radio"/>
ID	50	Officer number for authentication	<input type="radio"/>
Password	12	Specify the password.	<input checked="" type="radio"/>
Border	73	Borders may be assigned to multiple administrators. Defined values are ignored.	<input type="radio"/>

```
Border=-----
# Administrator setting file

FirstName=John
MiddleName=
LastName=Smith
ID=ICV12345
Password=pana1122

Border=-----

FirstName=Jane
MiddleName=
LastName=White
ID=ICV12346
Password=pana1234
```

Officer file

Identifier	Max. characters	Description	Classify
FirstName	50	Specify officer's first name	<input type="radio"/>
MiddleName	1	Specify officer's middle initial	<input checked="" type="radio"/>
LastName	50	Specify officer's last name	<input type="radio"/>
ID	50	Officer number for authentication	<input type="radio"/>
Password	12	Specify the password.	<input checked="" type="radio"/>
Border	73	Borders may be assigned to multiple officers. Defined values are ignored.	<input type="radio"/>

```
Border=-----
# Officer setting file

FirstName=John
MiddleName=
LastName=Smith
ID=ICV12345
Password=pana1122
Border=-----

FirstName=Jane
MiddleName=
LastName=White
ID=ICV12346
Password=pana1234
```

Administrator Setup (continued)

Field name file

Identifier	Max. characters	Description	Classify
Field1	50	Specify field name of Field1.	x
Field2	50	Specify field name of Field2.	x
Field3	50	Specify field name of Field3.	x
Field4	50	Specify field name of Field4.	x
Field5	50	Specify field name of Field5. The system uses Field5 for identifying a vehicle so that the name like Source, Vehicle, etc. is recommended to be used.	x

```
#-----
#Field name setting file

Field1=Agency
Field2=Unit
Field3=Shift
Field4=Area
Field5=VehicleID
```

Classify tags

Identifier	Max. characters	Description	Classify
Classify	99	Defines Classify tag.	o

```
#Border=-----
#Classify tag setting file

Classify=Classify1
Classify=Classify2
Classify=Classify3
Classify=Classify4
Classify=Classify5
```

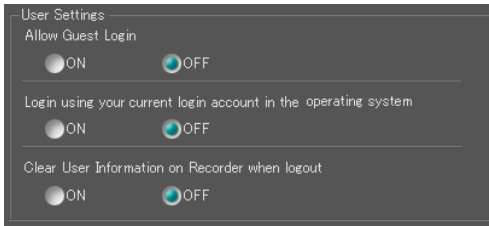
Field file

Identifier	Max. characters	Description	Classify
Agency	50	Specify the value of Field1.	o
Unit	50	Specify the value of Field2.	o
Shift	50	Specify the value of Field3.	o
Area	50	Specify the value of Field4.	o
Source	50	Specify the value of Field5.	o

```
#Border=-----
#Field List setting file

Agency=New York
Agency=Los Angeles
Agency=Dallas
Agency=San Diego
Agency=Chicago
```

User Settings



Allow Guest Login

Select if login of a user who has not been registered in the Front-End application or the Memory Card Video Recorder is permitted or not.

ON: Login is permitted. Entering of a password on the Login screen is no longer required.

OFF: Login is not permitted.

Login using your current login account in the operating system

When set to ON, if the current login user name to the PC is the same as that to the Front-End application, the login screen with the password entered will be displayed. This allows you to omit password input.

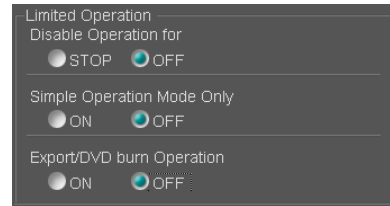
Clear User Information on Recorder when logout

Select if the user information is deleted upon logoff.

ON: Deleted

OFF: Not deleted

Limited Operation



Disable Operation for

Set the operation prohibited by a user.

STOP: Use of the STOP button is prohibited.

OFF: All operations are permitted.

Simple Operation Mode Only

This setting permits a user to use only Simple Operation Mode display.

Regardless of this setting, the administrator can use both Full and Simple Operation modes.

ON: A user can use only Simple Operation mode.

OFF: A user can use both Full and Simple Operation modes.

Note

The setting for use of only Simple Operation mode is enabled when the following two conditions are satisfied:

- Administrators List is registered on the Registration screen.

(See "Registration," page 105.)

- The user is logged in as an officer but not as an administrator.

(See "Startup and Termination," page 49.)

Export/DVD burn Operation

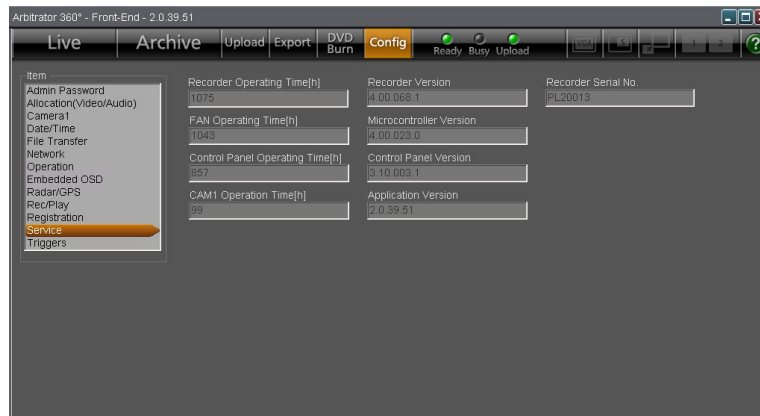
Set if **export and** DVD burn is permitted by a user.

ENABLE: Permitted

DISABLE: Not permitted

Exporting from the Front-End Application is not available at present. Upgrading is scheduled for the future.

Service



Recorder Operating Time [h]

Use this function to view the operating time of the Memory Card Video Recorder.

Unit: Hour

FAN Operating Time [h]

Use this function to view the operating time of the fan.

Unit: Hour

Control Panel Operating Time [h]

Use this function to view the total operating time of the Remote Control Panel.

CAM1 Operation Time [h]

Use this function to view the operating time of the color camera.

Unit: Hour

Recorder Version

Use this function to view the firmware version of the Memory Card Video Recorder.

Microcontroller Version

Use this function to view the version of the microprocessor.

Control Panel Version

Use this function to view the version of the remote control panel.

Application Version

Use this function to view the version of the Front-End application.

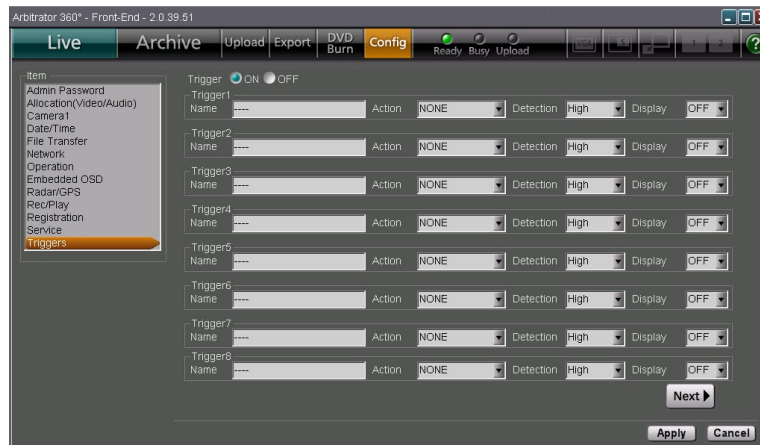
Recorder Serial No.

Use this function to view the serial number of the Memory Card Video Recorder.

Note

When the AG-CPD15P or AG-CPD10CRUP Memory Card Video Recorder is used, BIOS Creation Date is displayed to show the date and time when BIOS was created.

Triggers



Trigger

Set if GPI triggers are used or not.

ON: The GPI triggers are used.

OFF: The GPI triggers are not used.

Trigger1-Trigger16

When GPI triggers are used, set the names, action when a trigger is detected, detection conditions, and trigger IDs to be displayed on the screen. Page 1 is the setting screen for Triggers 1-8, and Page 2 is that for Triggers 9-16. To change the setting screens, click on the [Next] or [Prev] button.

Name

Specify a name with a maximum of 15 characters.

Action

Set an action to be taken when a trigger signal is detected.

<Trigger 1-16>

NONE: No action

REC: Recording starts.

STOP: Recording stops.

AUTOZOOM: Automatic zooming is performed.

CAM1LED: The [REC] lamp of the color camera is turned ON or OFF.

P1: Video specified in Preset1 is selected.

P2: Video specified in Preset2 is selected.

P3: Video specified in Preset3 is selected.

P1REC: Video specified in Preset1 is recorded.

P2REC: Video specified in Preset2 is recorded.

P3REC: Video specified in Preset3 is recorded.

AUDIO2ON: A signal input to [AUDIO IN 2] is recorded.

AUDIO2MUTE: A signal input to [AUDIO IN 2] is not recorded.

<Trigger 15, 16>

TGT(REC): Recording starts with a TGT input.

TGT(P1REC), TGT(P2REC), TGT(P3REC): Video specified in Preset1, Preset2, or Preset3 is recorded with a TGT input.

OWN(REC): Recording starts with an OWN input.

OWN(P1REC), OWN(P2REC), OWN(P3REC): Video specified in Preset1, Preset2, or Preset3 is recorded with an OWN input.

Notes

- The TGT and OWN triggers are generated when the speed of a target vehicle and your vehicle, respectively, exceeds the specified speeds.
- TGT and OWN can be set to either Trigger 15 or Trigger 16, but not to both of them.

Administrator Setup (continued)

Detection

Set the conditions for an action to be taken when a trigger is detected.

<Trigger 1-16>

Low: Low-edge trigger

High: High-edge trigger

Both: Both-edge trigger

Level Low: Low-level trigger

Level High: High-level trigger

<With Triggers 15 and 16, when Action is set to TGT or OWN>

Specify the speed of your or target vehicle. The unit is MPH or km/h. Set the unit on the Radar/GPS screen in Administrator Setup. The speed of a target vehicle can be also specified with TGT on the Info tab.

Setting values: OFF, 1, 2, . . . 200

Display

Assign characters to be used in the Embedded OSD display.

Setting values: A-Z, -, OFF (no display)

Note

The value set by Display appears when the state triggered by Detection prevails. However, only when a value "B" is set for Detection, the value set by Display will appear during a high state.

Indicator Lamps and Recorder Status

This table shows the relationship between lamp Lit/Unlit/blinking states and the Memory Card Video Recorder's operating status.

