# LC200 CaptureVision Station

**User Manual - English** 



### [Important]

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# **Table of Contents**

| Copyright I | Copyright Information2            |    |  |  |
|-------------|-----------------------------------|----|--|--|
| Chapter 1   | Safety Instructions               | 3  |  |  |
| Chapter 2   | Package Contents                  | 5  |  |  |
| Chapter 3   | Product Overview                  | 6  |  |  |
| 3.1         | Front panel                       | 6  |  |  |
| 3.2         | Rear panel                        | 6  |  |  |
| 3.3         | RS-232/RS-485 I/O pin description | 7  |  |  |
| Chapter 4   | Instruction for installation      | 8  |  |  |
| 4.1         | Product connection diagram        | 8  |  |  |
| Chapter 5   | Function Description              | 9  |  |  |
| 5.1         | Real-time operation menu          | 9  |  |  |
| 5.2         | Parameter setting                 |    |  |  |
| 5.3         | Director                          |    |  |  |
| 5.4         | File management                   | 25 |  |  |
| Chapter 6   | Troubleshooting                   |    |  |  |



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### **Chapter 1 Safety Instructions**

Always follow these safety instructions when using the product:

#### 1 Operation

- 1.1 Please use the product in the recommended operating environment.
- 1.2 Do not place product in tilted position.
- 1.3 Do not place the product on an unstable trolley, stand or table.
- 1.4 Do not use this product near water or source of heat.
- 1.5 Use attachments only as recommended.
- 1.6 Use the type of power source indicated on the product. If you are not sure of the type of power available, consult your distributor or local electricity company for advice.
- 1.7 Always take the following precautions when handling the plug. Failure to do so may result in sparks or fire:
  - Ensure the plug is free of dust before inserting it into a socket.
  - Ensure that the plug is inserted into the socket securely.
- 1.8 Do not overload wall sockets, extension cords or multi-way plug boards to avoid potential risks.
- 1.9 Do not block the slots and openings in the case of product. They provide ventilation and prevent the product from overheating.
- 1.10 Except as specifically instructed in this User Manual, do not open or remove covers, otherwise it may expose you to dangerous voltages and other hazards. Refer all servicing to licensed service personnel.
- 1.11 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 into 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 Never push objects of any kind through cabinet slots. Never allow liquid of any kind to spill into the product.
- 2.3 Unplug this product during thunderstorms or if it is not going to be used for an extended period.
- 2.4 Do not place this product or accessories on top of vibrating equipment or heated objects.

#### 3 Cleaning

- 3.1 Unplug all the cables before cleaning. Use a damp cloth for cleaning. Do not use liquid or aerosol cleaners.
- 4 Remote control (if the accessories are equipped with remote control)
  - 4.1 Using an incorrect battery type in the remote control may result in breakdown. Follow local instructions on how to dispose of used batteries.

#### ■ FCC Warning

This product has been tested and found to comply with the limits for a Class A computer device, pursuant to Article 15-J of FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a commercial environment.

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 numerique respecte les limites de bruits radioelectriques applicables aux appareils numeriques de Classe A prescrites dans la norme sur le material brouilleur: "Appareils Numeriques," NMB-003 edictee par l'Industrie.



EN55032 (CE Radiation) Warning
 Operation of this equipment in a residential environment could cause radio interference.



### **Chapter 2 Package Contents**





### **Chapter 3 Product Overview**



| No | Name               | Function Descriptions  |
|----|--------------------|--|
| 1  | RECORD             | Start/Stop recording   |
| 2  | SNAPSHOT           | Capture a single photo   |
| 3  | STREAM             | On/Off image streaming   |
| 4  | Single Channel     | Display a single channel screen  |
| 5  | PIP                | Switch to PIP display  |
| 6  | PBP                | Switch to PBP display  |
| 7  | Three              | Switch to three-channel display  |
| '  | Channel            | Switch to three-channel display  |
| 8  | Customize          | Customize layout display   |
| 9  | USB 3.0 Port       | USB hard disk interface for storage  |
| 10 | Switch Channel     | Switches between signal sources  |
| 11 | Channel 1 ~ 3      | Quickly switch to CH1/CH2/CH3 signal sources   |
| 12 | Line In (4 CH)     | Line In / Mic In audio input   |
| 13 | HDMI In (4 CH)     | HDMI signal source input   |
| 14 | Line Out           | Allows line audio out to amplifier transfer  |
| 15 | HDMI 2 Program     | Main screen output, display the recording or streaming screen and layout                   |
| 16 | HDMI 1 MultiView   | Operation interface output; display the device parameter setting menu and image management |
| 17 | USB 2.0 Port       | Connect USB keyboard/mouse device operation menu   |
| 18 | RS-232/RS-485 Port | Control the device through RS-232/RS-485   |
| 19 | Ethernet           | Connecting to LAN  |
| 20 | DC IN 12 V         | DC 12 V power connector  |
| 21 | Power              | On/Off the device power  |



### 3.3 RS-232/RS-485 I/O pin description



| ■ RS-232 |              |          |
|----------|--------------|----------|
| Pin NO.  |              | Function |
| 1        | TX+          |          |
| 2        | RX-          |          |
| 3        | GND          |          |
| ■ RS-485 |              |          |
| Pin NO.  |              | Function |
| 1        |              |          |
| 4        | I/R+         |          |
| 5        | T/R+<br>T/R- |          |



### **Chapter 4 Instruction for installation**

#### 4.1 Product connection diagram





#### 5.1 Real-time operation menu

Connect the HDMI1 MultiView output to the display panel to show the real-time operation menu

