

Smart Player

User's Manual

V1.1.0

General

This user's manual (hereinafter referred to be "the Manual") introduces the functions and operations of the Smart Player (hereinafter referred to be "the Player").

Safety Instructions

The following categorized signal words with defined meaning might appear in the Manual.

Signal Words	Meaning
 DANGER	Indicates a high potential hazard which, if not avoided, will result in death or serious injury.
 WARNING	Indicates a medium or low potential hazard which, if not avoided, could result in slight or moderate injury.
 CAUTION	Indicates a potential risk which, if not avoided, may result in property damage, data loss, lower performance, or unpredictable result.
 TIPS	Provides methods to help you solve a problem or save you time.
 NOTE	Provides additional information as the emphasis and supplement to the text.

Revision History

No.	Version	Revision Content	Release Time
1	V1.0.0	First Release.	March 3, 2017
2	V1.1.0	1. Delete the Installation Guide chapter. 2. Update Basic Operations chapter.	December 29, 2017

About the Manual

- The Manual is for reference only. If there is inconsistency between the Manual and the actual product, the actual product shall govern.
- All the designs and software are subject to change without prior written notice. The product updates might cause some differences between the actual product and the Manual. Please contact the customer service for the latest program and supplementary documentation.
- There still might be deviation between the actual value of some data and the value provided, if there is any doubt or dispute, please refer to our final explanation.

- Please contact the supplier or customer service if there is any problem occurred when using the device.
- We are not liable for any loss caused by the operations that do not comply with the Manual.
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- Please visit our website or contact your local service engineer for more information.
- If there is any uncertainty or controversy, please refer to our final explanation.

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1.1 Overview

The Player is an excellent playback software for security industry, and it has a variety of function such as playback, frame check and intelligence trace display.

The Player supports multi-window synchronous playback, asynchronous playback and a variety of view layout. In addition, the Player uses timeline with adjustable display accuracy instead of traditional playback progress bar.

1.2 Features

- Play backward frame-by-frame, including single-frame and multiple speeds.
- Multi-window synchronous playback.
- Zoom in a specific area of video and drag the screen.
- Support splice preview and synchronously play the splices to find the desired scene quickly.
- Support intelligent video stream and intelligent trace display.
- Support digital watermark.
- Convert code stream format.
- Check the video properties.
- Support H.265 and SVAC stream.
- Support .avi, .mp4, .flv, .asf, .mov, .dav and .dav_ format video files.
- Adjust brightness, contrast, saturation and hue for video.
- Support shortcuts key settings.
- Change fast play speed.
- Display multiple video playback progress on timeline.
- Support file list management.
- Support inner split when playing normal video.
- Support fisheye settings when playing fisheye video.

2 The Main User Interface

For the main user interface of the Player, see Figure 2-1, and for details, see Table 2-1.

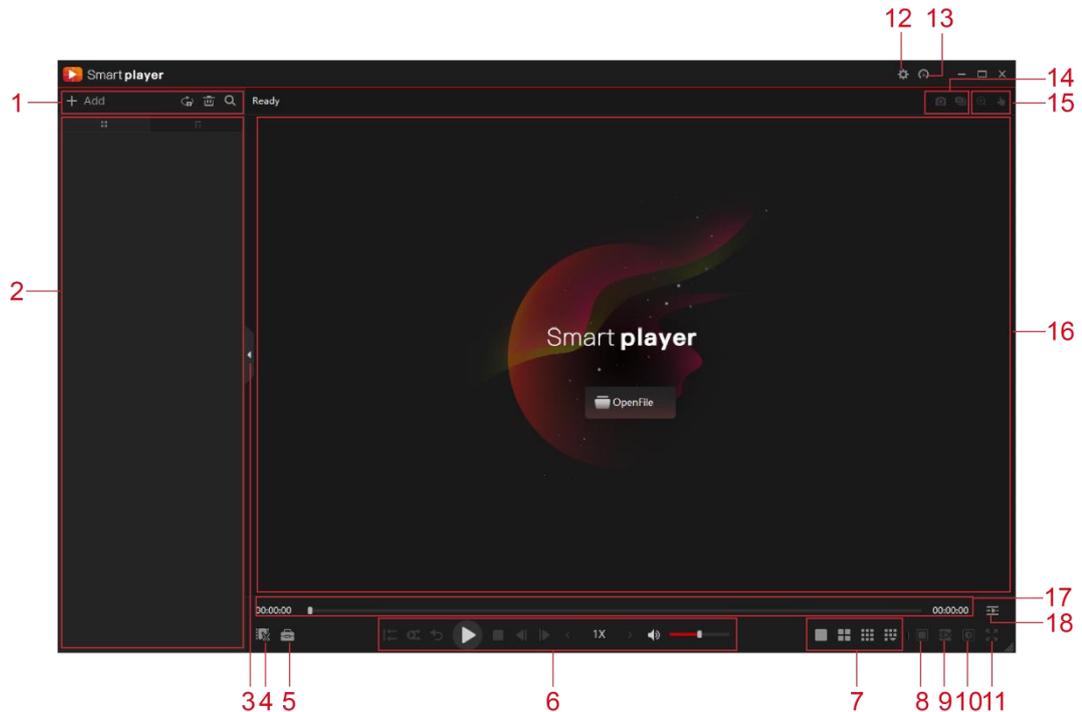


Figure 2-1

No.	Function	Description
1	File List Operation Button	Add, delete and search video files and select the play mode.
2	File List	Display the added files, including Single File List and Tree List .
3	Show File List Button	Hide or display File List Operation Button and File List.
4	Video Clip	Clip the desired part of a video.
5	Tool Box	<ul style="list-style-type: none"> Download: Download video from the external hard disk to PC. Watermark: Check the video information to confirm whether the video has been falsified. Preview: Cut the video into multiple splices and then preview at the same time.
6	Playback Controls Bar	Control video playback such as play from start, play/pause, backward and volume control.
7	View Layout	Set view layout, including fixed layout and custom layout.
8	Inner Split	Split the video being played in a video window into multiple images.
9	Fish Eye	Set Install Mode and Display Mode for viewing a fisheye video.

No.	Function	Description
10	Display Adjust	Adjust brightness, contrast, saturation and hue for the image
11	Full Screen	Click  to display in full screen.
12	Settings	<ul style="list-style-type: none"> Settings: Configure system settings. For details, see "3.1 Configuring System Settings". Help: Access to the <i>User's Manual</i>. About: View the version information.
13	CPU	View CPU and RAM information for PC. If the CPU bar is red, which indicates that the processor is running high, it is recommended to close some applications to make sure smooth playing.
14	Snap	<ul style="list-style-type: none"> Snap: Capture one image for video being played. Continuous Snapshot: Capture multiple images according to the set Interval.
15	Image Control	Enlarge a specific area of the image to view the details. When the image is in the enlarged status, you can drag the image toward any direction to view the other enlarged areas.
16	Video Window	Displays the video being played. You can click Open File to add video file.
17	Timeline	Displays playback time of the selected video window.
18	Timeline Switch	When multi-windows playback, click  to display the playback time of all video on the timeline.

Table 2-1

3.1 Configuring System Settings

Step 1 Click , and then select **Setting**.

The **Setting** interface is displayed. See Figure 3-1.