●: Lit ◐: Normal blinking ○: Unlit ◑: Fast blinking (about three times/sec)

Lamp indication

REC	Indicator Lamp			Recorder Status
	Ready (Green)	Busy (Red)	Upload (Green)	
	●	○		Live video display
●	●	●		Normal recording
	●	●		Postrecording
	◐	○		Administrator Setup screen displayed with recording stopped
	○	●		Playing, exporting
			●	Connecting the Memory Card Video Recorder to the Back-End server via the UPLOAD LAN
	○	●	◐	Uploading or exporting
	◐	○		Selecting a file for upgrading or copying menu settings
	○	◐		Just after selecting a file for upgrading or copying menu settings
	◐	●		<ul style="list-style-type: none"> Upgrading or copying menu settings Restoring automatically
	●	◐		Finishing upgrading or copying menu settings
	○	○		<ul style="list-style-type: none"> No SDHC Memory Card is inserted, or it is not recognized. No more SDHC Memory Card space available The write-protect switch of the SDHC Memory Card is set to "LOCK" An unformatted SDHC Memory Card

Notes

- If pressing the [REC] button or entering a recording trigger fails to start recording, the [REC] lamp blinks at a high rate.
- The [BUSY] lamp blinks when accessing to the SDHC Memory Card immediately after opening or closing the recorder's SDHC Memory Card slot cover.

Exporting from the Front-End Application is not available at present. Upgrading is scheduled for the future.

Setup

Admin Password

Enter your password.

Item	Factory-Preset	Description
Admin Password		For inputting an administrator password.
Password	admin	
Retype Password		

Allocation (Video/Audio) setup

Perform video and audio settings.

Item	Factory-Preset	Description
Resolution/RecordRate		The resolution and bit rate of the video can be set.
Main	D1 HI	The resolution and bit rate of the main video can be set. Setting values: D1 HI, D1 STD, D1 10*1, CIF
Sub	D1 HI	The resolution and bit rate of the sub video can be set. Setting values: D1 HI, D1 STD, D1 10*1, CIF
Connection Camera		Camera connection can be set.
Camera1	ON	The connection to the [CAMERA 1] connector can be set. Setting values: ON, OFF
Camera2	ON	The connection to the [CAMERA 2] connector can be set. Setting values: ON, OFF
Camera3	OFF	The connection to the [CAMERA 3] connector can be set. Setting values: ON, OFF
Camera4	OFF	The connection to the [CAMERA 4] connector can be set. Setting values: ON, OFF
Camera5	OFF	The connection to the [CAMERA 5] connector can be set. Setting values: ON, OFF
Camera6	OFF	The connection to the [CAMERA 6] connector can be set. Setting values: ON, OFF

(to be continued to the next page)

*1 If either the Main or Sub Resolution/RecordRec is set to "D1 10", the other is also set to "D1 10".

Setup (continued)

Item	Factory-Preset	Description																															
Preset1*1		Preset 1 can be set.																															
Form	1Channel	The channel mode can be set. Setting values: 1Channel, 2Channels, 4Channels QUAD, 4Channels PANORAMA, 5Channels QUAD, 5Channels PANORAMA, None																															
Pattern	Main 1, Sub-	The combination of cameras displayed as Main and Sub videos can be set. Setting values for Form and Pattern: <table border="1" data-bbox="636 483 1289 1344"> <thead> <tr> <th>Form</th> <th>Pattern</th> </tr> </thead> <tbody> <tr> <td rowspan="3">1Channel</td> <td>Main 1, Sub -</td> </tr> <tr> <td>Main 2, Sub -</td> </tr> <tr> <td>Main 3, Sub -</td> </tr> <tr> <td rowspan="3">2Channels</td> <td>Main 1, Sub 2</td> </tr> <tr> <td>Main 1, Sub 3</td> </tr> <tr> <td>Main 2, Sub 3</td> </tr> <tr> <td rowspan="3">4Channels QUAD</td> <td>Main -, Sub 1456</td> </tr> <tr> <td>Main -, Sub 2456</td> </tr> <tr> <td>Main -, Sub 3456</td> </tr> <tr> <td rowspan="3">4Channels PANORAMA</td> <td>Main -, Sub 1456</td> </tr> <tr> <td>Main -, Sub 2456</td> </tr> <tr> <td>Main -, Sub 3456</td> </tr> <tr> <td rowspan="4">5Channels QUAD</td> <td>Main 1, Sub 2456</td> </tr> <tr> <td>Main 1, Sub 3456</td> </tr> <tr> <td>Main 2, Sub 3456</td> </tr> <tr> <td>Main 3, Sub 2456*2</td> </tr> <tr> <td rowspan="4">5Channels PANORAMA</td> <td>Main 1, Sub 2456</td> </tr> <tr> <td>Main 1, Sub 3456</td> </tr> <tr> <td>Main 2, Sub 3456</td> </tr> <tr> <td>Main 3, Sub 2456*2</td> </tr> <tr> <td>None*3</td> <td></td> <td></td> </tr> </tbody> </table>	Form	Pattern	1Channel	Main 1, Sub -	Main 2, Sub -	Main 3, Sub -	2Channels	Main 1, Sub 2	Main 1, Sub 3	Main 2, Sub 3	4Channels QUAD	Main -, Sub 1456	Main -, Sub 2456	Main -, Sub 3456	4Channels PANORAMA	Main -, Sub 1456	Main -, Sub 2456	Main -, Sub 3456	5Channels QUAD	Main 1, Sub 2456	Main 1, Sub 3456	Main 2, Sub 3456	Main 3, Sub 2456*2	5Channels PANORAMA	Main 1, Sub 2456	Main 1, Sub 3456	Main 2, Sub 3456	Main 3, Sub 2456*2	None*3		
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(to be continued to the next page)

*1 Selectable Form and Patter of Preset1, Preset2, and Preset3 depend on the settings of Connection Camera.

*2 This setting is enabled when the camera connected to the [CAMERA 1] connector is set to OFF.

*3 "None" is not selectable for Preset1 unless all camera connections are set to OFF.

Setup (continued)

Item	Factory-Preset	Description																															
Presets ^{*1}		Presets 1, 2, and 3 can be set.																															
Form	1Channel	The channel mode can be set. Setting values: 1Channel, 2Channels, 4Channels QUAD, 4Channels PANORAMA, 5Channels QUAD, 5Channels PANORAMA, None																															
Pattern	Main 2, Sub-	The combination of cameras displayed as Main and Sub videos can be set. Setting values for Form and Pattern: <table border="1" data-bbox="636 472 1289 1335"> <thead> <tr> <th>Form</th> <th>Pattern</th> </tr> </thead> <tbody> <tr> <td rowspan="3">1Channel</td> <td>Main 1, Sub -</td> </tr> <tr> <td>Main 2, Sub -</td> </tr> <tr> <td>Main 3, Sub -</td> </tr> <tr> <td rowspan="3">2Channels</td> <td>Main 1, Sub 2</td> </tr> <tr> <td>Main 1, Sub 3</td> </tr> <tr> <td>Main 2, Sub 3</td> </tr> <tr> <td rowspan="3">4Channels QUAD</td> <td>Main -, Sub 1456</td> </tr> <tr> <td>Main -, Sub 2456</td> </tr> <tr> <td>Main -, Sub 3456</td> </tr> <tr> <td rowspan="3">4Channels PANORAMA</td> <td>Main -, Sub 1456</td> </tr> <tr> <td>Main -, Sub 2456</td> </tr> <tr> <td>Main -, Sub 3456</td> </tr> <tr> <td rowspan="4">5Channels QUAD</td> <td>Main 1, Sub 2456</td> </tr> <tr> <td>Main 1, Sub 3456</td> </tr> <tr> <td>Main 2, Sub 3456</td> </tr> <tr> <td>Main 3, Sub 2456^{*2}</td> </tr> <tr> <td rowspan="4">5Channels PANORAMA</td> <td>Main 1, Sub 2456</td> </tr> <tr> <td>Main 1, Sub 3456</td> </tr> <tr> <td>Main 2, Sub 3456</td> </tr> <tr> <td>Main 3, Sub 2456^{*2}</td> </tr> <tr> <td>None^{*3}</td> <td></td> <td></td> </tr> </tbody> </table>	Form	Pattern	1Channel	Main 1, Sub -	Main 2, Sub -	Main 3, Sub -	2Channels	Main 1, Sub 2	Main 1, Sub 3	Main 2, Sub 3	4Channels QUAD	Main -, Sub 1456	Main -, Sub 2456	Main -, Sub 3456	4Channels PANORAMA	Main -, Sub 1456	Main -, Sub 2456	Main -, Sub 3456	5Channels QUAD	Main 1, Sub 2456	Main 1, Sub 3456	Main 2, Sub 3456	Main 3, Sub 2456 ^{*2}	5Channels PANORAMA	Main 1, Sub 2456	Main 1, Sub 3456	Main 2, Sub 3456	Main 3, Sub 2456 ^{*2}	None ^{*3}		
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(to be continued to the next page)

*1 Selectable Form and Patter of Preset1, Preset2, and Preset3 depend on the settings of Connection Camera.

*2 This setting is enabled when the camera connected to the [CAMERA 1] connector is set to OFF.

*3 "None" is not selectable for Preset1 unless all camera connections are set to OFF.

Setup (continued)

Item	Factory-Preset	Description																															
Preset3*1		Preset 3 can be set.																															
Form	2Channel	The channel mode can be set. Setting values: 1Channel, 2Channels, 4Channels QUAD, 4Channels PANORAMA, 5Channels QUAD, 5Channels PANORAMA, None																															
Pattern	Main 1, Sub 2	The combination of cameras displayed as Main and Sub videos can be set. Setting values for Form and Pattern: <table border="1" data-bbox="636 439 1289 1301"> <thead> <tr> <th>Form</th> <th>Pattern</th> </tr> </thead> <tbody> <tr> <td rowspan="3">1Channel</td> <td>Main 1, Sub -</td> </tr> <tr> <td>Main 2, Sub -</td> </tr> <tr> <td>Main 3, Sub -</td> </tr> <tr> <td rowspan="3">2Channels</td> <td>Main 1, Sub 2</td> </tr> <tr> <td>Main 1, Sub 3</td> </tr> <tr> <td>Main 2, Sub 3</td> </tr> <tr> <td rowspan="3">4Channels QUAD</td> <td>Main -, Sub 1456</td> </tr> <tr> <td>Main -, Sub 2456</td> </tr> <tr> <td>Main -, Sub 3456</td> </tr> <tr> <td rowspan="3">4Channels PANORAMA</td> <td>Main -, Sub 1456</td> </tr> <tr> <td>Main -, Sub 2456</td> </tr> <tr> <td>Main -, Sub 3456</td> </tr> <tr> <td rowspan="4">5Channels QUAD</td> <td>Main 1, Sub 2456</td> </tr> <tr> <td>Main 1, Sub 3456</td> </tr> <tr> <td>Main 2, Sub 3456</td> </tr> <tr> <td>Main 3, Sub 2456*2</td> </tr> <tr> <td rowspan="4">5Channels PANORAMA</td> <td>Main 1, Sub 2456</td> </tr> <tr> <td>Main 1, Sub 3456</td> </tr> <tr> <td>Main 2, Sub 3456</td> </tr> <tr> <td>Main 3, Sub 2456*2</td> </tr> <tr> <td>None*3</td> <td></td> <td></td> </tr> </tbody> </table>	Form	Pattern	1Channel	Main 1, Sub -	Main 2, Sub -	Main 3, Sub -	2Channels	Main 1, Sub 2	Main 1, Sub 3	Main 2, Sub 3	4Channels QUAD	Main -, Sub 1456	Main -, Sub 2456	Main -, Sub 3456	4Channels PANORAMA	Main -, Sub 1456	Main -, Sub 2456	Main -, Sub 3456	5Channels QUAD	Main 1, Sub 2456	Main 1, Sub 3456	Main 2, Sub 3456	Main 3, Sub 2456*2	5Channels PANORAMA	Main 1, Sub 2456	Main 1, Sub 3456	Main 2, Sub 3456	Main 3, Sub 2456*2	None*3		
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	Main 3, Sub 2456*2																																
None*3																																	
Audio In Select		The audio inputs can be selected.																															
Audio1	Wireless Mic	The audio signal connected to the [AUDIO IN 1] connector can be selected. Setting value: Mic (microphone) Wireless Mic (wireless microphone) Off (no connection)																															
Audio2	Mic	The audio signal connected to the [AUDIO IN 2] connector can be selected. Setting value: Mic (microphone) Wireless Mic (wireless microphone) Off (no connection)																															
Audio3	OFF	The audio signal connected to the [AUDIO IN 3] connector can be selected. Setting value: Mic (microphone) Wireless Mic (wireless microphone) Off (no connection)																															
Audio4	OFF	The audio signal connected to the [AUDIO IN 4] connector can be selected. Setting value: Mic (microphone) Wireless Mic (wireless microphone) Off (no connection)																															
Init Audio Rec after power ON	ON	Initial audio output setting (upon power-on) Setting values: ON, OFF, LAST*4																															

