

# VC-BC301P

## Ultra HD Camera (UHD Box Camera)

User Manual - English



VCAM105

[Important]

To download the latest version of Quick Start Guide, multilingual user manual, software, or driver, etc., please visit Lumens <https://www.MyLumens.com/support>

# Table of Contents

Chapter 1 Package Contents .....	2
Chapter 2 Function Introduction .....	3
2.1 I/O functions Introduction .....	3
2.2 Tally Lamp Function Description.....	3
Chapter 3 Instruction for installation .....	4
3.1 Basic Devices .....	4
Chapter 4 System diagram .....	5
Chapter 5 Remote Control and Setting Menu .....	6
5.1 Functions of remote control.....	6
5.2 Setting Menu.....	7
Chapter 6 Network Function Settings Description .....	12
6.1 Web System Requirements .....	12
6.2 Web Page Function Description .....	16
Chapter 7 Troubleshooting .....	30
Chapter 8 Safety Instructions .....	31
Supplier's Declaration of Conformity 47 CFR § 2.1077 Compliance Information .....	32
Copyright Information .....	33

# Chapter 1 Package Contents

---

**VC-BC301P**

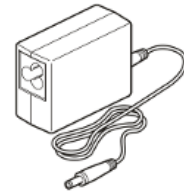


**Power Cord**

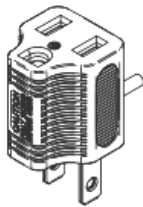


**Appearance may vary  
depending on  
country/region**

**Power Adapter**

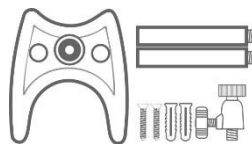


**Adapter**



(For Japan only)

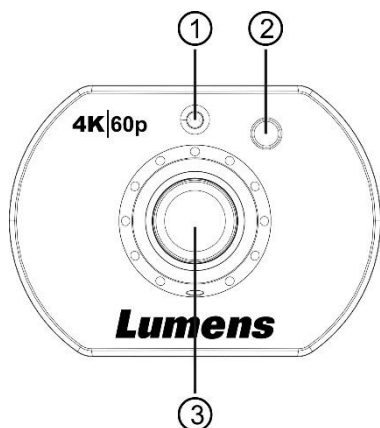
**Bracket Accessory Set**



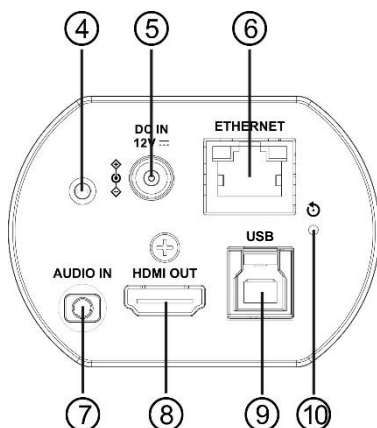
# Chapter 2 Function Introduction

## 2.1 I/O functions Introduction

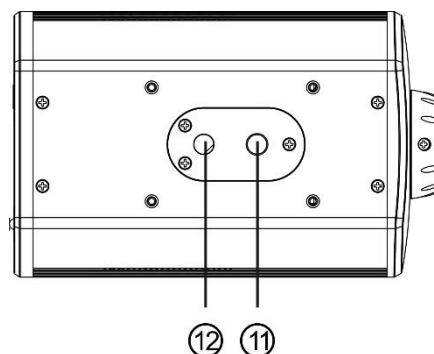
Front View



Back View



Bottom



NO.	Item	Function Descriptions
1	IR receive	Support infrared remote control
2	Tally Lamp	Display the Tally Lamp status of the camera
3	Lens	HD camera lens
4	Power indicator	Display the status of the camera
5	DC 12 V power connector	AC power supply connecting port
6	Network port	Network cable port supports routers or hubs of IEEE802.3af with PoE power supply
7	Audio input	Support Line In/Mic In audio input
8	HDMI 2.0 output	Connect to HDMI output signal source
9	USB 3.0 Type-B port	Connect to the computer using a USB cable; capture images via the software
10	Reset button	Press and hold for 5 seconds to reset the machine
11	Tripod locating holes	Tripod locating holes
12	Tripod screw holes	Support 1/4", 20 UNC

## 2.2 Tally Lamp Function Description

2.2.1 The tally indicator light function may be enabled through the control of VISCA command. The setting method is as follows:

Tally Mode: 8x 01 7E 01 0A 01 0p FF

p = 0: OFF

p = 4: On (half-brightness)

p = 5: On (full-brightness)

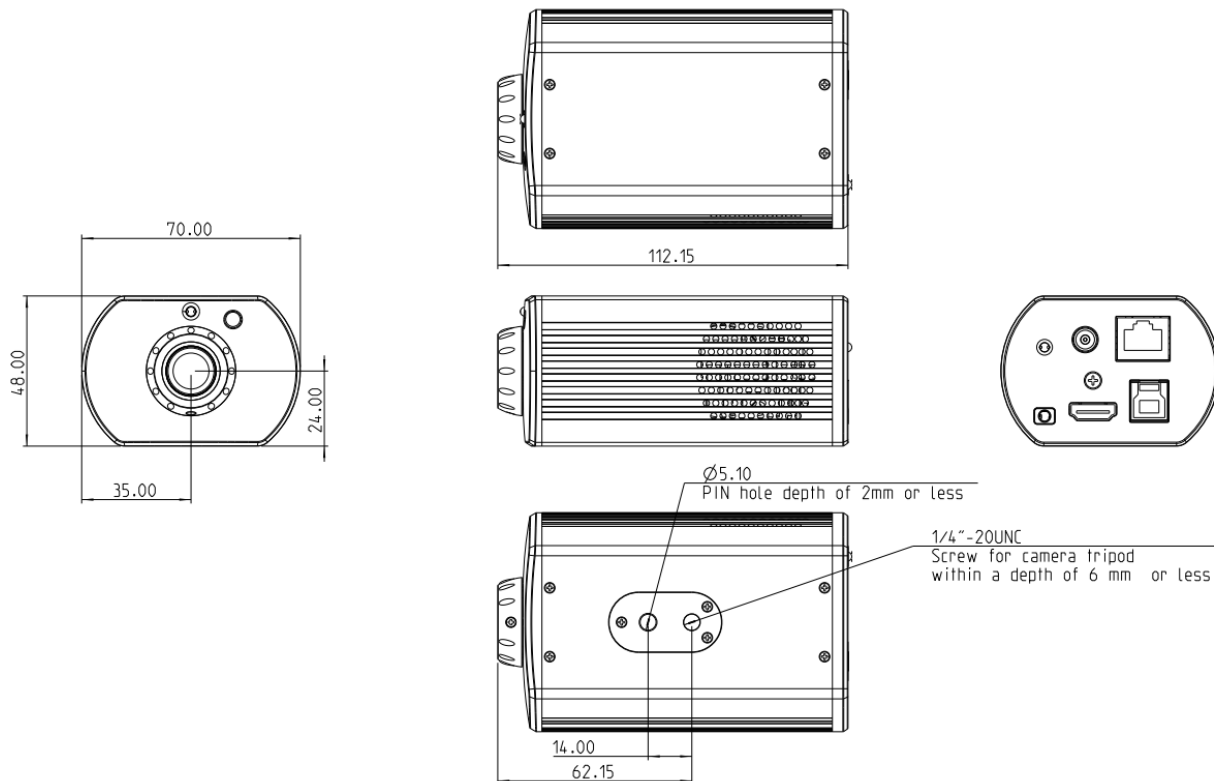
# Chapter 3 Instruction for installation

## 3.1 Basic Devices

### 3.1.1 VC-BC301P size

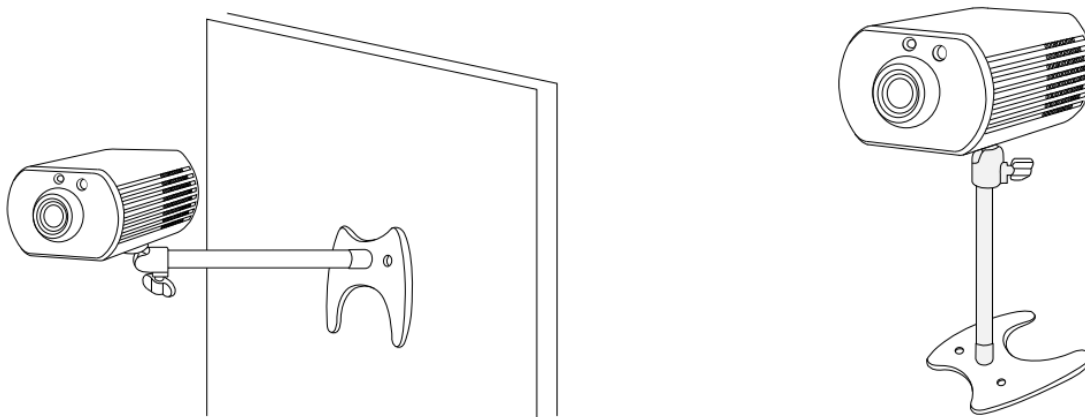
Length x Width x Height : 113 x 70 x 51 mm

Weight : 0.35 Kg



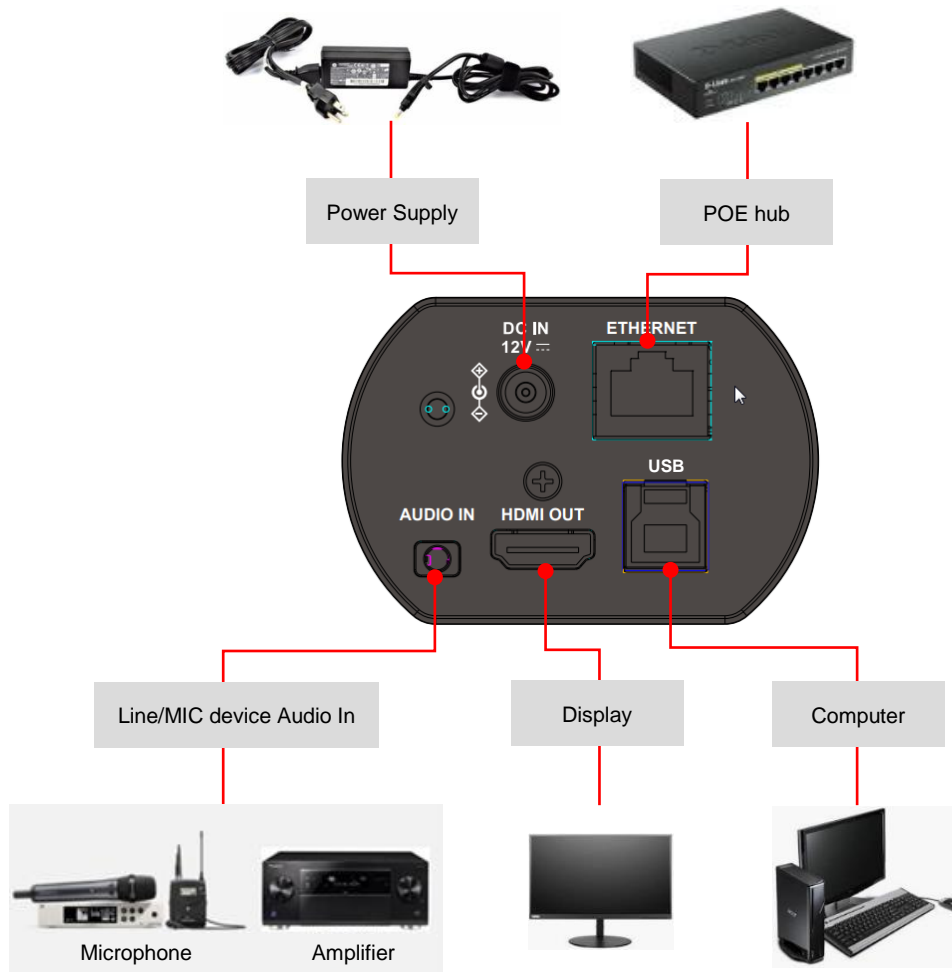
### 3.1.2 Installation method

You can use the included bracket accessory kit to install the camera on the wall or table



# Chapter 4 System diagram

---



# Chapter 5 Remote Control and Setting Menu

## 5.1 Functions of remote control

The remote control VC-IR01 is optional accessory

<Remark> The below functions are listed alphabetically.



