---

1 Preparation before use

▼ Very Important

- Please activate your warranty: http://www.MyLumens.com/reg
- To download the updated software, multilingual manuals, and Quick Start Guide, please visit Lumens™ web site at: http://www.MyLumens.com/support.php
- To ensure successful installation, please be sure to follow each of the following steps
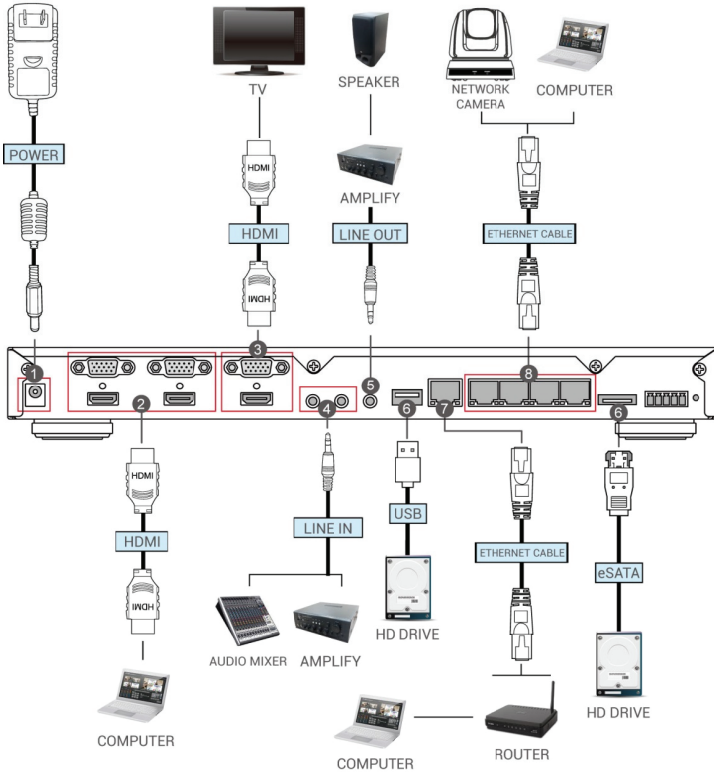
1.1 Equipment requirements

- VS-LC101 / VS-LC102 x 1
- IP PTZ camera x 1 ~ 3, e.g. VC-A20P x 3
- Computer (or Laptop) x 1
- Router x 1, Giga router recommended
- Display x 1
- Network cables x 3 ~ 5
- HDMI or VGA cable x 2
- External hard drive: USB or eSATA external hard drive x 1 (VS-LC102 has a built-in hard drive, and thus it is optional)
- Amplifier x 1
- Audio mixer x 1
- Speaker set x 1
- Mic x 1

[Remark] The number of connected devices can be increased or adjusted based on environment requirements.

2 How to connect

● Please follow the following instruction to complete the connection.

| NO.	Function	How to connect
1.	Power	Connect the power cord
2.	Image input	Connect the computer HDMI to the HDMI IN 1 **Note:** Replace the image input device from the computer to other devices as needed, e.g. projector.
3.	Image output	Connect HDMI OUT to the TV HDMI **Note:** If the TV does not provide HDMI, use an adapter instead according to the TV specification
4.	Audio input	Connect Line devices for audio input, e.g. amplifier, audio mixer
5.	Audio output	Connect Line devices for audio output, e.g. amplifier
6.	Storage Device	Insert USB or eSATA external hard drive as the storage device
7.	WAN	Connect the WAN port to the router to link with the computer in order to conduct remote management of VS-LC101 / VS-LC102 **Note:** Please first connect the computer to a LAN port (8), and then connect the computer to a router after completion of the external network setting
8.	Networking ports (LAN)	Connect webcam (e.g. VC-A20P) for image input Directly connect to the computer for online management operations. For the initial use, connect to this port for following operations

3 Instruction for installation and setting

3.1 Confirm and set the VC-A20P network configuration

- Use a C-Video cable or a DVI cable to connect VC-A20P and the monitor (refer to the figure below for the connection method)
- After the power is switched on, press the [MENU] 📋 button on the VC-A20P remote to open the OSD menu.
- Move down to [Ethernet]; press [↵] to enter
- Press [↵] to enter the [DHCP] setting; confirm [DHCP] to be in [Close] state.
- Press [MENU] 📋 to exit the [DHCP] setting
- Confirm the [IP Address] is the preset [192.168.100.150]

[Remark] If there are more than one VC-A20P to be connected, please modify the IP address to [192.168.100.x]，e.g. [192.168.100.151], [192.168.100.152]…etc.