Connect the keyboard/mouse through the USB port and use the keyboard/mouse to select the menu settings



| No | lcon   | Name                  | Function Descriptions  |
|----|--|-----------------------|--|
| 1  | (Ö)8   | Parameter setting     | Perform the system network setting, recording/streaming compress setting   |
| 2  | and the second s | Casting<br>Management | Input signal source selection, audio management,<br>recording/streaming control, output version selection, and<br>network video camera control |
| 3  | G  | File<br>management    | Conduct the video file content management, including the following functions: Upload, download, delete, replay video files                     |
| 4  | (!)  | About                 | Display the current firmware version and relevant production information of LC200  |
| 5  | NA   | Device IP             | When connecting to the router, the current assigned device IP address will be displayed  |



### 5.2 Parameter setting

5.2.1 System Settings

5.2.1.1 System Settings

You may set up the device's basic information, initial date and time, and others here.

| CaptureVision Station - Configuration |  |                        |  |
|---------------------------------------|--|------------------------|--|
| ⊙ System ~                            | System Settings  |                        |  |
| System Settings                       | Device Identification  | $\square$              |  |
| Senice                                | Hostname :   |                        |  |
| Conferentian                          |  |                        |  |
| Configuration                         | Device Description :   |                        |  |
| Display                               | LC200_FF2223   |                        |  |
| Account                               |  | Apply                  |  |
| A Source >                            | Date and Time  | $\prec$                |  |
| Video                                 |  |                        |  |
| 12-12                                 | Device Current Date and Time :   |                        |  |
| Scenes                                | 2019-10-02 19:18:27  |                        |  |
| 1000000000000                         | Time Zone :  |                        |  |
| C Storage                             | Asia/Taipei  |                        |  |
| E Scheduler                           | Setting Mode :   |                        |  |
|                                       | NTP Service  |                        |  |
| <ul> <li>Backup</li> </ul>            | NTP Server URL :   |                        |  |
|                                       | pool.ntp.org   |                        |  |
| C About                               |  | Apply                  |  |
|                                       |  |                        |  |
|                                       |  |                        |  |
|                                       | Frame Rate Mode 💊  |                        |  |
|                                       | System Frame Rate :  |                        |  |
|                                       | 3 FPS 10   |                        |  |
|                                       |  | Anolu                  |  |
|                                       |  | a francis              |  |
|                                       |  |                        |  |
|                                       | Welcome Screen   |                        |  |
|                                       |  | File Format            |  |
|                                       | 4 Field Fiel | vat: PNG<br>av.): 3.MR |  |
|                                       | Resolution   | M.): 1920x1080         |  |
|                                       |  | -Annhy                 |  |
|                                       |  | Carden I.              |  |

| No | ltem               | Function Descriptions   |  |  |
|----|--------------------|---|--|--|
| 1  | Device             | Defines the device name and device description for LC200  |  |  |
| I  | Identification     | ※Display name only accepts English characters and numbers   |  |  |
| 2  | Date & Time        | <ul> <li>LC200 supports different time zone setting. It can synchronize time with NTP service (default) and manual setup</li> <li>Time Zone: Select the correct time zone according to current location</li> <li>Configuration Mode: <ul> <li>NTP service: Synchronize time with a network server</li> <li>Manual Setup: Set time manually</li> </ul> </li> </ul> |  |  |
| 3  | Frame Rate<br>Mode | You can configure the output frame rate at 30/60 fps<br>%If the frame rate setting of LC200 is 60 fps<br>> Up to 2 network image inputs are supported<br>> Recording can only be Movie Mode<br>> Streaming video compression format is the same as recording  |  |  |
| 4  | Welcome Image      |   |  |  |



#### 5.2.1.2 Network

The factory reset of LC200 is DHCP. The IP address is assigned by the connecting LAN router. If you want to use a static IP address, please configure the connection here.

| CaptureVision Station - | Configuration   | 💷 🕒 🕒 |
|-------------------------|---|-------|
| )System 🗸               | Network   |       |
| System Settings         | Network Settings  |       |
| Network                 | The system will reboot after channing the network settings. Please re-login |       |
| Configuration           | IP Assignment :   |       |
| Display                 | DHCP  |       |
| Account                 | IP Address :  |       |
| Account                 | 192.168.4.50  |       |
| Source >                | Subnet Mask :   |       |
|                         | 255.255.255.0   |       |
| Video >                 | Default Gateway :   |       |
| Scenes                  | 192.168.4.254 Primary DNS Server :  |       |
|                         | 192.168.1.211   |       |
| Storage                 | Secondary DNS Server :  |       |
| out-adda                | 192.168.1.212   |       |
| Scheduler               |   | Apply |
| Backup                  |   |       |
| About                   |   |       |
|                         |   |       |
| No                      | Item Eunction Descriptions  |       |

| No | ltem             | Function Descriptions   |
|----|------------------|---|
|    |                  | DHCP: Dynamic IP address as default   |
|    |                  | <ul> <li>Static IP: Configure static IP address according to the network and</li> </ul> |
|    |                  | manually enter network information  |
| 1  | Ethernet Setting | Select and fill in required network setting information and click [Apply] to save       |
|    |                  | the settings  |
|    |                  | The system will restart after changing network setting. Please                          |
|    |                  | connect and log in again  |

