LumensCMS Auto Tracking Camera Image Management Software User Manual

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Contents

Copyright Information

Instructions on Software Installation and Tracking Settings

System Requirements

- Operating System: Windows 7 32 bits/64 bits or higher
  - Windows XP is not supported
  - MAC OS is not supported
- CPU: Intel i3 or higher level processor
- Memory: 4G RAM or above

- Min Hard Drive Space: 1GB or above

Connecting Camera to Network

Two common connection methods are shown below:

1. Connecting via switch or router

2. To connect directly through network cable, the IP address of the computer should be changed so that it is on the same network segment as the camera E.g.: The factory-preset default IP address of VC-TR1 is 192.168.100.100. The computer IP address must be set with the same network segment, such as 192.168.100.101, so that the computer can be connected correctly with the camera

● Change network settings
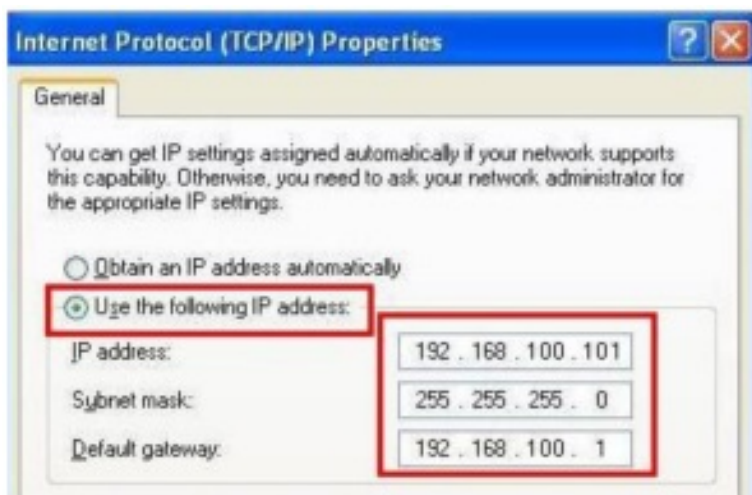
Connect LumensCMS Software with VC-TR1

1. Please download the software from [Support] > [Download] page on Lumens official website

2. Open the LumensCMS software, and add in the camera
   ■ **Automatically add it in**– First, turn on the camera. After opening the LumensCMS software, VC-TR1 will be automatically added to the list for about 5 – 7 seconds. Double-click the camera to display the screen
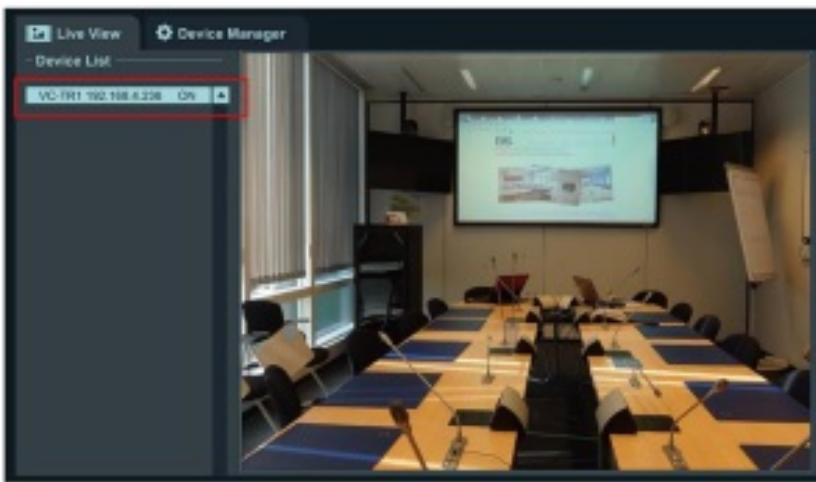
■ **Manually add it in-** Open the **Device Manager** page

➢ Search Device:

❶[Refresh]>❷Click the camera> ❸[Add to Device Manager] ,❹ Enter the camera password (Default is 9999)