- After complete the confirmation of the address and modification, repeat pressing the [MENU] 📋 button to exit OSD menu.
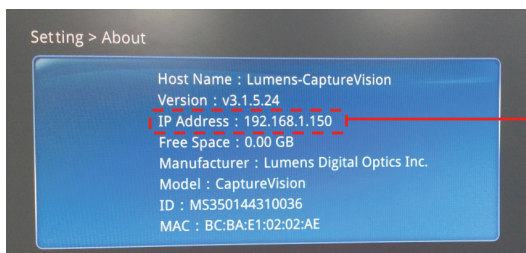
DVI cable

Monitor　or　HDTV

/

C-Video Cable

TV

TV
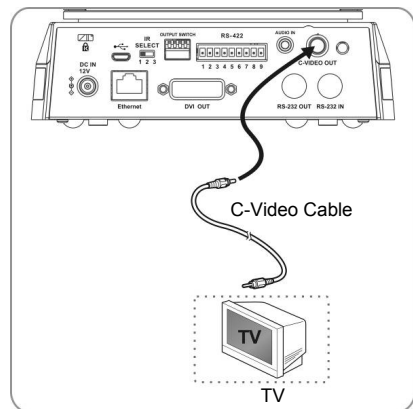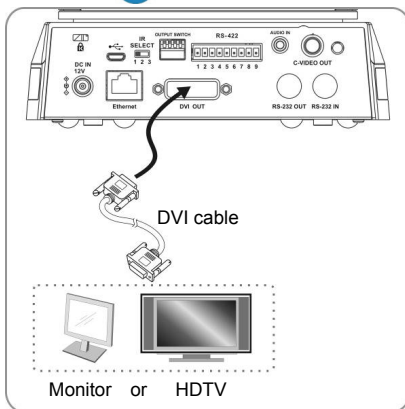
[Remark] For VC-A20P relevant use and operation method, please visit Lumens website; download and read the **VC-A20P operation manual**.

✦ Before begin the following settings, please confirm that the connection has been completed according to **2 instruction of connection**.

3.2 Confirm the VS-LC101/ VS-LC102 IP Address

- Press the 📗 button on the VS-LC101/ VS-LC102 remote control; open OSD menu
- Move rightward to [Setting]; press [OK]; and enter the setting page.
- Move downward to [About]; press [OK]; and enter the setting page to confirm the IP address.
- Repeat pressing the 📗 button to exit OSD menu

Setting > About

Host Name : Lumens-CaptureVision
Version : v3.1.5.24
IP Address : 192.168.1.150
Free Space : 0.00 GB
Manufacturer : Lumens Digital Optics Inc.
Model : CaptureVision
ID : MS350144310036
MAC : BC:BA:E1:02:02:AE

VS-LC101 /
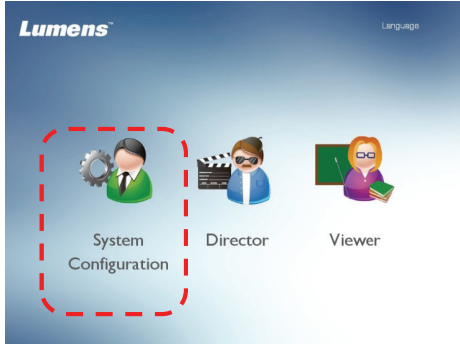VS-LC102
IP Address

Lumens™

3.3 Connect to the VS-LC101/ VS-LC102 Webpage (including log in)

[Remark 1] For the computer that remotely controls VS-LC101, the network interface card needs to be set to obtain the IP address automatically.

● Use the computer being connected to LAN, and open a web browser

● Enter the VS-LC101 / VS-LC102 IP address, http://192.168.1.150 (default)

[Remark 2] Firefox or Safari(MAC) browser recommended

● Select [System Configuration]

● Input the VS-LC101/ VS-LC102 Admin account and password.
  User: admin
  Password: admin

● Click [Log in] to log in

3.4 Settings

3.4.1 Confirm the time setting.

- Confirm the time to be correct. If time modification is required, use the manual setting or select other NTP servers.

3.4.2 Change the network setting

The following setting is related to the way of using DHCP. Please confirm the external network setting for WAN connection before starting the setup.
Confirm DHCP or the specified address is used. Set according to the correct network connection.

