

LC300 and LC300S

CaptureVision Station

User Manual - English



[Important]

To download the latest version of the Quick Start Guide, multilingual user manual, software and drivers, please visit Lumens

<https://www.MyLumens.com/support>

Table of Contents

Copyright Information.....	3
Chapter 1Safety Instructions.....	4
Chapter 2Package Contents	5
Chapter 3Product Appearance and Connections.....	6
3.1Product Appearance	6
3.2Product Connection	7
3.3RS-232 I/O Pin Description.....	8
Chapter 4Function Description.....	9
4.1Real-Time Operation Menu	9
4.2Webpage Login Interface	9
4.3Parameter Setting	10
4.4Online Director.....	31
4.5File Management	35
Chapter 5Troubleshooting.....	39
Addendum 1	41

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Chapter 1 Safety Instructions

Always follow these safety instructions when setting up and using the product:

1 Operation

- 1.1 Use the product in the recommended operating environment, away from water or sources of heat
- 1.2 Do not place the product on a tilted or unstable surface.
- 1.3 Please ensure the power plug is dust-free prior to usage. Do not insert the product's power plug into a multiplug to prevent sparks or fire.
- 1.4 Do not block the case's slots and openings. They provide ventilation and prevent the product from overheating.
- 1.5 Do not open or remove covers. Doing so may expose you to dangerous voltages and other hazards. Refer all servicing to licensed service personnel.
- 1.6 Unplug the product from the wall outlet and refer servicing to licensed service personnel when the following situations happen:
 - If the power cords are damaged or frayed.
 - If liquid is spilled on the product or the product has been exposed to rain or water.

2 Storage

- 2.1 Do not place the product where the cord can be stepped on as this may result in fraying or damage to the lead or the plug.
- 2.2 Unplug this product during thunderstorms or if the product is going to be unused for an extended period.
- 2.3 Do not place this product or accessories on vibrating equipment or hot surfaces.

3 Cleaning

- 3.1 Disconnect all cables prior to cleaning. Clean the surface with a dry cloth. Do not use alcohol or volatile solvents for cleaning.

4 Batteries (for products with batteries)

- 4.1 When replacing batteries, please only use the same type of batteries.
- 4.2 When disposing of batteries or products, please adhere to the relevant instructions in  / or region.
- 4.3 Warning

The following situations must be avoided:

- Using the wrong type of battery may compromise the security of the device
- Over-heating or damaging batteries may cause
 - Placing the battery in a high-temperature environment may cause an explosion or leakage of flammable liquids or gases;
 - Batteries subjected to extremely low air pressure may explode or leak flammable liquids or gases.

■ FCC Warning

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment.

Notice: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

■ IC Warning

This digital apparatus does not exceed the Class A limits for radio noise emissions from digital apparatus as set out in the interference-causing equipment standard entitled "Digital Apparatus," ICES-003 of Industry Canada.

Cet appareil numérique respecte les limites de bruits radioélectriques applicables aux appareils numériques de Classe A prescrites dans la norme sur le matériel brouilleur: "Appareils Numériques," NMB-003 édictée par l'Industrie.

■ EN55032 CE Warning

Operation of this equipment in a residential environment could cause radio interference.

Warning: Operation of this equipment in a residential environment may cause radio interference

■ BSMI Warning (label displayed on the bottom of the device)

Warning: To avoid electromagnetic interference, this product should not be installed or used in residential environments

Chapter 2 Package Contents

LC300/LC300S



**Power Adapter
(DC 19V)**

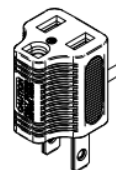


Power Cord



Appearance may vary depending
on country/region

3-PIN to 2-PIN Connector

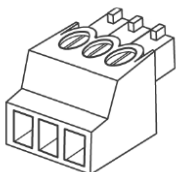


(Japan only)

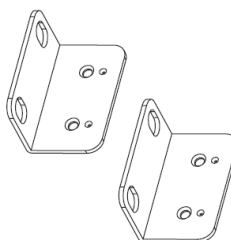
**USB 3.0 Cable (2M)
(Type B to Type A)**



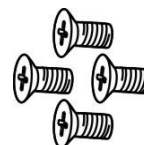
**RS-232
Connector (x2)**



Mounting Metal Plate (x2)



**M3 Metal Plate Screw
(4x4)**



Cable Holder-1



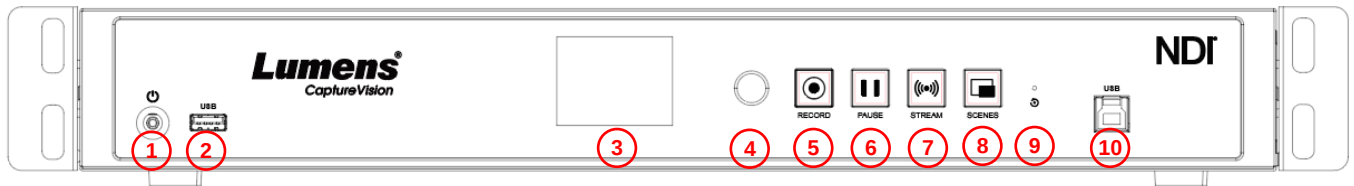
Cable Holder-2



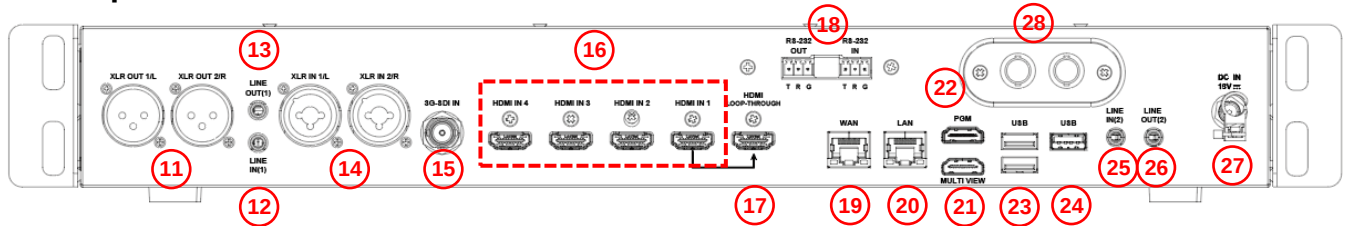
Chapter 3 Product Appearance and Connections