*1 Selectable Form and Patter of Preset1, Preset2, and Preset3 depend on the settings of Connection Camera.

*2 This setting is enabled when the camera connected to the [CAMERA 1] connector is set to OFF.

*3 "None" is not selectable for Preset1 unless all camera connections are set to OFF.

*4 The setting upon the last power-off will be restored when the camera is turned on. If the Memory Card Video Recorder is not turned off properly, the setting data upon power-off may not be stored properly.

Setup (continued)

Camera1 setup

Camera1 settings can be performed.

Item	Factory-Preset	Description
Camera1		Settings for the color camera connected to the [CAMERA 1] connector on the Memory Card Video Recorder
IR Level	LOW	Level setting for automatic IR switching*1 Setting values: LOW, HIGH
IR Time[s]	30	Level detection time for automatic IR switching*1 (seconds) Setting values: 10, 30, 60, 300
Auto Zoom Magnification	10	Maximum magnification setting for automatic zooming Setting values: 1, 2, 3, 4, 5, 7, 10, 15, 22
Auto Zoom Time[s]	3	Keeping time of the maximum zoom magnification during automatic zooming (seconds) Setting values: 3, 5, 8
Auto Zoom End Position	1	Automatic zooming end position setting Setting values: 1, 2, 3, 4, 5, 7, 10, 15, 22, LAST
Zoom Limit	220	Maximum magnification during zoom Setting values: 22, 220
AGC Level	HIGH	Automatic gain control setting for the color camera Setting values: LOW, MID, HIGH, OFF
Flip	OFF	Vertical flipping of the output image from the color camera Setting values: ON (vertically flipped) OFF (No flipping)
Auto Focus	PRESET	The focusing method of the color camera in the following conditions can be set: <ul style="list-style-type: none"> • When "Init LPR Mode" is set to "DISABLE" • When "Init LPR Mode" is set to "ENABLE" and "LPR Mode" is set to "PATROL" • When recording is started by a recording trigger signal with "Init LPR Mode" set to "ENABLE" and "LPR Mode" set to "LPR" Setting values: PRESET (When the zoom magnification is set to $\times 3$ or less, the camera focuses on an object at about 15 m distance from the camera. If zooming operation is performed afterward, automatic focusing will be activated.) DISABLE (The focal position is fixed at a distance of about 40 m, and automatic focus is disabled.) AUTO (Auto focusing when zooming magnification changes)

*1 The [IR Level] and [IR Time] settings are enabled only when [Init IR Mode] is set to "AUTO."

(to be continued to the next page)

Setup (continued)

Item	Factory-Preset	Description
Init Camera1 Settings after power ON		The initial settings upon startup of the color camera connected to the [CAMERA 1] connector on the Memory Card Video Recorder can be set.
Init Backlight	OFF	Initial setting of backlight compensation Setting values: ON, OFF, LAST* ¹ (The backlight compensation is enabled when set to ON.)
Init IR Mode	AUTO	Infrared imaging function switching Setting values: ON (The IR function is forcibly set to ON) OFF (The IR function is forcibly set to OFF.) AUTO (The IR function is automatically turned ON or OFF.) LAST* ¹
Init Camera1 LED	ON	Initial setting of the [REC] lamp of the color camera Setting values: ON (The lamp is lit during recording.) OFF (The lamp does not light.) LAST* ¹
Init AE Shift	0	Initial setting of the brightness for the color camera* ² Setting values: 2, 1, 0, -1, -2, LAST* ¹
Init LPR Mode	DISABLE	License Plate Recognition function switching Setting values: ENABLE (LPR function enabled) DISABLE (LPR function disabled. [LPR Mode] is switched to "PATROL".)

*1 The setting upon the last power-off will be restored when the camera is turned on. If the Memory Card Video Recorder is not turned off properly, the setting data upon power-off may not be stored properly.

*2 When [Init AE Shift] is set to "+2" and the subject is dark, the number of frames to be updated per second may become less than 30.

Setup (continued)

Date/Time setup

The date and time can be set.

Item	Factory-Preset	Description
Date/Time		Date, time, and time zone settings
Time Zone	Eastern Daylight Saving Time	Time zone Hawaii Standard Time Yukon Standard Time Yukon Daylight Saving Time Pacific Standard Time Pacific Daylight Saving Time Mountain Standard Time Mountain Daylight Saving Time Central Standard Time Central Daylight Saving Time Eastern Standard Time Eastern Daylight Saving Time Atlantic Standard Time Atlantic Daylight Saving Time Asia Tokyo
Date/Time Style	USA	Date/Time display style setting Setting values: ISO (YYYY-MM-DD HH : MM : SS) USA (MM/DD/YYYY HH : MM : SS)
Day/Night View		Day/Night mode setting
Day/Night View Auto Switch	Checked	Select if Day and Night views are automatically switched or not.
Switch to Day View at	7:00:00 AM	Time setting for switching to Day mode Setting range: 00:00:00 AM-11:59:59 PM
Switch to Night View at	6:00:00 PM	Time setting for switching to Night mode Setting range: 00:00:00 AM-11:59:59 PM

Setup (continued)

File Transfer setup

File transfer settings can be performed.

Item	Factory-Preset	Description
Upload		Upload settings
Auto Upload is Enabled	Unchecked	Select whether automatic uploading is enabled or not.
Server IP Address for Manual Upload	-	IP address of the Back-End Server during manual uploading
Export/DVD Burn	Confirmation	Select how to delete video files from the Memory Card Video Recorder after data exporting or DVD burning. Force: Automatically deleted Confirmation: A confirmation message is displayed.
Certification		
System Name	-	System name of the Memory Card Video Recorder.
Folder		Folder settings
Snapshot To	My Pictures	Set a folder in which snapshot files are to be stored.

Exporting from the Front-End Application is not available at present. Upgrading is scheduled for the future.

Setup (continued)

Network setup

The network settings can be performed.

Item	Factory-Preset	Description
Streaming		
IP Address	-	IP address setting for the Back-End server for streaming
Alert Streaming	Checked	When streaming is in progress in the Back-End application, that is indicated on the Front-End application. Streaming is not available at present. Upgrading is scheduled for the future.
Resolution	QCIF	Resolution of video recording. Setting values: QCIF, CIF, 720P
Recorder (PC LAN)		Setting of the LAN port on the Memory Card Video Recorder for connection with the Front-End server
DHCP*1	Server1	Setting of whether the port will serve as a server or not Setting values: OFF, Server1, Server2, Server3, Server4
Recorder (UPLOAD LAN)		Setting of the wired LAN port on the Memory Card Video Recorder for connection with the Back-End server
DHCP	Client	Setting of whether setting data will be obtained from the DHCP server or not Setting values: OFF, Client
Recorder (USB WIRELESS LAN)		Setting of the wireless LAN port on the Memory Card Video Recorder for connection with the Back-End server
DHCP	Client	Setting of whether setting data will be obtained from the DHCP server or not Setting values: OFF, Client
AP Priority	AP Highest	Set the priority of connection order to the access points. Setting values: AP Highest, Random

*1 If Server1, Server2, Server3, or Server4 is selected, the IP Address, Subnet Mask, and Gateway are fixed as shown below. If Off is selected, the IP Address, Subnet Mask, and Gateway can be changed.

	Server1	Server2	Server3	Server4	OFF
IP Address	192.168.10.10	192.168.217.192	172.24.217.192	10.216.217.192	192.168.10.10
Subnet Mask	255.255.255.0	255.255.255.0	255.255.255.0	255.255.255.0	255.255.255.0
Gateway	-	-	-	-	-

Setup (continued)

Embedded OSD setup

The settings for On-Screen Display can be performed.

Item	Factory-Preset	Description
Embedded OSD		Setting of whether Embedded OSD is displayed or not
Main	ON	Embedded OSD display setting for the Main video Setting values: ON, OFF
Sub	ON	Embedded OSD display setting for the Sub video Setting values: ON, OFF
Display Position	Upper-Left	Setting of Embedded OSD display location Setting values: Upper-Left (At the upper left) Upper-Right (At the upper right) Bottom-Left (At the bottom left) Bottom-Right (At the bottom right)
Embedded OSD Item		Settings of display items
Time	ON	Date/Time display setting Setting values: ON, OFF
Trigger	ON	Embedded OSD display when trigger signals (GPI1-16) are input Setting values: ON, OFF
VehicleID@Area	OFF	Setting of whether the vehicle identification data and location name are displayed Setting values: ON, OFF

Setup (continued)

Radar/GPS setup

Settings related with a radar gun and GPS

Item	Factory-Preset	Description
Radar		Settings related with a radar gun*1
Connection of Radar	OFF	Device to which a radar gun is connected*1 Setting values: Recorder, OFF
Model Select	ProLaser3	Model selection of the radar gun Setting values: ProLaser3 STALKER_DUAL GOLDEN_EAGLE_II
GPS		GPS-related settings
Connection of GPS	Recorder	Device to which the GPS is connected Setting values: Recorder, OFF
Collection Time [s]	1	Intervals of GPS data collection (seconds) Setting values: 1, 2, 5, 10
Rec Start Information		
Speed Unit	MPH	Unit of the speed of your vehicle Setting values: MPH, km/h

*1 When a radar gun is used, consult your supplier.