Item	Description
◀, ▶, ▲, ▼	Move the lens
Back Light	Turn on/off back light compensation
Camera select	Choose Camera ID 1~3
Focus-Manual / Far/Near	Reserved
Focus-Auto	Reserved
Freeze	Freeze the screen
Home-Enter	Go back to the main page / Execute
Info	Status information
L/R Direction Set	L/R Direction / Normal
Menu	Display OSD menu
Mirror	Rotate the image (OFF / Mirror / Flip / Rotate)
Pan/Tilt Reset	Clear the Pan / Tilt setting
Picture	Switch image effect (OFF / Neg / B&W)
Power	Power Switch
Preset	Appoint an ID (0~9) to save the current position data
Reset	Appoint an ID (0~9) to delete the current position data
Zoom-Fast	Adjust image size
Zoom-Slow	Fine-tune image size

## 5.2 Setting Menu

<Remark> Press [**Menu**] on the remote control to enter the setting menu; the **bold underlined** values in the following table are defaults.

1 <sup>st</sup> Level Major Items	2 <sup>nd</sup> Level Minor Items	3 <sup>rd</sup> Level Adjustment Values		Function Descriptions	
Exposure	Mode	1. <b><u>Full Auto</u></b> 2. Shutter Pri 3. Manual		Exposure mode setting	
	Exposure Comp.	On/ <b><u>Off</u></b>		AE Level	
	Exposure Comp. Level	-5~ <b><u>C</u></b> ~5		The value can be adjusted after <b><i>Exposure Comp.</i></b> is activated	
	Spot Light	On/ <b><u>Off</u></b>			
	Spot Light Position	X(0~6)Y(0~4)		The value can be adjusted after <b><i>Spot Light</i></b> is activated	
	Shutter Pri		60/30 mode	50/25 mode	Adjustable when the <b><i>Exposure mode</i></b> is set to <b><i>Shutter Pri</i></b>
			1/10000	1/10000	
			1/5000	1/5000	
			1/3000	1/3000	
			1/2500	1/2500	
			1/2000	1/1750	
			1/1500	1/1250	
			1/1000	1/1000	
			1/725	1/600	
			1/500	1/425	
			1/350	1/300	
			1/250	1/215	
			1/180	1/150	
			1/120	1/120	
1/100	1/100				
1/90	1/75				
<b><u>1/60</u></b>	<b><u>1/50</u></b>				
1/30	1/25				
1/15	1/12				
1/8	1/6				
1/4	1/3				
1/2	1/2				
1/1	1/1				



1 <sup>st</sup> Level Major Items	2 <sup>nd</sup> Level Minor Items	3 <sup>rd</sup> Level Adjustment Values		Function Descriptions
	Manual Gain	0dB/ 3 dB/ 6 dB/ 9 dB/ 12 dB/ 15 dB/ 18 dB/ 21 dB/ 24 dB/ 27 dB/ 30 dB/ 33 dB/ 36 dB/ 39 dB/ 42 dB/ 45 dB		Adjustable when the <i>Exposure mode</i> is set to <i>Manual</i>
	Manual Speed	60/30 mode	50/25 mode	Manually set the shutter
		1/10000	1/10000	
		1/5000	1/5000	
		1/3000	1/3000	
		1/2500	1/2500	
		1/2000	1/1750	
		1/1500	1/1250	
		1/1000	1/1000	
		1/725	1/600	
		1/500	1/425	
		1/350	1/300	
		1/250	1/215	
		1/180	1/150	
		1/120	1/120	
		1/100	1/100	
		1/90	1/75	
		1/60	1/50	
		1/30	1/25	
		1/15	1/12	
1/8	1/6			
1/4	1/3			
1/2	1/2			
1/1	1/1			
Gain Limit	9 dB/ 12 dB/ 15 dB/ 18 dB/ 21 dB/ 24 dB/ 27 dB/ 30 dB/ 33 dB/ 36 dB/ 39 dB/ 42 dB/ <u>45 dB</u>		Max. limit value of electron gain	
WDR	<ol style="list-style-type: none"> <li>1. <u>Disable</u></li> <li>2. 1</li> <li>3. 2</li> <li>4. 3</li> </ol>			

1 <sup>st</sup> Level Major Items	2 <sup>nd</sup> Level Minor Items	3 <sup>rd</sup> Level Adjustment Values	Function Descriptions
White Balance	Mode	<ol style="list-style-type: none"> <li><u>Auto</u></li> <li>Indoor</li> <li>Outdoor</li> <li>One Push WB</li> <li>ATW</li> <li>Manual</li> <li>Sodium Lamp</li> </ol>	Select the color temperature mode <ol style="list-style-type: none"> <li>4000k ~ 7000k</li> <li>3200k</li> <li>5800k</li> <li>1700k ~ 10000k</li> <li>1700k ~ 10000k</li> <li>Custom</li> <li>2800k</li> </ol>
	One Push Trigger	<u>ENTER</u>	One push trigger
	Manual Red	0~ <u>C</u> ~128	Adjustable when the white balance mode is set to <b>Manual</b>
	Manual Blue	0~ <u>C</u> ~128	Adjustable when the white balance mode is set to <b>Manual</b>
Picture	Picture effect	<ol style="list-style-type: none"> <li><u>Disable</u></li> <li>Neg</li> <li>B &amp; W</li> </ol>	
	Sharpness	0~ <u>A</u> ~14	
	2D NR	<ol style="list-style-type: none"> <li>Disable</li> <li><u>1</u></li> <li>2</li> <li>3</li> </ol>	
	3D NR	<ol style="list-style-type: none"> <li>Disable</li> <li>Low</li> <li><u>Typ</u></li> <li>Max</li> </ol>	
	Image Mode	<ol style="list-style-type: none"> <li><u>Default</u></li> <li>Custom</li> </ol>	The user may customize his/her desired image mode
	Image Mode Load	<u>ENTER</u>	Adjustable when the <b>Image mode</b> is set to <b>Custom</b> . After selected, the corresponding <b>Image mode</b> parameters will be read and applied to <b>Custom</b>
	Brightness	0~ <u>A</u> ~15	Adjustable when the <b>Image mode</b> is set to <b>Custom</b>
	Hue	0~ <u>A</u> ~15	Adjustable when the <b>Image mode</b> is set to <b>Custom</b>
	Saturation	0~ <u>A</u> ~15	Adjustable when the <b>Image mode</b> is set to <b>Custom</b>
Gamma	0~ <u>A</u> ~3	Adjustable when the <b>Image mode</b> is set to <b>Custom</b>	
Pan Tilt Zoom	Pan Flip	On/ <u>Off</u>	Activate the reverse Pan direction
	Tilt Flip	On/ <u>Off</u>	Activate the reverse Tilt direction

1 <sup>st</sup> Level Major Items	2 <sup>nd</sup> Level Minor Items	3 <sup>rd</sup> Level Adjustment Values	Function Descriptions
	Zoom Mode	Clear Image <u>Zoom/Digital Zoom</u>	
D-Effect	Mirror	1. <u>Disable</u> 2. Mirror 3. Flip 4. Mirror + Flip	Set the mode at which the image is mirror or flipped
Ethernet	DHCP	<u>On/Off</u>	Enable/Disable DHCP setting using left and right arrow keys and press [ENTER] to apply setting.
	IP Address	<u>192.168.100.100</u>	Press [ENTER] to be in modify mode; select the item to be modified using the up and down keys, and modify the value using the left and right keys or the numeric keys.
	Subnet Mask	<u>255.255.255.0</u>	Press [ENTER] to be in modify mode; select the item to be modified using the up and down keys, and modify the value using the left and right keys or the numeric keys.
	Gateway	<u>192.168.100.254</u>	Press [ENTER] to be in modify mode; select the item to be modified using the up and down keys, and modify the value using the left and right keys or the numeric keys.
Audio	Audio In	<u>Line In</u> /Mic In	Set Audio In
	Audio Enable	On/ <u>Off</u>	Turn on/off audio output
	Audio Volume	0~ <u>A</u> ~10	Audio Volume Setting
	Audio Delay	On/ <u>Off</u>	When the audio is not synchronized with the video, enable this function to set the audio delay time
	Audio Delay Time (ms)	-1~-500ms	Set audio delay time
	Encode Type	1. <u>AAC</u> 2. G.711	Set audio encode type

1 <sup>st</sup> Level Major Items	2 <sup>nd</sup> Level Minor Items	3 <sup>rd</sup> Level Adjustment Values	Function Descriptions
	<b>Encode Sample Rate</b>	1. <b><u>48 KHz(AAC)</u></b> 2. 44.1 KHz(AAC) 3. 16 KHz(AAC) 4. 16 KHz(G.711) 5. 8 KHz(G.711)	Set the encode type and sample rate
<b>System</b>	<b>Prompt</b>	On/ <b><u>Off</u></b>	Turn on/off the prompt information on the display
	<b>IR Receive</b>	<b><u>On</u></b> /Off	When it is Off, the remote control will not be able to control the camera. At this moment, turn off and then turn on the power to restore control of the remote control.
	<b>Tally Lamp</b>	<b><u>On</u></b> /Off	Select to enable or disable Tally Lamp function.
	<b>Language</b>	<b><u>English</u></b> /Chinese	
	<b>Initial Position</b>	<b><u>Last MEM</u></b> / 1st Preset	Select the camera lens to return to the last operated position or the first preset position after POWER ON
	<b>Output Mode</b>	1. 3840x2160/59.94p 2. 3840x2160/50p 3. 3840x2160/29.97p 4. 3840x2160/25p 5. 1080p/59.94 6. 1080p/50 7. 1080p/29.97 8. 1080p/25 9. 720p/59.94 10. 720p/50 11. 720p/29.97 12. 720p/25 13. 1080i/59.94 14. 1080i/50	Choose the output resolution
	<b>Factory Reset</b>	On/ <b><u>Off</u></b>	Resume the factory default setting
<b>Status</b>			Display the current setting status


# Chapter 6 Network Function Settings Description

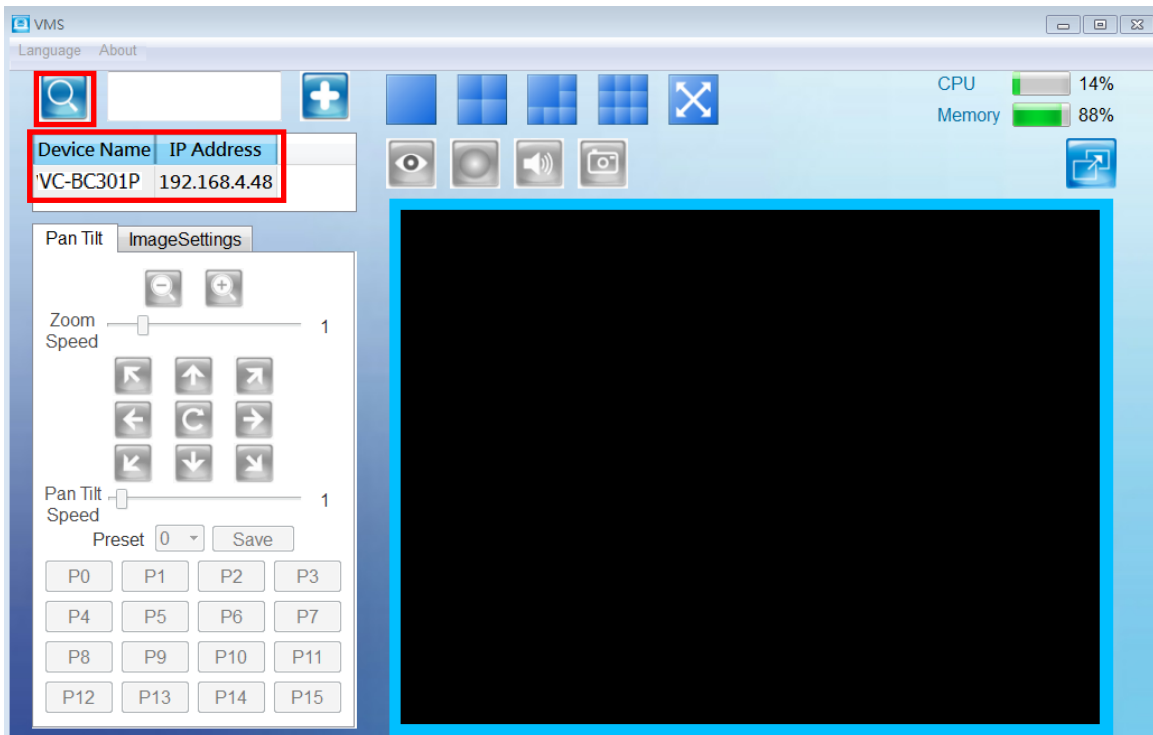
## 6.1 Web System Requirements

### 6.1.1 Web Browser:

- Internet Explorer 11 or above
- FireFox 66.0.3 or above
- Chrome 73 or above
- Edge 42.17134 or above
- Safari 12.1 or above