➢ Go back to ❺ [Live View] page. Double-click the camera added to the list to display the screen
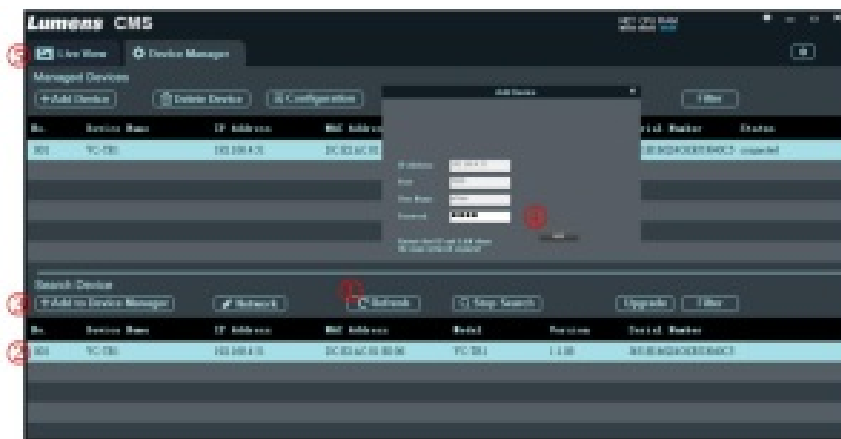
3. Set Tracking Parameters
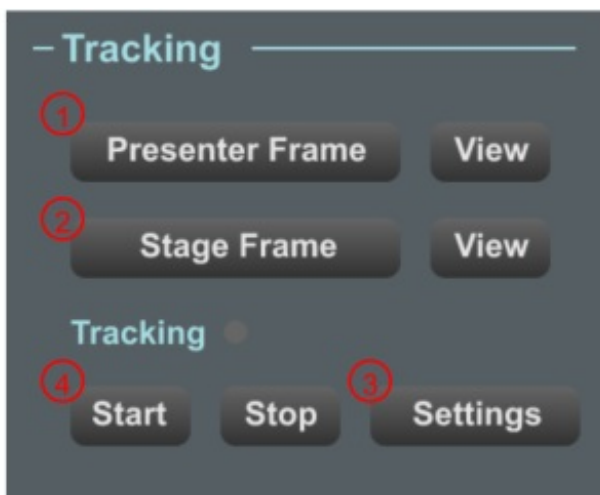
1. Presenter Frame

Operate the PTZ to set the tracking screen. This setting determines the magnification and the vertical angle of the PTZ during tracking

❈ **Recommendation:** The face shall be in the yellow auxiliary frame. After straightening the arms, the best distance between the left and right sides and the frame is to accommodate at most 2 people

<Remark> Presenter Frame is same with the setting of Preset 1. You can also set up from the remote control
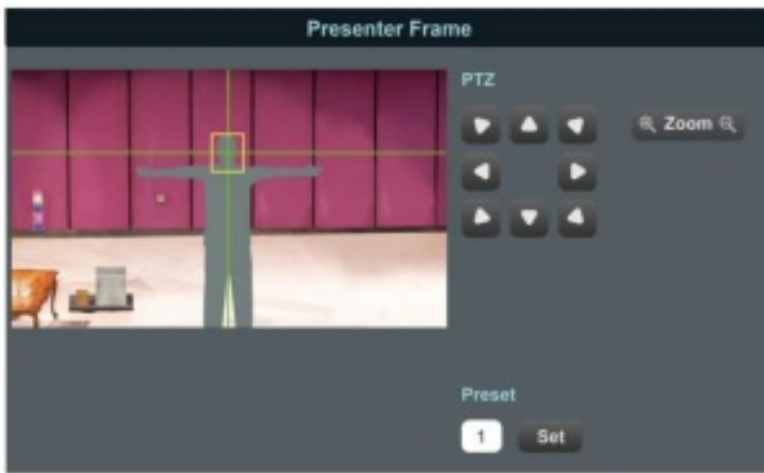
2. Stage Frame

Operate the PTZ to set the stage screen. This setting switches to the Stage Frame screen automatically when the camera loses the tracking target

<Remark> Stage Frame is same with the setting of Preset 0. You can also set up from the remote control

3. [Settings]> [Tracking Area]

Click **Tracking Area**, drag the mouse to customize the tracking area (green frame) When the target appears in the tracking area, the VC-TR1 will start the tracking.