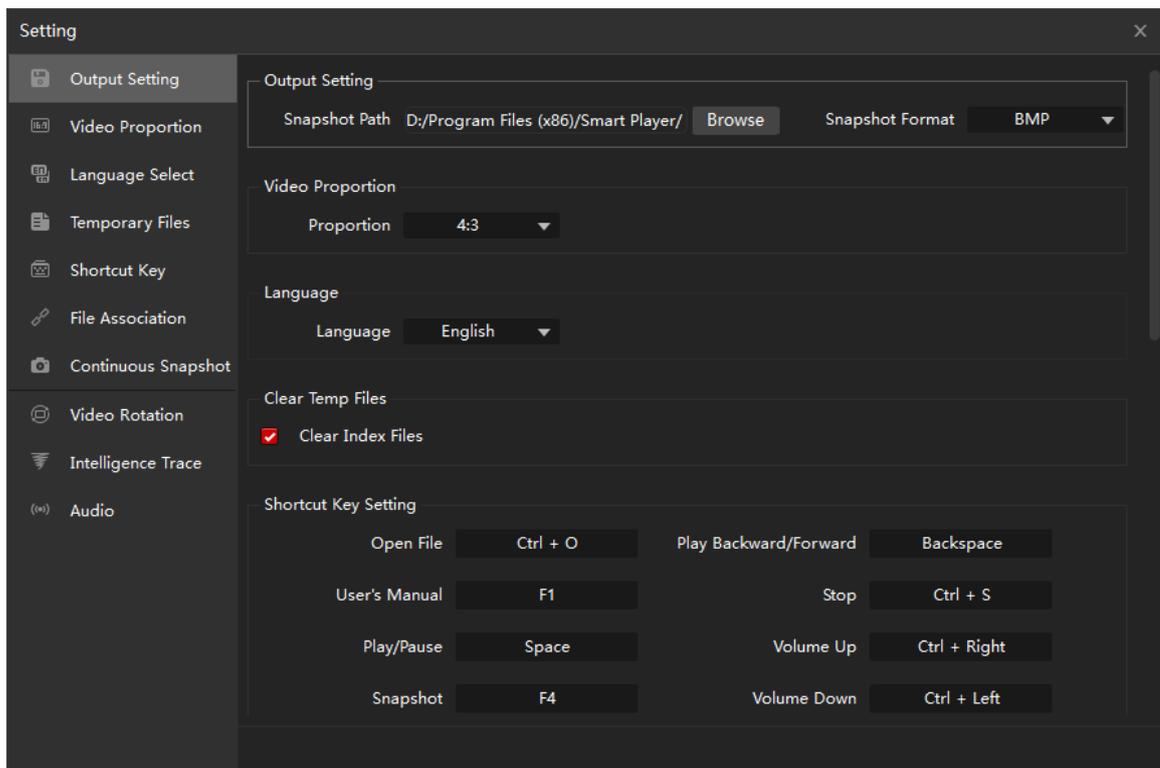


Figure 3-1

Step 2 Configure the settings. See Table 3-1.

Parameter	Description
Output Setting	Set the picture format and save path for Snap and Continuous Snapshot .
Video Proportion	In the Proportion list, select 4:3 , 16:9 , 100% or Original Proportion .
Language Select	In the Language list, select the language according to the actual situation.
Temporary Files	Select Clear Index Files to delete temporary files generated during playing video.
Shortcut key	Set shortcut keys according to your habits. For example, to set a shortcut to open file, you can click Open File box, and then enter shortcuts through the keyboard. Click Default to restore the factory settings.

Parameter	Description
File Association	Associate the Player with the supported video file formats. After the association, when you double-click the type of video file, the video file will be played through the Player by default.
Continuous Snapshot Setting	<ul style="list-style-type: none"> • Mode: Set Mode to By Time or By Frame. • Interval: Set Interval of continuous snapshot. The unit changes according to the Mode. • Snapshot Number: Set the picture numbers of each continuous snapshot.
Video Rotation	Set the rotation angle for all video windows.  NOTE When the playback is paused, the video window cannot rotate.
Intelligence Trace	Enable or disable the intelligence trace display.
Audio	Enable or disable the audio denoise. After enabling the audio denoise, you can select the value. The larger the value is, the better the audio denoise effect but the greater the damage to the sound quality.

Table 3-1

3.2 Configuring Video File

3.2.1 Adding Video File

Step 1 Add video file by following ways.

- On the video window, click **Open File**.
- On the main user interface, click **Add**.

The **Open** dialog box is displayed. See Figure 3-2.

 TIPS

For easy operation, you can drag the video file or folder to the video window.

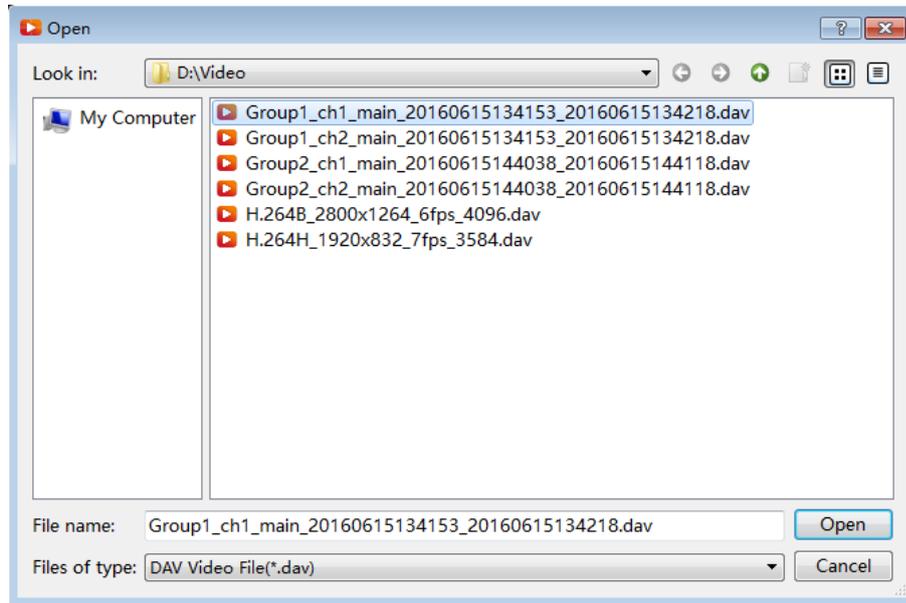


Figure 3-2

 NOTE

- The Player automatically searches and adds the supported video files in the same level as the selected file.
- If there are multiple video files have the same naming rules (such as "group name_channel name_start time_end time_other characters.dav"), the Player automatically create a group and adds these video files into the group in the **Tree List**. When playing video, you can double-click the group name to play in groups.

Step 2 Select the video file.

Step 3 Click **Open**.

The video file is displayed in the File List area.

3.2.2 Displaying File List

The added video files can be displayed in **Single File List** and **Tree List**.

- Click  to display **Single File List**. See Figure 3-3.

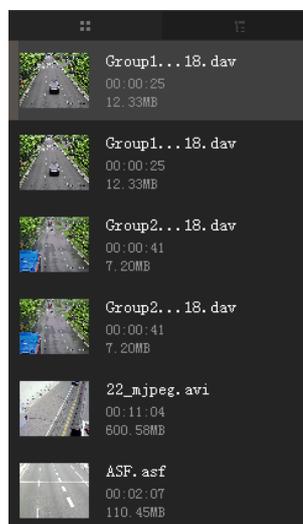


Figure 3-3

- Click  to display **Tree List**. See Figure 3-4.

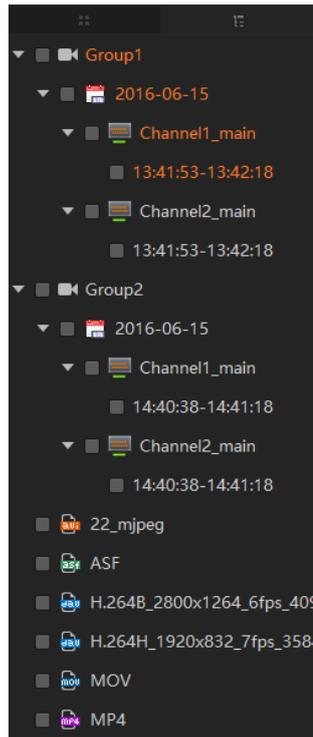


Figure 3-4

3.2.3 Searching Video File

- Step 1 Click .