3.1 Product Appearance

▪ Front panel



▪ Rear panel

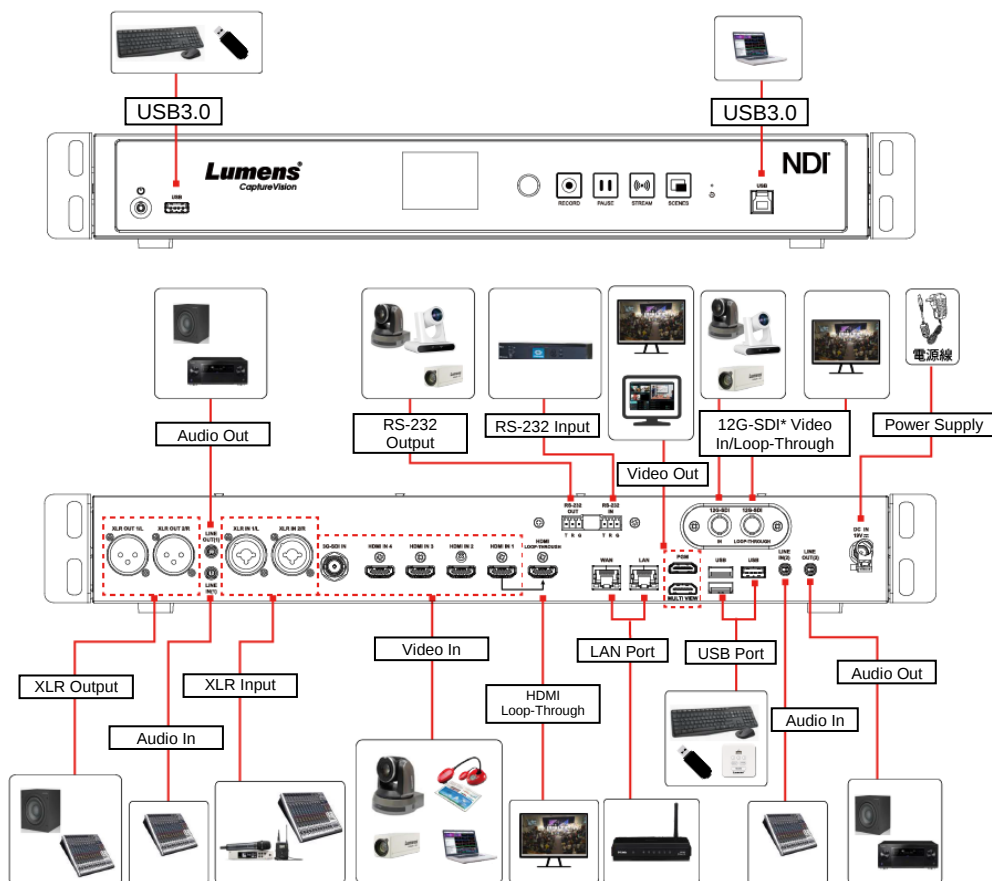


Note 12G-SDI is only applicable to LC300S

No	Name	Function Descriptions
1	Power	Turn the device On/Off
2	USB3.0 Port	To connect keyboard/mouse/USB flash drive/USB camera
3	LCM Screen	Displays PGM screen / LCM menu / message prompts
4	Knob	▪ Left/Right rotation: Adjust parameters and navigate the menu ▪ Press: Perform “confirm” action
5	Record	Start/Stop recording
6	Pause	Start/Pause recording
7	Stream	Start/Stop Video streaming
8	Scenes	Switch the theme scene to the PGM screen. If there are multiple scenes, switch them in order
9	Reset	Reset the device (long press for 3 seconds)
10	USB3.0 Port	Connect the computer to convert PGM audio and video into USB signal for use with video conferencing software ▪ Video/Audio source name: Lumens LC300(S) Processor
11	XLR Out	Balanced line output
12	Line In(1)	Line In audio source input
13	Line Out(1)	PGM audio output
14	XLR In	Balanced line input
15	3G-SDI	3G-SDI signal source input
16	HDMI In (4 CH)	HDMI signal source input ▪ HDMI 1 supports 4K resolution
17	HDMI Loop Through	Output HDMI 1 video screen
18	RS-232 Port	IN: Control the device through RS-232 OUT: Control the camera through RS-232

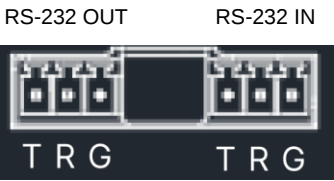
19	LAN	Connect to your Local Area Network
20	WAN	Connect to WAN
21	HDMI 1 Multiview	User interface output; displays the settings menu and video management
22	HDMI 2 Program	Main screen output, displays the recording or streaming screen and applied layout
23	USB 2.0 Port	To connect keyboard/mouse/USB flash drive/USB camera/LC-RC01 remote control panel
24	USB 3.0 Port	
25	Line In(2)	Line In audio source input
26	Line Out(2)	Multiview audio output
27	DC IN 19V	DC 19V power connector
28	12G-SDI In/ 12G-SDI Loop-through	Note LC300S only 12G-SDI signal source output/input

3.2 Product Connection



*12G-SDI is only applicable to LC300S

3.3 RS-232 I/O Pin Description



■ RS-232 IN/ OUT

Function
TX+
RX-
GND

Chapter 4 Function Description

4.1 Real-Time Operation Menu

Connect a monitor to the HDMI Multiview port to view the real-time operation menu
Connect a keyboard/mouse to the USB port to navigate the menu



No	Icon	Name	Function Descriptions
1		Configuration	Change system network settings, recording/streaming encoder settings
2		Director management	Input signal source selection, audio source management, recording/streaming control, layout selection, and IP camera control
3		File management	Conduct the video file content management, including the following functions: upload, download, delete, replay video files
4		About	Displays the current firmware version and device information
5	NA	Device IP	Displays the device's IP address when connected to a WAN

4.2 Webpage Login Interface



No	Item	Function Descriptions
1	User Login Account	Enter user login account (default: admin)
2	User Password	Enter user password (default: admin) ▪ For a first-time login, please refer to 4.2.1 Account to change the default password
3	Language	Supporting English/Traditional Chinese/Simplified Chinese
4	Login	Log in to the administrator screen on the website

4.3 Parameter Setting

This Section covers the web-based interface. Only the HDMI Multiview provides settings of [System Settings] > [Internet].

4.3.1 System Settings

4.3.1.1 System Settings

Set up the device's basic information, such as date and time

CaptureVision Station - Configuration

System

System Settings

Network

Service

Configuration

Display

Remote Control Panel

Account

Source

Audio

Video

Scenes

Storage

Scheduler

Backup

About

System Settings

1

Device Identification

Hostname :

LC300

Device Description :

LC300

Apply

2

Live

3

Date and Time

Device Current Date and Time :

2023-11-27 17:34:24

Time Zone :

Asia/Taipei

Setting Mode :

NTP Service

NTP Server URL :

pool.ntp.org

Apply

4

Front panel lock

☐ Front panel lock

Apply

5

Welcome Screen

Browse

File Format

File Format : PNG

Size (Max) : 3 MB

Resolution(Max) : 1920x1080

Apply

No	Item	Function Descriptions
1	Device Identification	The device's name and description Note Display name only accepts English characters and numbers

2	Live Streaming	Preview the program (PGM) output in real-time
3	Date & Time	Supports different time zone settings. Synchronize time with an NTP service (default) and perform a manual set up. ▪ Time Zone: Select the correct time zone according to current location ▪ Configuration Mode: ➤ NTP service: Synchronizes time with a network server ➤ Manual Setup: Set time manually
4	Front Panel Lock	Select to enable Front Panel Lock ▪ After rebooting the device, the front panel buttons will be locked. ▪ To disable this function, log in to the web interface to uncheck this item
5	Welcome Screen	Customize a welcome image for device 1 Click [Browse] and select a file to upload. A thumbnail will be automatically generated ✕File format: ➤ File format: PNG ➤ File size (Max.): 3 MB ➤ Resolution size (Max.): 1920 x 1080 2 Click [Apply] to save this change. If you need to select another file, click [Cancel] and reselect a file

4.3.1.2 Network

The factory setting is DHCP. If you want to use a static IP address, please configure the connection here.

CaptureVision Station - Configuration

System

System Settings

Network

Service

Configuration

Display

Remote Control Panel

Account

Source

Audio

Video

Scenes

Storage

Scheduler

Backup

About

Network

WAN Settings

The system will reboot after changing the network settings. Please re-login.

IP Assignment :
DHCP

IP Address :
192.168.4.57

Subnet Mask :
255.255.255.0

Default Gateway :
192.168.4.254

Primary DNS Server :
192.168.1.211

Secondary DNS Server :
192.168.1.212

Apply

LAN Settings

The system will reboot after changing the network settings. Please re-login.

IP Assignment :
DHCP

IP Address :

Subnet Mask :

Default Gateway :

Primary DNS Server :
undefined

Secondary DNS Server :

Apply

Function Descriptions

▪ DHCP: Dynamic IP address is set as default

▪ Static IP: Configure a static IP address and manually enter network information

Select and fill in required network settings and click [Apply] to save

Note The system will restart after changing network settings. Please connect and log in again

4.3.1.3 Services

CaptureVision Station - Configuration

System

System Settings

Network

Service

Configuration

Display

Remote Control Panel

Account

Source

Audio

Video

Scenes

Storage

Scheduler

Backup

About

Service

1

Firmware

Master Firmware Version :

LCB021

Update

Advance

2

Service Data

Export the log file to your computer

Description :

Export

3

Reset

Reset to factory default

☒ Except the network settings

Reset

4

Restart Device

Restart

No	Item	Function Descriptions
1	Firmware	View firmware information and apply updates Click [Update] and select the new firmware file Note Advance: Engineers update sub-firmware usage
2	Service Data	Save system log files to a user's computer 1 Enter a file name 2 Click [Export] to export system log files Note The length of file name must be between 0 ~ 16 characters. Special symbols and space are not permitted
3	Reset	Restores the device to factory reset ▪ Check [Keep Network Settings] and the network settings will be retained
4	Restart Device	Restart the device

4.3.1.4 Configuration

You can export the configuration files of the device to a computer, and import the configuration files to another device to apply the same configuration.

No	Item	Function Descriptions
1	Export	Export the current device configuration as a configuration file
2	Import	Import the exported configuration file from another device

4.3.1.5 Display

Function Descriptions
Select the HDMI PGM/Multiview output resolution for the device

4.3.1.6 Remote Control Panel

Function Descriptions
Remote control panel. Display the connection information of LC-RC01 remote control panel (optional). When there is no connection, a blank screen appears

4.3.2 Account

Select one of three user type accounts: modify the username and password for [System Management], [Online Director], [Content Management] roles.