- Open the [Network Setting] page
- Select [DHCP]
- Click [Apply] to apply the setting
- Reconnect after confirming the VS-LC101 / VS-LC102 IP address according to **3.2**

[Remark] Upon completion of the setting, the computer can be connected remotely via the LAN

3.4.3 Format a hard drive

[Remark] As for the SATA hard drive, the formatting step can be omitted.

- Open the [Local Storage Setting] page,

● Select a hard drive. For the initial use, please format the hard drive ⬜ first. It takes few minutes to format the hard drive and the duration varies according to different storage device formats. Before the formatting is completed, please do not close the webpage. Until the "Formatting…" message is closed, the formatting is completed.

● Check [Enable Local Storage] to load the hard drive.

● If recycling the use of hard drive storage space is required, check [Cycling Record]. Then, when the hard drive space is completely used, the old data will be overwritten by the new data in order to continue storing.

● "Select a hard drive according to the storage device".

● Press [Apply] to apply the setting.

● The state of the storage device will change to [Mounted] and the storage device setting is completed.
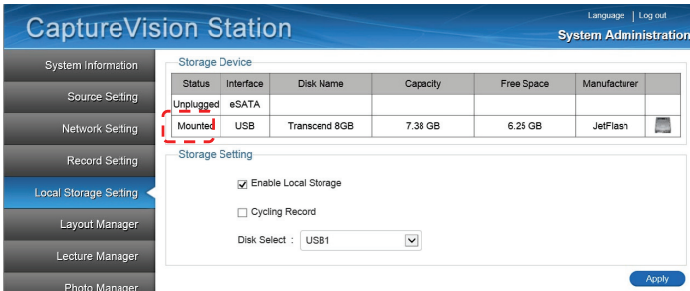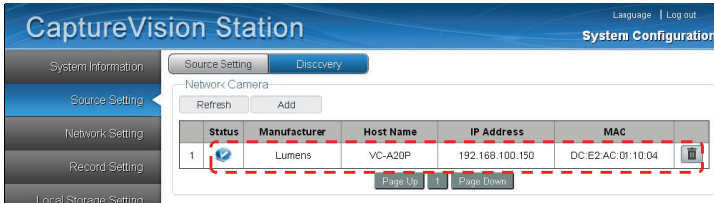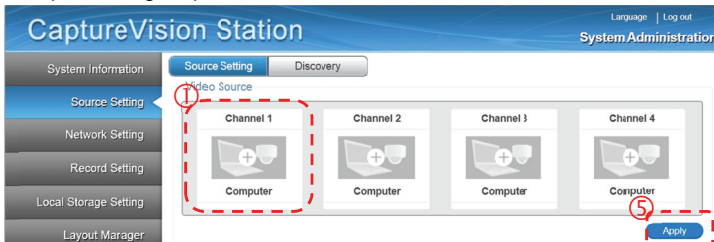

3.4.4 Connect webcam
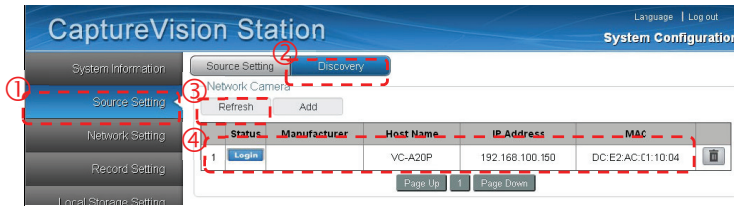
● Open the [Source Setting] page

● Execute the [Refresh] function of [Discovery].

● After the search is completed, the list will show the webcam that can be connected. Click Login .

● Input the VC-A20P account password

Administrator: admin

Password: 9999
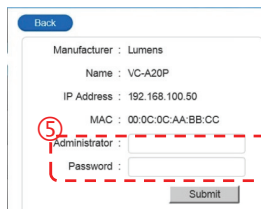
● Press [Submit] and wait until the state of the webcam is ✓