The search box is displayed. See Figure 3-5.

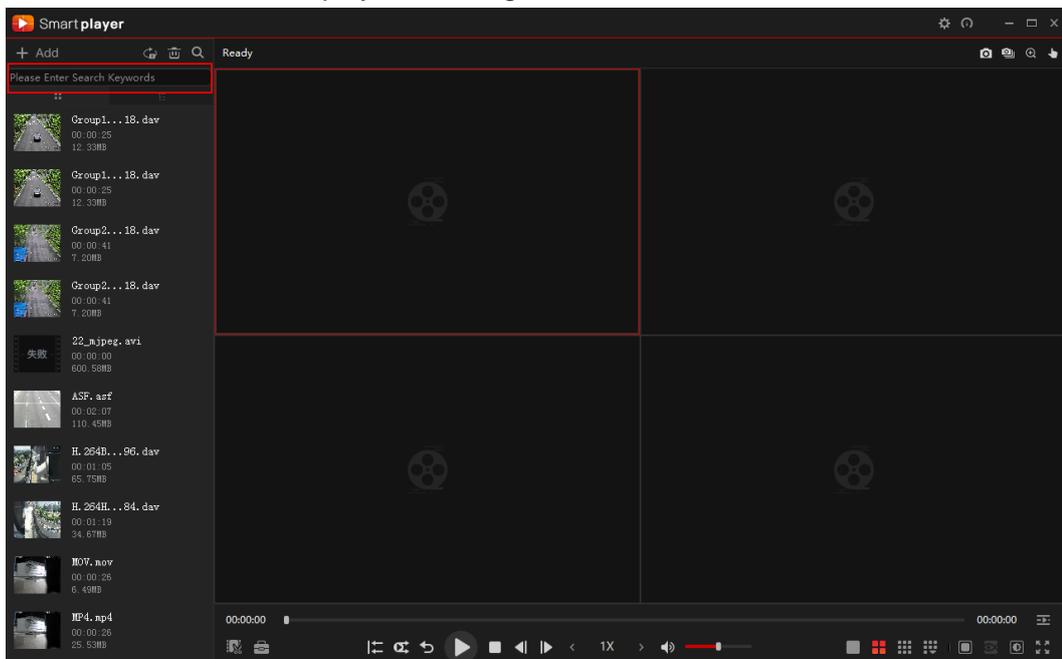


Figure 3-5

- Step 2 Enter the keywords for video file.
The video file is displayed in the File List area.

3.2.4 Playing Video File

Step 1 Select a video window.

The red box indicates it has been selected, see Figure 3-6.

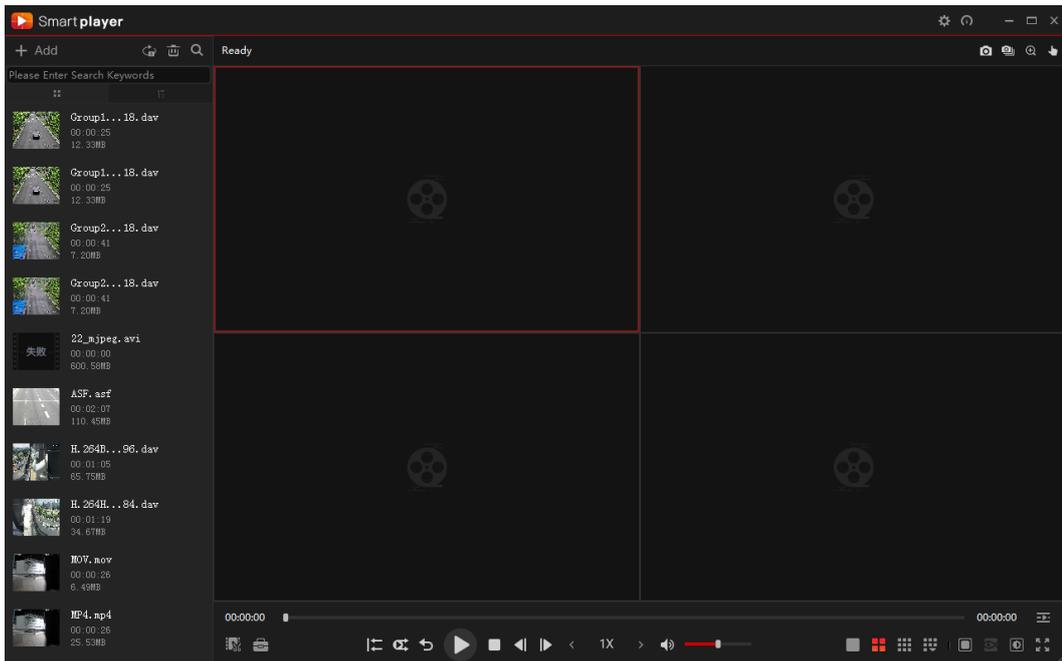


Figure 3-6

Step 2 In the File List area, double-click the video file.

The video file is playing in the selected window. See Figure 3-7.

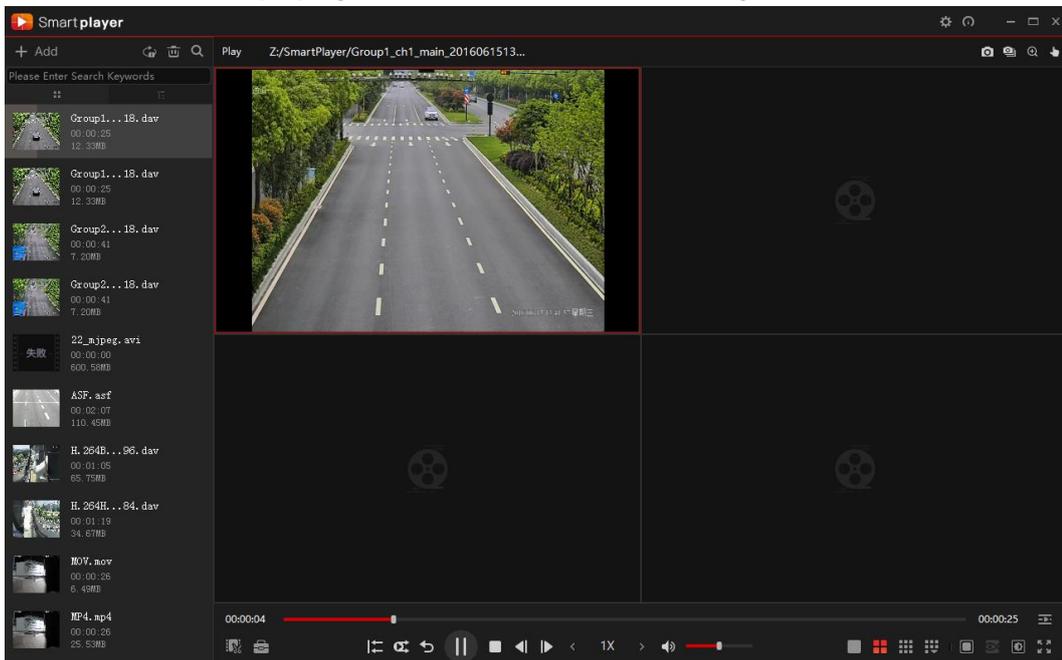


Figure 3-7

NOTE

- Click  to set the play mode as **Order** and **Repeat One**.
- You can operate the video by playback controls bar. For details, see "3.3.1 Introducing Playback Controls Bar".