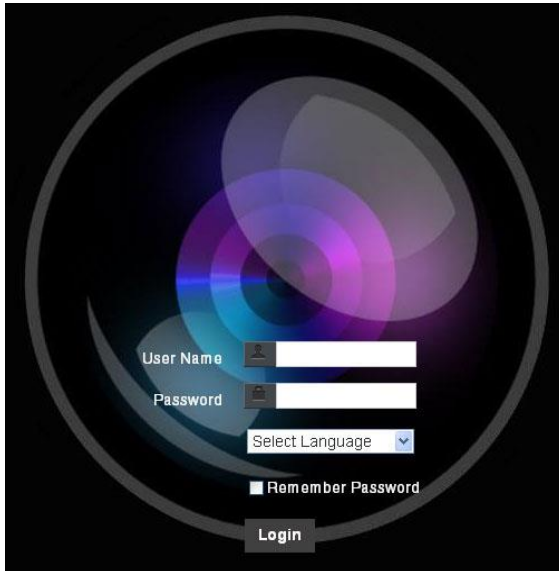
### 6.1.2 Using Lumens VMS Software to View the Images

- The VC-BC301P DHCP initial setting is ON. If VC-BC301P is connected to the local area network (LAN), the camera IP can be retrieved via the following methods
  - Install Lumens VMS software (Please download from the Lumens official website, <https://www.mylumens.com/support>)
    - Open **LUMENS VMS** software
    - Search for the camera: Press  [automatically search for the device] button to locate the VC-BC301P camera
    - Click VC-BC301P in the list and start operation after connecting to network
- <Note> When using automatic search, the camera and computer must be in the same network segment, e.g.: 192.168.4.X**



### 6.1.3 Using the Browser to View the Images

- Open the browser, and enter the URL of VC-BC301P in the IP address bar  
E.g.: <http://192.168.100.100> (default IP address)
- Enter administrator's account and password  
Account: admin (Default)  
Password: 9999 (Default)



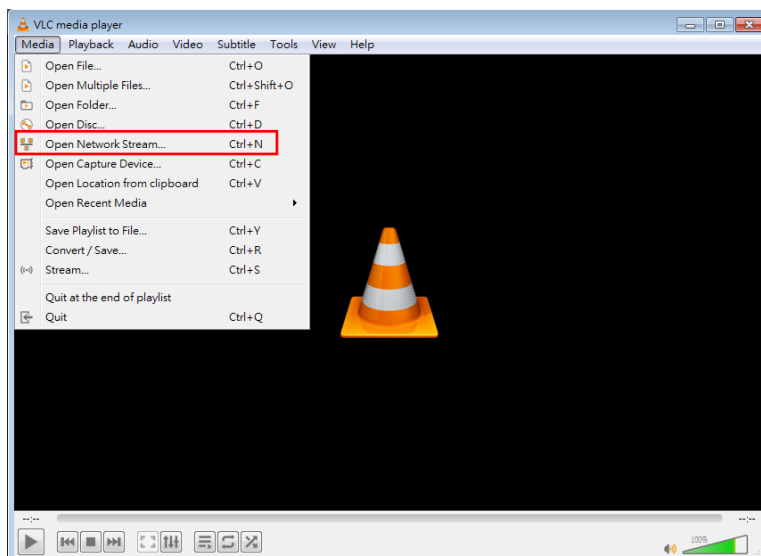
### 6.1.4 Using RTSP Player to View the Images

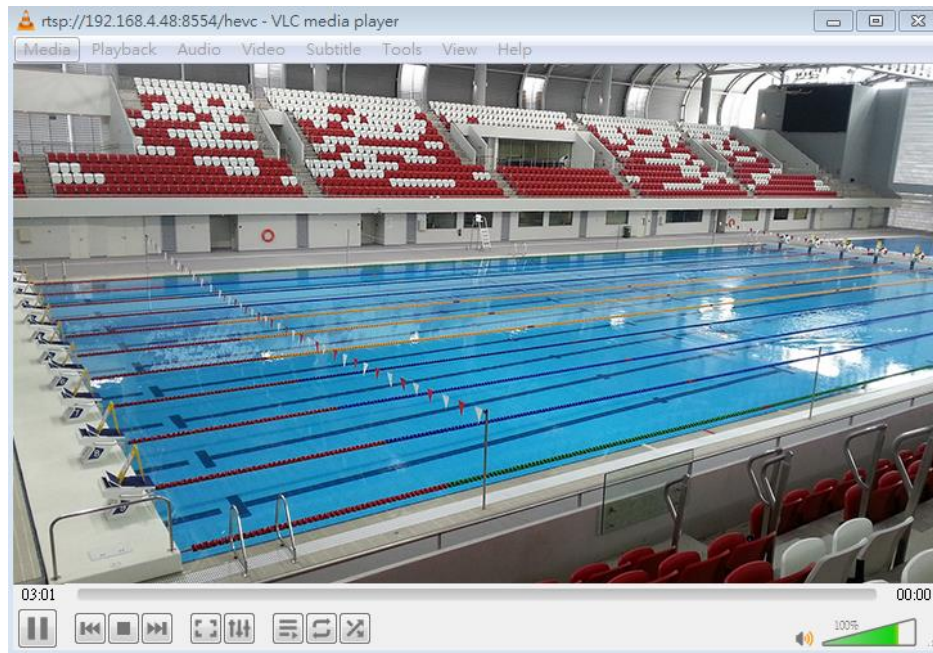
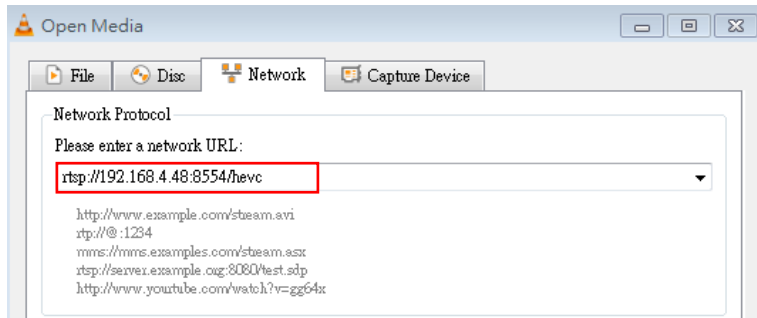
In addition to the browser and VMS, other free softwares also can be used for RTSP connection, such as VLC, Quick Time and PotPlayer

RTSP connection address formats are as follows:

- RTSP Main Streaming (1080P@H.265) => <rtsp://camera IP:8554/hevc>
- RTSP Sub1 Streaming (1080P@H.264) => <rtsp://camera IP:8557/h264>
- RTSP Sub2 Streaming (720P@H.264) => <rtsp://camera IP:8556/h264>

**Example:** Open VLC software and enter URL: <rtsp://192.168.4.48:8557/h264>



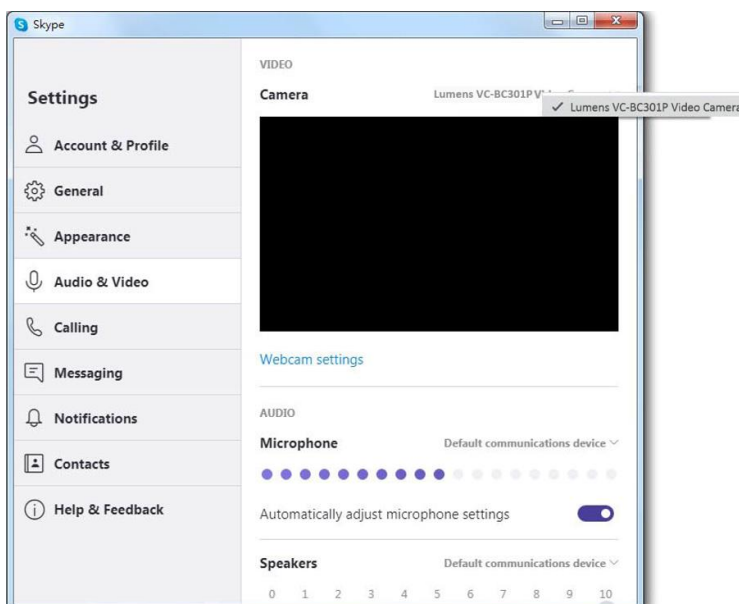


### 6.1.5 Get VC-BC301P images/Adjust parameter settings by connecting the computer via USB

- View the images

VC-BC301P can be connected to a PC via a USB cable as a USB video source, and used with a USB video software conference system, such as Skype and Zoom.

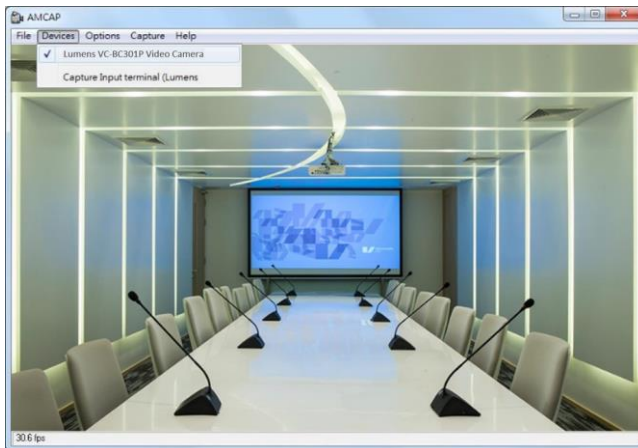
**Example: Enter Skype settings, go to audio and video page, and select VC-BC301P as the camera source**



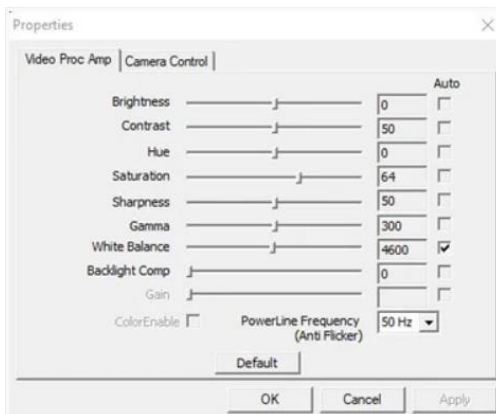
- Adjust parameter settings and control VC-BC301P

In addition to using the optional remote control VC-IR01, you can also download AMCAP software.

Select VC-BC301P as the Devices image source



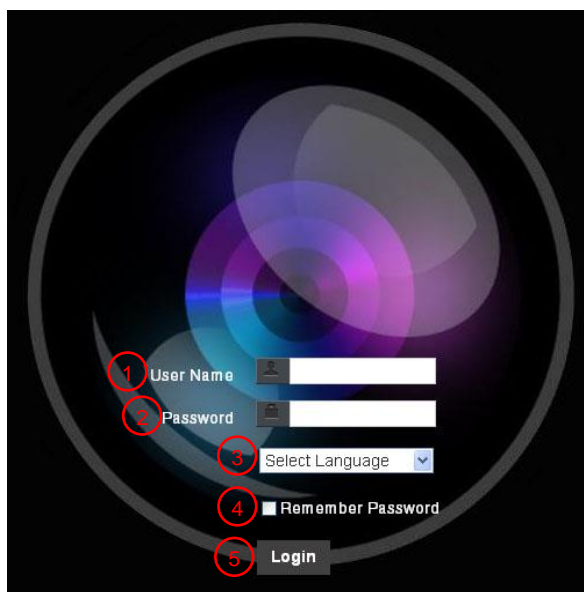
Click Options > Video Capture Filter to open the Properties Window to adjust the parameter settings and control VC-BC301P





