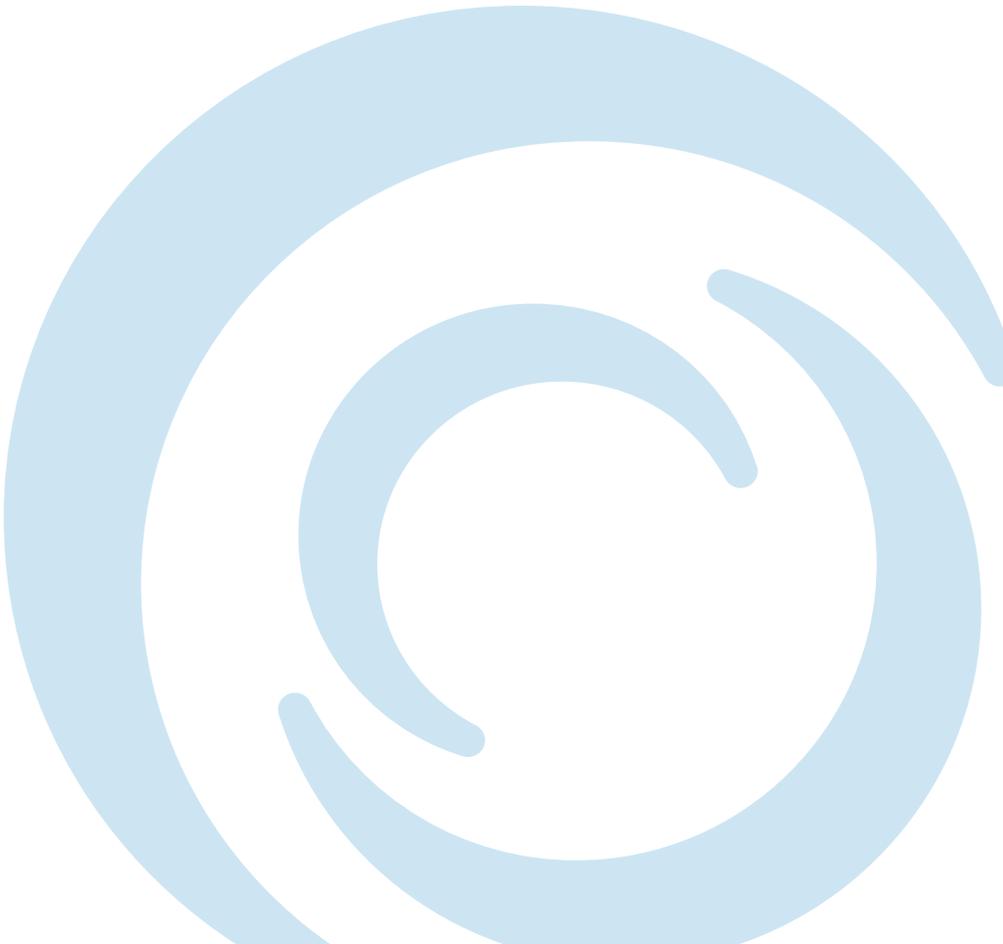




Viewer for Luma Fisheye
IP Surveillance Camera

Software Manual



Important Notes

This software is a third-party program that allows you to view, in a normal view, surveillance recordings that were made in fisheye format.

Luma Surveillance does not make any warranties, guaranteed, or representations regarding either this software or the manual.

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Introduction

The VSPlayer software is a media player designed for Windows OS. With user-friendly GUI, the software provides an intuitive, convenient way for playing media file and video control, and supports multiple audio and video formats.

The manual includes instructions for using and managing the product. Pictures, charts, images and all other information hereinafter are for description and explanation only. The information contained in the manual is subject to change, without notice, due to firmware updates or other reasons. Please check our website for the latest version of this manual.

System Requirements

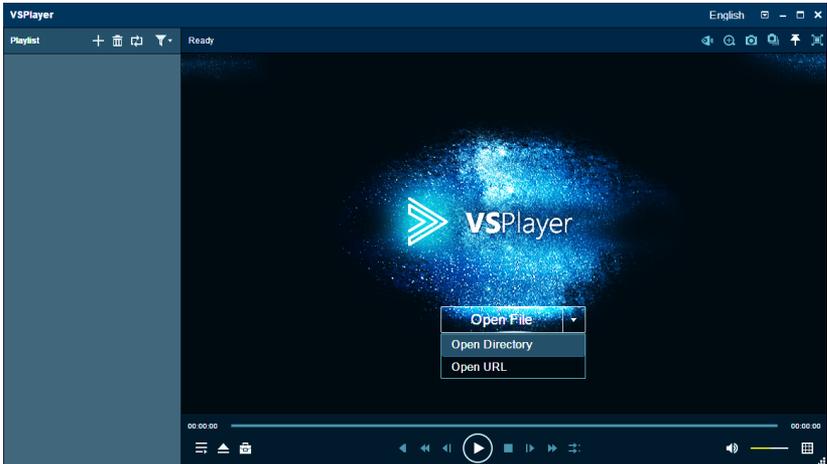
Operating System: Microsoft Windows XP (32 / 64-bit) / Windows 7 (32 / 64-bit) / Windows 8 (32 / 64-bit) / Windows 10 (32 / 64-bit)