CaptureVision Station - Configuration

System

Account

Source

Audio

Video

Scenes

Storage

Scheduler

Backup

About

Account management

1 Administrator

Username :

admin

New Password :

Confirm Password :

Apply

2 Online Director

Username :

director

New Password :

Confirm Password :

Apply

3 Video Manager

Username :

video

New Password :

Confirm Password :

Apply

No	Item	Username/Password	Function Descriptions
1	Administrator	admin / admin	High level authority. System management permissions.
2	Online Director	director / director	Manage playback and control basic video settings
3	Video Management	video / video	Manages file storage and video playback

Note

- The length of username must be between 4 ~ 16 characters. {}()'&@~^\$% "|, :?<>*~\#; symbols, and spaces are forbidden
- The length of password must be between 8 ~ 16 characters. {}()'~^" |, :?<>*~\#; symbols, and spaces are forbidden
- Duplicate usernames are forbidden

4.3.3 Source

4.3.3.1 Physical Video Source Manager

System

Account

Source

Physical Video Source

USB Video Source

Network Source Manager

Video Channel Manager

Physical Video Source

Physical Video Source Manager

ID	Source Name	Source Configuration	Visca Address	Protocol	Edit
1	Video Input 1	HDMI 1	N/A	N/A	
2	Video Input 2	HDMI 2	N/A	N/A	
3	Video Input 3	HDMI 3	N/A	N/A	
4	Video Input 4	HDMI 4	N/A	N/A	

Function Descriptions

Click [Edit] to edit the HDMI signal source name and resolution

- When using a 3G-SDI input, use Video Input 4

When using a 12G-SDI input (LC300S), use Video Input 1.

4.3.3.2 USB Video Source

System

Account

Source

Physical Video Source

USB Video Source

Network Source Manager

Video Channel Manager

USB Video Source

USB Video Source

ID	Source Name	Source Configuration	Delete
1	USB_Camera	Lumens VC-B2U Video Camera: Lum(3-6)	

Function Descriptions

Click [+Add], select the USB video source device, apply and then add it.

Note Ensure that the USB device is connected to the USB Type A port of the device

4.3.3.3 Network Source Manager

System

Account

Source

Physical Video Source

USB Video Source

Network Source Manager

Video Channel Manager

Audio

Video

Scenes

Storage

Scheduler

Network Source Manager

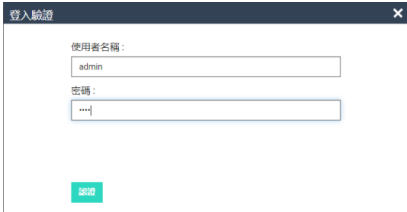
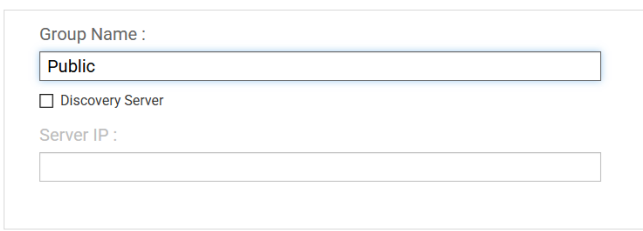
Network Source

Host Name	IP Address	MAC	Manufacturer	Status	Connected	Delete
VC-A71P-HN (HN-Default, 192.168.4.26)	192.168.4.26	-	-		OK	
VC-A71P	192.168.4.164	DC:E2:AC:01:B3:35			OK	
VC-A71P-HN	192.168.4.33	DC:E2:AC:02:B4:C3			OK	

Network Stream

Device Name	URL	Edit	Delete
VC-A51P	rtsp://192.168.4.154:8557/h264		

No	Item	Function Descriptions
1	Network Source	- Click [Refresh] to automatically scan for network cameras on the same LAN - Click [Login Verification]/[Add] and enter login information to connect a camera

		 Lumens Network Camera ● CameraAccount: admin ● Password: 9999 3 The status displays “OK” to indicate that the device can be used as a signal source input.
2	Network Stream	1 Click [Add] to add an IP video source to the device 2 Select the stream type SRT/ RTSP, enter the network streaming name and URL, and then click [Apply] 3 The newly added network device will now be listed
3	NDI Discovery Settings	 Configure NDI source discovery. Use a Discovery Server to discover devices across different networks.

4.3.3.4 Video Channel Manager

- System
- Account
- Source
 - Physical Video Source
 - USB Video Source
 - Network Source Manager
 - Video Channel Manager**

Video Channel Manager

Channel 1 Channel 2 Channel 3 Channel 4

ID	Source Name	Category	Format
1	12G SDI	usb	

Edit

Function Descriptions

Click [Edit]. Online video sources will be displayed in a list. Drag the source to the desired channel

- Drag the signal sources to change their order

Channel 1 Channel 2 Channel 3 Channel 4

ID	Source Name	Category	Format
1	HDMI 1	usb	

Network Stream

Total Source:

VC-A71P+HN

Channel 1:

HDMI 1

Channel 2:

HDMI 2
VC-TR40

Channel 3:

HDMI 3
VC-A51P

Channel 4:

HDMI 4
VC-R30

Cancel

Apply

Edit

4.3.4 Audio Source Manager

System
Account
Source
Audio
Audio Source Manager
Audio Detect Settings
Video
Scenes
Intelligent Director
Storage
Scheduler
Backup
About

Audio

Audio output description
Line out(1): PGM
Line out(2): MULTI VIEW

Audio Source Manager

Refresh

USB Device Name	Format
No network camera(s).	

Function Descriptions

Click [Refresh] to search for a USB audio device connected to the LC300

4.3.5 Audio Detect Settings

System
Account
Source
Audio
Audio Source Manager
Audio Detect Settings
Video
Scenes
Intelligent Director
Storage
Scheduler
Backup
About

Audio Detect Settings

PGM Audio Warning Settings

Trigger Time :
Anytime

Sound Level Setting :
1

Timer Setting :
10 MIN

Apply

Function Descriptions

When the audio volume remains continuously low for a specified period, the LC300 will send an alert.

- 1. Trigger Time:** Defines when the alert should be activated. (Off / Anytime / Recording or Streaming / Streaming only / Recording only)
- 2. Sound Level Setting:** Select the volume threshold level from 1 to 6.
- 3. Timer Setting:** Choose how long the volume must remain low before triggering the alert: 10 / 15 / 20 / 30 / 45 / 60 minutes

4.3.6 Video

Administrators can choose to record a single PGM (main program out) screen or record up-to 4 video inputs. Each recording can be set with individual encoding settings

4.3.6.1 Encoder Manager

System

Account

Source

Audio

Video

Encoder Manager

Record Manager

Stream Manager

Encoder Manager

Encoder Profile Manager

Add Encoder Profile

Encoder Name	Video Compression	Resolution	FPS	Bitrate(Mbps)	Audio Compression	Edit	Delete
1080P_Profile	H.264	1920x1080	30	6	AAC		
4K	HEVC	3840x2160	60	15	AAC		

Function Descriptions

Click [Add Encoder Profile] to configure the compression format/resolution/bit rate/audio sampling frequency settings

4.3.6.2 Record Manager

System

Account

Source

Audio

Video

Encoder Manager

Record Manager

Stream Manager

Record Manager

Record Manager

Add

Record Name	Video Source	Audio Source	Encoder Profile	Compression	Resolution	Bitrate(Mbps)	Edit	Delete
Record_Profile	PGM	Mixed Audio	4K	HEVC	3840x2160	15		

Function Descriptions

Click [Add] to configure video/audio sources and encoders

Note

- Maximum recording time: 12 hours
- Resolution settings will affect the split-screen supported by PGM. Please refer to the following limitations

Resolution	PGM Maximum Split-screen Quantity	Description
4K 50/60fps	1 channel	
1080p 50/60fps	5 channels	1 PGM channel + 4 input channels

4.3.6.3 Stream Manager

System

Account

Source

Audio

Video

Encoder Manager

Record Manager

Stream Manager

Stream Manager

Stream Manager

Add Stream Manager

Stream Name	Stream Type	Encoder Name	Video Source	Audio Source	Protocol	Edit	Delete
RTSP_Server	Stream Server	1080P_Profile	PGM	Mixed Audio	RTSP		
YT	Stream Client	1080P_Profile	PGM	Mixed Audio	Youtube		

Function Descriptions

Click [Add Stream Manager] to allow users to add stream settings.