Setup (continued)

Rec/Play setup

The settings related with recording and playback can be performed.

Item	Factory-Preset	Description
Rec		Recording-related settings
PreRec Time (Video)[s]	30	Video prerecording time (seconds) Setting values: 0, 10, 20, 30, 60, 90
PostRec Time (Video)[s]	0	Video post-recording time (seconds) Setting values: 0, 10, 20, 30, 60, 90
PreRec Time (Audio)[s]	0	Audio prerecording time (seconds) Setting values: 0, 3, 10, 20, 30, 60, 90
PostRec Time (Audio)[s]	0	Audio postrecording time (seconds) Setting values: 0, 3, 10, 20, 30, 60, 90
Rec Continue Time [min]	Continue	Recording duration (minutes) Setting values: Continue, 1, 2, 5, 10, 15, 20, 30, 60, 90
Intermittent Rec	OFF	Intermittent recording Setting values: ON, OFF
Loop Rec	OFF	Loop recording Setting values: ON, OFF
Rule of Filename	World Time	Rules of filename for recording files Setting values: World Time Local Time
Power On Rec	OFF	Automatic start of recording upon power-on Setting values: ON, OFF
Record sound	OFF	Setting of a beep during recording Setting values: ON, OFF
GPO		GPO settings
GPO1 Signal	OFF	Setting of output signals to GPO1 Setting values: OFF, REC, ERROR, REC+ERROR
GPO2 Signal	OFF	Setting of output signals to GPO2 Setting values: OFF, REC, ERROR, REC+ERROR
GPO3 Signal	OFF	Setting of output signals to GPO3 Setting values: OFF, REC
Auto Power Off		Settings upon automatic power-off
Power Off Time [min]	After Upload	Time required from the signal is turned off up to the Memory Card Video Recorder is turned off (minutes) Setting values: 0, 10, 20, 30, 60, 90, 120, 180, After Upload
Apply To	APPLICATION AND LAPTOP	When Power Off Time is set to After Upload, select which one's uploading is to be observed. Setting values: APPLICATION ONLY, LAPTOP ONLY, APPLICATION AND LAPTOP
Action Specified	Lock	When Power Off Time is set to After Upload, select an action. Setting values: Close, Lock, Log off, Shutdown, Stand by
Timeout [s]	120	When Power Off Time is set to After Upload, select time required for the Memory Card Video Recorder to shut itself off after the specified action. (Seconds) Setting values: 30, 60, 90, 120

(to be continued to the next page)

Setup (continued)

Item	Factory-Preset	Description
Init Settings after power ON		Initial settings upon power-on
Init Preset Select* ¹	Preset1	Initial Preset setting Setting values: Preset1, Preset2, Preset3, LAST* ²
Init Video Out 1* ¹	VIDEO_OUT 2	Setting of the throughout video signal to the [VIDEO OUT 1] connector Setting values: CAM1, CAM3, Video OUT2, LAST* ²
Force Classify		Classify information setting
Force Classify	DISABLE	Addition of classify information Setting values: DISABLE (No addition) ENABLE (Addition permitted) FORCE (Forcible addition)
Storage Capacity Warning		
Remaining Recordable Time[min]	60	A warning sounds when the remaining recordable time becomes shorter than the value set here. Setting values: 30, 60, 90 (minutes)
Warning sound	OFF	Select if a short beep is to sound twice every 30 seconds when the remaining recordable time becomes shorter than the set value. Setting values: ON, OFF

*1 Depending on the settings of the Video Allocation screen, some items may not be displayed.

*2 The setting upon the last power-off will be restored when the camera is turned on. If the Memory Card Video Recorder is not turned off properly, the setting data upon power-off may not be stored properly.

Setup (continued)

Registration setup

Various data can be registered.

Item	Factory-Preset	Description
Meta Definition	Administrator	Select the type of meta definition to be registered to the Memory Card Video Recorder. Setting values: Administrator, Officer, Classify, Field1, Field2, Field3, Field4, Field5
Allow Guest Login	OFF	Select if login of a user who has not been registered in the Back-End Server or the Memory Card Video Recorder is permitted or not. Setting values: ON, OFF
Login using your current login account in the operating system	OFF	Select whether the login screen with the password entered will be displayed upon startup. Setting values: ON, OFF
Clear User Information on Recorder when logout	OFF	Select if the user information of the Memory Card Video Recorder is deleted upon logoff. Setting values: ON, OFF
Disable Operation for	OFF	Set the operation prohibited by a user. Setting values: STOP, OFF
Simple Operation Mode Only	OFF	Select if only Simple Operation mode screen is permitted by a user or not. Setting values: ON, OFF
Export/DVD Burn Operation	DISABLE	Set if export and DVD burn is permitted by a user. Setting values: ENABLE, DISABLE

Exporting from the Front-End Application is not available at present. Upgrading is scheduled for the future.

Setup (continued)

Triggers setup

The trigger signals (GPI1-16) can be set.

Item	Factory-Preset	Description
Trigger	ON	Set if the GPI trigger function is used or not. Setting values: ON, OFF
Name	-	Enter a GPI trigger name.
Action	NONE	Action when a trigger signal (GPI1-16) is detected. Setting values: NONE (No action) REC (recording), STOP (stop) AUTOZOOM (Automatic zoom-in, pause for a specified time, then zoom-out) CAM1LED (Switching [lit/unlit] of the [REC] lamp of the color camera connected with the [CAMERA 1] input connector) Preset1 (Preset1 input selected) Preset2 (Preset2 input selected)*1 Preset3 (Preset3 input selected)*1 Preset1Rec (Recording of Preset1 input video) Preset2Rec (Recording of Preset2 input video)*1 Preset3Rec (Recording of Preset3 input video)*1 AUDIO2ON*2 (Recording of [AUDIO IN2] input) AUDIO2MUTE*2 (No recording of [AUDIO IN2] input) TGT(REC) (Recording starts upon a TGT input.)*3 TGT(P1REC) (Recording of input signals set in Preset1 starts upon a TGT input.)*3 TGT(P2REC) (Recording of input signals set in Preset2 starts upon a TGT input.)*1,*3 TGT(P3REC) (Recording of input signals set in Preset3 starts upon a TGT input.)*1,*3 OWN(REC) (Recording starts upon a OWN input.) OWN(P1REC) (Recording of input signals set in Preset1 starts upon an OWN input.)*3 OWN(P2REC) (Recording of input signals set in Preset2 starts upon an OWN input.)*1,*3 OWN(P3REC) (Recording of input signals set in Preset3 starts upon an OWN input.)*1,*3
Detection	High	Detection method for trigger signals (GPI1-16) The selectable detection methods vary, depending on the Action setting. • In a case of REC, Preset1Rec, Preset2Rec, Preset3Rec Setting values:High (High-edge trigger) Level High (High-level trigger) Low (Low-edge trigger) Level Low (Low-level trigger) Both (Both-edge trigger) • In a case of Preset1, Preset2, Preset3, CAM1LED, AUTOZOOM, AUDIO2ON, or STOP Setting values:High (High-edge trigger) Low (Low-edge trigger) Both (Both-edge trigger) • In a case of TGT(REC), TGT(P1REC), TGT(P2REC), TGT(P3REC), OWN(REC), OWN(P1REC), OWN(P2REC), or OWN(P3REC) Setting values: OFF, 1, 2, . . . 200 • In a case of NONE Setting values:High (High-edge trigger) Low (Low-edge trigger)
Display	OFF	Character definition when one character is displayed as an Embedded OSD Setting values: A-Z, -, OFF

*1 These may not be selected if Preset2 or Preset3 is not specified on the Allocation (Video/Audio) screen.

*2 These cannot be selected if Audio2 on the Allocation(Video/Audio) screen is set to OFF.

*3 Selectable only for Trigger15 and 16

Error Messages

Messages Common to the Memory Card Video Recorder

No.	Message	Measure
E00410	Invalid update file was found.	<p>The update file on the USB memory device is corrupted.</p> <ul style="list-style-type: none"> • Check whether the update file for the recorder has been correctly copied to the USB memory device. • Reformat the SDHC Memory Card or USB memory device before use. • Use another USB memory device.
E00411	Update file was not found.	<p>No update file could be found on the USB memory device.</p> <ul style="list-style-type: none"> • Check whether the update file for the recorder has been correctly copied to the USB memory device. • Reformat the SDHC Memory Card or USB memory device before use. • Use another USB memory device.
E00412	Two or more update files were found.	<p>Multiple update files were found on the USB memory device.</p> <ul style="list-style-type: none"> • Check whether there are multiple update files on the USB memory device. • Check whether there are multiple USB memory devices containing update files.
E00413	Invalid update file was found.	<p>The update file on the USB memory device is corrupted.</p> <ul style="list-style-type: none"> • Check whether the update file for the recorder has been correctly copied to the USB memory device. • Reformat the SDHC Memory Card or USB memory device before use. • Use another USB memory device.
E00414		
E00415		
E00418	Update file was not found.	<p>No update file could be found on the USB memory device.</p> <ul style="list-style-type: none"> • Check whether the update file for the recorder has been correctly copied to the USB memory device. • Reformat the SDHC Memory Card or USB memory device before use. • Use another USB memory device.
E00419	This media cannot be used for update.	<p>The used USB memory device cannot be used for updating.</p> <ul style="list-style-type: none"> • A USB memory device containing a folder other than the \WIDKEY folder cannot be used for updating.
E00420	Update file cannot be read.	<p>An update file load error occurred.</p> <ul style="list-style-type: none"> • Check whether the update file for the recorder has been correctly copied to the USB memory device. • Reformat the SDHC Memory Card or USB memory device before use. • Use another USB memory device.
E00449	Unexpected update failure was found.	<p>Some other update error occurred.</p> <ul style="list-style-type: none"> • Check whether the update file for the recorder has been correctly copied to the USB memory device. • Reformat the SDHC Memory Card or USB memory device before use. • Use another USB memory device.
E00460	Invalid update file was found.	<p>The update file on the USB memory device is corrupted.</p> <ul style="list-style-type: none"> • Check whether the update file for the recorder has been correctly copied to the USB memory device. • Reformat the SDHC Memory Card or USB memory device before use. • Use another USB memory device.