RAM: 2GB or above

Getting Started

Running the Software

This is the main interface of the software. In the center, you can either open a directory on your computer to locate surveillance recordings, or open a URL to stream video from the camera at that location.



Playlist Icons

The following icons are at the top left of the screen.



Add the local media file to the software.



Delete the added files.



Set the playing mode for the file (play one, play all, loop one, or loop all).



Filter the added files by file name or accurate time.

Windows Icons

The following icons are at the top right of the screen.

-  Select file, set language, configure player settings, view the user manual and check the software information.
-  Minimize the software.
-  Maximize the software.
-  Exit the software.

Software Icons

These are the icons in the second row at the top right of the screen.

-  Fisheye expansion.
-  Digital zoom. Use the mouse to draw a rectangle to zoom in on. You can also zoom using the mouse wheel.
-  Capture the playing video.
-  Continuous capture of the playing video.
-  Click and select whether to keep the window on top.
-  Display the playing window in full-screen mode.

Playback Control Icons

-  Hide the playlist.
-  Open files, open directory or open live view via URL mode.
-  Activate the window of clip, convert, merge or streaming.
-  Play the video in reverse.

 Set playback speed to 1/2, 1/4, 1/8, or 1/16.

 Move the video backward by one frame.

 Play or pause playback.

 Stop playback.

 Advance the video by one frame.

 Set playback speed to 2x, 4x, 8x, or 16x.

 Synchronous playback.

 Audio on / mute.

You can use the slider or press the Up or Down keys to adjust the volume. You can increase the volume up to 200%.

 Set grid mode (ranging up to 4x4).

Player Settings

Click and select Settings, or select Settings on the right-click menu of the playing window to enter the Player Settings interface. You can set basic, capture and hotkey settings for the player.

Restore resets the parameters to the default values.

Apply saves the current settings; **OK** saves the settings and exits.

Basic Settings

Stick on Top:

- **Stick on Top When Playing:** Keep the window on the top of all other windows when playing a file.
- **Never Stick on Top:** Never force the window to remain on top.
- **Always Stick on Top:** Always keep the window on the top of all other windows.

Location Method

- **By Timestamp:** Click on the timeline to locate the image according to the timestamp.
- **By Frame:** Click on the timeline to locate the image according to the frame.

Check Save List File When Exit: Selecting this keeps the playlist when you exit and you can get the playlist next time you open the software.

Check Hardware Decoding for Live View: This enables decoding by hardware for live view. It provides better decoding performance and lower CPU usage.

Capture Settings

Format: Select the file format for captured picture.

Saving Path: Click the Browse button to set the path for saved photos.

Continuous Capture Settings:

- **Mode:** Select whether to save by time or frame.
- **Interval:** Set the time interval (1–100 seconds) you want between each pair of snapshots.
- **Max. Capture Number:** Configure the maximum number of captures (up to 200).

Hotkey Settings

This displays the keyboard hotkeys for common activities.

Click on a text field and press your new hotkey combination to change the hotkey as desired.

Playing Video Files

To play a recorded video file, you must first add the supported media file to the playlist.

Adding Individual Local Video Files

There are two ways to add the local video files: adding all contents of a selected folder, and adding files directly.

Click + icon, or click Open File in the main window (Open File in the main window is only available when no video is playing and you are not using grid mode).

In the dialog, select the file to be added. You can use the Shift or Ctrl keys to select multiple files.

Adding Video Files by Folder

Click the dropdown in the main window and select Open Directory, or click the Open icon (lower left) and select Open Directory.

In the dialog, select a folder for adding. All supported files in that folder are added to the playlist.

Adding a Live Feed

You can also open a live view by entering a device's URL.

Click the dropdown in the main window and select Open URL, or click the Open icon (lower left) and select Open URL.

In the pop-up window, enter the URL of the camera. Note: URL mode only supports RTSP and HLS protocols.

RTSP: `rtsp://admin:12345@172.10.7.157/Stream/Channels/101.`

- admin: The user name of the camera.
- 12345: The password to log in to the camera.
- 172.10.7.157: The IP address of the camera.
- 101: The main stream of camera 01.