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#### 5.2.1.3 Services

| CaptureVision Station - Configuration |  |  |  |  |
|---------------------------------------|--|--|--|--|
| ⊚ System ~                            | Service  |  |  |  |
| System Settings<br>Network            | Master Firmware  |  |  |  |
| Service<br>Configuration<br>Display   | Master Firmware Version :     v4.3.029   |  |  |  |
| Account                               |  |  |  |  |
| it. Source                            | Slave Firmware Version :   |  |  |  |
| • Video                               | 2 v19.7.26   |  |  |  |
| Scenes                                | Update   |  |  |  |
| C Storage                             | Service Data   |  |  |  |
| Scheduler                             | Export the log file to your computer           Observation                           |  |  |  |
| About                                 | Export   |  |  |  |
|                                       | Reset  |  |  |  |
|                                       | 4       Reset to factory default         ☑ Except the network settings         Reset |  |  |  |
|                                       | 5 Restart Device   |  |  |  |

| No | ltem            | Function Descriptions  |
|----|-----------------|--|
| 1  | Main Firmwara   | Main firmware information and update                                     |
| I  | Main Firmware   | Click [Update] and select the main firmware file to update               |
| 2  | Secondary       | Secondary firmware information and update                                |
| 2  | Firmware        | Click [Update] and select the secondary firmware file to update          |
|    |                 | Saves system log files to user's computer                                |
|    | Service History | 1 Enter file name  |
| 3  |                 | 2 Click [Export] to export system log files                              |
|    |                 | %The length of file name must be between 0 ~ 16 characters.              |
|    |                 | {}()'&@~^\$%" ,`:?<>*\/#; symbols, and space are forbiddlen              |
| 4  | Depat           | Restores LC200 to factory reset  |
|    | Reset           | %Check [Keep Network Settings] and the network settings will be remained |
| 5  | Restart the     | Postart the LC200  |
| 5  | device          |  |



#### 5.2.1.4 Setting File

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.

| C | CaptureVision Station - Configuration 💿 🕒 |     |  |  |   |  |
|---|---|-----|--|--|---|--|
| 0 | System 🗸                                  | Con | figuration   |  |   |  |
|   | System Settings<br>Network<br>Service     |     | Export  All Configuration                                      |  |   |  |
|   | Configuration<br>Display                  | 1   | Display     Display     Record, Storage, and Backup     Scenes |  |   |  |
| • | Account                                   |     | Export   |  | ) |  |
|   | Video >                                   | (   | Import   |  |   |  |
| • | Scenes                                    | 2   | Load a configuration.  |  |   |  |
| Q | Storage                                   |     |  |  | ) |  |
| 曲 | Scheduler                                 |     |  |  |   |  |
| æ | Backup                                    |     |  |  |   |  |
|   | About                                     |     |  |  |   |  |

| No | Item   | Function Descriptions   |
|----|--------|---|
| 1  | Export | Export the current configuration of LC200 as a configuration file     |
| 2  | Import | Import the exported configuration files from a LC200 to another LC200 |

#### 5.2.1.5 Display Settings

| CaptureVision Station -    | Configuration 00 1 | ŀ |
|----------------------------|--------------------|---|
| ⊚ System ✓                 | Display            |   |
| System Settings<br>Network | Output Resolution  |   |
| Service                    | HDMI1 and HDMI2:   |   |
| Configuration              | Apply              |   |
| Account                    |                    |   |
| € Source >                 |                    |   |
| ● Video >                  |                    |   |
| Scenes                     |                    |   |
| C Storage                  |                    |   |
| 🛗 Scheduler                |                    |   |
| <ol> <li>Backup</li> </ol> |                    |   |
| ) About                    |                    |   |
|                            |                    |   |
|                            |                    |   |

| No | Item                 | Function Descriptions                    |
|----|----------------------|--|
| 1  | Output<br>Resolution | Select a HDMI output resolution on LC200 |



#### 5.2.2 Account

You can manage accounts for 3 kinds of user mode here: modify the user name and password to [System Management], [Director], and [Content Management].

| CaptureVision Station -    | - Configuration      |        |
|----------------------------|----------------------|--------|
| ⊙ System >                 | Account management   |        |
|                            | Administrator 🔈      |        |
| : Source                   | Username :           |        |
| • Video >                  | New Password :       |        |
| Scenes                     | Confirm Password :   |        |
| 3 Storage                  |                      | t make |
| Scheduler                  |                      | Арру   |
| <ul> <li>Backup</li> </ul> | Online Director 🛸    |        |
| About                      | Username :           |        |
|                            | 2 New Password :     |        |
|                            | Confirm Password :   |        |
|                            |                      | Anniv  |
|                            |                      |        |
|                            | Video Manager 💊      |        |
|                            | Username :           |        |
|                            | video                |        |
|                            | 3 New Password :     |        |
|                            | Confirm Descriverd - |        |
|                            | Continue Password :  |        |
|                            |                      |        |
|                            |                      | Apply  |
|                            |                      |        |

| No  | Item  | Username/Password   | Function Descriptions                             |  |  |
|---|---|---------------------|---|--|--|
| 1   | System  | odmin / odmin       | Sets up the permission of main system management  |  |  |
| I   | Management  | aumin / aumin       | Sets up the permission of main system management  |  |  |
| 2   | Director  | director / director | Manages playback and changes simple basic image   |  |  |
| 2   | Director  | director / director | settings and the permission of Director           |  |  |
| 2   | Content   | )/idea / videa      |   |  |  |
| 5   | Management  | VIdeo / VIdeo       | Views the permission of file storage and playback |  |  |
|   |   |                     |   |  |  |
| The leng  | The length of user name must be between 4 ~ 16 characters. {}()'&@~^\$%" ,`:?<>*\/#; symbols, and |                     |   |  |  |
| space a   | space are forbidden   |                     |   |  |  |
| The length of password must be between 8 ~ 16 characters. {}()'~^" ,`:?<>*V; symbols, and space are |   |                     |   |  |  |
| forbidde  | forbidden   |                     |   |  |  |