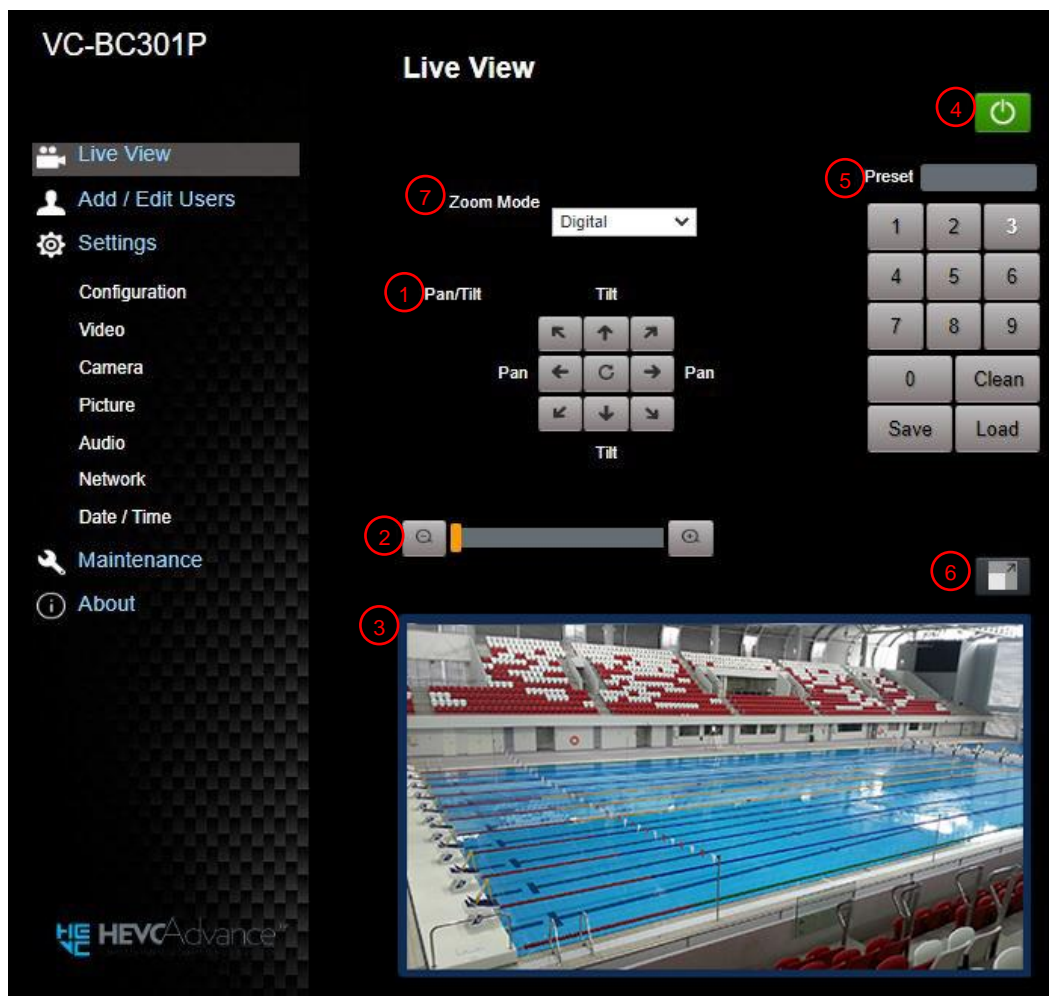
## 6.2 Web Page Function Description

### 6.2.1 Login Screen



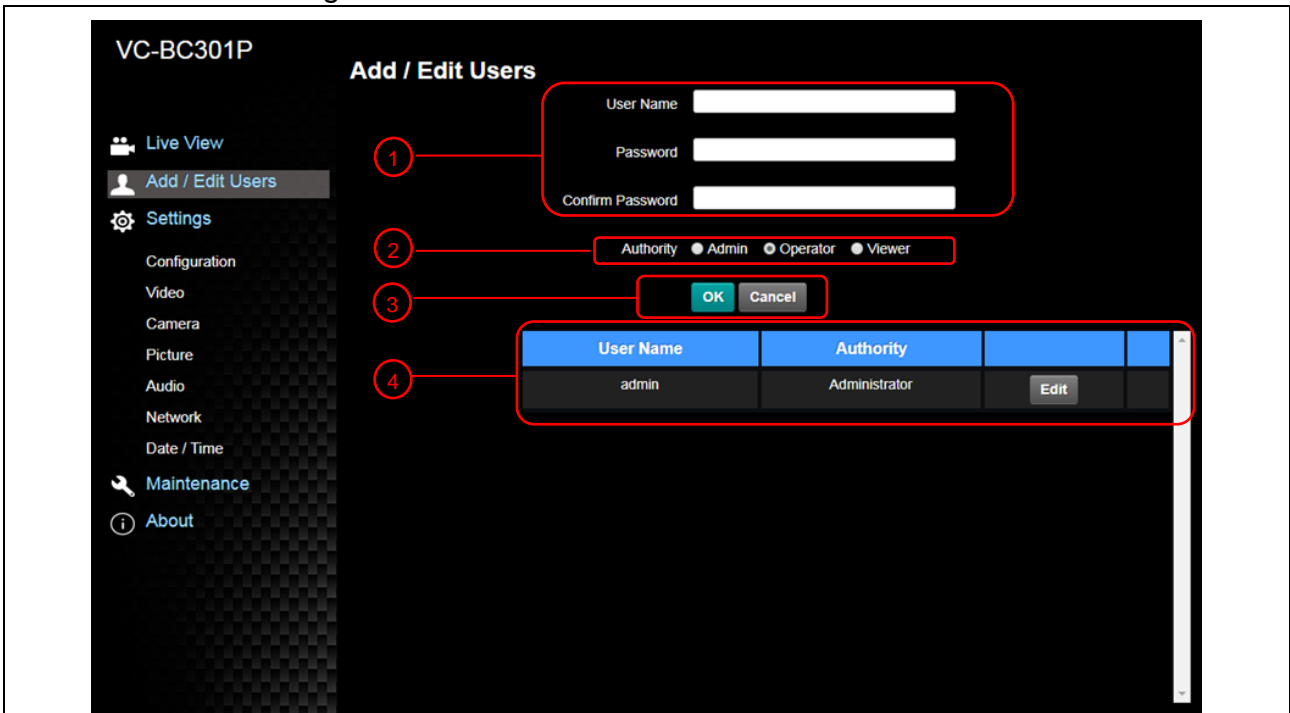
No	Item	Function Descriptions
1	Username	Enter user account (default: admin)
2	Password	Enter user password (default: 9999)
3	Language selection	Currently, the system supports English, Traditional Chinese and Simplified Chinese
4	Remember password	Save user account name and password to the browser. When you log in next time, there is no need to re-enter them
5	Login	Log into the administrator screen on the website

## 6.2.2 Viewing In Real Time



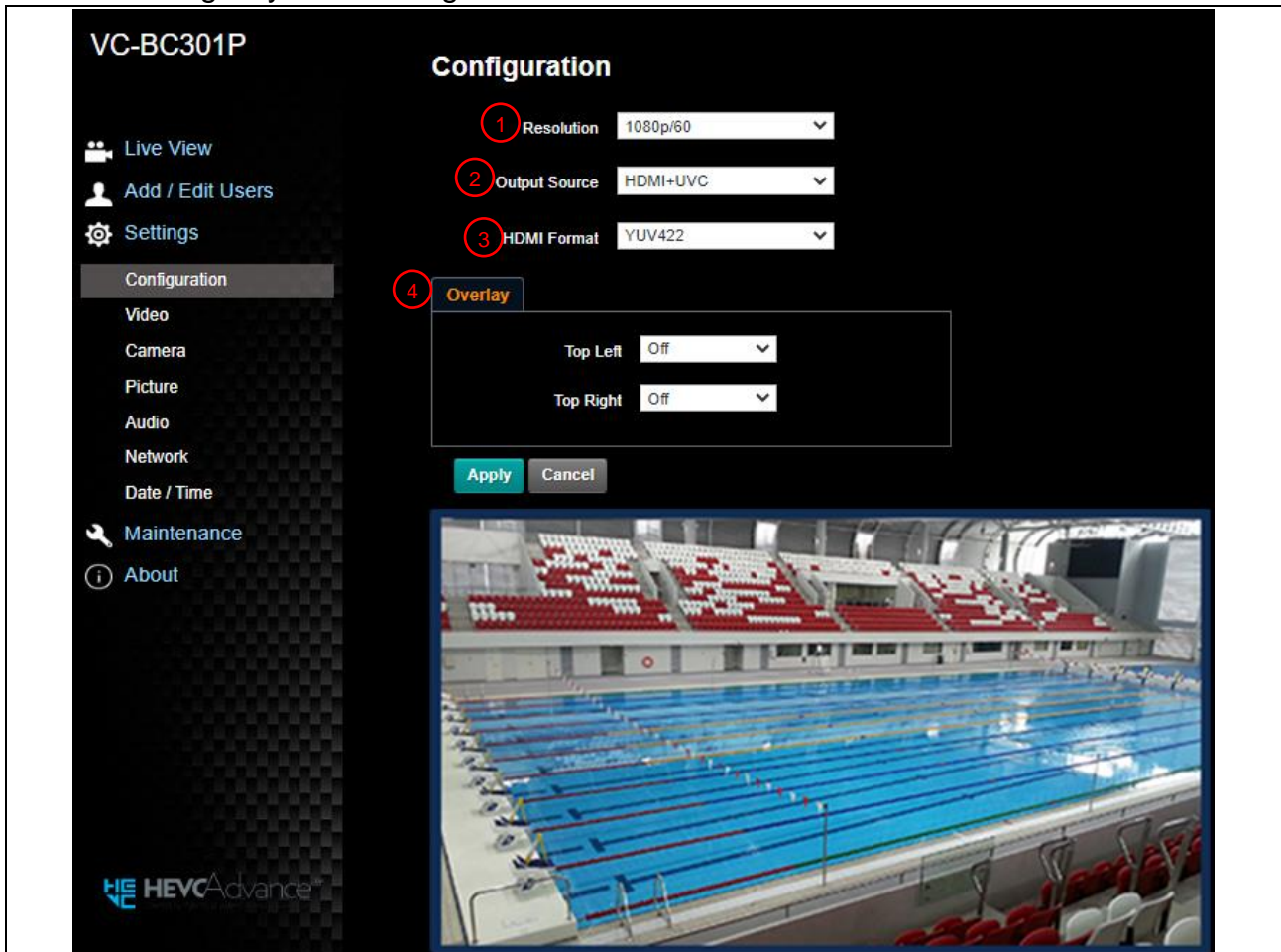
No	Item	Function Descriptions
1	Pan/Tilt setting	Adjust the Pan/Tilt position of the camera screen (ePTZ)
2	Zoom ratio	Adjust the zoom-in or zoom-out ratio via scroll bar
3	Preview window	Display the screen currently captured by the camera
4	Power button	Turn on or turn off the camera power
5	Preset setting	Select the number first and then select SAVE or LOAD
6	Switch to Full Screen	Switch the preview window to full screen
7	Zoom Mode	Select Zoom Mode (Digital/Optical)

### 6.2.3 Account Management



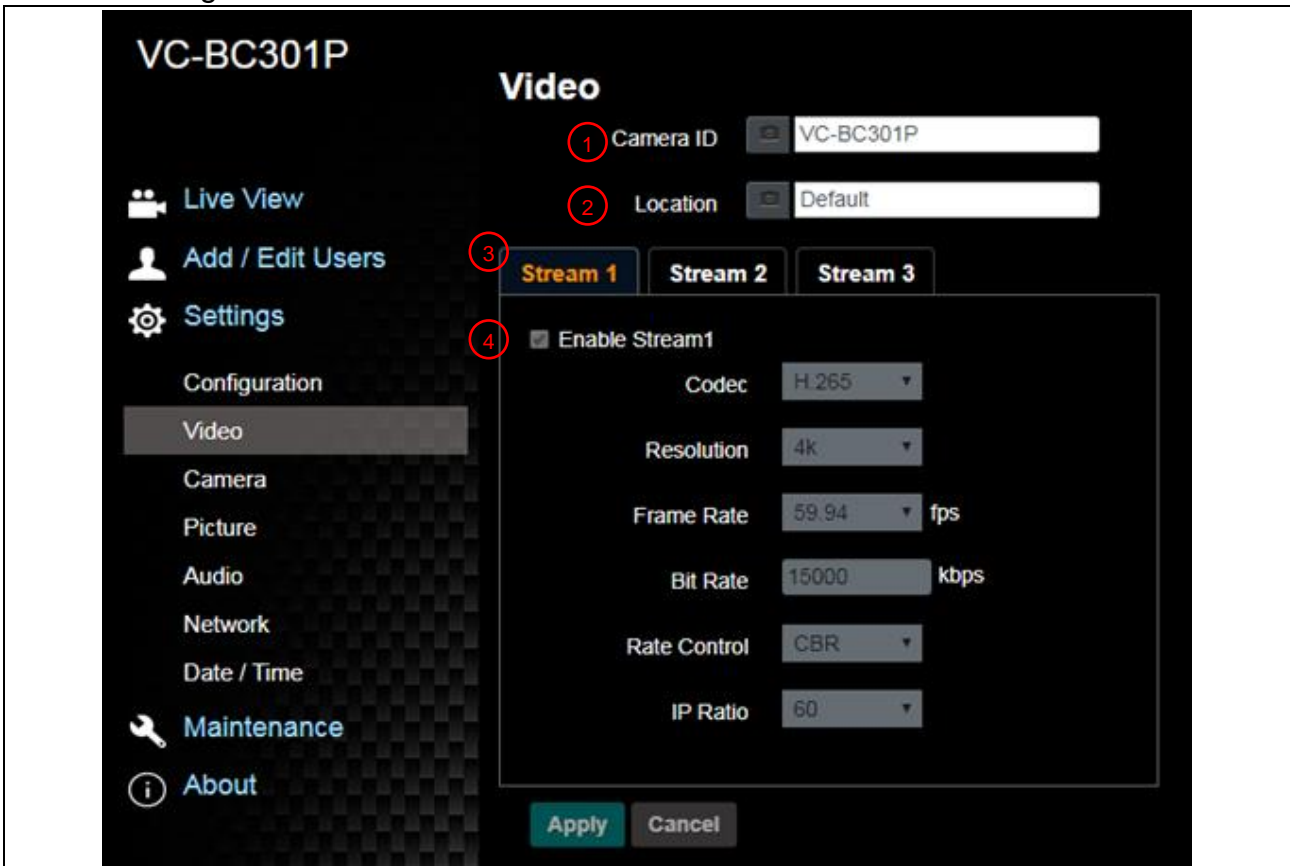
No	Item	Function Descriptions																
1	Add user account	Enter a user name and password to add a new user																
2	Permission setting	Set the new account management permissions <table border="1"> <thead> <tr> <th>User Type</th> <th>Admin</th> <th>Operator</th> <th>Viewer</th> </tr> </thead> <tbody> <tr> <td>View Images</td> <td>Y</td> <td>Y</td> <td>Y</td> </tr> <tr> <td>Settings</td> <td>Y</td> <td>Y</td> <td>N</td> </tr> <tr> <td>Account Management</td> <td>Y</td> <td>N</td> <td>N</td> </tr> </tbody> </table>	User Type	Admin	Operator	Viewer	View Images	Y	Y	Y	Settings	Y	Y	N	Account Management	Y	N	N
User Type	Admin	Operator	Viewer															
View Images	Y	Y	Y															
Settings	Y	Y	N															
Account Management	Y	N	N															
3	Applying setting	Add the newly created user to the list of account																
4	List of accounts	Edit: Modify the user password and permissions Delete: Delete the user account																