3.2.5 Deleting Video File

- In the **Single File List**, select the video file, and then click . To clear the file list, click .
 - In the **Tree List**, there are two cases.
 - ◇ To delete a group files (selected by default), click .
 - ◇ To delete other files, select the video files that you want to delete and then click .
- To clear the file list, select all video files and then click .

 **NOTE**

If you want to delete the video file that is under operation such as playing, exporting and searching, a **Prompt** dialog box will display.

3.3 Video Windows

3.3.1 Introducing Playback Controls Bar

For the playback controls bar, see Figure 3-8. For the details description, see Table 3-2.



Figure 3-8

Icon	Description
	Click  to play from start.  NOTE This function applies to all the video windows being played.
 	Click  to switch to synchronous playback, and the icon switches to  . Click  to switch to asynchronous playback. In synchronous playback mode, you can control multiple video windows at the same time.  NOTE Only group playing supports this function.
 	Play Backward. During playing back, click  to backward play the video and the icon switches to  . Click  to stop playing backward.

Icon	Description
	Play or pause video file of the selected video window.
	Click to close playing of the selected video window.
	<ul style="list-style-type: none"> When the playback is paused, click or to play single-frame video. When playing video file, click or to switch video file. <p> NOTE When the group playing, it will switch the entire group. Otherwise, only the selected video window will be switched.</p>
	<p>Set the playback speed.</p> <ul style="list-style-type: none"> Click to set the speed of slow playback as 1/2x, 1/4x, 1/8x, 1/16x, 1/32x or 1/64x. Click to set the speed of fast playback as 1x, 2x, 4x, 8x, 16x, 32x or 64x.
	Adjust volume of playback or click to switch to mute mode.

Table 3-2

3.3.2 Configuring View Layout

For the video layout bar, see Figure 3-9. There are nine fixed common view layouts, and you can customize the view layout according to the actual situation.



Figure 3-9

Click to display the complete video layout bar, see Figure 3-10. You can switch the view layout by clicking the layout icon, see Table 3-3.

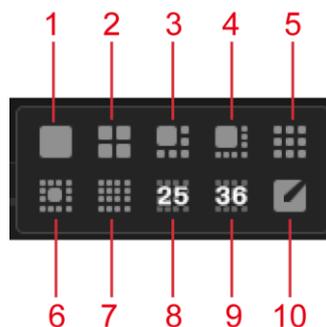


Figure 3-10

No.	Name	No.	Name

No.	Name	No.	Name
1	View 1	6	View 13
2	View 4	7	View 16
3	View 6	8	View 25
4	View 8	9	View 36
5	View 9	10	Custom Layout

Table 3-3

Customizing View Layout

Step 1 Click .

The **Custom Layout** interface is displayed. See Figure 3-11.

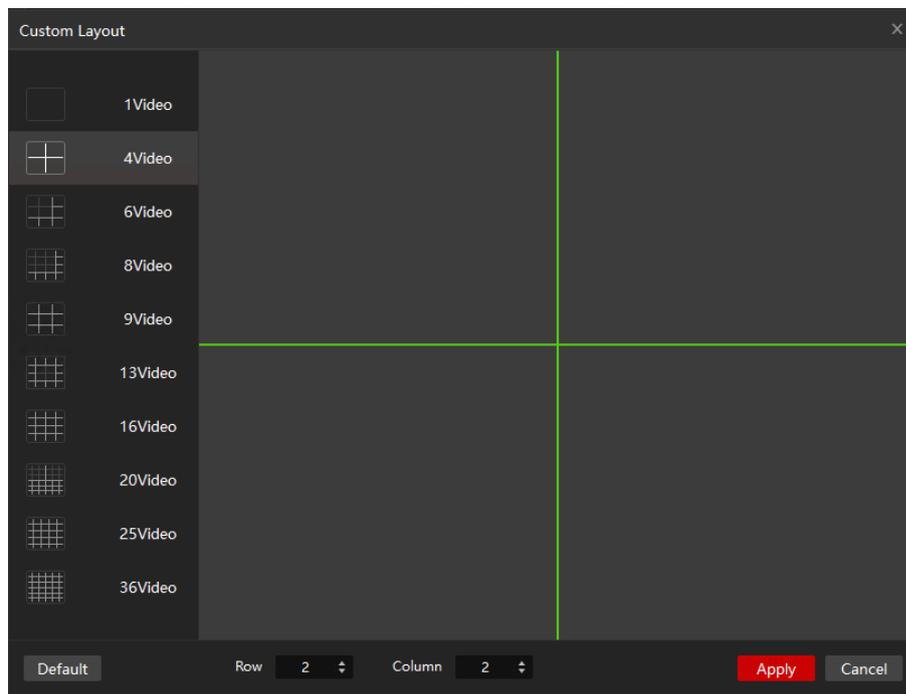


Figure 3-11

Step 2 Set row and column numbers.

- In the **Row** and **Column** box, select or type a value.
- On the left area, select the view layout, and then click the window split line (the green line as shown in Figure 3-11 to set the number of windows.

Step 3 Click **Apply**.

The new view layout is displayed.

3.3.3 Configuring Inner Split

You can split the video being played in a video window into multiple images.

 **NOTE**

- The function is available only when the video is being played.
- The inner split will apply to all the video windows being played.
- Click  to exit the inner split.

Step 1 Click .

The inner split pattern is displayed. See Figure 3-12.



Figure 3-12

- : Original image.
- : Original image and three independent sub-images. The sub-images and sub-frame in the original image support zoom and move.
- : Original image and five independent sub-images. The sub-images and sub-frame in the original image support zoom and move.

Step 2 Split the video into four images or six images.

For example, click  to split the video into four images, see Figure 3-13.



Figure 3-13

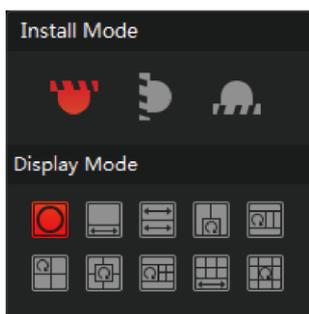
3.3.4 Configuring Fisheye

 NOTE

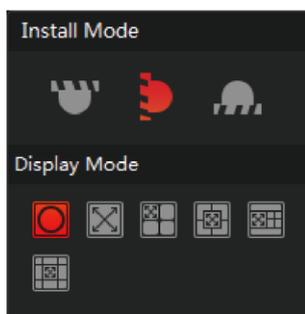
- The function is available only when playing fisheye video.
- The inner split function does not apply to fisheye.

Click  to view the **Install Mode** and **Display Mode** for fisheye, see Figure 3-14. For details, see Table 3-4.