Duplicate username is forbidden



#### 5.2.3 Video Source

#### 5.2.3.1 Network Device Management

| CaptureVision Station - Configuration |     |                   |              |                   |                               |        |           |   |
|---------------------------------------|-----|-------------------|--------------|-------------------|-------------------------------|--------|-----------|---|
| ⊙ System >                            | Net | work Device Manag | er           |                   |                               |        |           |   |
| Account                               |     | Network Cameras   |              |                   |                               |        |           |   |
| 🚓 Source 🗸 🗸                          |     | 👌 Refresh         |              |                   |                               |        |           |   |
| Network Device Manager                | (1) | Host Name         | IP Address   | MAC               | Manufacturer                  | Status | Connected |   |
| Video                                 |     | VC-A50P           | 192.168.4.56 | DC:E2:AC:01:60:49 | Lumens                        | ок     | ок        | Î |
| <b>•</b> •••••                        |     | VC-A50P           | 192.168.4.55 | DC:E2:AC:01:61:23 |                               | Login  | ок        | Ī |
| Le Scenes                             |     |                   |              |                   |                               |        |           |   |
| Storage                               |     | Network Stream    |              |                   |                               |        |           |   |
| 🛱 Scheduler                           |     | + Add             |              |                   |                               |        |           |   |
|                                       | 2   | De                | evice Name   |                   | URL                           |        |           |   |
| . About                               |     |                   | VC-A50P      |                   | rtsp://192.168.4.56:8557/h264 |        | Ô         |   |
|                                       |     |                   |              |                   |                               |        |           |   |
|                                       |     |                   |              |                   |                               |        |           |   |
|                                       |     |                   |              |                   |                               |        |           |   |
|                                       |     |                   |              |                   |                               |        |           |   |

| No | ltem              | Function Descriptions   |
|----|-------------------|---|
|    |                   | <ol> <li>Click [Refresh] and automatically scan the network cameras in the<br/>same LAN</li> <li>Click [Login Verification] and enter login information to connect the<br/>camera</li> </ol>  |
| 1  | Network Camera    | Login Authentication       ×         Username:  |
| 2  | Network Streaming | <ul> <li>Click [Add]</li> <li>Enter the network streaming name and URL, and then click [Apply]</li> <li>Network Stream</li> <li>Vc-A50P</li> <li>URL:</li> <li>Itsp://192.168.4.56.8557/h264</li> <li>The newly added network streaming name will be displayed in the list</li> </ul> |



#### 5.2.4 Video Settings

#### 5.2.4.1 Record Settings

| CaptureVision Station - | Configuration                                    | 💷 🕒   |
|-------------------------|--|---|
| ⊙ System >              | Record   |   |
| Account                 | Encoder Settings                                 |   |
| • Source >              | Recording Mode :                                 | Full HD<br>Resolution : 1920x1080<br>Average Bitrate : 4 Mbps |
| ● Video 🗸 🗸             | Video Compression :                              | FPS : 30<br>GOP : 30<br>H.264 Profile : high profile          |
| Record                  |  | Audio Bitrate : 256 Kbps<br>Audio Sample Rate : 48.0 KHz      |
| Stream                  | Preferentially record to front USB flash drive : |   |
| Scenes                  |  |   |
| Storage                 |  |   |
| 🛗 Scheduler             |  | Apply   |
| ① Backup                | Recording File Name Setting 🐌                    |   |
| 📼 About                 | Prefix Setting :                                 |   |
|                         |  | Apply   |
|                         |  |   |

| No | Item                       | Function Descriptions  |  |
|----|----------------------------|--|--|
| 1  | Encoder Settings           | <ul> <li>Recording Mode: You can select Movie Mode (MP4) and<br/>Movie/Resource Mode (MP4)</li> <li>Encode Profile: 6 default encoding formats are available to be<br/>selected by resolutions and average bitrate (Please refer to the<br/>instructions of Encode Profile). You can also set user-defined<br/>image quality.</li> <li>Preferentially record to front USB hard drive: Videos or pictures<br/>will be preferentially recorded to the USB flash drive which has<br/>already been connected to the front USB port.</li> <li>Cycling Record: Enabling the cycle record function can prevent<br/>recording error when storage device is full</li> </ul> |  |
| 2  | Video File Name<br>Setting | Customizes the prefix name of video file   |  |

#### ■ Instruction on Encode Profile

| Name              | Video Resolution/ABR   | Description  |  |
|-------------------|--|--|--|
| Full HD           | 1080p / 4 Mbps   | Dynamic scene; Large film site; Local drive recording  |  |
| Internet Full HD  | 1080p / 3 Mbps   | General scene, Medium film site, Local drive recording |  |
| HD                | 720p / 2 Mbps  | Static scene, Small film site, Local drive recording   |  |
| Internet HD       | 720p / 1.5 Mbps  | LAN director   |  |
| SD                | 480p / 800 kbps  | Static scene, LAN director                             |  |
| Mobile network SD | 480p / 500 kbps  | Director via mobile device                             |  |
| User-Defined      | Click [] to open Custom (as shown in the following figure). Once done, click "Save". |  |  |



#### 5.2.4.2 Streaming Settings

You may change the streaming settings here. Related settings must follow the streaming protocol and the settings recommended by server system support.