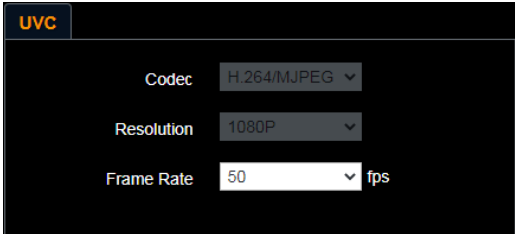
## 6.2.4 Setting - System Setting



No	Item	Function Descriptions
1	Resolution	<p>Set the resolution of the camera, resolutions supported by the camera are as follows:</p> <ul style="list-style-type: none"> <li>➤ 3840x2160/60p/ 59.94p/ 50p/ 30p/ 29.97p/ 25p</li> <li>➤ 1080p/60/ 59.94/ 50/ 30/ 29.97/ 25</li> <li>➤ 720p/60/ 59.94/ 50/ 30/ 29.97/ 25</li> <li>➤ 1080i 59.94/50</li> </ul> <p>After switching the resolution, the camera will restart. If there are no images on the website, please refresh the browser</p>
2	Output source	<p>According to the output resolution, you can select HDMI + streaming output or HDMI + UVC output</p> <p><b>&lt;Remark&gt; UVC option is limited to less than the 3840x2160/29.97p (inclusive) resolution</b></p>
3	HDMI format	<p>Select YUV422, YUV420, or RGB</p> <p><b>&lt;Remark&gt; YUV420 is limited to two resolution options: 3840x2160/59.94p and 3840x2160/50p</b></p>
4	Overlay	Select content to add to the preview window

## 6.2.5 Setting - Video

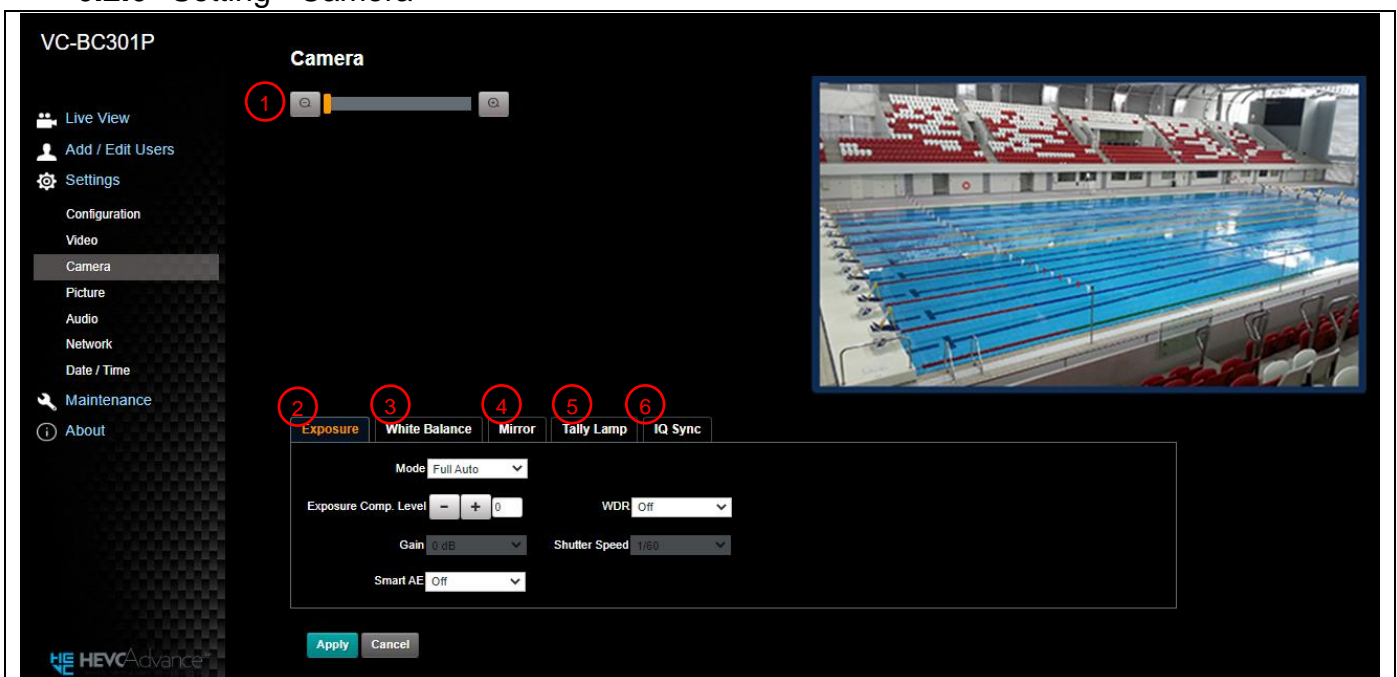


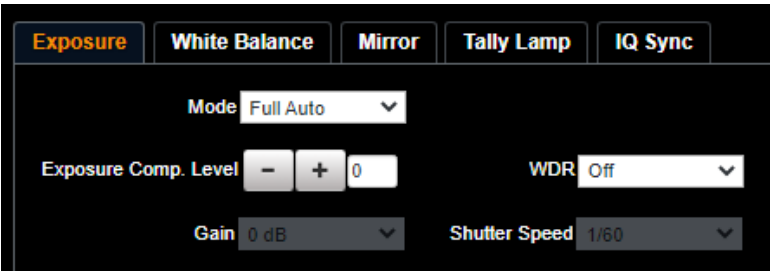
No	Item	Function Descriptions
1	Camera name	<p>Modify the camera name</p> <ul style="list-style-type: none"> <li>Camera names are limited to 1-12 characters</li> <li>Please use a camera name by mixing uppercase and lowercase letters or numbers. Do not use "/" and "space" or special symbols</li> </ul>
2	Camera Location	<p>Modify the location of the camera, such as ROOM 1</p> <ul style="list-style-type: none"> <li>Camera location is limited to 1-12 characters</li> <li>Please use a camera name by mixing uppercase and lowercase letters or numbers. Do not use "/" and "space" or special symbols</li> </ul>
3	Streaming 1 / Streaming 2 / Streaming 3	<p>This can be seen when <b>Settings - System Settings - Output Signals</b> is set to HDMI + Streaming</p> <p>Supports 3 streaming outputs. Please refer to <a href="#">6.2.5.1 Streaming Parameter Setting</a> for relevant settings</p>
4	Open Streaming	<p>Confirm whether or not the streaming function is opened</p>
5	UVC	<p>This can be seen when <b>Settings - System Settings - Output Signals</b> is set to HDMI + UVC</p>  <ul style="list-style-type: none"> <li>Encode Format: <ul style="list-style-type: none"> <li>➢ 3840x2160 / 29.97 / 25 : H.264</li> <li>➢ Less than 1080p (inclusive): H.264/MJPEG</li> </ul> </li> <li>Resolution: It is shown based on <b>Settings - System Settings - Resolution</b></li> </ul> <p>Frame Rate: 3840x2160 can only select the highest 29.97</p>

### 6.2.5.1 Streaming parameter setting

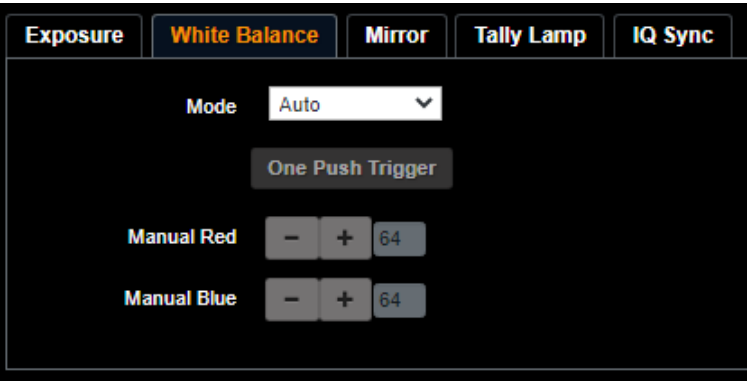
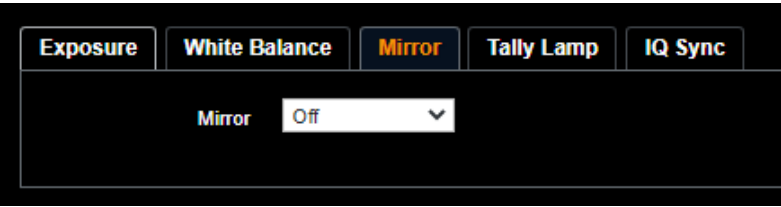
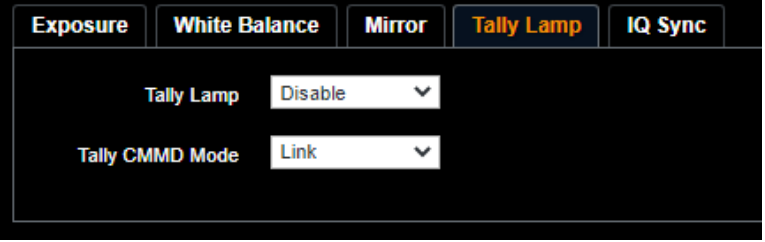
Function		Streaming 1	Streaming 2	Streaming 3
Encode Format		H.265	H.264	
Resolution		4K / 1080P / 720P	1080P / 720P	640x360
Frame Rate		Setting according to the supported resolution		
Bit Rate(kbps)	Range	2,000~20,000	2,000~20,000	512~5,000
	Factory Default	15,000	7,500	1,000
Rate Control		CBR / VBR		
IP Ratio		Setting according to the supported resolution		