HLS: `http://10.20.37.12:9086/8ch06la25569d.m3u8.`

You can generate the HLS URL when creating network media streaming task. For details, refer to Media Streaming, page 14.

You should select the connection mode according to actual needs.

Right-click the file in the playlist and the following items are available in a pop-up menu. The contents of the right-click menu may vary according to file type of the file in question.

- **Play/Pause:** Start/stop playback.
- **Delete File:** Removes the selected file(s) from the playlist.
- **Remove Invalid File:** Remove all files marked as Invalid from the playlist.
- **Clear Playlist:** Remove all files from the playlist.
- **File Location:** Open the folder of the file.
- **Enter Key:** Enter the password in an encrypted file.

Playback Controls

After adding video files to the playlist, you can play the file using the controls described here. To start playing a file from the playlist, double-click it or drag it into the main window. Encrypted files require you to enter the password.

Note that the following commands are not available when viewing a live feed via URL:



Play in reverse.



Set playback speed forward or backward.



Advance/reverse the video by one frame.



Synchronous playback.

Play Control Menu

Right-click on the playing window to access the play control menu.

Full Screen: Display the active video in full-screen mode.

Stick on Top: Determine whether the video remains on top of other computer windows.

Play Control: Choose whether you locate the video file by timestamp

or frame. In addition, the following controls are available:

- **First Frame:** Go to the first frame of the video.
- **Last Frame:** Go to the last frame of the video.
- **Drop Frame:** Drop the frame to reduce the CPU usage.
- **Motion Flow:** Enable the function to get the fluent video, especially for motion image.
- **Repeat A-B Segment:** Click to enable this function, and drag the A and B point on the timeline to adjust the position. Then the video can repeat between the configured two points.

Play Mode: Select to play a single file, all files in order, repeat one file, or repeat all files.

Mute: Turn off the audio.

Image Control: This includes the commands listed here.

- **Image Rotation**
- **Color Adjustment:** saturation, hue, contrast and brightness
- **Watermark**
- **VCA Info (By default, VCA information does not display. These commands require that you configure the VCA information at the camera's live view; refer to the User Manual of the device.):**
 - **VCA:** Display the VCA information.
 - **Motion Detection:** Highlight the motion of the video.
 - **POS Text Overlay:** Display the POS text.
 - **Temperature:** Display the detected temperature (thermal cameras only).
 - **Picture Overlay:** Display the picture on the display window.
 - **Fire Source:** Display the file source information (thermal cameras only).

Aspect Ratio: Set the video size as original size, 4:3, 16:9 or Fill Window. You can also set the window size as 2X, original size, 1/2 or 1/4.

Window Division: Set the grid mode to display up to 16 cameras.

Capture: Take a snapshot the playing video.

Continuous Capture: Take multiple snapshots of the playing video. This is not available if hardware decoding is enabled.

Digital Zoom: Enable digital zoom.

Clip: Trim the file to get the required video footage. Not available in live view, or after hardware decoding is enabled.

Convert: You can convert the files or real-time streams to other format.

Merge: Combine multiple files into a single large file.

Media Streaming: Create local, network, or desktop media streaming and generate URL to share the videos to other computers and devices in the same LAN.

Fisheye Expansion: Play a fisheye video file in expansion mode. Not available in live mode, or when hardware decoding is enabled.

Settings: Configure the basic, capture and hotkey settings.

File Information: Check the details of the file, including video length, file size, file type, resolution, and more.

Special Operations

Synchronous Playback

You can play multiple video files in synchronization if they have overlapped time duration. This is not available in live view.

Steps:

1. Click and select a multi-window (2x2, 3x3 or 4X4) division.
2. Double-click each window that you want to play a video file in.
3. Click the synchronous play button.

Files for synchronous play must have overlapping time stamps.

Capture and Continuous Capture

You can take stills of the surveillance file and save them to your PC. See the settings on page 8.

Capture: During the video playing, click the capture button to take a snapshot.

Continuous Capture: During the video playing, click to start continuous capture of the playing video to take pictures continuously. Click again to stop the continuous capture manually. Otherwise, continuous capture stops after the number of captured pictures has reached the configured maximum.

Continuous capture is disabled if hardware decoding has been enabled.

Clipping a File

You can clip a file to trim it to the events of interest. This function is not available in the live view or when hardware decoding is enabled.

While the video is playing, right-click to enter the Clip interface.

On the timeline of the clip interface, drag the arrows to set the desired start and end position of the video footage. You can also click to adjust the position. You can click the preview button to check the editing.

Click Browse to set a saving path and file name for the clipped file.

Click the clip to export the clipped file.

Converting a File Format

You can convert a files or live stream to a selected format.