| CaptureVision Station - | Configuration                     | 💿 🕒  |
|-------------------------|-----------------------------------|--|
| ⊙ System >              | Stream                            |  |
| Account                 | Encoder Settings                  |  |
| th Source >             | Video Compression :               | Internet Full HD<br>Resolution : 1920x1080<br>Average Bitrate : 3 Mbps |
| ● Video 🗸 🗸             |                                   | GOP : 30<br>H.264 Profile : high profile                               |
| Record                  |                                   | Apply  |
| Stream                  | Strapping Sattings                |  |
| Scenes                  | Streaming Settings                |  |
| Storage                 | Stream 1 Stream 2 Stream 3 RTSP   |  |
| 🛗 Scheduler             | Stream Type : RTMP                |  |
| ① Backup                | 2 Server : rtmp://0.0.0.0         |  |
| . About                 | Stream Key :                      |  |
|                         | Authentication                    |  |
|                         | Public URL: rtmp://0.0.0.0/       |  |
|                         | Start Stream with Record Function | Apply  |

| No | ltem               | Function Descriptions  |  |  |
|----|--------------------|--|--|--|
| 1  | Encoder Settings   | Encode Profile: 6 default encoding formats are available to be selected<br>by resolutions and average bitrate (Please refer to 5.2.4.1 for the<br>instructions of Encode Profile in Network Settings). You can also set<br>user-defined image quality.   |  |  |
| 2  | Streaming Settings | <ul> <li>Streaming 1 / Streaming 2 / Streaming 3: You can customize 3 podcast addresses of network streaming Supported streaming type: RTMP / RTMPS / RTP / Youtube / Youtube_Gaming / Facebook Live / Twitch / Smashcast</li> <li>Stream 1 Stream 2 Stream 3 RTSP</li> <li>Enable Stream</li> <li>Stream Type : RTMP</li> <li>Server : rtmp://192.168.23.157:193</li> <li>Stream Key : livestream</li> <li>Authentication</li> <li>Public URL : rtmp://192.168.23.157:193</li> <li>Start Stream with Record Function</li> <li>Apply</li> <li>Real Time Streaming Protocol (RTSP): You can customize the real time streaming route of LC200</li> <li>Default RTSP location: rtsp://LC200_IP_address:554/pgm</li> </ul> |  |  |



| Stream 1 Stream 2 Stream 3     | RTSP     |
|--------------------------------|----------|
| Session : pgm                  |          |
| Port : 554                     |          |
| Authentication                 |          |
| RTSP URL : rtsp://192.168.4.50 | :554/pgm |
| Reset to factory default       |          |
|                                | Apply    |

#### 5.2.5 Scene

LC200 provides 5 overlay styles, 5 background images, and 5 scenes. You can also add your own styles.



| No  | ltem              | Function Descriptions  |  |  |
|-----|-------------------|--|--|--|
|     |                   | Select and delete overlay style. You can upload files to apply.  |  |  |
|     |                   | Click [ 📀 ] and select a desired file from the window. Check the   |  |  |
|     |                   | preview image and file name, and click [Apply] to start uploading and applying this overlay style. Click [Delete] to cancel the upload.    |  |  |
|     | O sala            | %File format:  |  |  |
| 1   | Overlay           | PNG format   |  |  |
|     |                   | Supported size: (a) 1920 x 136   |  |  |
|     |                   | (b) 1080 x 240   |  |  |
|     |                   | (c) 800 x 320  |  |  |
|     |                   | (d) 640 x 400  |  |  |
|     | Background Image  | Select and delete background image. You can upload files to apply.   |  |  |
|     |                   | Click [ 💿 ] and select a desired file from the window. Check the   |  |  |
| 2   |                   | preview image and file name, and click [Apply] to start uploading and applying this background image. Click [Delete] to cancel the upload. |  |  |
|     |                   | %File format:  |  |  |
| Lun | iens <sup>®</sup> |  |  |  |

|   |       | PNG format   |
|---|-------|--|
|   |       | Supported size: 1920 x 1080  |
|   |       | Scene is the integration of "Overlay," "Background Image," and                       |
|   |       | "Recording Layout," which provides the scene made of different                       |
|   |       | background images, layout, and overlay style. You can customize the                  |
| 3 | Scene | layout content in 9 scenes.  |
|   |       | Click [ 📀 ] to open scene settings. Enter the scene name and                         |
|   |       | select the required overlay, layout, and background image. Once done, click "Apply". |

#### 5.2.6 Storage Settings

You can set up recording storage, cycle recording, and view hard drive information here.



| No | ltem   | Function Descriptions   |
|----|--|---|
| 1  | Recording Hard Drive<br>SettingLocal storage: Select a storage from internal hard drives<br>Click drop-down menu and select local storage hard drive |   |
| 2  | Hard Drive Information   | Display hard drive information, free space, and capacity. Click<br>"Format" to clear the internal storage devices. Confirm if you want to<br>format the hard drive in the pop-up dialog and click "Confirm" to delete<br>all video files. |



#### 5.2.7 Schedule Setting

| CaptureVision Statio        | ion - Configuration                         | 💿 🕒      |
|-----------------------------|---|----------|
| System                      | Scheduler                                   |          |
| <ol> <li>Account</li> </ol> | Schedule Settings 🖻                         | 1949<br> |
| 📩 Source                    |   |          |
| Video                       | Schedule Source :<br>Manual Calendar Import |          |
| 📄 Scenes                    | Load a configuration. >                     |          |
| 🖸 Storage                   | Import                                      |          |
| Scheduler                   |   | Apply    |
| 🕑 Backup                    | Recording Interruption                      |          |
| 💬 About                     | 2 Cancel engoing recording task :           | Stop     |
|                             |   |          |
|                             |   |          |
|                             |   |          |
|                             |   |          |
|                             |   |          |

| No | Item             | Function Descriptions  |
|----|------------------|--|
| 1  | Schedule Setting | <ul> <li>Click [On/Off] .: Enables/Disables schedule function</li> <li>Click [Calendar] .: Check the current schedule status</li></ul> |
| 2  | Cancel Recording | Click [Stop] to stop the current scheduled recording   |

#### 5.2.8 Backup Setting

LC200 provides auto backup service which can upload videos to a designated space automatically. You can set up upload destination and test the connection here.