❈ Recommendation: When setting the tracking area, you have to make sure there is only one tracking target moving in this area. Excluding the probability of non-tracking targets appearing in this area is required

■ Everywhere Tracking:

After being checked, the target will still be tracked automatically if it is outside the green tracking area frame

■ Blocked Area(1-8):

Draw the Blocked Area, the Blocked Area can block the motion detection (but not the face detection).
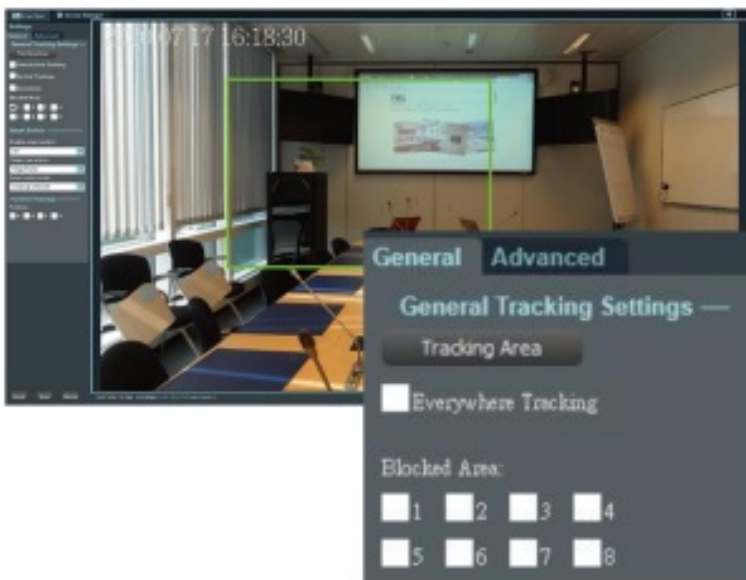
4.Click Start **to start tracking**

Software Function Descriptions

Launch Screen (Live View)
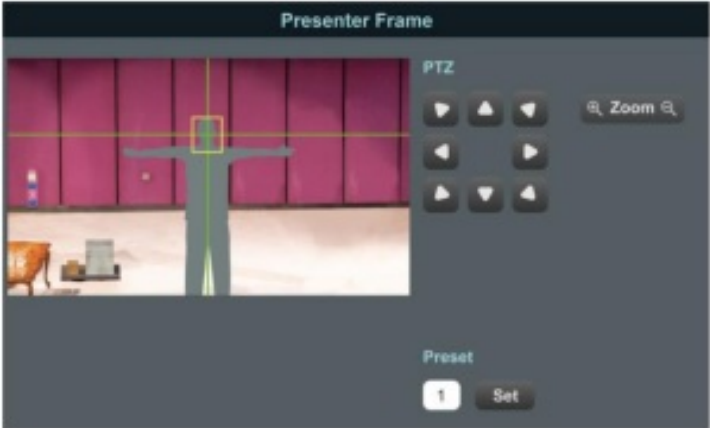
No	Item	Function Descriptions
1	Live View	Preview the camera screen, control tracking and PTZ function
2	Device Manger	Search and manage the available cameras
3	Device List	List of controllable cameras
4	Tracking	Control the auto tracking function of the camera

5	PTZ control	Control the PTZ of the camera, menu, Preset, image parameters
6	Preview Screen	Support up to the four-pane preview screen
7	Snapshot	Take snapshots and save in the designated path
8	Recording	Recording and save in the designated path
9	Audio In	Turn on/off the sound of LumensCMS software
10	Close all screens	Click to close all preview screens
11	Screen Switch	Switch the selected screen to a single window or go back to the four-pane preview screen
12	Computer's performance status	Display computer's performance status
13	Stand By/Wake Up	Stand By/Wake Up the selected cameras in Device list
14	About	In formation of software version and release date
15	Lumens CMS Settings	• Language: English • Snapshot location: Select the path to save the snapshots • Recording location: Select the path to save the recordings