Error Messages (continued)

No.	Message	Measure
E00461	Update file was not found.	No update file could be found on the USB memory device. <ul style="list-style-type: none"> • Check whether the update file for the recorder has been correctly copied to the USB memory device. • Reformat the SDHC Memory Card or USB memory device before use. • Use another USB memory device.
E00462	Two or more update files were found.	Multiple update files were found on the USB memory device. <ul style="list-style-type: none"> • Check whether there are multiple update files on the USB memory device. • Check whether there are multiple USB memory devices containing update files.
E00463	Invalid update file was found.	The update file on the USB memory device is corrupted. <ul style="list-style-type: none"> • Check whether the update file for the recorder has been correctly copied to the USB memory device. • Reformat the SDHC Memory Card or USB memory device before use. • Use another USB memory device.
E00464		
E00465		
E00466	Unexpected update failure was found.	Some other update error occurred. <ul style="list-style-type: none"> • Check whether the update file for the recorder has been correctly copied to the USB memory device. • Reformat the SDHC Memory Card or USB memory device before use. • Use another USB memory device.
E00467		
E00468	Update file was not found.	No update file could be found on the USB memory device. <ul style="list-style-type: none"> • Check whether the update file for the recorder has been correctly copied to the USB memory device. • Reformat the SDHC Memory Card or USB memory device before use. • Use another USB memory device.
E00469	This media cannot be used for update.	The used USB memory device cannot be used for updating. <ul style="list-style-type: none"> • A USB memory device containing a folder other than the \WIDKEY folder cannot be used for updating.
E00470	Update file cannot be read.	An update file load error occurred. <ul style="list-style-type: none"> • Check whether the update file for the recorder has been correctly copied to the USB memory device. • Reformat the SDHC Memory Card or USB memory device before use. • Use another USB memory device.
E00499	Unexpected update failure was found.	Some other update error occurred. <ul style="list-style-type: none"> • Check whether the update file for the recorder has been correctly copied to the USB memory device. • Reformat the SDHC Memory Card or USB memory device before use. • Use another USB memory device.
E00602	AG-RCP30 needs to be updated! Will start updating soon.	A connected AG-RCP30 was found to need an update. The Remote Control Panel reboots automatically to start an update.
E00603	Unsupported Control Panel! Replace Control Panel.	A Remote Control Panel not supported by the Memory Card Video Recorder was detected. Disconnect the Remote Control Panel.
E00604	Will power off after uploading. Turn ACC ON to cancel power off.	The vehicle engine switch is set to LOCK (OFF) when "PowerOff Time" on page 103 is set to "After Upload." The system awaits that uploading is finished, that the connection with the Back-End application is released, or uploading, streaming, administrator setup, or upgrading on the Back-End application is finished. To continue using the Memory Card Video Recorder without turning it off, set the engine switch to ON.

Error Messages (continued)

No.	Message	Measure
E02431	DSP error. This system is rebooting.	Wait until the error message is cleared. Contact your supplier if the message does not clear after about a minute.
E02432		
E02440	System error. Couldn't format cards.	Insert another SDHC Memory Card.
E02441	Couldn't format cards.	
E02442	Write Protect cards found. Couldn't format.	Disable SDHC Memory Card write-protection.
E02444	No SDHC Cards found. Couldn't format.	Insert an SDHC Memory Card.
E02460	System error. Couldn't delete files.	Contact your supplier.
E02461	Couldn't delete files.	Check the card information, and proceed as follows according to the information. CARD PROTECT: Disable SDHC Memory Card write-protection. UNFORMATTED: Replace with the formatted SDHC Memory Card. NO CARD: Insert an SDHC Memory Card. Others: Replace the SDHC Memory Card with another one.
E02470	System error. Couldn't restore files.	Contact your supplier.
E02471	Couldn't restore files.	
E02481	Write error on slot1. Record cannot be continued.	Be sure to use the correct procedure to remove and load SDHC Memory Cards. Replace an SDHC Memory Card that is not recognized after inserting it in the SDHC Memory Card slot and closing the SDHC Memory Card slot cover.
E02482	Write error on slot2. Record cannot be continued.	
E02483	Write error on slot3. Record cannot be continued.	
E02484	Write error on slot4. Record cannot be continued.	
E07671	CAMERA1 communication error. Please check the CAMERA1.	The Color Camera may not be correctly connected to the Memory Card Video Recorder. Check whether the camera cable (included in the Color Camera) is correctly connected to the Color Camera. Contact your supplier if this measure does not solve the problem.
E08601	Playback and record cannot be executed.	Close the SDHC Memory Card slot cover.
E08602	The recorder's fan has stopped.	Contact your supplier.
E10400	Radar model file was not found.	
E10401	More than 10 radar model files were found.	
E10402	Invalid radar model file was found.	
E10403	Radar model file cannot be read.	
E10410	Radar communication error. Please check the radar setting.	

Error Messages (continued)

No.	Message	Measure
E15751	VUP Card found on slot1. Record cannot be started.	A card for upgrading is inserted. Data cannot be written to the card.
E15752	VUP Card found on slot2. Record cannot be started.	
E15753	VUP Card found on slot3. Record cannot be started.	
E15754	VUP Card found on slot4. Record cannot be started.	
E15755	Unsupported Card found on slot1. Record cannot be started.	The inserted card cannot be used. Check card type.
E15756	Unsupported Card found on slot2. Record cannot be started.	
E15757	Unsupported Card found on slot3. Record cannot be started.	
E15758	Unsupported Card found on slot4. Record cannot be started.	
E15759	Unformatted Card found on slot1. Record cannot be started.	An unformatted SDHC Memory Card has been inserted. Format the SDHC Memory Card using the Memory Card Video Recorder or "SDHC Memory Card Formatting Software," or replace it with a formatted SDHC Memory Card. You can download the "SDHC Memory Card Formatting Software" from the Web site shown below: http://panasonic.jp/support/global/cs/sd/download/sd_formatter.html
E15760	Unformatted Card found on slot2. Record cannot be started.	
E15761	Unformatted Card found on slot3. Record cannot be started.	
E15762	Unformatted Card found on slot4. Record cannot be started.	
E15763	Write Protect Card found on slot1. Record cannot be started.	The write-protect switch of the SDHC Memory Card is set to "LOCK." Slide the write-protection switch away from the "LOCK" position.
E15764	Write Protect Card found on slot2. Record cannot be started.	
E15765	Write Protect Card found on slot3. Record cannot be started.	
E15766	Write Protect Card found on slot4. Record cannot be started.	
E15767	No SDHC Cards found. Record cannot be started.	No SDHC Memory Card is inserted. Insert an SDHC Memory Card.
E15768	Write Error. Record cannot be started.	Data cannot be written to the SDHC card. Replace the SDHC Memory Card.
E15769	Card Full. Record cannot be started.	The following conditions may have occurred: <ul style="list-style-type: none"> • There is no space left on the SDHC Memory Card. • Files contained in one of the SDHC Memory Cards inserted in the SDHC Memory Card slots 1, 2, 3, and 4 exceed 5,000 files. Replace the SDHC Memory Card with an SDHC Memory Card with free capacity, or free up space of 10 Mbytes or more in the SDHC Memory Card for new data.
E20801	Recorder reboots by unrecoverable card ejection error.	Be sure to use the correct procedure to remove and load SDHC Memory Cards.
E20802	Please reinsert the card or reboot the system.	Check the SDHC Memory Card and re-insert it, or reboot the Memory Card Video Recorder.
E20901	Firmware Update FAILED!	An error occurred during the update. <ul style="list-style-type: none"> • Check whether the update file for the recorder has been correctly copied to the USB memory device. • Reformat the SDHC Memory Card or USB memory device before use. • Use another USB memory device. • Check whether there are multiple update files on the USB memory device. • Check whether there are multiple USB memory devices containing update files. • A USB memory device containing a folder other than the \WIDKEY folder cannot be used for updating.

Error Messages (continued)

No.	Message	Measure
E20911	Microcontroller Update FAILED!	An error occurred during the update. The Memory Card Video Recorder reboots automatically to restart an update. Contact your supplier if the problem persists.
E20912	Unsupported Microcontroller Detected!	The Memory Card Video Recorder has broken down. Contact your supplier.
E20921	AG-RCP30 Update FAILED!	An error occurred during an update of an AG-RCP30 connected to the Memory Card Video Recorder. The Memory Card Video Recorder reboots automatically to restart an update. Contact your supplier if the problem persists.
E20922	Unsupported Control Panel Detected!	A Remote Control Panel not supported by the Memory Card Video Recorder was detected. Disconnect the Remote Control Panel.
E22420	Officer's information file cannot be loaded.	The officer data file (WID****.TXT) is corrupted. Create a new officer's data file, save it to a USB memory device and re-register it.
E22421	Since you are not an administrator, you cannot open this menu.	You are not registered as an administrator and cannot open this menu. Ask a registered administrator for assistance.
E22422	Officer's information file cannot be loaded.	There is no Officer Registration file or it contains the wrong data. Create a correct Officer Registration file (WOFFICER.TXT), copy it to a USB memory device and reload it.
E22423	Admin's information file cannot be loaded.	There is no Administrator Registration file or it contains the wrong data. Create a correct Administrator Registration file (WADMIN.TXT), copy it to a USB memory device and reload it.
E22425	Classification list cannot be loaded.	There is no classify file or the content of the file is incorrect.
E22426	Menu copy failed.	For copying to a USB memory device, connect a write-enabled USB memory device. For copying to a recorder, connect a USB memory device that contains data.
E22427	Source information file cannot be loaded.	There is no vehicle ID registration file or the content of the file is incorrect.
E22428	Shift information file cannot be loaded.	There is no shift file or the content of the file is incorrect.
E22429	Area information file cannot be loaded.	There is no area registration file or the content of the file is incorrect.
E22432	Service log copy failed.	Copying service log is failed. Retry copying.
E22448	Operation was canceled to start streaming.	Streaming starts, and the operation is canceled. Wait until streaming ends.
E25410	GPS communication error. Please check the GPS module.	An error occurred in the GPS module. Contact your supplier.
E27200	FinishUpload	File transfer was completed.
E27201	Storage capacity was not enough to transfer the file.	Capacity of the server is not enough for uploading data, and upload is canceled.
E27202	File transfer was completed. Restore file remained.	Upload was completed, but video files not restored remain on the SDHC Memory Card.
E27203	File not found in SDHC cards.	No file for uploading is found on an SDHC Memory Card.
E27401	Write Protect cards found. Couldn't start file transfer.	A read-only SDHC Memory Card is found, and uploading cannot be started.
E27403	Media error. File transfer was incomplete.	A read/write error has occurred on the media. Replace the SDHC Memory Card.
E27405	Storage write error. File transfer was incomplete.	A verifying error has occurred in the server storage, and upload cannot be completed.
E27407	No SDHC Cards found. Couldn't start file transfer.	No SDHC Memory Card is inserted, and upload cannot be started.