| CaptureVision Station | on - Configuration | 💿 🕒  |
|-----------------------|--------------------|------|
| System                | Backup             |      |
| Account               | Backup Settings    |      |
| n Source              | Backup Type :      |      |
| • Video               | Mode :             |      |
| Scenes                | FTP V              |      |
| Storage               | 192.168.4.37       |      |
| Scheduler             | Port:              |      |
| Backup                | Folder :           |      |
| About                 | Authentication :   |      |
|                       | Username :         |      |
|                       | nerb               |      |
|                       | Password :         |      |
|                       |                    |      |
|                       |                    | pply |
|                       |                    |      |

| No | ltem           | Function Descriptions  |
|----|----------------|--|
| 1  | Upload Setting | <ul> <li>Auto upload: Disable / Upload right after recording completes /<br/>Upload periodically</li> <li>Mode: FTP / SFTP / Kaltura / Panopto / Opencast HTTP /<br/>Opencast HTTPS</li> <li>Connection Test: Click [Connection Test] to test if a<br/>connection can be created with the current setting</li> <li>※ Please refer to the videos of How to series on Lumens<sup>™</sup> website for<br/>related application settings</li> </ul> |

#### 5.2.9 About

LC200 Device-related Information: Firmware version, device serial number, and technical support link

| CaptureVision Station - Configuration |                                      |  |  |
|---------------------------------------|--------------------------------------|--|--|
| ⊘ System >                            | System Information                   |  |  |
| Account                               | Information                          |  |  |
| 📩 Source >                            | Manufacturer :                       |  |  |
| ● Video →                             | Model :                              |  |  |
| Scenes                                | LC200<br>Master Firmware Version     |  |  |
| C Storage                             | v4.3.0.29                            |  |  |
| 🛗 Scheduler                           | Slave Firmware Version :<br>v19.7.26 |  |  |
| <ol> <li>Backup</li> </ol>            | Serial Number :                      |  |  |
| About                                 | MAC:<br>BCBAF1FE2223                 |  |  |
|                                       | Webpage :                            |  |  |
|                                       | www.MyLumens.com                     |  |  |
|                                       | Support :<br>service.lumens.com.tw   |  |  |
|                                       |                                      |  |  |



#### 5.3 Director

LC200 is built in Director, which allows you to monitor recording and preview the output video from streaming director.

Related feature description as below:

|                     | CaptureVis  | ion Station - Director (192.168  | .7.53 , version : v4.3.0.23 )   | Home                     |
|---------------------|---|--|---|--------------------------|
| 1                   | Channel 1<br>HDMI1<br>HDMI1<br>HDMI3<br>HDMI3<br>HDMI4<br>VC-AS0_PDM<br>VC-AS0_PDM<br>Channel 3<br>VC-AS0_PDM | Channel 2<br>RTSP 01<br>TSP 01<br>Channel 4<br>VC-SOFN<br>Channel 4  |   |                          |
|                     |   |  |   | ie: 00:00:04             |
| 2                   | REC   | Record   | Sync MP4, 1920x1080, 30fps, 4MB   | 7                        |
| $\underbrace{3}{3}$ | م ((پارلې) Audio  | Stream 1   | FLV, 1920x1080, 30fps, 3MB  |                          |
| (4)                 | Scene   | s Stream 2   | Image: State of the s |                          |
| 5                   | Camer   | ra Control Stream 3  | ((••)) FLV. 1920x1080. 30/ps, 3MB   |                          |
| [                   |   |  |   |                          |
|                     | No  | Item   | Function Descriptions   |                          |
|                     | No<br>1   | Item<br>Channel Signal   | Function Descriptions The drop-down menu of image sources includes 4-channel HDMI so  | urce,                    |
|                     | No<br>1   | Item<br>Channel Signal<br>Selection  | Function Descriptions<br>The drop-down menu of image sources includes 4-channel HDMI so<br>IP camera, or streaming image  | urce,                    |
|                     | No<br>1<br>2  | Item<br>Channel Signal<br>Selection<br>REC Record  | Function Descriptions<br>The drop-down menu of image sources includes 4-channel HDMI so<br>IP camera, or streaming image<br>Start or stop recording; also select whether to synchronously stream  | urce,<br>or not          |
|                     | No<br>1<br>2  | Item<br>Channel Signal<br>Selection<br>REC Record<br>Setting   | Function Descriptions<br>The drop-down menu of image sources includes 4-channel HDMI so<br>IP camera, or streaming image<br>Start or stop recording; also select whether to synchronously stream  | urce,<br>or not          |
|                     | No 1 2 3  | Item<br>Channel Signal<br>Selection<br>REC Record<br>Setting<br>Audio Source   | Function Descriptions         The drop-down menu of image sources includes 4-channel HDMI so         IP camera, or streaming image         Start or stop recording; also select whether to synchronously stream         Manage the input and output audio source; adjust the audio volume   | or not                   |
|                     | No 1 2 3  | Item<br>Channel Signal<br>Selection<br>REC Record<br>Setting<br>Audio Source<br>Management   | Function Descriptions         The drop-down menu of image sources includes 4-channel HDMI so         IP camera, or streaming image         Start or stop recording; also select whether to synchronously stream         Manage the input and output audio source; adjust the audio volume recording   | or not                   |
|                     | No 1 2 3 4  | Item<br>Channel Signal<br>Selection<br>REC Record<br>Setting<br>Audio Source<br>Management<br>Scenes Layout  | Function Descriptions         The drop-down menu of image sources includes 4-channel HDMI so         IP camera, or streaming image         Start or stop recording; also select whether to synchronously stream         Manage the input and output audio source; adjust the audio volume recording         Fast select the recording layout, or customize the background and s   | or not<br>of the<br>cene |
|                     | No 1 2 3 4  | Item<br>Channel Signal<br>Selection<br>REC Record<br>Setting<br>Audio Source<br>Management<br>Scenes Layout<br>Setting   | Function Descriptions         The drop-down menu of image sources includes 4-channel HDMI so         IP camera, or streaming image         Start or stop recording; also select whether to synchronously stream         Manage the input and output audio source; adjust the audio volume recording         Fast select the recording layout, or customize the background and s style   | or not<br>of the<br>cene |
|                     | No 1 2 3 4 5  | Item<br>Channel Signal<br>Selection<br>REC Record<br>Setting<br>Audio Source<br>Management<br>Scenes Layout<br>Setting<br>Camera Control   | Function Descriptions         The drop-down menu of image sources includes 4-channel HDMI so         IP camera, or streaming image         Start or stop recording; also select whether to synchronously stream         Manage the input and output audio source; adjust the audio volume recording         Fast select the recording layout, or customize the background and s style         Provide the IP video camera PTZ control or simple function settings   | or not<br>of the<br>cene |
|                     | No 1 2 3 4 5 6  | Item<br>Channel Signal<br>Selection<br>REC Record<br>Setting<br>Audio Source<br>Management<br>Scenes Layout<br>Setting<br>Camera Control<br>Main Screen Output                       | Function Descriptions         The drop-down menu of image sources includes 4-channel HDMI so         IP camera, or streaming image         Start or stop recording; also select whether to synchronously stream         Manage the input and output audio source; adjust the audio volume recording         Fast select the recording layout, or customize the background and s style         Provide the IP video camera PTZ control or simple function settings         Display the layout of current output screens  | or not<br>of the<br>cene |
|                     | No 1 2 3 4 5 6 7  | Item<br>Channel Signal<br>Selection<br>REC Record<br>Setting<br>Audio Source<br>Management<br>Scenes Layout<br>Setting<br>Camera Control<br>Main Screen Output<br>Recording Progress | Function Descriptions         The drop-down menu of image sources includes 4-channel HDMI so         IP camera, or streaming image         Start or stop recording; also select whether to synchronously stream         Manage the input and output audio source; adjust the audio volume recording         Fast select the recording layout, or customize the background and s style         Provide the IP video camera PTZ control or simple function settings         Display the layout of current output screens         Display information of the current status of recording/streaming, such   | or not<br>of the<br>cene |