Live View – Tracking

No	Item	Function Descriptions

1	Presenter Frame

Operate the PTZ to set the tracking screen.
This setting determines the magnification and the vertical angle of the PTZ during tracking
※ **Recommendation:** The face shall be in the yellow auxiliary frame .
After straightening the arms, the best distance between the left and right sides and the frame is to accommodate at most 2 people
<Remark> Presenter Frame is same with the setting of Preset 1. You can also set up from the remote control |
| 2 | Stage Frame |

Operate the PTZ to set the stage screen.
This setting calls the Stage Frame screen automatically when the camera loses the tracking target |
3	View	Load Presenter Frame (Preset 1)
4	View	Load Stage Frame (Preset 0)
5	Start	Start tracking
6	Stop	Stop tracking
7	Settings	For parameter setting, please refer to the following sections about detailed parameters.
2.3 Live View – Tracking – Settings – General
2.4 Live View – Tracking – Settings – Advanced

Live View – Tracking – Settings – General

		No	Item	Function Descriptions

1	Tracking Area	Drag the mouse to customize the tracking area (green frame). When the target appears in the tracking area, the VC-TR1 will start the tracking.
2	Everywhere Tracking	After being checked, the target will still be tracked automatically if it is outside the green tracking area
3	Blocked Area	Draw the Blocked Area. The Blocked Area can block the motion detection (but not the face detection).
4	Enable smart switch	• **OFF:** Turn off the smart switch function. The camera will follow the setting of the Target lost action. • **PTZ Main Stream:** Turn on PTZ Stream smart switch function. The mode will follow the setting of the smart switch mode. • **Panoramic Stream:** Turn on Panoramic Stream smart switch function. The mode will follow the setting of the smart switch mode.
5	Target lost action	• **Stage Frame:** Returning to the stage frame when the camera loses the target • **Presenter Frame:** Returning to the presenter frame when the camera loses the target • **Stay:** Staying in place when the camera loses the target.
6	Smart switch mode	• **Close-up when still:** Switches to Panoramic View when the target is moving. Switches to Close-up when the target is still. Close-up is determined by the Presenter frame. • **Close-up when slow moving:** Switches to Panoramic View when the target is moving. Switches to Close-up when the target is moving slowly or still. Close-up is determined by the Presenter frame. • **Continuous following:** Close-up when auto tracking the target. Switches to Panoramic View when the camera loses the target. Close-up is determined by the Presenter frame.
7	Partition	Select to draw the tracking area of the preset. When the target enters this tracking frame, the preset screen will be loaded automatically until the target leaves the tracking frame. A (Blue): Preset 101 / B (Orange): Preset 102 C (Yellow): Preset 103 / D (Purple): Preset 104

	8	Multi-People Detection	After selecting, the camera will call when two or more targets appear in the Tracking Area (green frame) 1. Multi-People Frame (Preset 2) 2. Stage Frame (Preset 0) 3 Panoramic View
	9	Multi-People Frame	Click to set multi-people detection (Preset 2) screen
	10	Reset	Reset to the initial setting
	11	Save	Save parameters
	12	Return	Return to Live view

- **Tracking Area**

When the target appears in the tracking area, the VC-TR1 will start the tracking.
※Recommendation: When setting the tracking area, you have to make sure there is only one tracking target moving in this area. Excluding the probability of non-tracking targets appearing in this area is required

1. Click ![Tracking Area], drag the mouse to customize the tracking area (green frame)
2. Click Save to save the settings
3. Click Return to return to the Live View screen

- **Blocked Area**

Draw the blocked area (red frame). You can set 8 blocked areas in total. The blocked area can block the motion detection (but not the face detection).