Select Convert from the right-click menu of the main window. This opens the Format Converter window.

Click the + icon and select Single Add to add one file, Batch Add to add an entire folder, or Stream to add a live video stream.

Note: You can convert video files from H.265 format to other formats, but converting video files from the other formats to H.265 is not supported.

Merging Files

Note: This function is not supported from live view mode.

Right-click in the main window and select Merge.

Click Add to select the files to be merged from your PC. You can click on a file and click the up and down arrows to adjust its position in the group, or click the X icon to remove it from the list.

Click Browse to set the location and name for the merged file.

Click Start to merge the files.

Media Streaming

Create a local, network, or desktop media streaming task and generate a URL to share the videos of local files, live view, or your desktop to other users in the LAN. Supported encoding formats are as follows:

Format	RTSP	HLS	RTMP
PS	Video: H.264, H.265; Audio: G711a, G711u, G722, AAC, MPEG;	Video: H.264; Audio: AAC;	Video: H.264; Audio: G711a, G711u, AAC;
RTP	Video: H.264, H.265; Audio: G711a, G711u, G722, AAC;	Video: H.264; Audio: AAC;	Video: H.264; Audio: G711a, G711u, AAC;
TS	Video: H.264; Audio: G711a, G711u, G722, AAC	Video: H.264; Audio: AAC;	Video: H.264; Audio: G711a, G711u, AAC;

Right-click on the main window area and select Media Streaming to open the streaming tool. Note: The streaming tool must run the whole time you are streaming.

Click the +Add button and select local, network, or desktop streaming.

Local

Shares surveillance files from your PC.

- Input the media streaming name in the Name field as you want.
- Click Add button to browse and select the files from your PC.
- Select the protocol (RTSP, HLS or RTMP).
- Click Create to start the task and generate the streaming URL.

Network

This share a camera's live view.

- Input the media streaming name in the Name field as you want.
- In the Source URL field, input the address of the device. This must be a valid URL address with the username, password, and the corresponding protocol. For example, the source URL can be: `rtsp://10.16.6.113:8487/live/ubp2195t78674q6`
- Select the protocol type as RTSP, HLS or RTMP. See the table above for details.
- Click Create to start the task and generate the streaming URL.

Desktop

This shares a live image of the desktop.

- Input the media streaming name in the Name field as you want.
- Select the protocol type as RTSP, HLS or RTMP.
- Click Create to create the task and generate the media streaming URL.

The created task with details, including name, status, protocol type, create time and URL, will display in the media streaming list.

Options

You can select a streaming task and then click the X icon to delete it.

Click the trash can to clear all streaming tasks.

Select a streaming task with the *Succeeded* status and click Copy button to copy its URL to the clipboard. You can send the URL to others to share the streaming task.

Fisheye Expansion

This takes a raw fisheye video file and plays it back in one of several non-distorted views. This function is not available for the live view, or after hardware decoding is enabled.

Start playing the video file before opening the fisheye expansion.

To open the interface, right-click on the main window and select Fisheye Expansion. For best results, the video files should be larger than 4KB in size.

To use the fisheye expansion, first select where the camera is mounted: ceiling, wall, or table. Next, select the display mode.



Full fisheye view.



Dual-180° panorama.



Panorama view.



Panorama view and one PTZ view.



Panorama and 3 PTZ.



Panorama view and 6 PTZ views.



Panorama and 8 PTZ.



2 PTZ views.



4 PTZ views.



One fisheye and 3 PTZ.



One fisheye and 8 PTZ.



Panorama for wall-mounted cameras.



Panorama view and 3 PTZ with a wall mount.



Panorama view and 8 PTZ views.

Each PTZ view is marked on the Fisheye view and Panorama view with a specific navigation area with different colors. You can drag the navigation area on the Fisheye view or Panorama view to adjust the PTZ view, or drag the PTZ view to adjust the view to the desired angle.

You can control a PTZ view using the PTZ Control panel in the lower left.



Select the PTZ view, and click the arrow buttons to adjust the aim. The + or - buttons zoom in or zoom out. Click the  button (in the center of the arrows) to start an auto-scan.

You can also click and drag the PTZ view to move the aim, and use the mouse wheel to adjust zoom.

The sliders at the bottom set the auto-scan speed, pan speed, and tilt speed for better PTZ control.

Fisheye Calibration

Click the  button (at the top right) to calibrate the fisheye and make the image more accurate. When you click the button, a red ellipse appears around the camera view. Drag the green handles of the ellipse to resize the red ellipse until it matches the fisheye view. Click OK to save the calibration.

Support

Need Help? Contact Tech Support!

If you need further clarification, please email support@SnapAV.com. For more information, instructional videos, support documentation, or ideas, visit our website and view your item's product page.

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