#### 5.3.1 REC Record Setting

| • RE               | c                 | Record        | ync  |  |  |
|--------------------|-------------------|---------------|--|--|--|
| 📢 ))) Au           | dio               | 1<br>Stream 1 | ((*))         (1) </td   |  |  |
| Sc.                | enes              | Stream 2      | Image: Window Stress |  |  |
| <÷→ Ca             | mera Control      | Stream 3      | FLV. 1920x1080. 30fps. 3MB   |  |  |
| No                 |                   | tem           | Function Descriptions  |  |  |
| 1                  | 1 Recording while |               | Check stream(s) and click recording button <b>I</b> to strart streaming  |  |  |
|                    | Streaming         |               | and recording function   |  |  |
| 2 Recording Button |                   | g Button      | Record the main screen image   |  |  |
| 3 Single-channel   |                   | annel         | Streams right away without starting recording function   |  |  |
|                    | Olligic on        |               |  |  |  |

### 5.3.2 Audio Source Management

| REC                | Input 1 | Input 2  | Input 3   | Input 4                       | Output         |
|--------------------|---------|----------|-----------|-------------------------------|----------------|
| (1)) Audio         | i       |          |           |                               |                |
| Scenes             | 2       |          |           | Line-in                       | Line out + PGM |
| <+> Camera Control |         | HDMI-inV | Line-in V | HDMI-in<br>HDMI-in<br>HDMI-in | ALL V          |

| No | Item                 | Function Descriptions            |
|----|----------------------|----------------------------------|
| 1  | Volume Control       | Adjust the volume of audio input |
| 2  | Mute Button          | Mute audio output                |
| 3  | Audio Source Setting | Select a audio source            |

#### 5.3.3 Scenes Layout Setting

| REC     I     Scenes     J) Audio     C     C     Scenes     Scenes     Scenes     Audio     C     Scenes     Audio     Scenes     Audio     Scenes     Audio     Scenes     Audio     Scenes     Scenes |        | Layout<br>Overlay<br>Background  |   |  |
|---|--------|--|---|--|
| Califera  |        |  |   |  |
| No  | Item   |  | Function Descriptions   |  |
| 1 S   | Scenes | nes Scenes page is the integration of "Overlay," "Background Image," and |   |  |
|   |        |  | "Recording Layout," which can perform a series of scene change          |  |
|   |        |  | according to your needs.  |  |
| 2 Layout  |        |  | Apply a different layout to highlight the screen focus of different     |  |
|   |        |  | channels. Click a desired layout style to apply.                        |  |
| 3 Overlay Select a desired style to apply   |        | Select a desired style to apply  |   |  |
| 4 Background  |        |  | Display the background images supported by "Director" system. Click the |  |
|   |        |  | thumbnail to apply  |  |



#### 5.3.4 Camera Setting

| O REC    | c 1 Camera Channe       |   |
|----------|-------------------------|---|
| ┥ ))) Au | dio                     | 2     3       5     6         Z     3         Z     3         AF/MF     Focus   Backlight       Z     3 |
| Sce      | enes 2 7                | 8 9 Pan speed 50  |
| <÷> Ca   | mera Control            | Store 4 Tilt speed 50   |
| No       | Item                    | Function Descriptions   |
| 1        | Camera                  | Select a desired camera to control  |
| 2        | Preset Setting and Call | Click number keys to perform preset settings and calls  |
| 3        | Direction Control Panel | Move the center point to control the shooting direction   |
| 4        | Zoom In/Zoom Out        | Zooms in/out the lens   |
| 5        | Focus Setting           | Set up auto or manual focus   |
| 6        | Backlight               | Enables/disables backlight compensation   |
|          | Compensation            |   |
| 7        | PTZ Speed Setting       | Set up the moving speed of Pan Tilt Zoom  |