Top Mounting



Wall Mounting



Ground Mounting

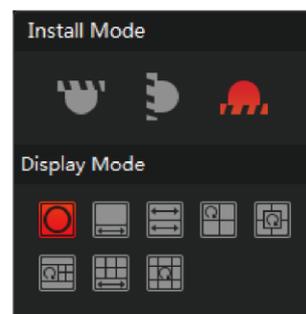


Figure 3-14

Functions	Description	
Install Mode	There are three installation modes: top mounting, wall mounting, and ground mounting.	
Display Mode	<p>Refers to the current image presentation (the original image is supported by default). According to different Install Mode, Display Mode has a different presentation.</p> <ul style="list-style-type: none"> • Top mounting: 1P+1, 2P, 1+2, 1+3, 1+4, 1P+6, 1+8. • Wall mounting: 1P, 1P+3, 1P+4, 1P+8. • Ground mount: 1P+1, 2P, 1+3, 1+4, 1P+6, 1+8. <p> NOTE</p> <p>When switching the Install Mode, the original image is displayed by default.</p>	
Top mounting/Wall mounting/Ground mount		Original image.
Top mounting/Ground mount		1P+1. 360° panorama image and an independent sub-image. The sub-image and sub-frame in the panorama image support zoom and move. And the panorama image also supports moving from left to right side.
		2P. Two associated 180° sub-images that make up a 360° panorama image at any time. The sub-images support moving from left to right side and interrelate to each other.
		1+2. Original image and two independent sub-images. The sub-images and sub-frame in the original image support zoom and move. And the original image also supports rotation to change the initiation point (Ground mount does not support).
		1+3. Original image and three independent sub-images. The sub-images and sub-frame in the original image support zoom and move. And the original image also supports rotation to change the initiation point.

Functions	Description	
		1+4. Original image and four independent sub-images. The sub-images and sub-frame in the original image support zoom and move. And the original image also supports rotation to change the initiation point.
		1P+6. 360° panorama image and six independent sub-images. The sub-images and sub-frame in the panorama image support zoom and move. And the panorama image also supports moving from left to right side.
		1+8. Original image and eight independent sub-images. The sub-images and sub-frame in the original image support zoom and move. And the original image also supports rotation to change the initiation point.
Wall mounting		1P. 180° panorama image that supports moving upward and downward to change the vertical viewing angle.
		1P+3. 180° panorama image and three independent sub-images. The sub-images and sub-frame in the panorama image support zoom and move. And the panorama image also supports moving upward and downward to change the vertical viewing angle.
		1P+4. 180° panorama image and four independent sub-images. The sub-images and sub-frame in the panorama image support zoom and move. And the panorama image also supports moving upward and downward to change the vertical viewing angle.
		1P+8. 180° panorama image and eight independent sub-images. The sub-images and sub-frame in the panorama image support zoom and move. And the panorama image also supports moving upward and downward to change the vertical viewing angle.

Table 3-4

3.3.5 Adjusting Image Settings

You can adjust brightness, contrast, saturation and hue for the image.

 NOTE

The image settings will apply to all the video windows being played.

Step 1 Click .

The image settings interface is displayed. See Figure 3-15.



Figure 3-15

Step 2 Drag the bar to adjust the image settings according to the actual situation.

 NOTE

Click **Reset** to restore the factory settings.

3.3.6 Switching Timeline

The timeline automatically shows the time of the video file being played.

The Player displays the timeline of the selected video window by default, see Figure 3-16.



Figure 3-16

Step 1 Click .

The entire timeline is displayed. See Figure 3-17.

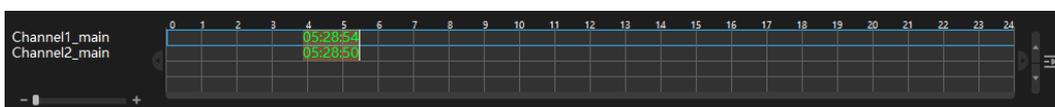


Figure 3-17

If playing the video in groups, only one time line is displayed. See Figure 3-18.

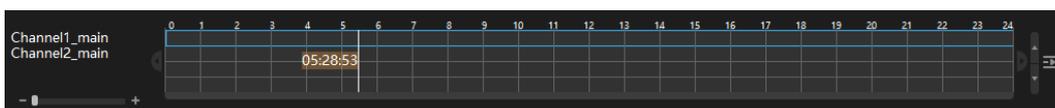


Figure 3-18

Step 2 Click the timeline to switch the focus video window.

The selected timeline displays in blue box.

 NOTE

- If playing multiple video at the same time, the selected timeline will display in blue box after switching the focus video window.
- Click  to switch to next day and click  to switch to previous day. When there is a cross-day video file, the triangle in the button becomes red.

3.3.7 Zooming in Video

You can enlarge a specific area of the image to view the details.

 NOTE

- This function does not apply to fisheye video.
- When video window is enlarged to a certain extent, it cannot be enlarged any more. You can right-click on the enlarged image to return the original status.

Step 1 Click .

The icon switches to .

Step 2 Hold down the left mouse button to select the area you want to enlarge.
The area is enlarged after the left mouse button is released. See Figure 3-19.

 TIPS

Point to the center that you want to enlarge, and then rotate the wheel button to enlarge the area.

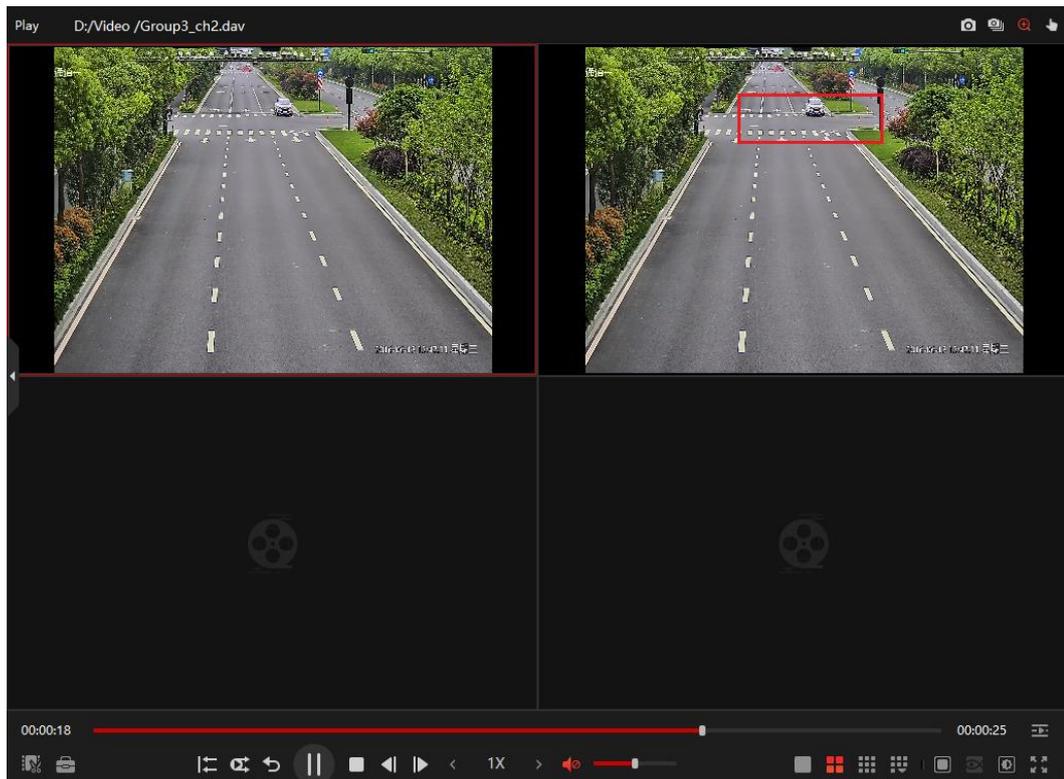


Figure 3-19

3.3.8 Dragging Video Window

When the image is in the enlarged status, you can drag the image toward any direction to view the other enlarged areas.

 NOTE

This function does not apply to fisheye video.

Step 1 Click .

The icon switches to .

Step 2 Point to the video window and then drag the image.

3.3.9 Switching to Full Screen

Click  to display in full screen. Full screen is mainly used for video surveillance or long-time video playback.

Press **Esc** or click  to exit full screen mode.

3.3.10 Configuring Snap

You can take a snapshot or multiple snapshots for the video file that is being played and view the captured image in the set path.