### 6.2.6 Setting - Camera

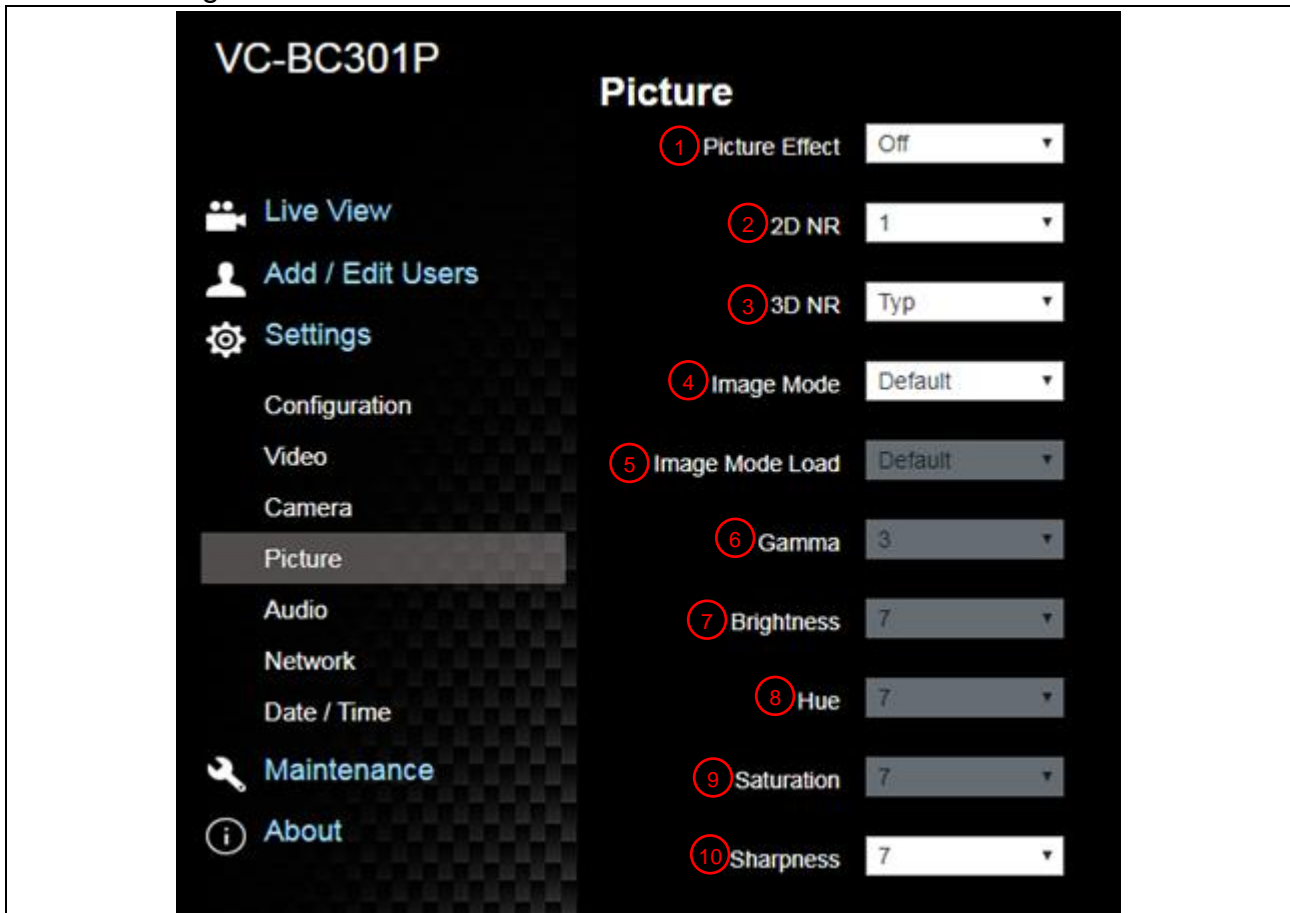


No	Item	Function Descriptions
1	Zoom ratio	Adjust the zoom-in or zoom-out ratio via scroll bar
2	Exposure	 <ul style="list-style-type: none"> <li>■ <b>Mode:</b> Select exposure mode (Automatic/Shutter Priority/Aperture Priority/Manual)</li> <li>■ <b>Exposure Comp. Level:</b> Select exposure compensation level</li> <li>■ <b>Gain:</b> The gain limit is adjustable when the exposure mode is set to “Manual”</li> <li>■ <b>WDR:</b> Set the level of wide dynamic range (WDR) in order to obtain better images</li> <li>■ <b>Shutter Speed:</b> The shutter speed is adjustable when the exposure mode is set to “Manual” or “Shutter Priority”</li> </ul>



3	White Balance	 <ul style="list-style-type: none"> <li>■ <b>Mode:</b> Select the color temperature mode <ul style="list-style-type: none"> <li>➢ Auto</li> <li>➢ Indoor</li> <li>➢ Outdoor</li> <li>➢ One Push WB</li> <li>➢ ATW</li> <li>➢ Manual</li> <li>➢ Sodium Lamp</li> </ul> </li> <li>■ <b>Open Push WB:</b> One push color temperature is adjustable when the white balance mode is set to “One Push WB”</li> <li>■ <b>Manual Red/Blue:</b> Manually adjust blue/red color temperature</li> </ul>
4	Mirror	 <ul style="list-style-type: none"> <li>■ <b>Mirror:</b> Set the mode at which the image is mirror and flipped <ul style="list-style-type: none"> <li>➢ Off</li> <li>➢ Mirror</li> <li>➢ Flip</li> <li>➢ Mirror + Flip</li> </ul> </li> </ul>
5	Tally Lamp	 <p>Enable/Disable Tally Lamp function</p> <ul style="list-style-type: none"> <li>■ Tally CMMD Mode: Tally On and Mode command linked <ul style="list-style-type: none"> <li>Normal: Not linked</li> <li>Link: Linked</li> </ul> </li> </ul> <p>&lt;Remark&gt; When it is disabled, the Tally indicator will not receive RS232 commands to trigger Enable or Disable</p>

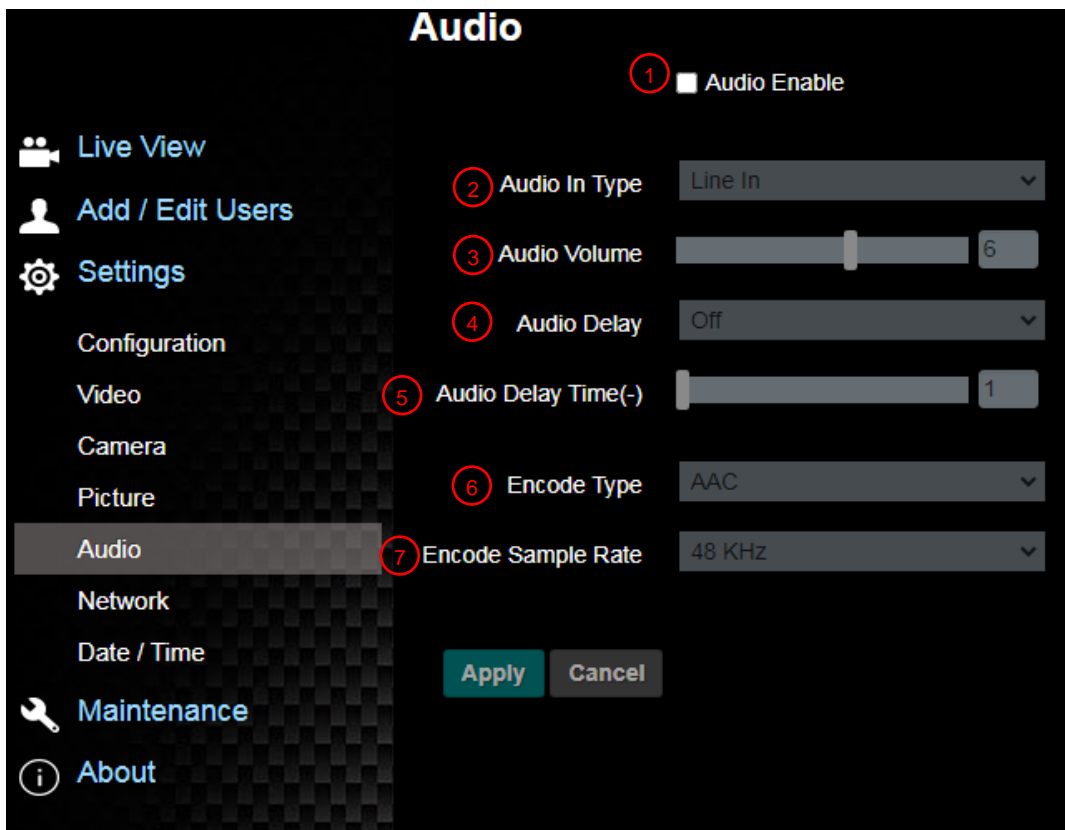
## 6.2.7 Setting - Picture



No	Item	Function Descriptions
1	Picture Effect	Set picture effect, Off/Neg/Black and White
2	2D noise reduction settings	2D noise reduction settings, selecting from Off/1/2/3
3	3D noise reduction settings	3D noise reduction settings, selecting from Off/Low/Typ/Max
4	Image mode	By selecting Default/Custom, the user may customize his/her desired image mode
5	Image Mode Load	When no custom setting is needed, reset the picture parameters back to the factory default by selecting this item
6	Gamma	Gamma Level adjustment; Adjustable when the image mode is set to Custom
7	Brightness	Brightness adjustment; Adjustable when the image mode is set to Custom
8	Contrast*	Contrast adjustment; Adjustable when the image mode is set to Custom
9	Saturation	Saturation adjustment of the image; Adjustable when the image mode is set to Custom
10	Sharpness	Adjust the sharpness of the image

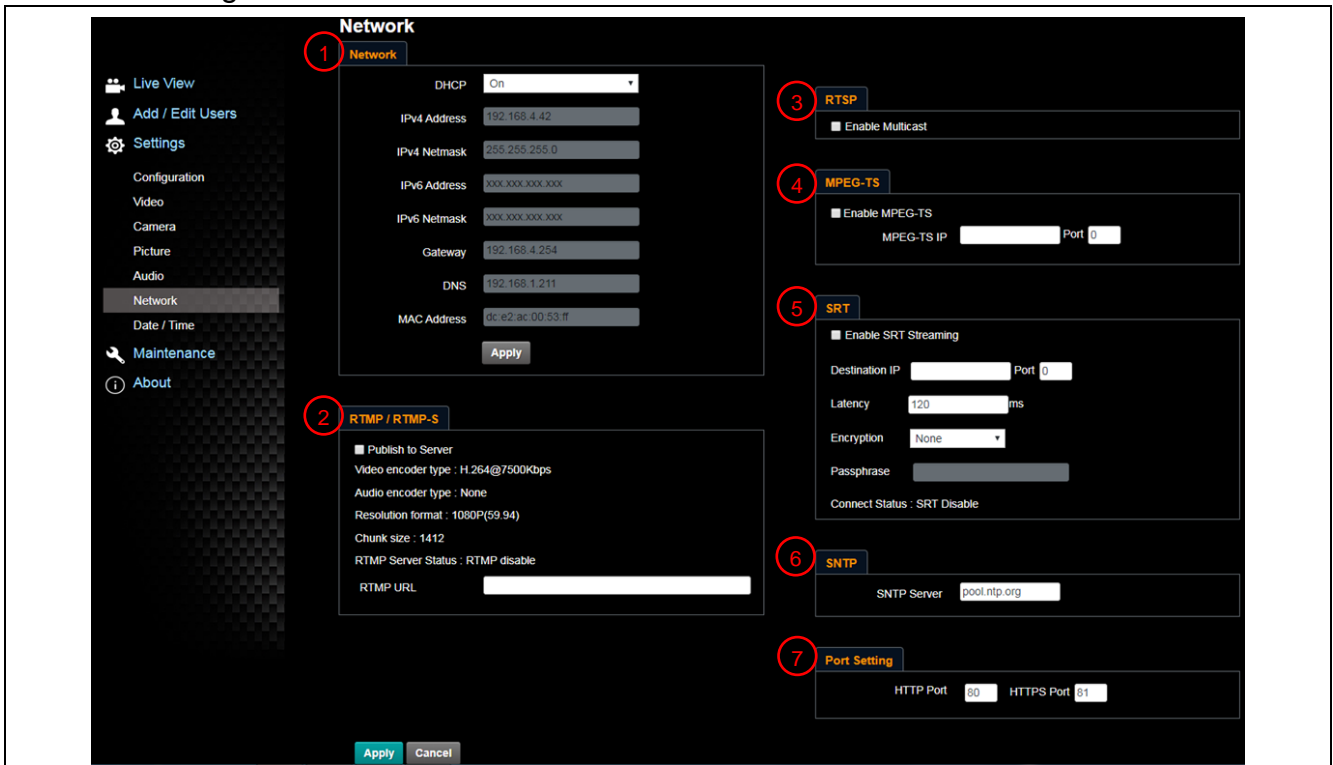



### 6.2.8 Setting - Audio

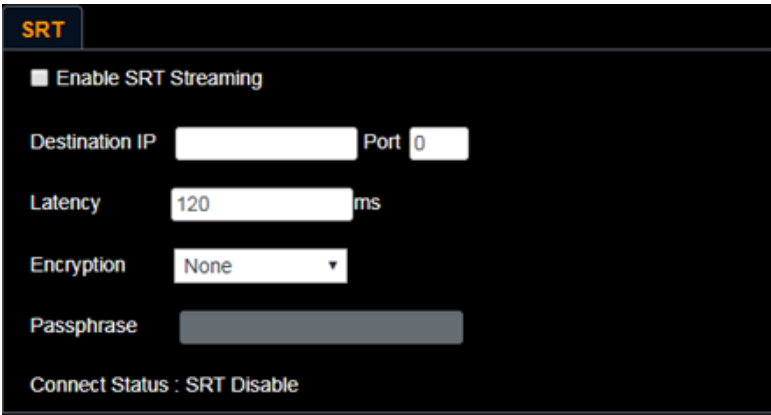


No	Item	Function Descriptions
1	Open audio	Turn on/off sound
2	Soundtrack effect setting	Set MIC In/Line In
3	Audio Volume	Adjust Audio Volume
4	Audio Delay	Turn on/off audio delay
5	Audio Delay Time	Set audio delay time for -1~-500 ms
6	Encode Format	Set encode format as ACC/G.711
7	Encode sample rate	Set audio sample rate > 48 KHz (AAC) > 44.1 KHz (AAC) > 16 KHz (AAC) > 16 KHz (G.711) > 8 KHz (G.711)