1. After being checked, drag the mouse to draw the blocked area (red frame)
2. Click Save to save the settings
3. Click Return to return to the Live View screen
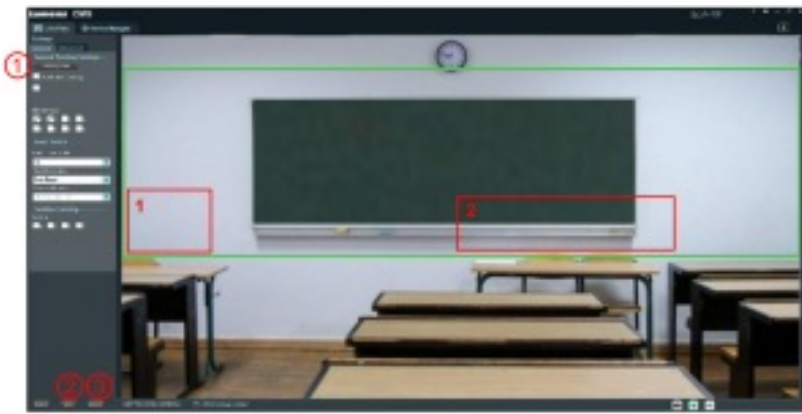
- **Partition**

Draw the Partition area. You can set 4 Partition areas in total.

1. Check Partition
2. Drag the mouse to draw the Partition tracking area
   - A: Blue frame
   - B: Orange frame
   - C: Yellow frame
   - D: Purple frame
3. Set the preset position for Preset
   - A: Preset 101
   - B: Preset 102
   - C: Preset 103
   - D: Preset 104
4. Click Save to save the settings
5. Click Return to return to the Live View screen.

Live View – Tracking – Settings – Advanced

	No	Item	Function Descriptions
	1	Tracking When Power On	Turn on/off Auto Tracking after the camera boots up
	2	Reset	Reset to the initial setting
	3	Sensitivity	The bigger the value, the higher the tracking sensitivity and the more small movement can be detected
	4	Pan speed	The PTZ horizontal moving speed during tracking
	5	Tilt speed	The PTZ vertical moving speed during tracking
	6	Lost time	The time before returning to target lost action setting when the camera loses the target
	7	Expert Mode	Turn on/off identifier When the green light next to the button is on, the tracking identifier will be turned on
	8	Service Zone	For engineers use only
	9	Reset	Reset to the initial setting
	10	Save	Save parameters
	11	Return	Return to Live view

Live View – PTZ Control

No	Item	Function Descriptions
1	←→↑↓↖↗↙↘	Control the PTZ direction
2	Enter	Enter the next layer of the menu
3	Menu / Back	Enter: Turn on or off the menu Back: Return to the previous layer of the menu
4	Preset	**Number:** Enter the preset number from 3 to 255 (Special preset can not be used as general preset. Please refer **2.5.1 Special Preset Function Descriptions**) for more details about the related function descriptions **Call:** Load the preset of the set **Set:** Set the preset of the set **Clear:** Clean the preset of the set
5	Zoom	Zoom setting
6	Focus	Focus Setting
7	Iris	Iris setting
8	Home	Restore the PTZ to the initial position

Special Preset Function Descriptions: Special preset cannot be used as general preset

Special preset	Function	Remark
80	Start tracking	
81	Stop tracking	
95	Enter or exit the setting menu	
96	Clear 0 – 64 preset	
99	Reboot the machine	
121	Output the PTZ screen	HDMI/ SDI
122	Output the panoramic screen	HDMI/ SDI
123	PTZ and panoramic PIP screen	HDMI/ SDI