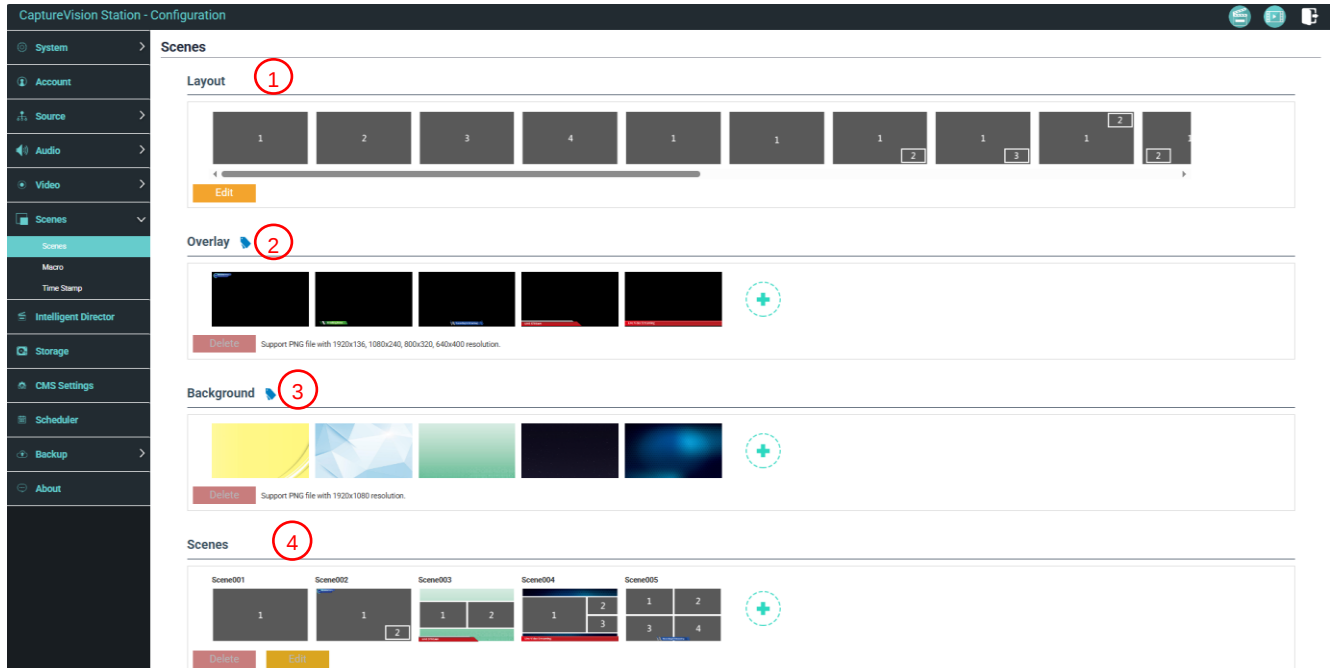
Related settings must comply with streaming protocols and the settings recommended by your streaming server.

4.3.7 Scene

4.3.7.1 Scene

The Theme feature integrates Layout, Overlay, Background, and other related settings, allowing users to quickly apply different recording screen styles.

Multiple preset themes are provided, and custom themes can also be created.



No	Item	Function Descriptions									
1	Layout	Provides multiple Layout options for users to quickly apply different recording screen configurations. Click [Edit] to enter the Layout Editing page and customize the position, size, and display order of each Channel. <table border="1"> <thead> <tr> <th>No</th><th>Item</th><th>Function Descriptions</th></tr> </thead> <tbody> <tr> <td>1</td><td>Layout Editing</td><td> Select an existing Layout or create a custom Layout. ➤ Add: Add a new Layout ➤ Duplicate: Duplicate the current Layout ➤ Delete: Delete the current Layout </td></tr> <tr> <td>2</td><td>Channel Editing</td><td> Configure the Channels in the selected Layout. ➤ Create Channel: Create a new Channel ➤ Delete Channel: Delete the current Channel ➤ Switch Channel: Switch to the Channel to be edited ➤ Arrange: Adjust the display order of Channels ➤ X, Y: Adjust the Channel position ➤ W, H: Adjust the Channel size ➤ Save: Save the current Layout </td></tr> </tbody> </table>	No	Item	Function Descriptions	1	Layout Editing	Select an existing Layout or create a custom Layout. ➤ Add: Add a new Layout ➤ Duplicate: Duplicate the current Layout ➤ Delete: Delete the current Layout	2	Channel Editing	Configure the Channels in the selected Layout. ➤ Create Channel: Create a new Channel ➤ Delete Channel: Delete the current Channel ➤ Switch Channel: Switch to the Channel to be edited ➤ Arrange: Adjust the display order of Channels ➤ X, Y: Adjust the Channel position ➤ W, H: Adjust the Channel size ➤ Save: Save the current Layout
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		<table border="1"> <tr> <td>3</td><td>Layout Preview</td><td>Displays the Layout preview area, where the position and size of each Channel can be adjusted according to the Layout settings.</td></tr> </table>	3	Layout Preview	Displays the Layout preview area, where the position and size of each Channel can be adjusted according to the Layout settings.
3	Layout Preview	Displays the Layout preview area, where the position and size of each Channel can be adjusted according to the Layout settings.			
2	Overlay	Select, upload or delete an image overlay. Click [] to select a file then click [Apply] to upload and apply this overlay style. Click [Delete] to cancel the upload. ※File format: ➤ PNG format ➤ Supported size: (a) 1920 x 136 (b) 1080 x 240 (c) 800 x 320 (d) 640 x 400			
3	Background	Select and delete a background image. To upload a file, click [] to select and apply a background image. Click [Delete] to cancel the upload. ※File format: ➤ PNG format ➤ Supported size: 1920 x 1080			
4	Scene	Scene incorporates the three elements of “Overlay,” “Background Image,” and “Production Layout.” You can customize up-to 30 scenes. Click [] to open scene settings. Enter a scene name and select the required overlay, layout, and background image. Once done, click “Apply”.			

4.3.7.2 Marco

System

Account

Source

Audio

Video

Scenes

Macro

Time Stamp

Intelligent Director

Storage

Macro Settings

Macro

Macro 1

Scene001

Scene002

Scene003

Scene004

Scene005

Channel 1

Channel 2

Channel 3

Channel 4

Camera Preset 1

Camera Preset 1

Camera Preset 1

Camera Preset 1

No	Item	Function Descriptions
1	Scene Selection	Select a scene to be set ■ If the layout style of the scene needs to be changed, please refer to 4.3.6.1 Scene
2	Camera Preset Setting	Set [Camera Preset Position]. Each supports up-to 9 camera preset positions or start/stop tracking ■ After checking the box, the macro will store the settings of the network camera on the assigned Channel 1 ~ 4

4.3.7.3 Time Stamp

System

Account

Source

Audio

Video

Scenes

Time Stamp

Intelligent Director

Storage

Scheduler

Time Stamp

1

Enable Time Stamp :

off

2

Format :

YYYY-MM-DD hh:mm:ss

3

Color :

Yellow

4

Size :

4

5

X Position (0~100) :

100

Y Position (0~100) :

100

Remarks:When the Time Stamp function is enabled, other overlays cannot be applied

No	Item	Function Descriptions
1	Time Stamp	Enable / Disable Time Stamp
2	Format	Choose the format of the Date and Time
3	Color	Choose the color: White / Yellow / Black / Red / Blue
4	Size	Choose the size from 1 to 10.
5	Position	Use the X Position slider and Y Position slider to adjust the coordinates from 0 to 100

4.3.8 Intelligent Director (For Lumens camera VC-TR40,AT version only)

Remark: For more detailed information about the TR40,AT version, please refer to the VC-TR40 user manual.

No	Item	Description
1.	Intelligent Director on / off	Turn Intelligent Director on/off
2.	Trigger Timing	Configure when the Intelligent Director will be activated: Anytime/Recording/Streaming
3.	Template	Configure how many Presenter/ Audience cameras will display in the list on the webpage here.
4.	Target Lost Action	Configure which scene will be switched to when all targets are lost from the cameras.
5.	Presenter Camera Settings	Configure which scene will be switched to after the tracking target appear or is lost from the Presenter camera's field.
6.	Audience Camera Settings	Configure which scene will be switched to after the tracking target stands up or sits down in the field of the Audience camera.
7.	Priority	Configure which scene will take priority when two events are triggered at the same time, Remark: Every trigger event needs to be set with a different priority rank. If they are configured the same, the scenes will not be switched.
8.	Apply	Apply

Please remember to complete the Command and Advanced sections' settings on VC-TR40,AT webpage to link the VC-TR40,AT and LC300.