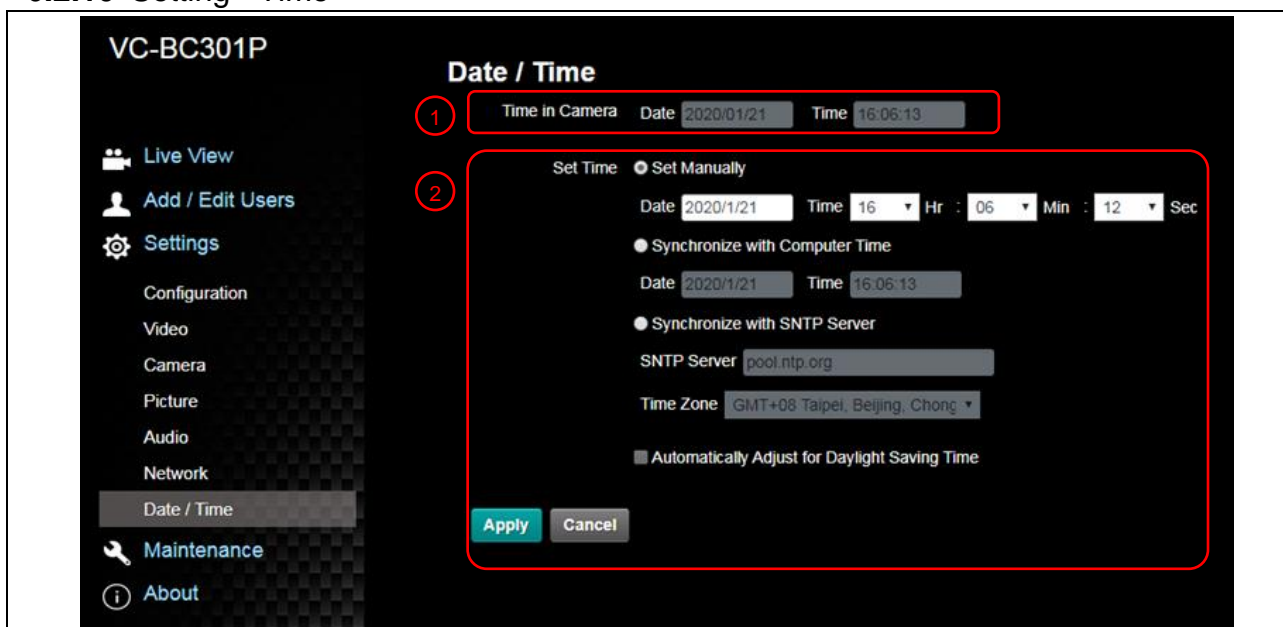
## 6.2.9 Setting - Network



No	Item	Function Descriptions
1	Network	Network setting of camera. Change of setting is available only when DHCP function is closed.
2	RTMP/RTMP-S Setting	Copy the RTMP/RTMP-S web address provided by the RTMP/RTMP-S service platform and paste it to the RTMP/RTMP-S connection address to publish the camera images on the RTMP/RTMP-S service platform To upload to YouTube for live streaming, please see <a href="#">6.2.8 Settings - Audio</a> to turn on the audio function first
3	RTSP Setting	Enable/Disable Multicast. It is suggested to enable Multicast when the number of users online watching the live image simultaneously is more than 4
4	MPEG-TS Setting	 <p>1. Port must be set in the range above 1024 with a maximum value of 9999 The following port has been used by the camera. Setting of the port may not connect correctly 8554, 8556, 8557, 8080, 9090, 1935</p>

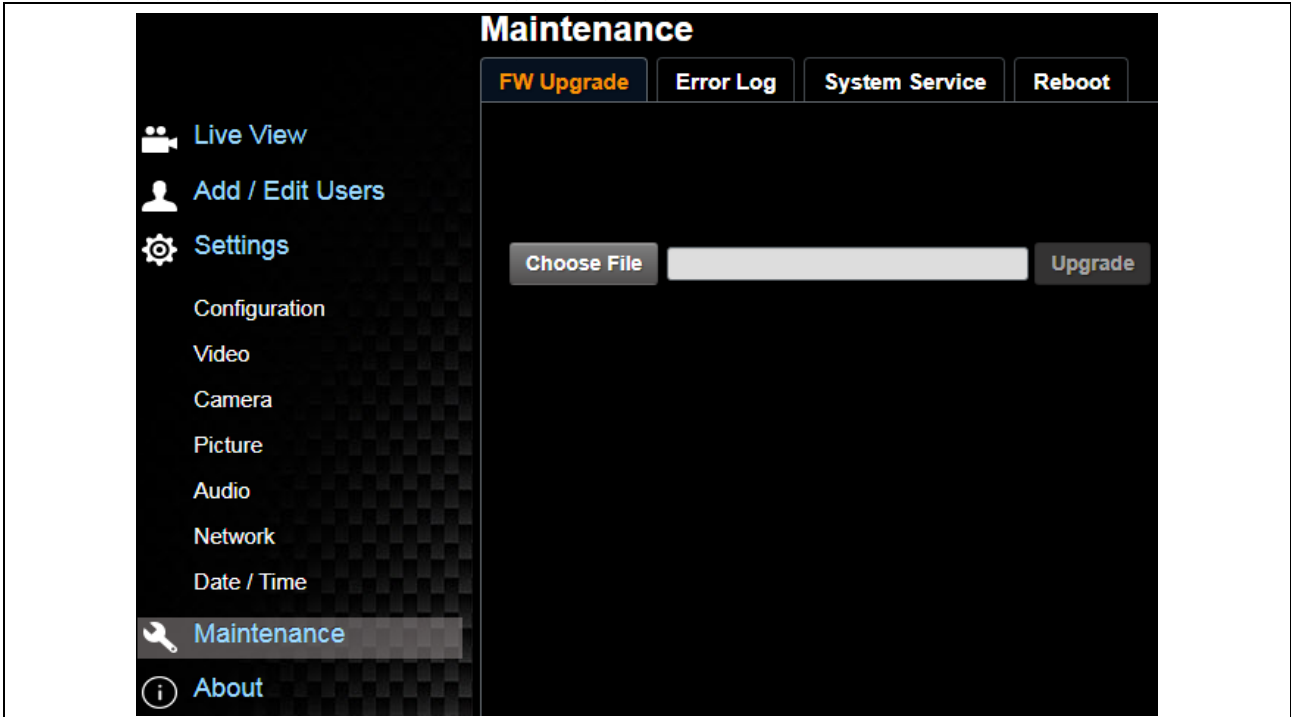
5	SRT Setting	 <p>1. Set the field of SRT and then check the item to open SRT streaming After the SRT streaming is opened, it will be connected automatically upon startup</p> <p>2. The port number must be set in the range above 1024 with a maximum value of 9999 The following port has been used by the camera. Setting of the port may not connect correctly 8554, 8556, 8557, 8080, 9090, 1935</p> <p>3. Delay time is for 20 to 8,000 microseconds. The default value is 120 microseconds</p>
6	SNTP Setting	Set SNTP Server IP
7	Port Setting	Set HTTP and HTTPS ports. The default values are Port 80 and Port 81 respectively <b>&lt;Remark&gt;</b> Change of setting is available only when DHCP function of camera is closed

### 6.2.10 Setting - Time



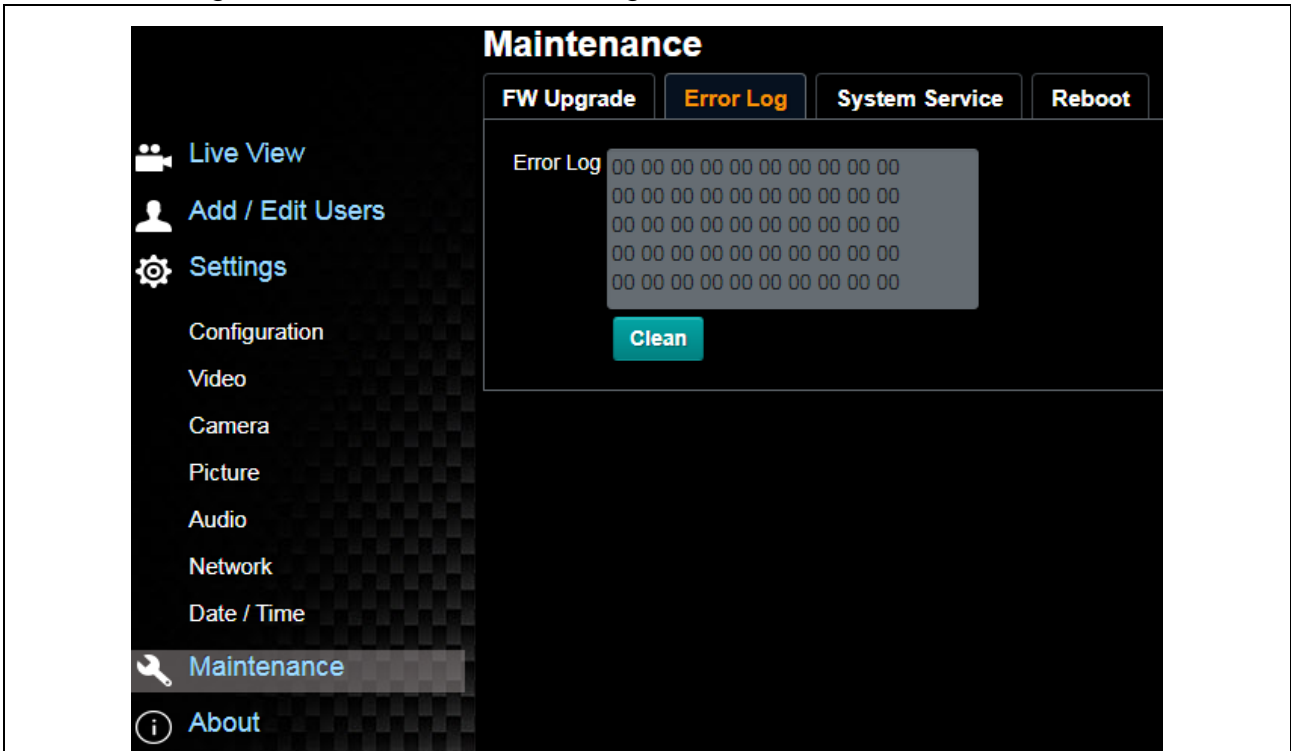
No	Item	Function Descriptions
1	Camera Time	Display the date and time of the camera
2	Set the Time	<ul style="list-style-type: none"> <li>■ Manual Configuration: Set time manually</li> <li>■ Synchronize with computer time: Set the camera time according to the computer time</li> <li>■ Synchronize with SNTP server: Set the camera time synchronously with the SNTP server</li> </ul> <b>&lt;Remark&gt;</b> SNTP server address: Please change in network setting