Error Messages (continued)

No.	Message	Measure
E27430	Couldn't start file transfer.	Upload cannot be started. Check the network connection.
E27431	File transfer was incomplete.	Upload cannot be completed because of the network trouble.
E27499	System error. File transfer was incomplete.	A system error has occurred, and upload cannot be completed.
E28200	FinishExport.	Export was completed.
E28201	USB storage capacity was not enough to export.	Use other USB memory device that is not full.
E28202	Export was completed. Restore file remained.	Restore the file not yet restored, and export it again.
E28203	File not found in SDHC cards.	There are no files to export. No export operation needed.
E28400	No USB storage devices found. Couldn't start export.	Connect a USB memory device.
E28401	Write Protect cards found. Couldn't start export.	Disable SDHC Memory Card write-protection.
E28402	All USB storages are read only. Couldn't start export.	Connect a write-enabled USB memory device.
E28403	Media error. Export was incomplete.	Replace the SDHC Memory Card or the USB memory device.
E28404	USB storage file system error. Couldn't start export.	Replace the USB memory device.
E28405	USB storage write error. Export was incomplete.	
E28406	Found update file in USB storage. Couldn't start export.	Delete the update file on the USB memory device.
E28407	No SDHC Cards found. Couldn't start export.	Insert an SDHC Memory Card with recorded files.
E28409	Couldn't start export.	Replace the SDHC Memory Card.
E28499	System error. Export was incomplete.	Reboot the recorder.
E28880	USB storage was ejected. Export was incomplete.	Do not remove the USB memory device while exporting data. Reconnect the USB memory device and export again.
E28881	USB storage was inserted. Export was incomplete.	Export the data again.
E29400	Unsupported camera connection.	A camera is connected only to the [CAMERA 4], [CAMERA 5], or [CAMERA 6] connector. Check the input.
E29401	No CAMERA1 video signal.	[CAMERA 1] connector input cannot be detected. Check whether the signal is input to the [CAMERA 1] connector.
E29402	No CAMERA2 video signal.	[CAMERA 2] connector input cannot be detected. Check whether the signal is input to the [CAMERA 2] connector.
E29403	No CAMERA3 video signal.	[CAMERA 3] connector input cannot be detected. Check whether the signal is input to the [CAMERA 3] connector.
E29404	No CAMERA4 video signal.	[CAMERA 4] connector input cannot be detected. Check whether the signal is input to the [CAMERA 4] connector.
E29405	No CAMERA5 video signal.	[CAMERA 5] connector input cannot be detected. Check whether the signal is input to the [CAMERA 5] connector.
E29406	No CAMERA6 video signal.	[CAMERA 6] connector input cannot be detected. Check whether the signal is input to the [CAMERA 6] connector.
E30400	Network setting parameter error.	Network settings are not correct. Check the network settings.

Error Messages (continued)

Messages Unique to the Front-End Application

Error Messages 30200 and after are the command error of the Memory Card Video Recorder.

No.	Message	Measure
20004	There is no response form the recorder.	Connection with the recorder was interrupted. <ul style="list-style-type: none"> • Check that the LAN cable is connected to the recorder. • Check that the recorder is turned on.
20006	Application cannot communicate with Recorder, please check connections.	The application could not communicate with the recorder. <ul style="list-style-type: none"> • Check that the LAN cable is connected to the recorder. • Check that the recorder is turned on. • Check that the network setting is correct.
20015	Cannot start recording due to no live mode.	Recording could not be started. <ul style="list-style-type: none"> • Start recording after entering Live mode.
20019	The application failed communication with the recorder.	The command could not be transmitted to the recorder. <ul style="list-style-type: none"> • Check that the LAN cable is connected to the recorder. • Check that the recorder is turned on.
20021	There was no same time of bookmark.	
20022	There was no same time of classify.	
20028	Cannot operate bookmark because there already existed classify.	A bookmark cannot be created within 2 seconds before or after a classify tag. <ul style="list-style-type: none"> • Create a bookmark 2 seconds or more apart from a classify tag.
20029	Cannot operate bookmark because there already existed bookmark.	A bookmark cannot be created within 2 seconds before or after another bookmark. <ul style="list-style-type: none"> • Create bookmarks 2 seconds or more apart from each other.
20033	Cannot operate classify because there is already bookmark.	A classify tag cannot be created within 2 seconds before or after a bookmark. <ul style="list-style-type: none"> • Create a classify tag 2 seconds or more apart from a bookmark.
20037	Failed in creating the snapshot file.	Creation of a snapshot file failed. <ul style="list-style-type: none"> • Check that there is sufficient free space in the destination medium. • If the file is to be stored in a removable medium, check that the removable medium has been inserted.
20051	The file is invalid.	The setting file is invalid. <ul style="list-style-type: none"> • Specify the file that was created as a setting master.
20052	The file may be tampered with.	The file may have been tampered with or damaged.
20053	Skipped uploading the video file because Back-End Server was busy. Try again later.	Upload could not be started because the server is in processing. <ul style="list-style-type: none"> • Retry later.
20054	Failed to transfer the file.	Connection with the recorder was failed. <ul style="list-style-type: none"> • Check that the FE and BES are connected through LAN. • Check that the recorder is turned on. • Check that the network settings of the FE and BES are properly made.
20055	Failed in the output of the file. The free space at the output destination is insufficient or there is a possibility that the output destination is inhibited to write.	File output (export, upload, or DVD burn) failed. <ul style="list-style-type: none"> • Check that there is sufficient free space in the destination medium. • Check if the medium is write-protected. • Check that writing to the destination medium by Windows is authorized.
20056	Failed to transfer file from Recorder.	No video file could be found on the recorder. <ul style="list-style-type: none"> • Check that the LAN connection to the recorder is properly made.
20057	Failed to transfer file from Recorder.	During file output (export, upload, or DVD burn), file transfer from the recorder failed. <ul style="list-style-type: none"> • Check that the LAN cable is connected to the recorder. • Check that the recorder is turned on.

Error Messages (continued)

No.	Message	Measure
20058	Failed in connection with the Back-End Server.	The FE could not communicate with the BES. <ul style="list-style-type: none"> • Check that the FE and BES are connected through LAN. • Check that the network settings of the FE and BES are properly made. • Check if communication is interrupted by a firewall.
20059	The output path was not found.	During file output (export, upload, or DVD burn), file transfer from the recorder failed. <ul style="list-style-type: none"> • If the file is to be output to a removable medium, check that the removable medium has been inserted. • Check if the medium is write-protected. • Check that writing to the destination medium by Windows is authorized.
20060	Failed to open or create the file.	During file output (export, upload, or DVD burn), creation of an output file failed. <ul style="list-style-type: none"> • Check that there is sufficient free space in the destination medium. • Check if the medium is write-protected. • Check that writing to the destination medium by Windows is authorized.
20061	Disconnected the recorder while exporting.	During exporting or DVD burning, communication with the recorder was interrupted. <ul style="list-style-type: none"> • Check that the LAN cable is connected to the recorder. • Check that the recorder is turned on.
20067	Fatal error.	An error was generated. A program bug is suspected.
20068	Failed.	An error whose cause could not be specified was generated.
20071	Cannot operate classify because there already existed classify.	A classify tag cannot be created within 2 seconds before or after another classify tag. <ul style="list-style-type: none"> • Create classify tags 2 seconds or more apart from each other.
20072	Cannot operate snapshot because there already existed snapshot. The snapshot file was created.	A snapshot operation is not possible at the location where another snapshot has been created. The snapshot file was created.
30100	Back End use the recorder.	The recorder is being used by the BES. The FES cannot operate the recorder.
30200	Failed authentication.	Authentication of the administrator failed. (Only with the recorder V1.9) <ul style="list-style-type: none"> • Insert the USB memory device in which administrator data have been stored into the recorder.
30300	Failed cancelling recovery.	Canceling of recovery failed.
30400	Failed recording.	Starting of video recording failed.
30402	Failed recording.	Starting of video recording failed.
30403	Failed recording.	Starting of video recording failed.
30501	Failed to stop recording.	Stopping of video recording failed.
30502	Cannot restart live.	Live mode cannot be restarted.
30600	The recorder cannot execute bookmark or classify.	The recorder cannot perform a bookmark or classify information operation.
30601	The recorder cannot execute bookmark or classify.	The recorder cannot perform a bookmark or classify information operation.
30700	The recorder cannot execute snapshot.	The recorder cannot perform a snapshot operation.
30800	The recorder cannot execute operation of user info or case file number.	The recorder cannot perform a user information or case file No. operation.

Error Messages (continued)

No.	Message	Measure
30900	The recorder cannot execute operation of streaming setting.	The recorder cannot perform a streaming operation.
31000	GPS module isn't connected.	The GPS is not connected.
31100	The recorder cannot process data from the radar gun.	Input data from the radar gun cannot be processed.
31200	Cannot delete video due to the system problem.	The video signal cannot be deleted because of a system problem.
31201	Cannot delete video due to the media problem.	The video signal cannot be deleted because of a problem with recording media.
31300	Cannot format due to the system problem.	Formatting is impossible because of a system problem.
31301	Cannot format due to the media problem.	Formatting is impossible because of a problem with recording media.
31302	Cannot format because the media is protected writing.	Formatting is impossible, because the recording media is write-protected. • Cancel the write-protection status.
31303	Cannot format because the media is not supported.	Formatting is impossible, because of unsupported recording media.
31304	Cannot format because no media is in recorder.	Formatting is impossible, because no recording medium is inserted in the recorder.
31400	Cannot recover due the media problem.	Recovery is impossible because of a problem with recording media.
31500	firmware of recorder is not found.	The firmware of the recorder could not be found. • Check that the firmware of the recorder is stored in the USB memory device.
31501	Failed in updating firmware of recorder.	Updating of the firmware of the recorder failed. • Try updating again.
31600	Radar gun library is not found.	The radar gun library could not be found. • Check that the radar gun library of the recorder is stored in the USB memory device.
31601	Cannot add radar gun library because the number of registration of the radar gun library exceeds the maximum number.	As the number of registered data in the radar gun library exceeds the upper limit, no further data can be added. • Decrease the number of the registered data in the radar gun library.
31602	The radar gun library is illegal.	The radar gun library is illegal. • Copy the radar gun library again then try again.
31603	Cannot read radar gun library.	A radar gun library cannot be read. • Copy the radar gun library again then try again.
31604	Cannot execute while booting.	The command cannot be executed, because the recorder is being booted.
31701	Because the file is invalid, the radar gun library cannot be loaded.	The radar gun library cannot be registered, because the file is invalid. • Copy the radar gun library again then try again.
31801	Because the file is invalid, the officer list file cannot be loaded.	The officer list cannot be registered, because the file is invalid.
31901	Because the file is invalid, the source list file cannot be loaded.	The vehicle list cannot be registered, because the file is invalid.
32001	Because the file is invalid, the shift list file cannot be loaded.	The shift list cannot be registered, because the file is invalid.
32101	The area list file cannot be loaded because it is not in administrator mode.	The area list cannot be registered, because the file is invalid.
32200	Failed.	Menu copy is failed. • Create a setting file and try again.