Basic SettingCommandsAdvanced

Send Times

Always send

☒Stand up

90 07 08 05 01 00 F

☒Close up

90 07 08 05 01 03 F

☒Multi-Obj

90 07 08 05 01 02 F

☒Sit down

90 07 08 05 01 01 F

Save

Basic SettingCommandsAdvanced

Connect by

Network

Director IP

192.168.4.127

Protocol

UDP

Director Port

52362

4.3.9 Storage

Set up primary storage and back up / NAS storage and display hard drive information

CaptureVision Station - Configuration

System > **Storage**

Account

Source

Audio

Video

Scenes

Storage

Scheduler

Backup

About

1 Record Disk Settings

Local Storage :

Internal (SATA HDD) ✓

Apply

2 Disk Information

Interface	Disk Name	Manufacturer	Capacity	Free Space	Format
SATA	Internal (SATA HDD)	ATA TOSHIBA HDWT840	3.64 TB	2.86 TB	Format

3 NAS settings

Mount : ☐ off

Protocol : NFS ✓

Address : 0.0.0.0

Port : 445

Folder : NFS

Username :

Password :

Options : defaults

Apply

No	Item	Function Descriptions
1	Record Disk Settings	Local storage: Click drop-down menu ✓ and select the local storage hard drive Formats supported: FAT/ FAT32/ NTFS/ ext3/ ext4/ exFAT
2	Disk Information	Display hard drive information, free space, and capacity. Click "Format" to clear the internal storage devices. Confirm if you want to format the hard drive in the pop-up dialog and click "Confirm" to delete all video files.
3	NAS Settings	Enable NAS mounting and related settings. ▪ Go to Backup Setting> Upload Setting> Mode to select a NAS. After recording, the video can be uploaded to NAS

4.3.10 CMS

CaptureVision Station - Configuration

System

Account

Source

Video

Scenes

Storage

CMS Settings

Scheduler

Backup

About

CMS Settings

CMS Settings

Device Name :

LC200_0410E0

Server Type :

Kaltura

Authentication Method :

Account Secret Method

URL :

Partner ID :

Username :

Password :

Mode :

HTTPS

Port :

Authentication :

Normal

Deregister Device

Scheduler

Backup

Connection Test

No	Item	Function Descriptions
1	CMS Settings	After setup, the recording schedule can be synchronized with supported platforms. 1. Server Type: Kaltura / Panopto / Opencast Choose the desired server type, then enter the login information to enable the LC100 to synchronize scheduling data with the corresponding server. 2. Connection Test: Click [Connection Test]  to verify if the current configuration successfully establishes a connection. For detailed configuration support, please contact Lumens technical support.

4.3.11 Schedule

System

Account

Source

Audio

Video

Scenes

Storage

Scheduler

Backup

About

Scheduler

1 Schedule Settings

off

Schedule Source :

Manual Calendar Import

Load a configuration.

Import

Apply

2 Standby and wake up

Schedule standby :

OFF

Schedule wake up :

OFF

Apply

No	Item	Function Descriptions
1	Schedule Settings	- Click [On/Off]  : Enables/Disables schedule function - Click [Calendar]  : Check the current schedule status: <Remark> Reset schedule source and replace the current schedule - Schedule Source - Importing calendar manually: You can import iCalendar files (e.g. Outlook or Google Calendar) Click [Import] and select custom scheduled video file <Remark> Only files in .ics format can be imported - Importing calendar periodically You can synchronize schedules from network servers (e.g. Google Calendar) <Remark> Please refer to the videos of How to series on Lumens' YouTube channel for related settings
2	Stand by and Wake up	Enable/disable the scheduled standby and wake-up functions. Set wake-up and standby times.

4.3.12 Backup

Auto backup service automatically uploads videos to a designated storage. Set the upload destination and test the connection.

System

Account

Source

Audio

Video

Scenes

Storage

Scheduler

Backup

About

Backup

Backup Settings

Backup Type :
OFF

Mode :
FTP

IP Address :

Port :

Folder :

Authentication :
Normal

Username :

Password :

Upload Content :
Upload Record Folder

Connection Test

Apply

No	Item	Function Descriptions
1	Backup Settings	- Backup type: Back up after recording / Schedule daily backup - Mode: FTP/ SFTP/ NAS/ USB Storage/ WebDAV http/ WebDAV https Note Select NAS. Go to Storage Settings > NAS Setting to enable NAS mounting and related settings Connection Test: Click [Connection Test] to check the status of the current settings

4.3.13 About

Displays device-related Information: Firmware version, device serial number, and technical support link

CaptureVision Station - Configuration

System

Account

Source

Audio

Video

Scenes

Intelligent Director

Storage

Scheduler

Backup

About

System Information

Information

Manufacturer :
Lumens Digital Optics Inc.

Model :
LC300S

Master Firmware Version :
LCB107

Serial Number :
VDBA00016

WAN MAC :
DC:E2:AC:03:00:0E

LAN MAC :
DC:E2:AC:03:00:0F

Webpage :
www.MyLumens.com

Support :
service.lumens.com.tw



4.4 Online Director

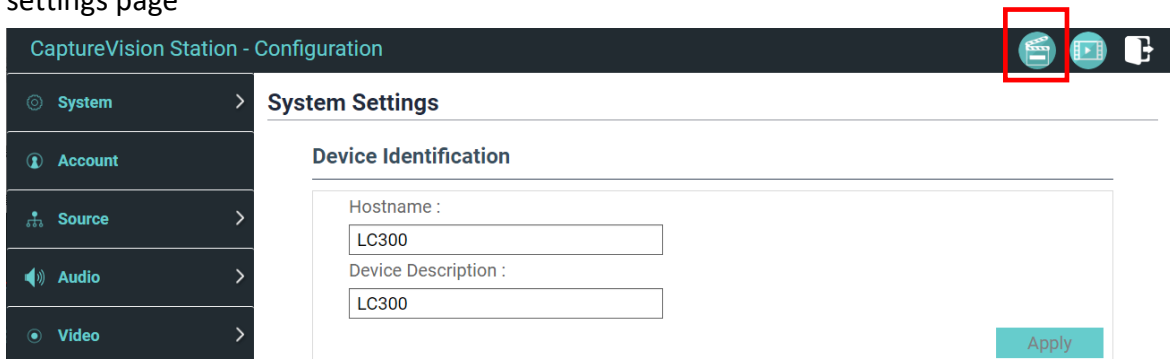
LC300 and LC300S have a built-in Online Director, which allows you to monitor recordings and the output video.

Three login methods below are available:

- Select Online Director from the HDMI Multiview real-time operation menu



- Log into the web interface and select the Online Director icon at the upper right corner of the settings page



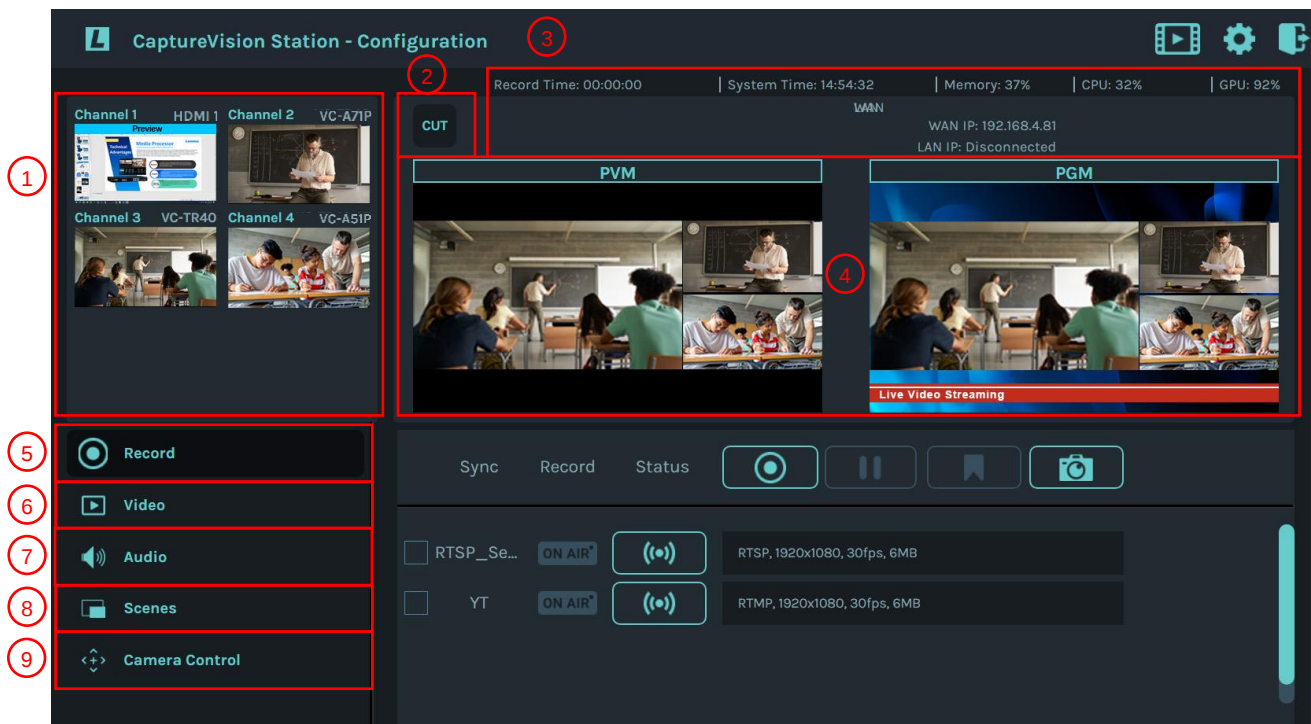
- Log into the web interface and use the Online Director account