You can use **Snap** to capture one image at a time and use **Continuous Snapshot** to capture multiple images according to the set **Interval**. For details, see "3.1 Configuring System Settings."

- Snap: Select the video window, and then click .
- Continuous Snapshot: Select the video window, and then click .

3.4 Video Clip

You can export the entire video file or the clipped video file.

 NOTE

Only the .DAV format video files can be clipped and exported.

Step 1 Select the video file being played, see Figure 3-20.

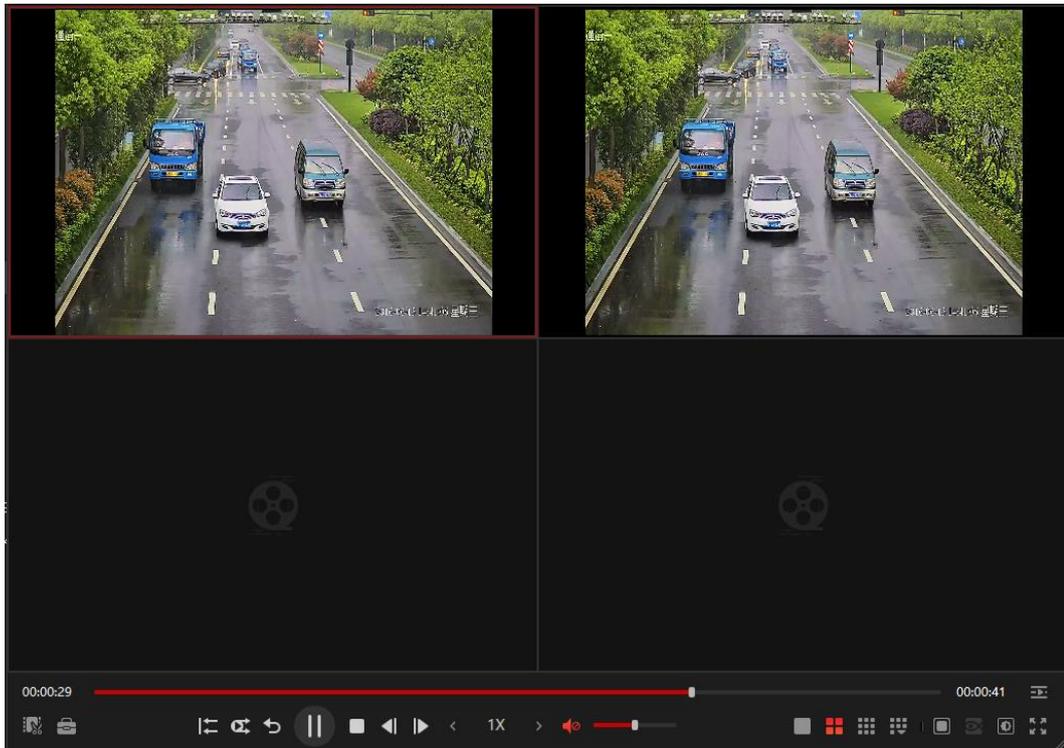


Figure 3-20

Step 2 Click .

The **Video Clip** interface is displayed. See Figure 3-21.

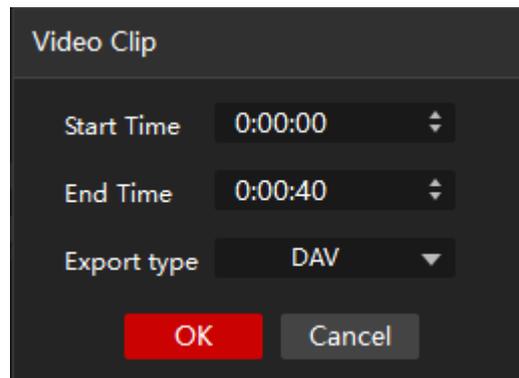


Figure 3-21

Step 3 Export video file.

- To export the clipped video file, set **Start Time**, **End Time** and **Export type** according to the actual situation.
- To export the entire video file, set **Export type** according to the actual situation.

Step 4 Click **OK**.

The **Find Directory** dialog box is displayed. See Figure 3-22.

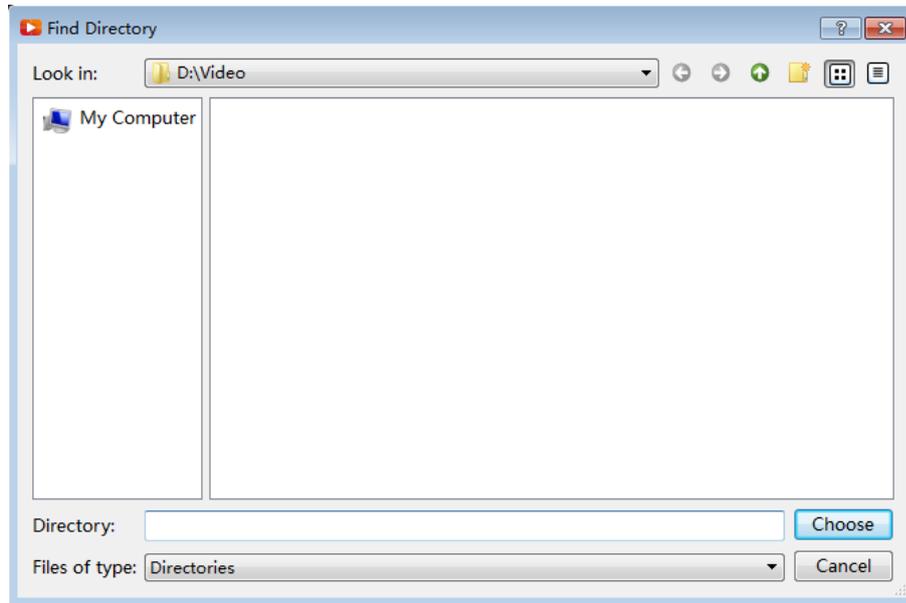


Figure 3-22

Step 5 Select the save path.

Step 6 Click **Choose**.

After the exporting is completed, a message indicating export result is displayed. See Figure 3-23.

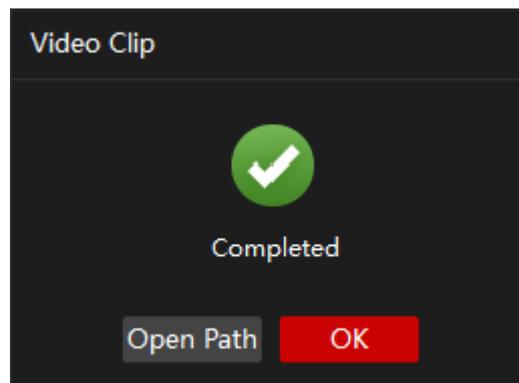


Figure 3-23

Step 7 Click **OK**.

You can click **Open Path** to view the exported video file.

3.5 Tool Box

The Tool Box provides more operations about video files. You can download video, check the watermark and preview splices.

3.5.1 Downloading Video

NOTE

In the Windows 10 system, you need to open the Player as an administrator to use the video download function.

You can download video file from the external hard drive to the PC. Before operation, please make sure the external hard drive has connected to the PC.

Step 1 Click .

The **Tool Box** interface is displayed. See Figure 3-24.

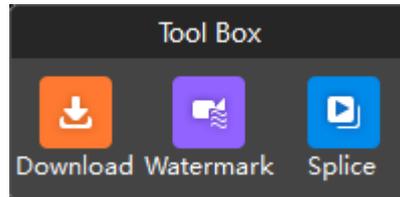


Figure 3-24

Step 2 Click **Download**.