3.4.5 Setup the image input

● Click [Video Source] page. Set the video sources of CH1、CH2、CH3、CH4
● CH1: Click [Channel1]; select [Computer] from the channel name; set image as [Video Port]; Select image port [HDMI1 or VGA1]
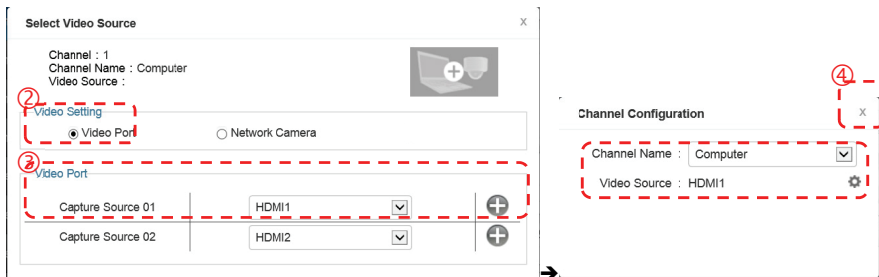
● CH2: Network Camera → Select Camera
● Select other already connected video inputs for CH3, CH4 respectively.
● Press [X] at the upper right and close the setting window.
● Press [Apply] to apply the setting.
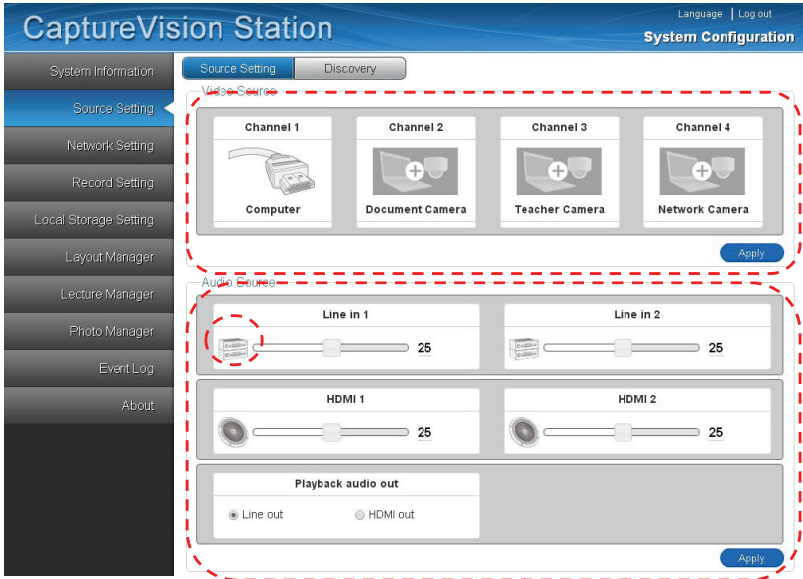
3.4.6 Audio In

- Audio Volume
- Select sound output according to the output device
  ([**Remark**] HDMI output is preferred)
- Press [Apply] to apply the setting.

[Remark] When Line In is connected to a microphone, please click ⊞ to change to microphone input.

3.4.7 Screen and video programming

- Open the [Layout Manager] page
- Set [Display layout] style. There are totally 9 sets of style available for setting.
- Set [Record layout] style. There are totally 9 sets of style available for setting.

After the above setting is completed, please **log out from the webpage**.

3.5 Confirm the setting is normal.

3.5.1 Confirm the setting of the screen split style.

Confirm whether there are images on CH1 ~ 4. If the image is different from the setting, please refer to **3.4.5 Setup the image input** to reset the setting.

● Use the remote control; press the ⊟ button; confirm whether the 9 video split styles are the same as the plan. Blue color represents the current style applied.

● Use the remote control; press the ⊞ button; confirm whether the 9 screen split styles are the same as the plan. Blue color represents the current style applied.

3.5.2 Confirm that the screen capture function is normal.

Use the remote control; test the screen capture function. If failed, please refer to **3.4.3 Format a hard drive** to confirm whether the hard drive is installed correctly.

● Use the remote control and press the 🗇 button to capture screen images.

3.5.3 Confirm that the recording function is normal

Use the remote control; test the recording function. If failed, please refer to **3.4.3 Format a hard drive** to confirm whether the hard drive is installed correctly.

● Use the remote control and press the ● button to begin recording; press the ■ button to stop recording.

3.5.4 Confirm that the playback function is normal

Use the playback function to confirm the photograph and video results.

● Use the remote control; press the 🖹 button to open the OSD menu.

● Select [Playback] -> [Local Storage]

● [Photo] -> Select the folder by date -> choose photo

● Press ⤺ to exit the photo browser.

● [Video] -> Select the folder by date -> Select the video and begin to play.

● Press ⤺ to exit the video play

[Remark] When use the playback function for the first time, a message [Storage device mounting…] will appear, indicating LC101 supports the format of storage device being mounted normally.