### 5.4 File management

LC200 provides file management feature which can perform the following functions via the file management interface: Upload, download, delete, replay video files and editing recording information.

| c  | CaptureVision Station - Files Manager (192.168.7.53, version : v4.3.0.23) Home |   |  |  |  |
|--|--|---|--|--|--|
| Preview       Image: Control of the image: Contr |  |   |  |  |  |
| ()   | 4<br>20<br>20<br>20<br>20<br>20<br>20<br>20<br>20<br>20                        | 2019/06/26<br>Folder<br>Pl9_05_30_14_02_20<br>Pl9_05_30_13_45_07<br>Pl9_05_30_13_44_00<br>Pl9_05_23_11_49_16<br>Pl9_05_23_11_15_31<br>Pl9_05_23_10_47_42<br>the Folder Backup Folder Copy | Y26       Q       C       Size         Image: Pile Name       Date       Size         Image: Pile Name       2019-05-23 11:15       Size         Image: Pile Name       2019-05-23 11:15       Size         Image: Pile Name       2019-05-23 11:15       O Byte         Image: Pile Pile Name       Image: Pile Pile Name       Image: Pile Pile Pile Pile Pile Pile Pile Pile |  |  |
|  | No   | Item  | Function Descriptions  |  |  |
|  | 1  | Preview Screen  | Click desired video files to play and control on the Preview screen  |  |  |
| Ĩ  | 2  | Program Screen  | Display the Director screen or switch to synchronize with the Preview screen   |  |  |
|  | 3  | Screen Switch<br>Button   | Switch the Program screen to the LIVE Director screen or the Preview screen  |  |  |
| Ĩ  | 4  | Discovery   | You can search recording video files by selecting date period on the calendar  |  |  |
|  | 5  | Display Mode<br>Switch  | Video view mode. You can switch to thumbnail mode or list mode   |  |  |
|  | 6  | Folder Display  | Display the recording video folders  |  |  |
|  | 7  | Video File Display  | Display the files in the video folder  |  |  |
|  | 8  | File Management   | Delete, backup or copy recording video to an external USB flash drive  |  |  |



#### 5.4.1 Webpage Interface

The default page after accessing LC200 web page is system setting page. Click the

video management icon i on the top-right corner to access video management

page.



| 1 | • | 2 |
|---|---|---|

| No | Item               | Function Descriptions   |  |
|----|--------------------|---|--|
| 1  | Video              | Click to access the video management page   |  |
|    | Management         |   |  |
| 2  | Photo              |   |  |
|    | Management         | Click to access the the picture management page                                   |  |
|    |                    | Click to access the system setting page   |  |
|    |                    | ※ Caution:  |  |
| 3  | System Settings    | Log in the web page with admin/admin to display system setting subpage            |  |
|    |                    | If you log in the web page with video/video, you will not find the system setting |  |
|    |                    | subpage and you can only manage videos and photos                                 |  |
| 4  | Logout             | Click this icon to log out the web page interface                                 |  |
| 5  | File Management    | Upload, download and delete the checked video files                               |  |
| 6  | Hard Drive Status  | Display the used space and the capacity of the current hard drive                 |  |
|    | Display            |   |  |
| 7  | Video File Display | List information, including the file names of recording videos, thumbnails,       |  |
|    |                    | capacity, and date  |  |

#### ■ File Management Description

#### > Uploading

Check the thumbnails of the videos to upload. Click [ 1] 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:

| lcon | Upload Status                    | lcon | Upload Status                |
|------|----------------------------------|------|------------------------------|
|      | Videos are uploaded successfully |      | Videos are queued for upload |
|      | Fail to upload videos            |      | Videos are uploading         |

#### Download

Check the thumbnails of the videos to download. Click [ ] and 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 the video files only.

#### > Delete

Check the thumbnails of the videos to delete. Click [ iii ] and the video files will be deleted for good.

#### Video Playback

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

| (1) | Movie 2019-08-22 13:39:32 2 | Content   |
|-----|-----------------------------|---|
|     |                             | Title :         2019_08_22_13_39_32         Organization :         Lumens         Department :         FAE         Event_date :         Camera Color Test |
|     |                             | Semester : Topic : Level :  |
| 3   | Movie 25 MD                 | Audience : Room :   |
| (4) | Download 5                  | Арріу   |

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

### Lumens

#### Photo Management

You can manage the photo files captured by pressing SNAPSHOT. Folders will be named with the shooting date automatically; all photos shot in 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 6 Troubleshooting**

This chapter describes problems you may encounter while using LC200. If you have questions, please refer to related chapters and follow all the suggested solutions. If the problem still occurred, please contact your distributor or the service center.

| No. | Problems  | Solutions   |
|-----|---|---|
| 1.  | Boot without power signal   | Make sure you have plugged in the power cord  |
|     |   | 1. Check the power  |
|     | No image output   | 2. Check if the input/output device cables are loose  |
|     |   | 3. Replace the cables and make sure they are not faulty   |
| 2.  |   | 4. Make sure if the signal source connects to the device correctly  |
|     |   | 5. LC200 cannot record video from a video output  |
|     | The nanel keys are not  | The papel become non-functional when logging into the   |
| 3.  | responding  | system  |
| 4.  | LC200 cannot perform<br>camera control after<br>connecting to a camera                      | Please make sure the dial setting of Camera Address<br>Selector is 0. LC200 cannot identify<br>camera correctly if it is not 0  |
| 5.  | You cannot log in the web<br>page administration<br>interface if you forget the<br>password | If you forget the default password, please press the<br>panel concurrently<br>Snapshot  +Switch Channel  buttons on the<br>panel at the same time for 5 seconds to restore the<br>factory reset |