Device Manager
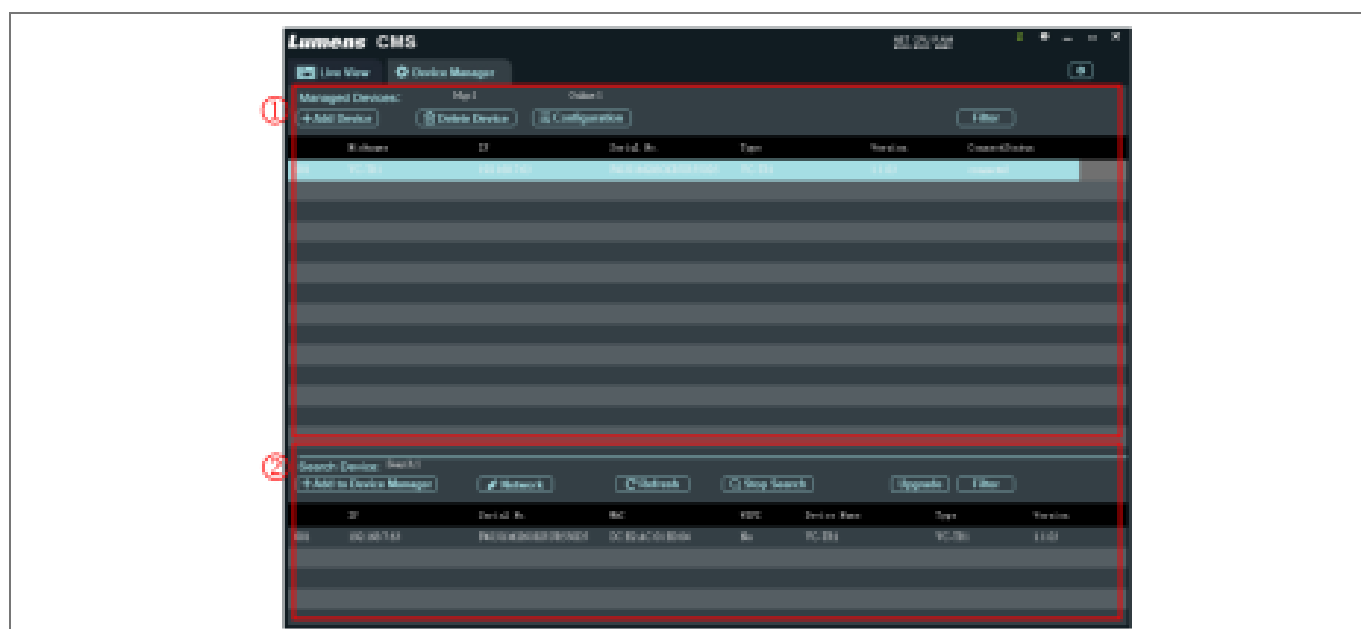
No	Item	Function Descriptions
1	Managed Device	Display the list of added devices which can be managed by LumensCMS
2	Search Device	Display the list of available cameras found

Device Manager – Managed Device
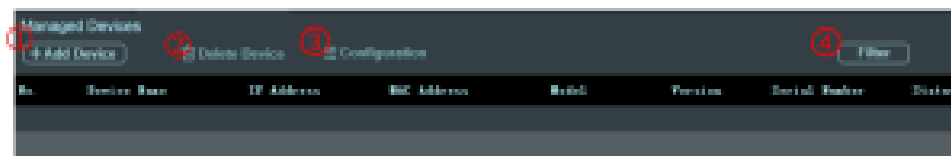
No	Item	Function Descriptions
1	Add Device	After entering data, you can add devices manually. The user name cannot be changed
2	Delete Device	Delete the selected devices
3	Configuration	Set the selected devices
4	Filter	There will be an input box after clicking. After entering the text, only the devices with keywords will appear on the list

Device Manager – Search Device

No	Item	Function Descriptions
1	Add to Device Manager	Add devices to Managed Devices list
2	Network	Change network settings (DHCP/static IP)
3	Refresh	Refresh the device list
4	Start / Stop Search	Start or stop searching cameras
5	Upgrade	Update camera firmware
6	Filter	There will be an input box after clicking. After entering the text, only the devices with keywords will appear on the list

Device Manager – Configuration – Streams

No	Item	Function Descriptions
1	Stream	Set IP streaming. There are 3 IP streaming options: PTZ, Panoramic, Preview stream
2	Resolution	There are 4 resolution settings: QVGA, D1, HD720P, and HD1080P The different streaming sources provide different resolution settings • **PTZ:** Support up to HD1080@60 • **Panoramic:** Support up to HD1080@30 • **Preview:** Support up to HD720@30 **Caution:** The resolution of IP streaming is set independently, which is not subject to the resolution setting of DIP SWITCH and MENU
3	Bitrate type	Select CBR (Constant Bit Rate) / VBR (Variable Bit Rate)
4	Bitrate (Kbps)	Users enter bitrate
5	Frame rate	Select frame rate 50 / 60 option is subject to the maximum FPS limit of DIP SWITCH
6	GOP	50 / 60 option is subject to the maximum FPS limit of DIP SWITCH
7	Video encoding	The encoding type. H.265 and H.264 encoding are available
8	Encoding Profile	The encoding level. Base, Main and High Profile setting are available for selection
9	Channel	The audio channel setting. Currently only Mono setting is supported
10	Audio Encoding	The audio encoding type supported by the current device. Currently only AAC is supported