Online Director (Default)

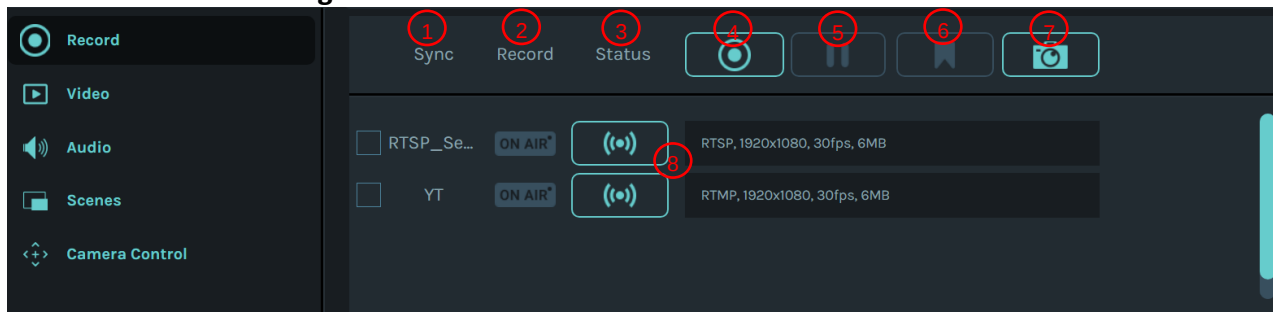
- Account: director
- Password: director

Online Director Function Descriptions



No	Item	Function Descriptions
1	Channel	Video inputs
2	CUT	Switch the PVM (preview) screen to the PGM (program) screen
3	Status	Displays current recording status, hard disk capacity and Internet connection status, etc.
4	PVM/PGM	Displays the preview (PVM) and program output (PGM)
5	Record	Start/stop recording; Option for simultaneous streaming
6	Video	See all available video sources
7	Audio	Manage the input and output of audio sources; adjust the audio recording volume
8	Scenes	Quickly select the required production layout, or customize the background and scene style
9	Camera Control	Control Lumens IP cameras

4.4.1 REC Record Setting



No	Item	Function Descriptions
1	Synchronize	After checking the box, press the record button  to start/stop streaming and recording
2	Record	Displays recording-related information
3	Status	The streaming connection status will be highlighted
4	Start/Stop Recording	Start/stop recording. The start recording status bar will display the recording time

5	Pause	Pause recording
6	Index	A timestamp can be added after the recording starts
7	Capture	Capture a photo
8	Single-channel Stream Button	Stream without starting recording Note PGM Stream and PGM HDMI output are not recommended for video conferencing, as they may introduce latency

4.4.2 Video

Record
Video
Audio
Scenes
Camera Control

Channel 1 Channel 2 Channel 3 Channel 4

HDMI 1

No Signal
HDMI 2

No Signal
HDMI 3

No Signal
HDMI 4

Function Descriptions

Preview Channel 1 ~ 4 signal sources screen. Click to select the required output signal source

▪ Please refer to [4.3.3.4 Image Distribution Management](#) for adding video sources.

4.4.3 Audio

Record
Video
Audio
Scenes
Camera Control

1
2
3
4

Input1
Input2
Input3
Input4
Input5(XLR)
Input6
Input7
Input8
PGM Level
Audio Out Level

Follow
Follow
Follow
Follow
Line Level
Line in 1
Lumens VC-TR
Lumens VC-TR

VC-A7IP-HN
VC-TR40
VC-TR40
VC-TR40,AT
L/R Stereo
Line in
Lumens VC-TR
Lumens VC-TR

102
100
100
100
100
100
0
100
2
100
100
100

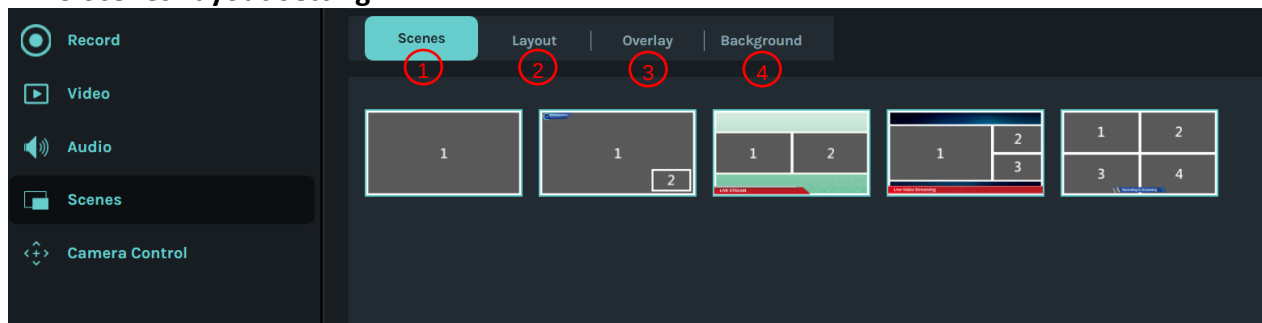
L R
L R
L R
L R
L R
L R
L R
L R
L R
L R
L R
L R

300 ms
100 ms
100 ms
100 ms
100 ms
100 ms
ms
ms
ms
ms
ms
ms

+48V
XLR

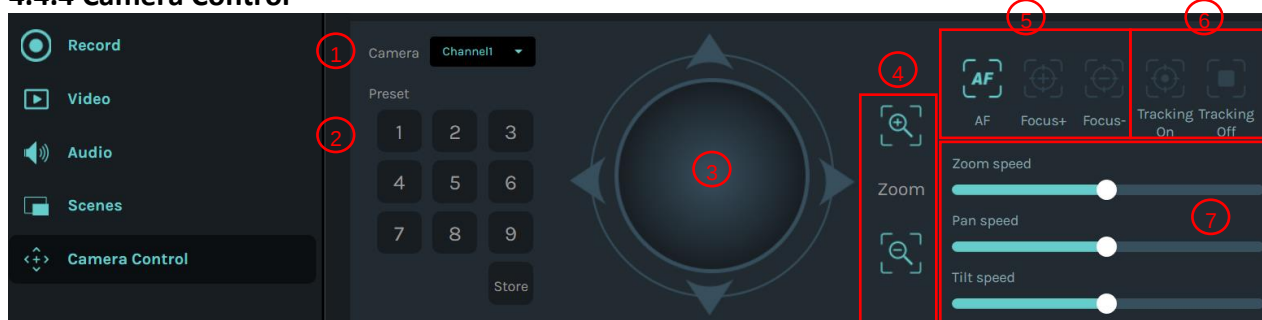
No	Item	Function Descriptions
1	Set Delay Time	Set an audio delay
2	Audio Source	Select an audio source
3	Audio Volume	Displays the current audio volume
4	Volume Control	Adjust the volume of each audio input
5	Mute/ Unmute	Mute/ Unmute audio output
6	+48V phantom Power	Turn On/Off the +48V phantom power
7	PGM Level	The master volume control changes the main volume of PGM recording/streaming
8	Audio Out Level	- PGM HDMI: Set the program (PGM) HDMI volume - Multiview HDMI: Set the Multiview HDMI volume Note Line out (2) volume is synchronized with the Multiview HDMI volume - Line Out (1) & XLR: Sets the volume for Line Out (1) & XLR Note This field adjusts the volume and does not affect the recording/streaming volume

4.4.3 Scenes Layout Setting



No	Item	Function Descriptions
1	Scenes	A customized Scene combines "Overlay," "Background Image," and "Production Layout,"
2	Layout	Apply a different layout to change the position of each input on the screen. Click the layout style to apply.
3	Overlay	Add an image overlay to your program
4	Background	Display the background images supported by "Online Director" system. Click a thumbnail to apply.