### 6.2.11 Setting - Maintenance - Upgrading Firmware



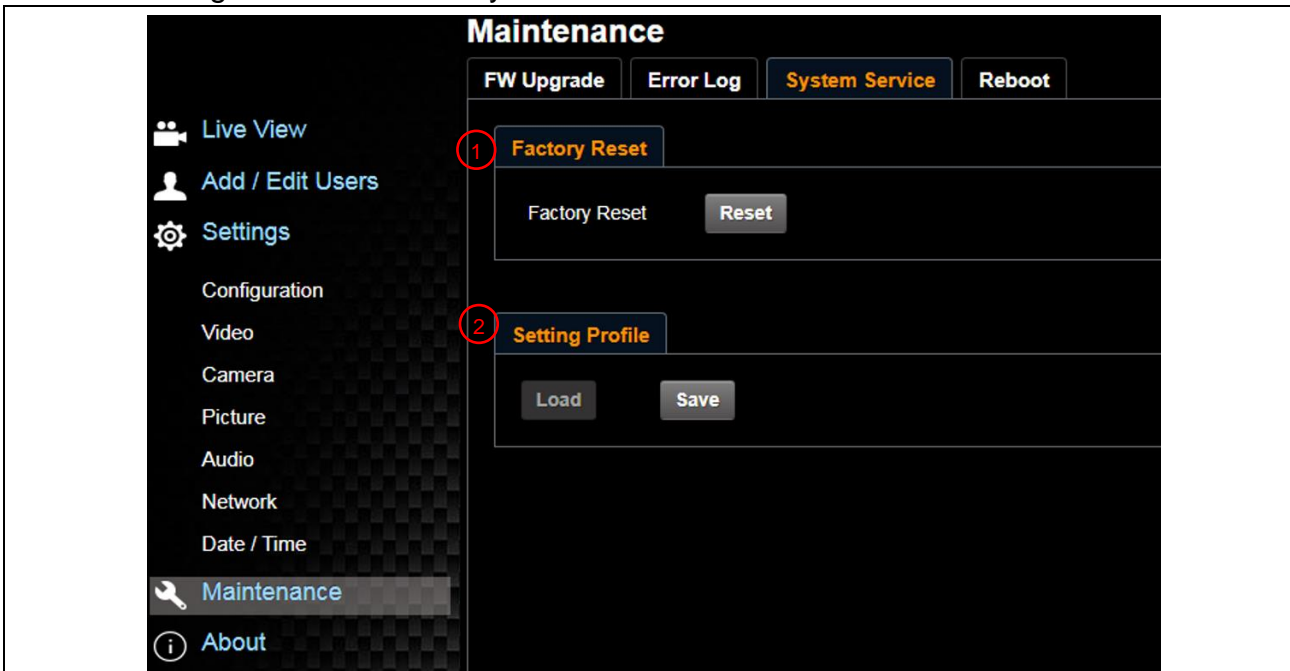
No	Item	Function Descriptions
1	Firmware Update	The camera firmware may be upgraded via web page. For the upgrade method, please download the FW upgrade manual from Lumens official website

### 6.2.12 Setting - Maintenance - Incident Log



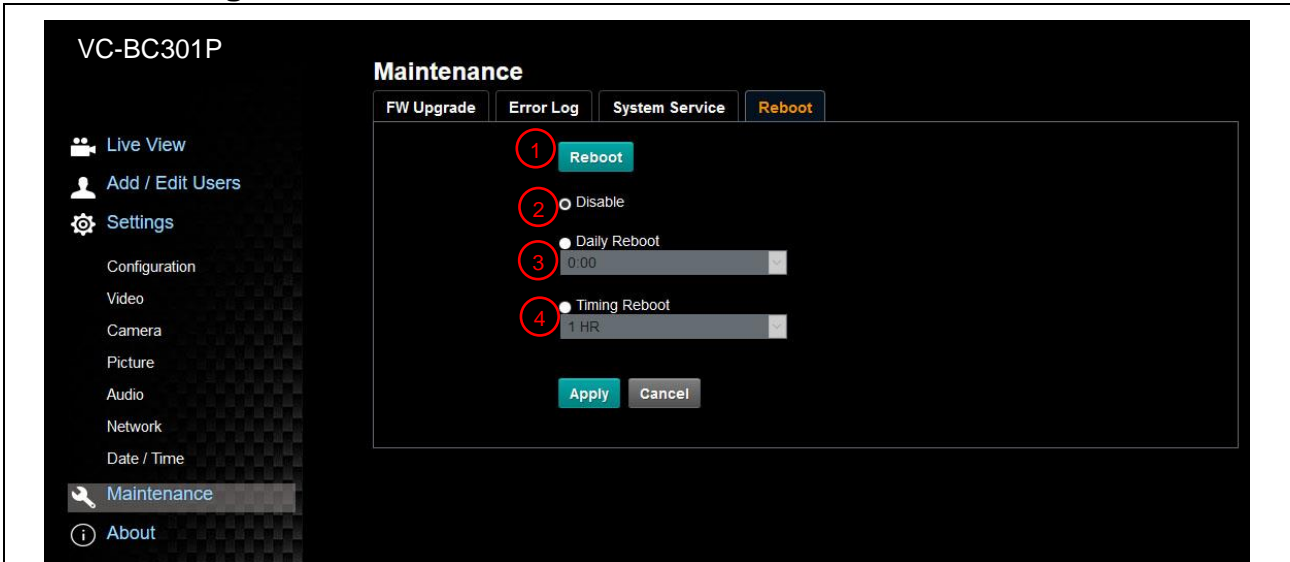
No	Item	Function Descriptions
1	Event Logs	If the camera encounters errors, an error code log will be established <Remark> If an error code appears, the user may try to clear and confirm if the error will repeat itself

### 6.2.13 Setting - Maintenance - System Service



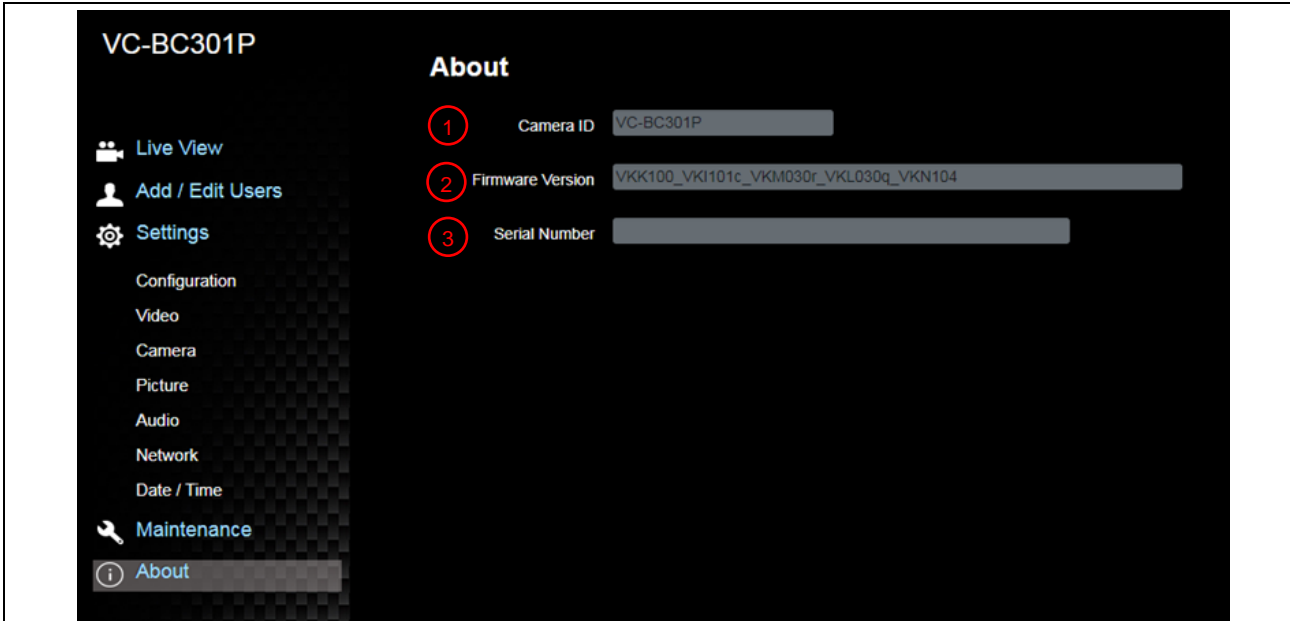
No	Item	Function Descriptions
1	Reset to the default value	Select the reset button to resume the factory default setting as the web page setting
2	Setting File	The web page setting parameters can be exported from the computer and imported/applied to another camera

### 6.2.14 Setting - Maintenance - Reboot



No	Item	Function Descriptions
1	Reboot	Reboot immediately
2	Disable	Disable the reboot settings
3	Daily reboot	Set the daily reboot time <Remark> Please go to <i>Settings - Time</i> to complete the SNTP server synchronization to set daily reboot
4	Timing Reboot	Set the timing reboot time

## 6.2.15 About



No	Item	Function Descriptions
1	Camera name	Display the camera name
2	Firmware Version	Display the firmware version of the camera
3	Serial No.	Display the camera serial No.

# Chapter 7 Troubleshooting

---

This chapter describes problems you may encounter while using VC-BC301P. 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.	<b>Boot without power signal</b>	<ol style="list-style-type: none"><li>1. Make sure you have plugged in the power cord.</li><li>2. When using a PoE connection, ensure that the power supply supports IEEE 802.3af hubs</li></ol>
2.	<b>There is no image output from VC-BC301P</b>	<ol style="list-style-type: none"><li>1. Check the power supply or PoE supply functions.</li><li>2. Confirm the output signals are in streaming output.</li><li>3. If the camera is connected to a monitor, confirm the monitor equipment supports 4K output.</li><li>4. Replace the cables and make sure they are not faulty.</li></ol>
3.	<b>VC-BC301P image is severely delayed</b>	<ol style="list-style-type: none"><li>1. Please use 4K, 1080p or 720p 60/50 Hz signals rather than 25/30 Hz signals.</li></ol>
4.	<b>RS-232 over IP cannot be controlled</b>	<ol style="list-style-type: none"><li>1. Please make sure the port number (52381) is set correctly</li><li>2. For related command settings, please download the Command Set Manual from Lumens official website</li></ol>
5.	<b>The ONVIF software cannot find the machine</b>	Please make sure that [Setting]> [Video]> [Camera ID]/[Location] in the webpage uses only English letters or numbers. The ONVIF software cannot find the machine if you use special characters and space.

# Chapter 8 Safety Instructions

Always follow these safety instructions when setting up and using the VC-BC301P UHD Box Camera:

## 1 Operation

- 1.1 Please use the product in the recommended operating environment, away from water or source of heat.
- 1.2 Do not place the product on a tilted or unstable trolley, stand or table.
- 1.3 Please clean the dust on the power plug prior to usage. Do not insert the product's power plug into a multiplug to prevent sparks or a fire.
- 1.4 Do not block the slots and openings in the case of the product. They provide ventilation and prevent the product from overheating.
- 1.5 Do not open or remove covers, otherwise it may expose you to dangerous voltages and other hazards. Refer all servicing to licensed service personnel.
- 1.6 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 into the product or the product has been exposed to rain or water.

## 2 Installation

- 2.1 For security considerations, please make sure the standard hanging rack you bought is in line with UL or CE safety approbations and installed by technician personnel approved by agents.

## 3 Storage

- 3.1 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.
- 3.2 Unplug this product during thunderstorms or if it is not going to be used for an extended period.
- 3.3 Do not place this product or accessories on top of vibrating equipment or heated objects.



## 4 Cleaning

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

## 5 Batteries (for products or accessories with batteries)

- 5.1 When replacing batteries, please only use similar or the same type of batteries.
- 5.2 When disposing of batteries or products, please adhere to the relevant instructions in your country or region for disposing of batteries or products.

## ■ Precautions

	This symbol indicates that this equipment may contain dangerous voltage which could cause electric shock. Do not remove the cover (or back). No user-serviceable parts inside. Refer servicing to licensed service personnel.		This symbol indicates that there are important operating and maintenance instructions in this User Manual with this unit.
---	---	--	---

## ■ 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 :

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

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.

## ■ 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 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 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.



# Supplier's Declaration of Conformity

## 47 CFR § 2.1077 Compliance Information

**Manufacturer :** Lumens Digital Optics Inc.

**Product Name :** VC-BC301P

**Model Number :** UHD Box Camera

### Responsible Party – U.S. Contact Information

**Supplier :** Lumens Integration, Inc.

4116 Clipper Court, Fremont, CA 94538, United States

**e-mail :** support@mylumens.com

### FCC Compliance Statement

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions : (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

# Copyright Information

---

Copyrights © Lumens Digital Optics Inc. All rights reserved.

Lumens is a trademark that is currently being registered by Lumens Digital Optics Inc.

Copying, reproducing or transmitting this file is not allowed if a license is not provided by Lumens Digital Optics Inc. unless copying this file is for the purpose of backup after purchasing this product.

In order to keep improving the product, the information in this file is subject to change without prior notice.

To fully explain or describe how this product should be used, this manual may refer to names of other products or companies without any intention of infringement.

Disclaimer of warranties: Lumens Digital Optics Inc. is neither responsible for any possible technological, editorial errors or omissions, nor responsible for any incidental or related damages arising from providing this file, using, or operating this product.