|		
11	Audio sample rate	The audio sample rate. Currently only 48 KHz is supported
12	Audio bitrate	The audio encoding setting. Currently only 48 Kbps is supported
13	Audio source	The audio input method. Currently only LineIn is supported
14	Volume	Drag the volume bar to set the volume. The adjustable range is 0 – 100

Device Manager – Configuration – Network

No	Item	Function Descriptions
1	IP Assignment	Select Static IP or set DHCP auto configured IP
2	IP Address	IP address setting
3	Subnet Mask	Subnet mask setting
4	Gateway	Gateway setting
5	Primary DNS	Primary DNS setting
6	Secondary DNS	Secondary DNS setting
7	RTSP port	RTSP port setting. Default is 554
8	APP port	APP port setting. Default is 5000

Device Manager – Configuration – RTMP

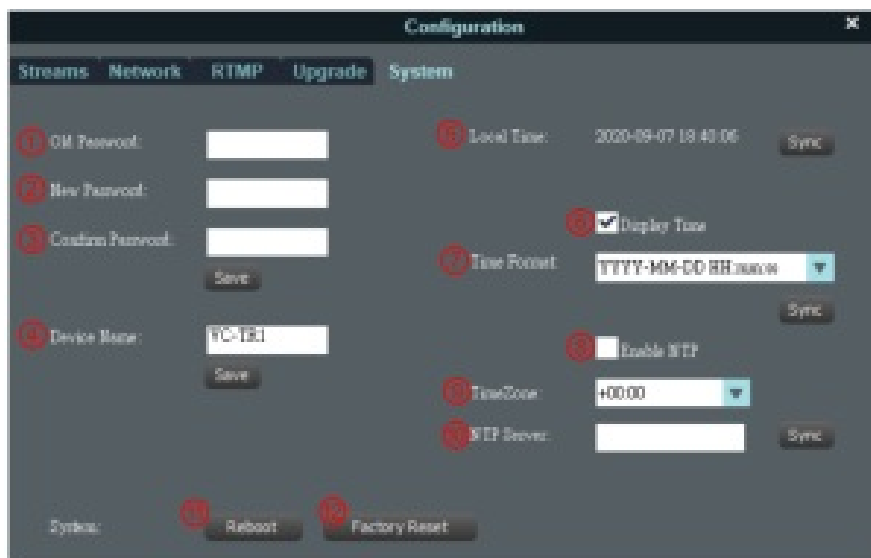| No	Item	Function Descriptions
1	RTMP 1	Set the streaming which is live streamed to RTMP1 server. Select the signal source, check the box to save it and start live streaming
2	RTMP 2	Set the streaming which is live streamed to RTMP2 server. Select the signal source, check the box to save it and start live streaming
3	RTMP 3	Set the streaming which is live streamed to RTMP3 server. Select the signal source, check the box to save it and start live streaming