4.4.4 Camera Control

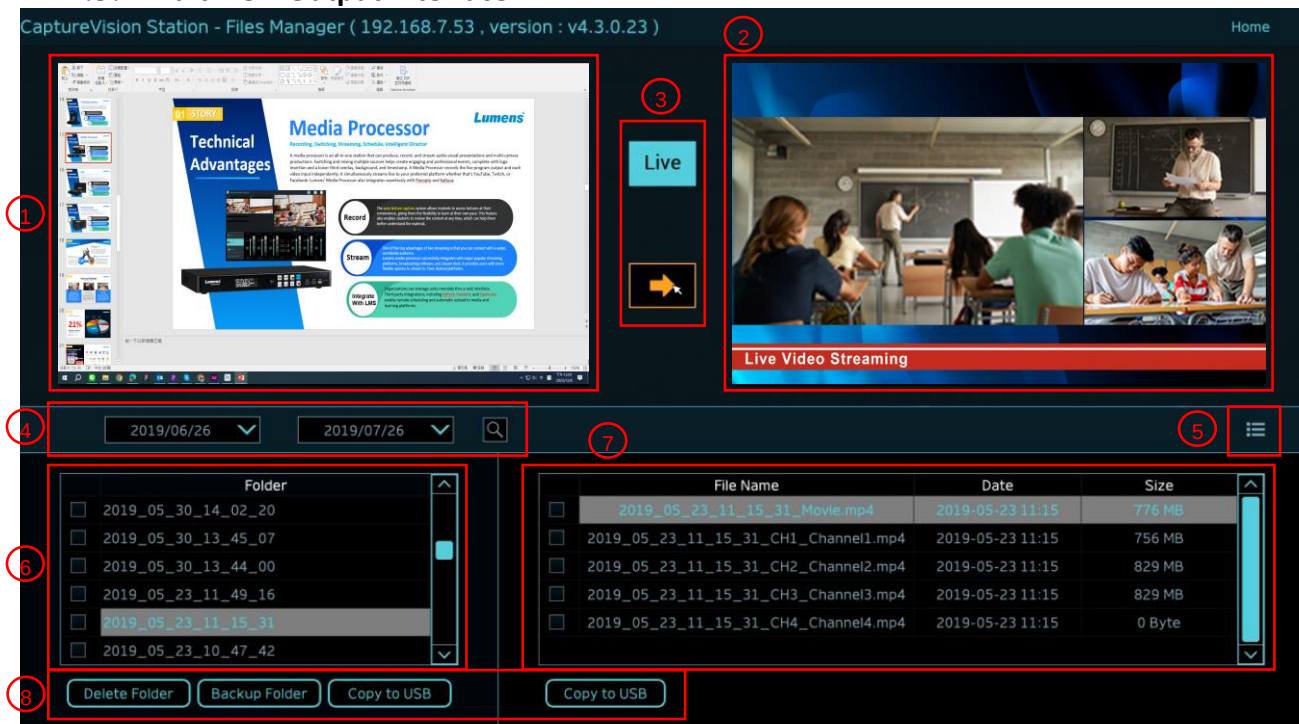


No	Item	Function Descriptions
1	Camera	Select the camera you wish to control
2	Preset	Click number buttons to store and recall presets
3	Direction Control	Move the center point to control the camera's position Note The web interface does not support trackball controls. Please use arrow buttons to control the camera
4	Zoom In/ Out	Zooms in/out
5	Focus	Set up auto or manual focus
6	Tracking	Set the tracking function on/off Note This function is only works with Lumens tracking cameras
7	PTZ Speed	Set the speed of Pan Tilt Zoom movement

4.5 File Management

Perform the following functions via the file management interface: Upload, download, delete, replay video files and edit recording information.

4.5.1 Multiview Output Interface

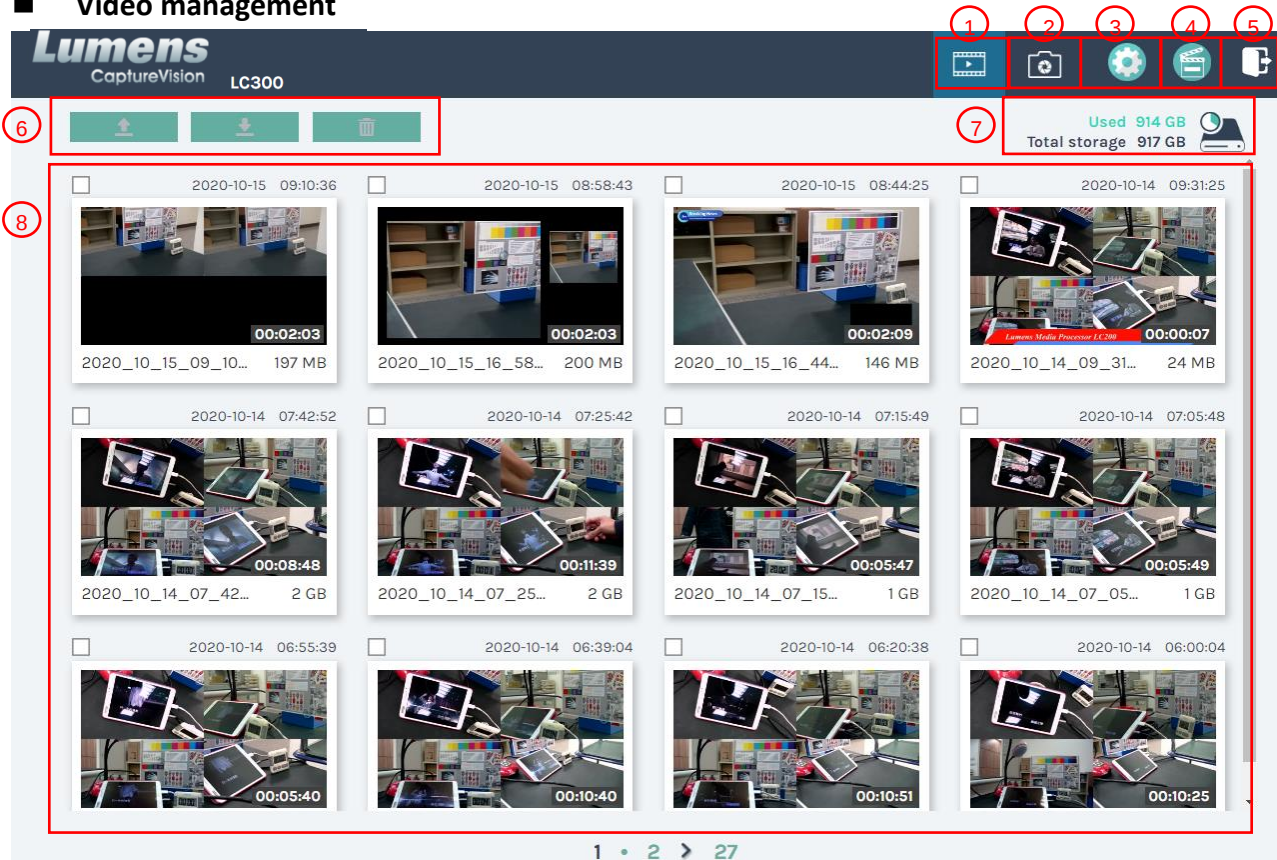


No	Item	Function Descriptions
1	Preview	Select a video file for play out and control on the Preview screen
2	Program	Display the Director screen or switch to synchronize with the Preview screen
3	Screen Switch	Switch the Program screen to the LIVE Director screen or the Preview screen
4	Discovery	Search video recordings by date
5	Display Mode	Video view mode. Switch to thumbnail or list mode
6	Folder	Show recording video folders
7	Video File Display	Display files in the video folder
8	File Management	Delete, backup or copy recording video to an external USB flash drive

4.5.2 Webpage Interface

The default web interface page is the system settings page. Click the video management icon  on the top-right corner to access the video management page.

■ Video management



No	Item	Function Descriptions
1	Video Management	Click to access the video management page
2	Photo Management	Click to access the picture management page
3	Configuration	Click to access the system settings page Note Log into the web interface with admin/admin to display the system setting subpage. If you log in the web page with video/video, you can only manage videos and images.
4	Online Director	Click to enter the Online Director page
5	Logout	Click this icon to log out of the web interface
6	File Management	Upload, download and delete selected video files
7	Hard Drive Status	Display the used space and the capacity of the current hard drive
8	Video File Display	Lists information, including file names of recording videos, thumbnails, capacity, and date

■ File Management Description

➤ Uploading

Check the thumbnails of the videos to upload. Click [] and the videos will be uploaded to the location set in Upload Settings. Please refer to [System Management/Upload Settings] for related settings.

Upload Status Description:

Icon	Upload Status	Icon	Upload Status
	Videos are uploaded successfully		Videos are queued for upload
	Fail to upload videos		Videos are uploading

➤ Downloading

Check the thumbnails of the videos to download. Click [] the videos will be saved as MP4 video files and datasets.