The **Download** interface is displayed. See Figure 3-25.

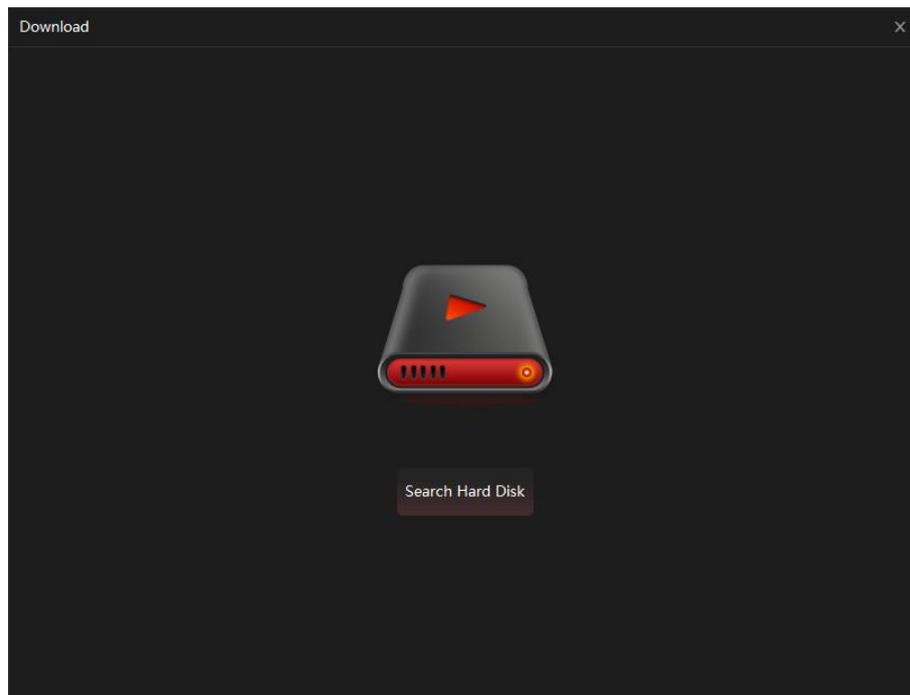


Figure 3-25

Step 3 Click **Search Hard Disk**.

The hard disk search result is displayed and the Hard Disk 0 and its contents are displayed in the list by default. See Figure 3-26.

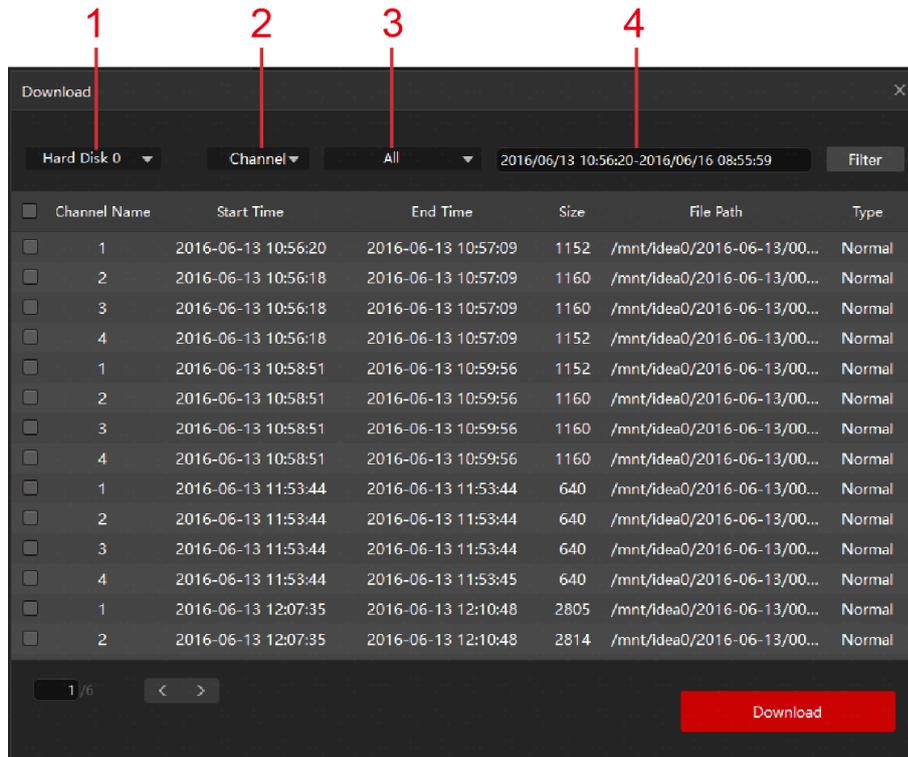


Figure 3-26

Step 4 Filter the information.

1. Configure the settings. See Table 3-5.

No.	Function	Description
1	Disk	Select external hard drive. NOTE This parameter determines the options in Channel Name and Video Type list.
2	Channel Name	Select the channel name.
3	Video Type	Select the video type. According to Disk, there are different video type such as All , Normal and Motion .
4	Time	Set the start time and end time of the video. NOTE When searching video, the start time indicates the time of the first I-frame in the video and the end time indicates the time of the last I-frame.

Table 3-5

2. Click **Filter**.
The filter result is displayed.

NOTE
Click **Research** to reset the filter criteria and display the entire contents.

Step 5 Select one or multiple video files.

Step 6 Click **Download**.

The **Download** dialog box is displayed. See Figure 3-27.

NOTE
During the downloading, if there is an abnormal video, each abnormal video needs to wait about one minute before it can be skipped.

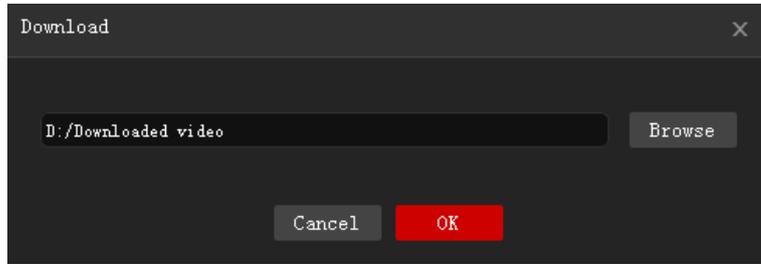


Figure 3-27

Step 7 Click **Browse** to set the save path.

Step 8 Click **OK**.

After the downloading is completed, the **Download** interface is displayed. See Figure 3-28.

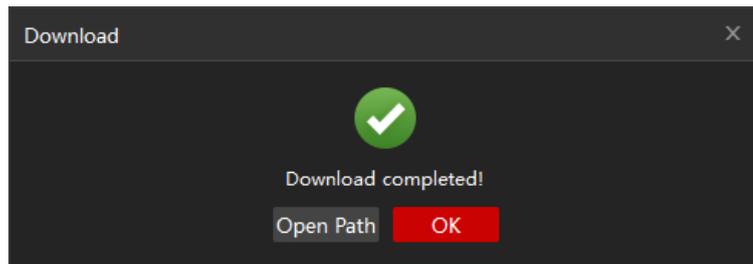


Figure 3-28

Step 9 Click **OK**.

You can click **Open Path** to view the downloaded video file.

3.5.2 Checking Watermark

You can check the video file information to confirm whether the video file has been falsified.

Step 1 Click .

The **Tool Box** interface is displayed. See Figure 3-29.

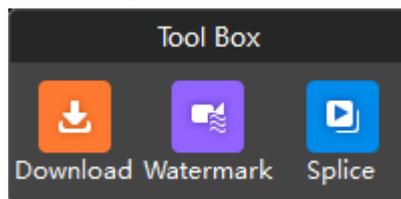


Figure 3-29

Step 2 Click **Watermark**.