Device Manager – Configuration – Upgrade
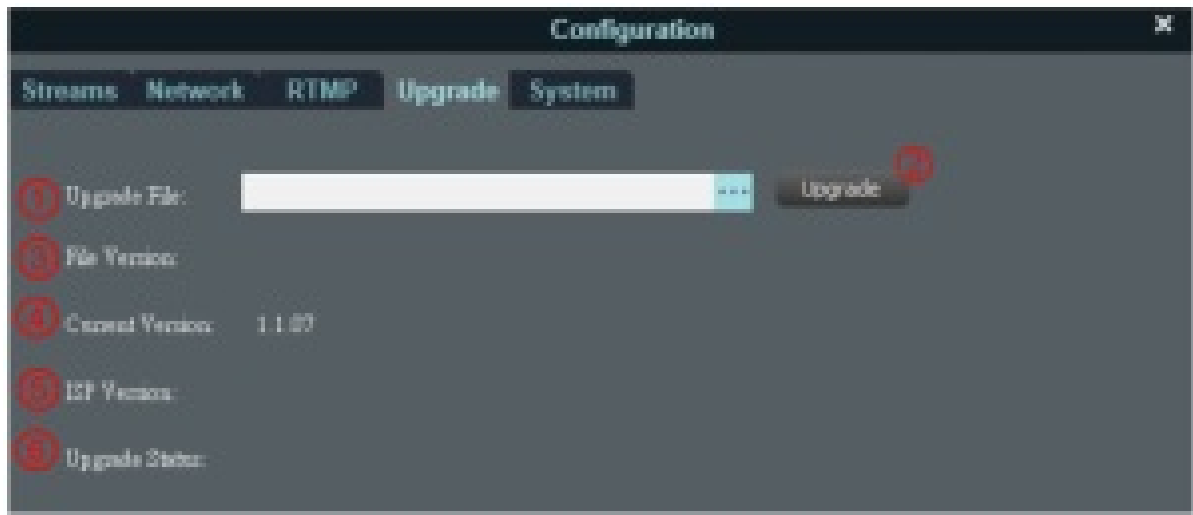
No	Item	Function Descriptions
1	Upgrade File	Select the firmware file to upgrade
2	Upgrade	Click to start firmware upgrade
3	File Version	Displaying the version of the selected upgrade firmware file
4	Current Version	Displaying the current firmware version of the machine
5	ISP Version	The ISP version for judgment of engineers only
6	Upgrade Status	Displaying the status of upgrade firmware

Device Manager – Configuration – System

No	Item	Function Descriptions
1	Old Password	Enter the old password
2	New Password	Enter the new password
3	Confirm Password	Confirm the new password
4	Device Name	Set the camera name
5	Local Time	Displaying the current local time
6	Display Time	Turn on/off time display
7	Time Format	Time display format setting
8	Enable NTP	Enable NTP auto time zone setting
9	TimeZone	Select the time zone of your location
10	NTP Server	You can set the NTP Server by yourself. Confirm and click Sync to synchronize
11	Reboot	Reboot the camera
12	Factory Reset	Restore the camera to the factory reset

Troubleshooting

This chapter describes problems you may encounter while using VC-TR1 and LumensCMS software. 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.	After enabling tracking, the target size does not meet expectations	You can adjust the setting by Presenter Frame. Set the scale size by the designated position, and zoom to the desired scale
2.	When stopping tracking, can the screen stay at the designated position?	By Stage Frame function, you can set the desired position to stay as the position for stopping tracking
3.	How to activate and stop the tracking function?	It can be activated and stopped via [Start]/[Stop] in the CMS software. In addition, F1/F2 on the remote control can be used to activate and stop the function
4.	How to make the camera direct to a designated position instead of tracking the presenter (target) during tracking?	You can set by Partition Tracking This function is to set the customized area. When the tracking target appears in the specific position, the camera will automatically direct to the preconfigured Preset position
5.	After using the mask frame function, why does the camera still tracking the target when it appears in the mask frame?	The mask frame will only turn off moving object detection, not face detection. When TR1 already detects the target tracking face, even the target enters the mask area, TR1 will keep tracking the target until the target leaves the tracking area
6.	Turn on/off Expert Mode	Expert Mode is to show the identifier fame after enabling tracking. It helps users to know the current detection precision and if there is any on-site tracking issue caused by environment interference (Blue/red one is the face detection fame, and green one is the object detection frame)
7.	How to change the default path of recording and snapshots?	Access the LumensCMS main screen and click the tool icon (LumensCMS Configuration) to change the recording path
8.	LumensCMS cannot connect to VC-TR1	1. Please confirm that the computer and the camera are in the same network segment 2. Please refer Chapter 7 DIP Switching Setting in the VC-TR1 User Manual to make sure the dial is set to Ethernet output

Documents / Resources

Lumens LumensCMS Auto Tracking Camera Image Management Software [pdf] User Manual
LumensCMS, Auto Tracking Camera Image Management Software