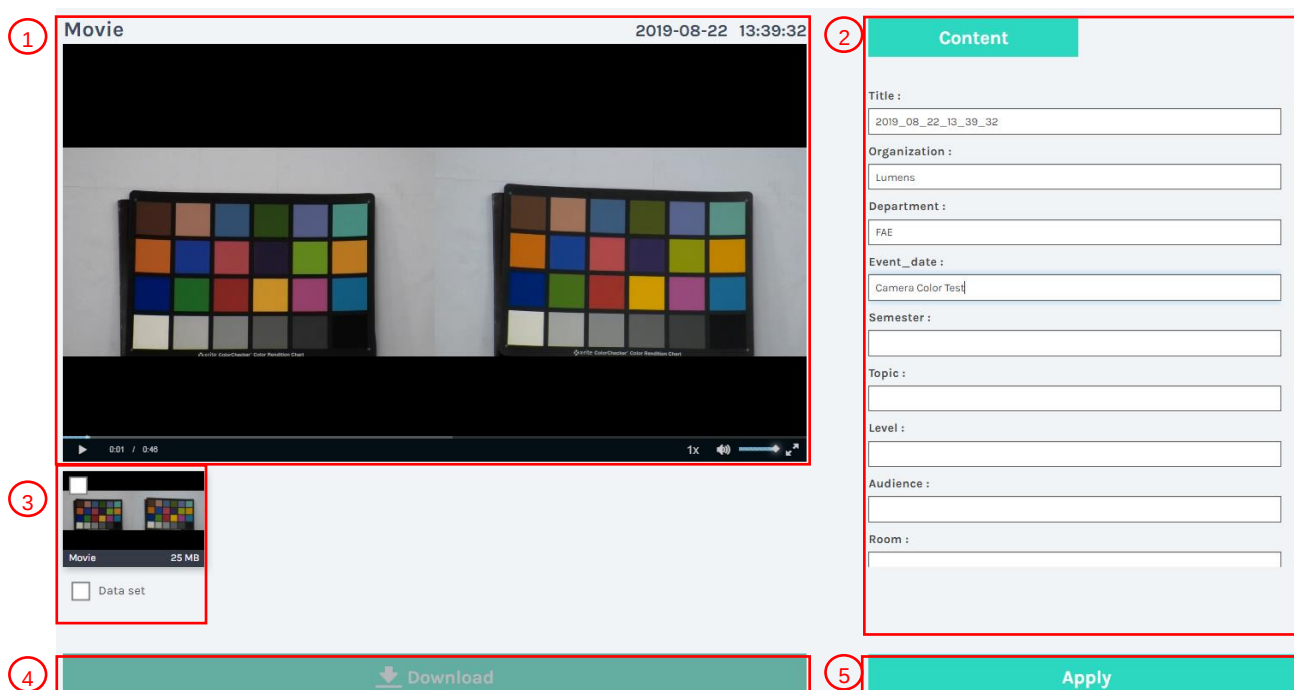
If only video files are needed, you can click the video thumbnails and access video playback page to download only video files.

➤ Delete

Select the thumbnails of the videos to delete. Click [] permanently delete the files.

■ Video Playback

Right-click a video to preview the video, edit the related content data, and download the video file and dataset



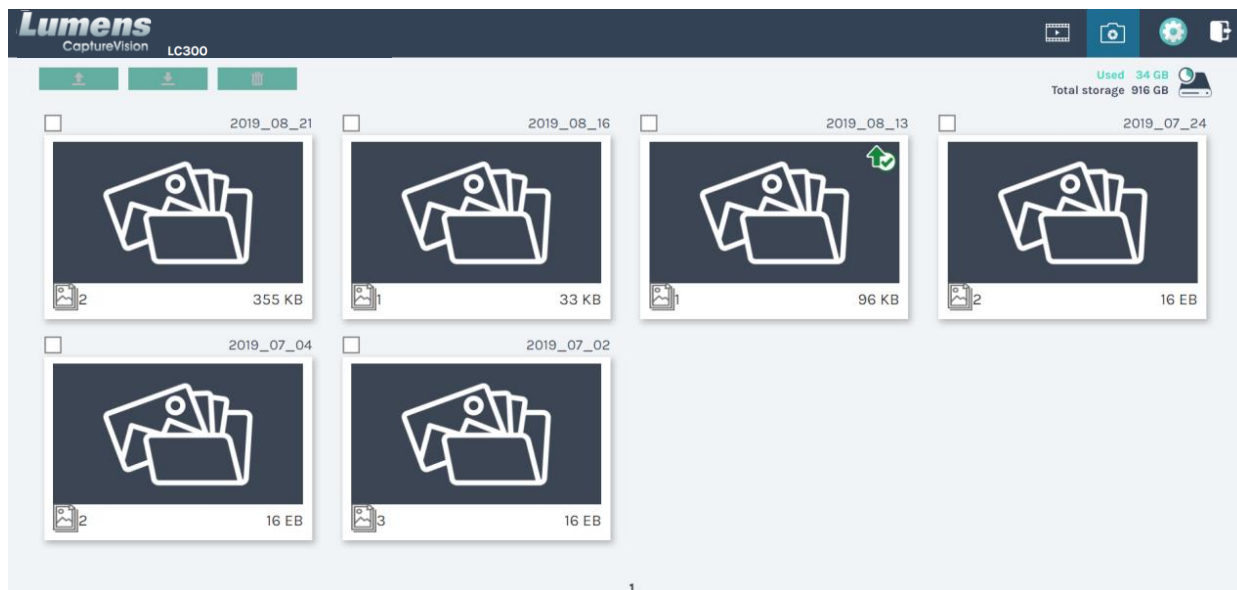
The screenshot shows the video playback interface. Callout 1 points to the video player window showing a color calibration chart. Callout 2 points to the 'Content' form on the right, which includes fields for Title, Organization, Department, Event_date, Semester, Topic, Level, Audience, and Room. Callout 3 points to the video file and dataset selection area at the bottom left, showing a thumbnail and a 'Data set' checkbox. Callout 4 points to the 'Download' button at the bottom. Callout 5 points to the 'Apply' button at the bottom right.

No	Item	Function Descriptions
1	Video Control Window	Playback and control recorded videos
2	Video Content	Edit and modify video content
3	Video File and Dataset	Select the video files or datasets to download
4	Download	Click this button to download the selected video files or datasets
5	Apply	After editing and modifying the video content, click this button to apply

■ Photo Management

You can manage the photo files captured by pressing SNAPSHOT. Folders will be named with the shooting date automatically; all photos shot on the same date will be stored in the same folder.

Just like Video Management, you can also upload, download, and delete photos in Photo Management subpage.



Chapter 5 Troubleshooting

This chapter describes problems you may encounter while using LC300 and LC300S. If you have questions, please refer to related chapters and follow all the suggested solutions. If the problem still occurs, please contact your distributor or the service center.

No.	Problems	Solutions
1.	Boot without power signal	Please confirm that the power cord used is of DC 19V specification
2.	No image output	1. Check the power 2. Check if the input/output device cables are loose 3. Replace the cables and make sure they are not faulty 4. Make sure if the input source is connected to the device correctly 5. LC300/LC300S cannot record video from a HDCP source 6. Confirm whether the machine is in standby mode. Tap any button on the device panel to wake the machine ^(*Note 1)
3.	The panel buttons are not responding	The panel is non-functional when logging into the system
4.	LC300/LC300S cannot perform camera control after connecting to a camera	Please make sure the dial setting of the Camera Address Selector is 0. The device cannot identify a camera correctly if it is not 0 
5.	You have forgotten the web interface administration password	Press the Reset button on the front panel to reset the device (hold press for 3 seconds)
6.	Web interface login failed	1. Confirm whether the machine is in standby mode. Tap any button on the device panel to wake the machine ^(*Note 1) 2. Please confirm whether the password is correct. If you forget your password, please refer to Troubleshooting #5.
7.	LC300/LC300S cannot find the camera	1. Ensure that the camera has been set up using only English letters or numbers. Check [Setting] > [Video] > [Camera ID]/[Camera Location] in the webpage. The device cannot find a machine if you use special characters and spaces. 2. When the device is connected to a switch and the switch IGMP function is on, it will not be able to search for cameras on the local area network. Please disable the IGMP function first and then search for cameras again.
8.	LC300/LC300S supports maximum recording time	The maximum recording time which LC300/LC300S supports is 12 hours. 24/7 recording is not supported.
9.	No image, black screen, or no signal is displayed when using the HDMI output	Some HDMI displays may not display the video correctly due to differences in HDMI input mode, EDID, or compatibility settings. If a black screen or no signal occurs, please check the display's HDMI input settings and try selecting a more compatible mode, such as: ▪ Compatibility Mode ▪ Standard Mode

		The actual setting name may vary depending on the display brand and model. Please refer to the display manufacturer's user manual for details. After changing the setting, reconnect the HDMI cable to allow the device to detect the display information again.
--	--	--

* Note 1: Standby Mode: Enable via RS232/TCP command.

Addendum 1

■ Frequently used port No.

Port No.	Description
1935/TCP	Applicable for RTMP push to most platforms, such as YouTube, Vimeo, and Twitch
80/TCP	Applicable for RTMP push to Periscope
443/TCP	Applicable for RTMPS push to Facebook
1935/TCP 1936/TCP	Applicable for RTMP push to LinkedIn
2935/TCP 2396/TCP	Applicable for RTMPS push to LinkedIn
443/TCP (HTTPS)	Applicable for platforms with built-in HTTPS security authentication, such as YouTube, Facebook, Ustream, Livestream, and Twitch
53/UDP (DNS)	Applicable to services of changing DNS IP address