If the above function can be performed normally, then the installation is completed. The user can begin the operation remotely via the Internet connection

Use of the operational functions or detailed descriptions of various settings and functions of VS-LC101, please refer to Lumens website; download and read the **VS-LC101 User Manual**.

4 Product Overview
4.1 Host Computer Front Panel Description
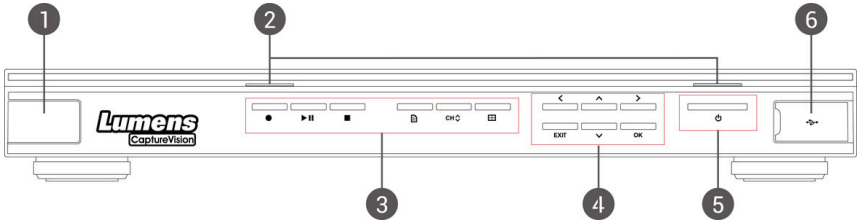
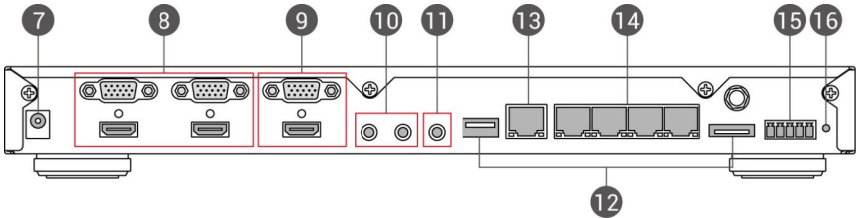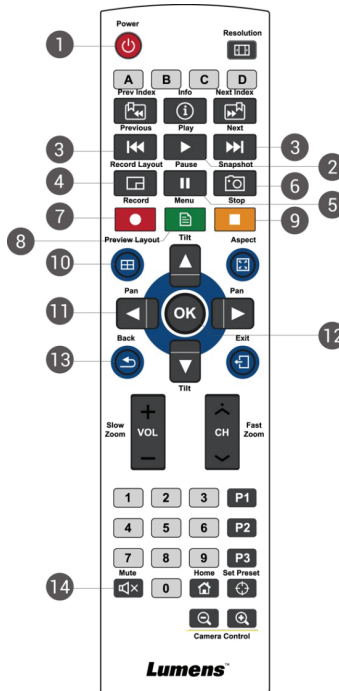| NO.	Name	Function Descriptions
1.	Remote sensor	IR Receiver
2.	Indicator	Record / Power
3.	Function keyboard shortcuts	Record / Play / Pause / Stop / Menu / Channel / Split Display
4.	Operation selection key	Up / Down / Left / Right / Return / OK
5.	Power button	Power Switch
6.	Output plug	Plug in the USB-supporting hard drive to output files or update firmware via the USB-supporting hard drive.

4.2 Host computer backend I/O Description

NO.	Name	Function Descriptions
7.	Power jack	12V / 2A
8.	Image input	VGA / HDMI device image input **Note:** Use DVI to HDMI adapter or component to VGA cable device for image input.
9.	Image output	VGA / HDMI device image output
10.	Audio input	Line / MIC device audio input
11.	Audio output	Line audio output can be transmitted to the amplifier device.
12.	Hard drive plug	USB / eSATA supporting interface for the interface of storage hard drive
13.	LAN	Connected to LAN
14.	Webcam image	Webcam image input
15.	DIDO	RS-232 bilateral control signal adaptor
16.	Reset button	Return to the default values

5 Remote control brief description

NO.	Icon	Name	Function Descriptions
1.	⏻	Power	Turn on / off.
2.	▶	Play	Play the video. Press again while playing, the video will pause.
3.	◄◄ ►►|	Previous / Next	Previous / Next video while playing.
4.	⊟	Video version type	During recording, switch between recording image configurations.
5.	❚❚	Pause	Pause playing. Pause recording.
6.	📷	Snapshot	Capture the screen image and save to a file.
7.	●	Record	Start recording.
8.	📄	Menu	Enter Main menu: Play / Record / Set.
9.	■	Stop	Stop playing. Exit recording.
10.	⊞	Split Display	In the lower part of the screen, switch between the screen layout models.
11.	▲▼◄►	Up, down, left, and right	Move Up / Down / Left / Right to select the item.
12.	OK	OK	The executed items in the menu. Display and zoom in window in the lower part of the screen.
13.	↰	Return	Return to the previous level menu or cancel the selection.
14.	🔇	Mute	Turn off the audio.