Error Messages (continued)

No.	Message	Measure
40002	Execute Cancel.	This message notifies that the user canceled the operation, and it does not denote an error.
40003	The parameter was not able to be set.	As an illegal behavior was generated, the status has been recovered.
40004	Another processing has already been executed.	The command is canceled, because another command is being processed.
40005	The video was not able to be converted.	The DirectShow filter does not function properly. <ul style="list-style-type: none"> • Reinstall DirectShow filter. • Install Media Player. • Reinstall the OS.
40006	Because the composition of the drive has been changed, it is not possible to output it.	The configuration of the drive was changed after the DVD setting screen had been opened. <ul style="list-style-type: none"> • During DVD output, never perform any operation that will change the drive configuration, including plugging/unplugging of the USB memory device.
40007	Other applications are using the drive. Please exit the application for which the drive is used.	The Sonic module returned an error code that notified that the DVD drive was unavailable. <ul style="list-style-type: none"> • If the DVD drive is being used by another application, stop that application.
40008	The tray of the drive is open. Please insert the unused DVD disc in the drive and close the tray.	The tray of the DVD drive is open. <ul style="list-style-type: none"> • Load a blank DVD-R/-R DL/+R/+R DL or DVD-RW/+RW disc into the drive then close the tray. This error message is displayed only when a DVD drive that can judge open/closed status of the tray is used.
40009	Information on the drive cannot be acquired. There is a possibility that the disc not supported has been inserted in the drive.	An unsupported DVD drive is used, or an unsupported disc medium is loaded in the DVD drive. <ul style="list-style-type: none"> • Load a blank DVD-R/-R DL/+R/+R DL or DVD-RW/+RW disc into the drive then close the tray.
40010	The drive is not ready. Please insert the unused DVD disc in the drive.	The drive is not ready to enable writing. <ul style="list-style-type: none"> • Load a blank DVD-R/-R DL/+R/+R DL or DVD-RW/+RW disc into the drive, close the tray, then after several seconds, execute the command.
40011	It is not possible to store it on this disc. Please insert unused DVD-R/-R DL/+R/+R DL or the DVD-RW/+RW disc.	A disc on which data have already been written is inserted or the disc is damaged. <ul style="list-style-type: none"> • Load a blank DVD-R/-R DL/+R/+R DL or DVD-RW/+RW disc into the drive.
40012	This disc is read-only. Please insert it in the drive after releasing read-only.	The disc is write-protected. <ul style="list-style-type: none"> • Load a blank DVD-R/-R DL/+R/+R DL or DVD-RW/+RW disc into the drive.
40013	The disc not supported has been inserted. Please insert unused DVD-R/-R DL/+R/+R DL or the DVD-RW/+RW disc.	An unsupported or damaged disc is inserted. <ul style="list-style-type: none"> • Load a blank DVD-R/-R DL/+R/+R DL or DVD-RW/+RW disc into the drive.
40014	The free space in the work area is insufficient.	The free capacity of the drive in which the temporary folder is stored is insufficient. <ul style="list-style-type: none"> • Delete unnecessary files to increase free space in the drive.
40015	Because the capacity of the disc cannot be acquired, it is not possible to store it on this disc.	The capacity of the disc cannot be obtained. <ul style="list-style-type: none"> • Load a blank DVD-R/-R DL/+R/+R DL or DVD-RW/+RW disc into the drive then close the tray.
40016	Because the capacity of the DVD disc is insufficient, it is not possible to output it.	The playback duration of the selected video files is too long for the DVD disc to be burned. <ul style="list-style-type: none"> • Reduce the total playback duration by decreasing the number of selected files.

Error Messages (continued)

No.	Message	Measure
40017	Failed in writing the file.	<p>The drive that is used for temporary storage is not ready for writing.</p> <ul style="list-style-type: none"> • If the temporary folder does not exist, create it. • If the free capacity of the temporary drive is insufficient, delete unnecessary files. • Delete unnecessary files from the temporary folder.
40018	Verifying was canceled.	<p>This message is displayed when Verify is canceled.</p> <ul style="list-style-type: none"> • Execute Verify.
40019	The DVD disc will be verified. Please push "OK" after closing the tray without pulling out the DVD disc. (Processing will be ended without verifying if pushing "Cancel").	<p>This message is displayed before Verify is started, and it does not denote an error.</p>
40020	The DVD drive was not able to be verified because it was not ready. Please push "OK" after confirming the tray closes after inserting the DVD disc to the DVD drive when verifying it again. (Processing will be ended without verifying if pushing "Cancel").	<p>This error is generated when acquisition of drive information fails.</p> <ul style="list-style-type: none"> • If other software that uses the DVD drive has been installed, uninstall that software. • Stop the Auto Play function. • Wait for about 30 seconds after the tray is closed then click on the OK button. • If Verify fails, quit by canceling.
40021	Failed in verifying the DVD disc. There is a possibility not to be written correctly in this disc. Please push "OK" after confirming the tray closes after inserting the DVD disc to the drive when verifying it again. (Processing will be ended without verifying if pushing "Cancel").	<p>This error is generated when a discrepancy of data is found during Verify.</p> <ul style="list-style-type: none"> • If the disc is replaced, load a disc on which writing has been performed. • If the reliability of the medium is low, replace it with one from a reliable manufacturer. • If the drive is old, its performance may be deteriorated. Replace the drive with a new one. • The compatibility of the medium and drive may matter. Replace the medium with one recommended by the manufacturer of the drive. • If Verify fails, quit by canceling.
40022	Formatting Disc. This may take several minutes...	<p>This is a status message that is returned during disc formatting and will not be displayed as an actual error.</p>
40023	Writing lead-out. This may take several minutes.	<p>This is a status message that is returned during disc readout and will not be displayed as an actual error.</p>
40024	Burning Disc.	<p>This is a status message that is returned during disc writing and will not be displayed as an actual error.</p>
40025	Verifying Disc.	<p>This is a status message that is returned during disc verify and will not be displayed as an actual error.</p>
40026	Failed in making the temporary folder.	<p>The OS temporary folder does not exist or writing cannot be performed in it.</p> <ul style="list-style-type: none"> • Create the temporary folder in a drive with large capacity formatted for NTFS. • Reinstall the OS.
100001	Improper module structure. Please reinstall.	<p>Lack of the necessary module or setting.</p> <ul style="list-style-type: none"> • Reinstall the necessary module.
100002	Invalid officer1 ID. Please input registered ID.	<p>The Officer 1 ID is invalid.</p> <ul style="list-style-type: none"> • Check that Officer 1 has been registered in the Back-End System. • Check that Officer 1 has been registered in the recorder. • Set Guest mode to ON in Administrator Setup.
100003	Invalid officer2 ID. Please input registered ID.	<p>The Officer 2 ID is invalid.</p> <ul style="list-style-type: none"> • Check that Officer 1 has been registered in the Back-End System. • Check that Officer 1 has been registered in the recorder. • Set Guest mode to ON in Administrator Setup.
100004	The officer1ID and the officer2 ID are the same. Please input different IDs.	<p>The IDs for Officers 1 and 2 are identical.</p> <ul style="list-style-type: none"> • Use different IDs.

Error Messages (continued)

No.	Message	Measure
100005	The password is wrong.	The input password is invalid. • Input a correct password.
100006	The recorder is disconnected.	Connection with the recorder was interrupted. • Check that the LAN cable is connected to the recorder. • Check that the recorder is turned on.
100007	Cannot set same preset. Set different preset.	A different preset setting has been made with the same preset No. • Use a different preset No.
100008	Invalid Camera connection. Connect two or more cameras or either from camera1 to camera3.	Invalid camera connection: • Connect 2 or more cameras. • Connect any of Cameras 1 to 3.
100009	When preset3 is set, it is not possible to set "None" in preset2.	When Preset 3 has been set, "None" cannot be specified to Preset 2.
100010	The retyped password is different. Please input again.	The retyped password is different. Input the password again.
100011	Length of folder name is up to xxx. Select the other folder.	Up to xxx characters can be used in a folder name. • Select another folder.
100012	An invalid character is included. Please input again.	An invalid character is included. • Input again. The available characters are "<"(3Ch), ">"(3Eh), "\"(5Ch), "&"(26h), "."(2Ch), control characters (00h–1Fh), and one-byte alphanumeric characters and symbols, except for "DELETE"(7Fh).
100013	Failed to export AVViewer.	Exporting of AV Viewer failed. • Check that there is sufficient free space in the destination medium. • Check if the medium is write-protected. • Check that writing to the destination medium is authorized. • Reinstall AV Viewer.
100015	The time for setting day/night view is the same. Please set another time.	Identical times are set for switching the day/night views. • Set different times.
100016	There is no last error.	There is no Last Error data item.
100017	Please input both IP address and the subnet mask.	Specify both the IP address and subnet mask.
100018	Either of IP address, the subnet mask or the default gateway value is not correct. Please input again.	The IP address, subnet mask, or default gateway is incorrect. • They are configured as four numbers delimited by periods, each in the range of 0 to 255. Input correct values.
100019	IP address is not correct. Please input again.	The value for the IP address is invalid. • The IP address is configured as four numbers delimited by ;periods, each in the range of 0 to 255. Input the password again.
100020	Invalid the gateway address.	The gateway address is invalid. • Check that the IP address and the gateway belong to the same subnet address.
100021	Invalid the subnet mask.	The subnet mask is invalid. • Check that the network block and host block of the subnet mask are correctly set.
100022	The snapshot folder doesn't exist.	The snapshot folder does not exist. • If the snapshot folder is stored in a removable medium, check that the removable medium is connected to the PC.
100023	There is no snapshot in the folder.	As the specified snapshot file is not in the specified snapshot folder, that snapshot image cannot be sent by e-mail. • If the storage location of a snapshot file is changed, transmission of the file is not possible.

Error Messages (continued)

No.	Message	Measure
100024	The e-mail software could not be opened. Please install a MAPI compliant e-mail application.	Startup of the e-mail software failed. • Check that the e-mail settings in Internet Option are in compliance with the MAPI standards.
100025	The character string length of the network key is 5 or 13. Or, if the length of the character string is 10 or 26, please input character (0-9,a-f,A-F) that shows the hexadecimal number.	The length of the network key (WEP) is invalid. • The character-string length of the network key must be 5 or 13. Or, if the length of the character string is 10 or 26, check that all the characters are in hexadecimal notation (0-9, a-f, A-F).
100026	The character string length of the network key is 8 or more, and 63 or less. Or, if the length of the character string is 64, please input character (0-9,a-f,A-F) that shows the hexadecimal number.	The length of the network key (WPA) is invalid. • The character-string length of the network key must be in the range of 8 to 63. Or, if the length of the character string is 64, check that all the characters are in hexadecimal notation (0-9, a-f, A-F).
100027	Cannot set same IP Address. Set different IP Address.	Identical IP addresses cannot be specified for PC-LAN, UPLOAD-LAN, and WIRELESS-LAN. • Use different IP addresses.
100028	Application cannot open help. Confirm if Acrobat Reader is installed.	The Help file could not be opened. • Check that Acrobat Reader has been installed.
100029	Because the work area is not formatted with NTFS, the DVD output cannot be used.	DVD output signals cannot be used, because the work area is not formatted in NTFS. • Change the format of the drive in which the OS is installed to the NTFS format.
100030	The number of video files is 49 pcs at maximum to output to DVD.	The number of video files that can be output to the DVD exceeds the predetermined value.
100031	The video file output to DVD has not been selected.	The video files that will be output to the DVD have not been selected. • Select the files.
100032	Video length must be 2 seconds or more to output to DVD.	A video file whose playback duration is less than 2 seconds cannot be output to a DVD. • Select a video file whose playback duration is 2 seconds or longer.
100033	The DVD drive that can be used is not found. Please connect a recordable drive with the DVD-R disc.	An available DVD drive cannot be found. • Connect a drive that can write to a DVD-R disc.
100034	Necessary work area size:xxMB	—
100035	Recordable time in the disc:xx	—
100036	Cannot change modes while recording. Because stop recording function by the user operation is locked, the recording cannot be stopped.	Modes cannot be changed during recording. Recording cannot be stopped, because the function for recording stop by the user is locked.
100037	The number of items that can be displayed on the screen at a time is 13.	The maximum number of metadata items that can be displayed on the screen at a time is 13.
100038	Cannot delete some files. Because the recorder is disconnected, recording, opened a front lid, or used to the back end system.	Some files could not be deleted. Possible causes are that the recorder was disconnected, in Record mode, or in use by the BES, or the front cover of the recorder was opened.
100039	Formatting Disc. This might take several minutes...	—
100040	Writing lead-out. This may take several minutes.	—
100041	Burning Disc.	—
100042	Verify Disc.	—
100043	Fatal error.	An error was generated. A program bug is suspected.