The **Watermark** interface is displayed. See Figure 3-30.

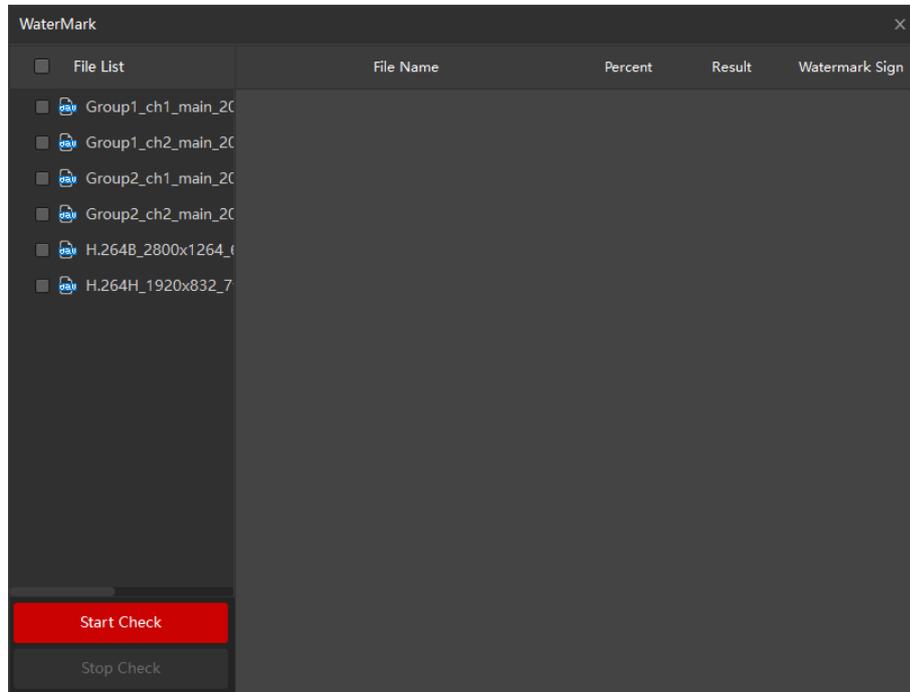


Figure 3-30

Step 3 In the **File List**, select one or multiple video files.

Step 4 Click Start Check.

After the checking, the result is displayed, see Figure 3-31. If the video file has been falsified, double-click **Falsified** for the details.

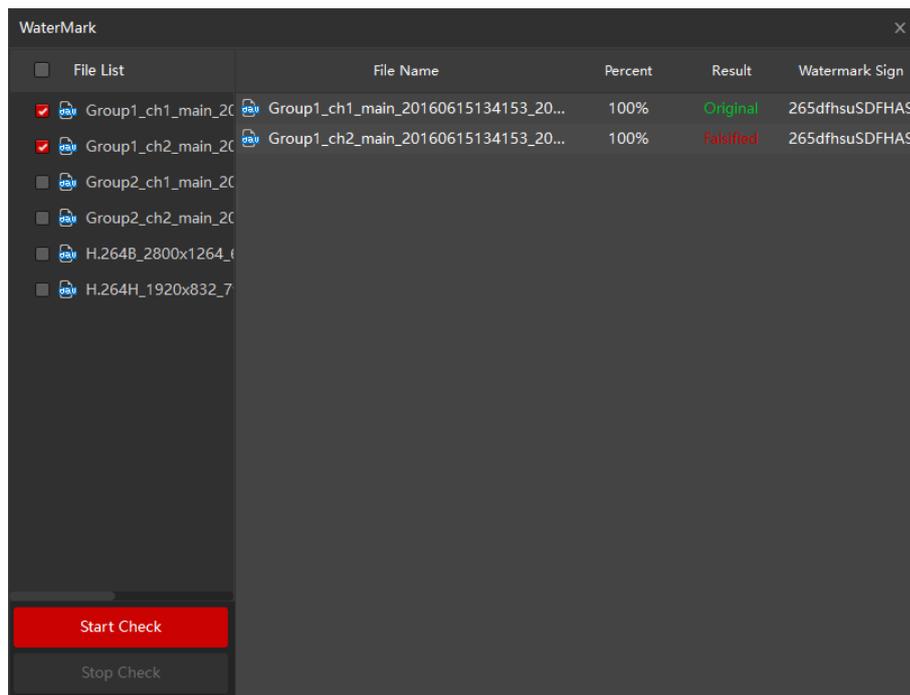


Figure 3-31

 **NOTE**

During the checking, you can click **Stop Check** to stop checking the video file.

3.5.3 Previewing Splices

You can cut the video into multiple splices and then preview at the same time to save your time.

Step 1 Click .

The **Tool Box** interface is displayed. See Figure 3-32.

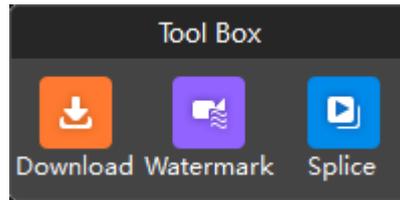


Figure 3-32

Step 2 Click **Splice**.

The **Splice Preview** interface is displayed. See Figure 3-33.

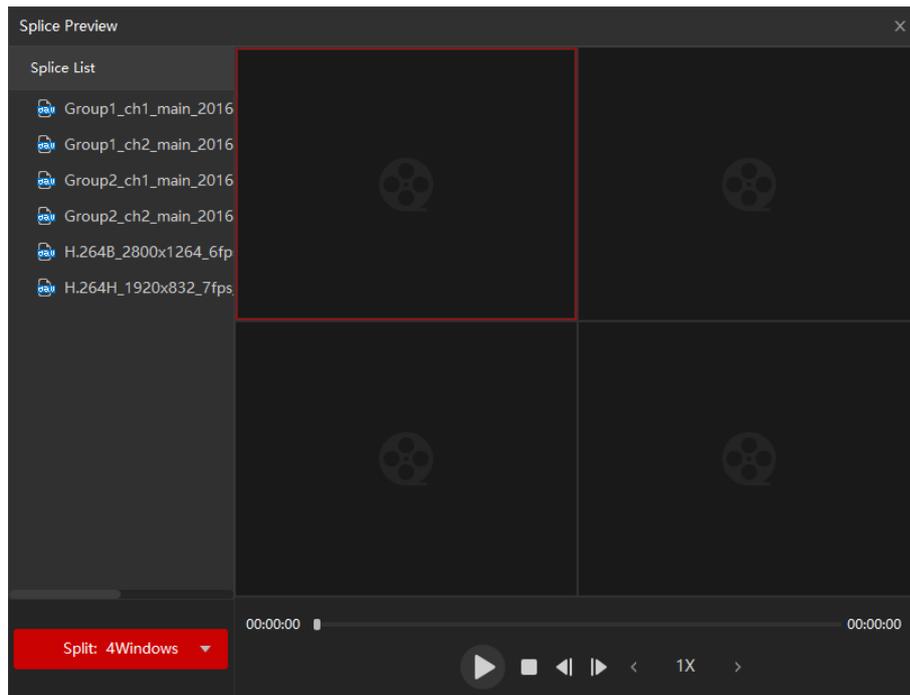


Figure 3-33

Step 3 In the **Split** list, select the number of splices. For example, select **4** to split into four video windows.

Step 4 In the **Splice List**, double-click video file.

The video file will be played in the split window and the splice being played in each window will decrease in length. For example, if you split into four windows, the first window plays the entire video, the second window plays three-fourths video, the third window plays two-fourths video, and the fourth window plays a quarter video. See Figure 3-34.



Figure 3-34