Camera Connection and Combination of Cameras

Combination of cameras depends on the cameras connected to the recorder. Available combination is as shown below.

Selectable combination of cameras depends on the detected cameras.

- If only CAM4, CAM5, and CAM6 are set to OFF, preset patterns, 4Ch-QUAD, 4Ch-PANORAMA, 5Ch-QUAD, and 5Ch-PANORAMA, cannot be selected.
- If all of CAM1, CAM2, and CAM 3 are set to OFF, preset patterns, 4Ch-PANORAMA and 5Ch-PANORAMA, cannot be selected.
- If two channels of CAM1, CAM2, and CAM 3 are not connected, preset patterns, 5Ch-PANORAMA cannot be selected.

Selectable preset patterns depends on the detected cameras.

- If CAM1 is set to OFF, any combination of cameras indicated by "1" cannot be selected.
- If CAM2 is set to OFF, any combination of cameras indicated by "2" cannot be selected.
- If CAM3 is set to OFF, any combination of cameras indicated by "3" cannot be selected.
- If any of CAM4, CAM5, or CAM6 is set to ON, a pattern indicated by "456" can be selected.

Camera connection				Combination of cameras																				
1	2	3	456	1	2	3	1,2	1,3	2,3	1456	2456	3456	1456P	2456P	3456P	1, 2456	1, 3456	2, 3456	3, 2456	1, 2456P	1, 3456P	2, 3456P	3, 2456P	
0	X	X	X	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
X	0	X	X	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0	0	X	X	1	2	-	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
X	X	0	X	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0	X	0	X	1	-	2	-	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
X	0	0	X	-	1	2	-	-	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0	0	0	X	1	○	○	2	3	○	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
X	X	X	0	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0	X	X	0	1	-	-	-	-	-	○	-	-	2	-	-	3	-	-	-	-	-	-	-	-
X	0	X	0	-	1	-	-	-	-	-	2	-	-	○	-	-	-	3	-	-	-	-	-	-
0	0	X	0	○	○	-	1	-	-	○	○	-	-	○	-	2	-	-	-	3	-	-	-	-
X	X	0	0	-	-	1	-	-	-	-	2	-	-	○	-	-	-	-	3	-	-	-	-	-
0	X	0	0	○	-	○	-	1	-	○	-	○	-	○	-	2	-	-	-	3	-	-	-	-
X	0	0	0	-	○	○	-	-	1	-	○	○	-	○	○	-	-	2	3	-	-	○	○	○
0	0	0	0	○	○	○	1	○	○	○	○	○	○	○	○	2	3	○	-	○	○	○	○	-

- P: Panorama
- : Preset number of recommended combination of cameras
- : Selectable combination of cameras
- 0: A camera is connected.
- X: A camera is not connected.

Service Logs

The operation history of the recorder can be obtained as service logs.

Contents

The items shown below can be obtained as service logs.

■ Normal operation

Items	Level	Character strings	Timing
Starting (start, restart)	N	Power On	just after start
Ending (all power off, restart)	N	Power Off	just before end
Starting (start, restart)	N	System Start AG-CPD20 4.xx.xxx.0 Serial No. Destination	just after start
Ending (all power off, restart)	N	System End	just before end
Ending with power off	I	System End Acc	when occurred
Restarting by restart operation	I	System End Reboot	when occurred
Recording start	N	Rec File Start factor slot1 data/yyyymmdd/mmhhss.av	when occurred
Recording end	N	Rec Stop End factor	when occurred
Restoring a file (succeeded)	N	Restore File slot1 data/yyyymmdd/mmhhss.av	when occurred
Deleting a file (succeeded)	N	Delete File slot1 data/yyyymmdd/mmhhss.av	when occurred
Formatting SD cards	N	Format	when occurred
Deleting all files	N	DeleteAll	when occurred
Application: transition to live mode	I	Mode Live	when occurred
Application: transition to play mode	I	Mode Play	when occurred
Application: transition to administrator mode	I	Mode Admin	when occurred
Application: transition to upload mode	I	Mode Upload	when occurred
Registering data from a USB memory device	I	Load Admin/Officer/... number of cases	when occurred
Exporting start	I	Export Start	when occurred
Exporting end	I	Export End	when occurred
Uploading start	I	Upload Start	when occurred
Uploading end	I	Upload End	when occurred
Upgrading start	I	Vup Start New 4.xx.xxx.0	when occurred
Upgrading end	I	Vup End	when occurred
Upgrading without menu display start	I/N	VupMenuless Start	when occurred
Upgrading without menu display end	I/N	VupMenuless End	when occurred
Menu exporting start	I	MenuExport Start	when occurred
Menu exporting end	I	MenuExport End	when occurred
Menu importing start (with or without menu display)	I	MenuImport Start	when occurred
Menu importing end (with or without menu display)	I	MenuImport End	when occurred

Service Logs (continued)

Items	Level	Character strings	Timing
Initializing personal data	I	Clear Personal	when occurred
Resetting to the factory default settings	I	Clear All	when occurred
Resetting to the factory default settings without menu display	N	ClearMenuless All	when occurred
Detecting the remote control panel connection	I	CP Attach 3.xx.xxx.x	just after start when occurred
Detecting the remote control panel disconnection	I	CP Dettach	when occurred
Detecting the SD card slot door open	N	Slot Open	just after start when occurred
Detecting the SD card slot door closed	I	Slot Close	just after start when occurred
Recognizing SC cards in slots 1 to 4	I	Card Slot1 PA-SV16G-C6 Total capacity, free capacity, serial No., etc. (hexadecimal number of MID//PRV//PSN//MDT) Card Slot2 NONE Card Slot3 NONE Card Slot4 NONE	just after start when the SD card slot door closed
Detecting a USB memory device inserted	I	USBMem Attach 0/1	just after start when detected
Detecting a USB memory device removed	I	USBMem Dettach 0/1	when detected
Changing a USB memory device status	I	USB Front/Rear VendorID // ProductID // manufacturer // product // serial	just after start when occurred
Changing GPS status	I	GPS On	just after start when occurred
Changing GPS status	I	GPS Off	just after start when occurred
Adjusting the GPS time (other than GPS)	I	GPS Adjust	when occurred
Radar gun connection status	I	Rader Detect model name	First data reception after start-up
Camera connection status (1 to 6)	I	Camera 1=On 2=Off 3=..	just after start when occurred
Network connection status	I	Net PC=192.168.xx.xx UPLOAD=NONE WIRELESS=NONE	just after start when occurred
Front-End and Back-End application connection status	I	PC FE=192.168.xx.xx BE=NONE	when status changed

N (NOTICE): When a specified event is occurred

I (INFO): Debugging message

Service Logs (continued)

■ Error (displayed)

Items	Level	Character strings	Timing
Record error	E	[Rec Error] error number factor number	when occurred
SD card format error	E	[Format Error] error number	when occurred
All deletion error	E	[DeleteAll Error] error number	when occurred
Play error	E	[Play Error] error number	when occurred
Export error	E	[Export Error] error number	when occurred
Upload error	E	[Upload Error] error number	when occurred
Upgrading error	E	[Vup Error] error number	when occurred
Menu export error	E	[MenuExport Error] error number	when occurred
Menu import error	E	[MenuImport Error] error number	when occurred
Others	E	[Misc Error] error number	when occurred

E (ERROR): When an error is generated

■ Error (not displayed)

Items	Level	Character strings	Timing
Restoration error	E	Restore Error slot1 data/yyyymmdd/mmhhss.av	when occurred
Deletion error	E	Delete Error slot1 data/yyyymmdd/mmhhss.av	when occurred
Upgrading error without menu display	E	VupMenuless Error "factor number"	when occurred

E (ERROR): When an error is generated

Format of Service Log

The format of the service log is as shown below.

```
<TS>UTC 2008-11-22 00:48:09</TS><LV>N</LV><OP>Power On</OP>
<TS>2008-11-22 09:48:12</TS><LV>N</LV><OP>System Start AG-CPD20 4.xx.xxx.0 ABCD123456 usa</
OP>
<TS>2008-11-22 09:48:23</TS><LV>N</LV><OP>Slot Close</OP>
<TS>2008-11-22 09:48:27</TS><LV>N</LV><OP>Card Slot1 PA-SV16G-C6 15814656 15814560
1//88//2080763F//7B
</OP>
<TS>2008-11-22 09:48:27</TS><LV>N</LV><OP>Card Slot2 NONE</OP>
<TS>2008-11-22 09:48:27</TS><LV>N</LV><OP>Card Slot3 NONE</OP>
<TS>2008-11-22 09:48:27</TS><LV>N</LV><OP>Card Slot4 NONE</OP>
<TS>2008-11-22 10:23:45</TS><LV>N</LV><OP>Rec File GPIO1 slot1 data/20081122/102345.av</OP>
<TS>2008-11-22 11:07:32</TS><LV>N</LV><OP>Rec Stop STOP</OP>
<TS>2008-11-22 12:13:30</TS><LV>N</LV><OP>System End Acc</OP>
<TS>2008-11-22 12:13:35</TS><LV>N</LV><OP>System End</OP>
<TS>2008-11-22 12:13:37</TS><LV>N</LV><OP>Power Off</OP>
```

<TS> (Time Stamp): The local time is automatically added upon obtaining other user log. However, the times for the Power On log, upgrading without displaying menu during start-up, and initializing to the factory default settings during start-up are the UTC times.

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- To decode AVC Video that was obtained from a video provider licensed to provide AVC Video

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