
Smart Player Operation User's Manual

Version 3.42

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Welcome

Thank you for using our player!
This user's manual is designed to be a reference tool for the installation and operation of
your system!

1 General Introduction

1.1 Overview

This player is excellent player software for the security field. It has various functions such as play, frame check, intelligent track display. It supports multiple-window synchronization play or asynchronous play. It supports multiple-channel display mode and customized setup. It adopts the time line design instead of the traditional process bar. Supports customized time line accuracy setup. It calls the play module to realize play operation and adopts framework design of plug-in matching mode. It reduces the risk of bug occurrence when you are implementing maintenance work and can meet flexible customized requirements.

1.2 Features

- Frame by frame backward play function, support various speeds.
- Multiple-channel playback at the same time.
- Local zoom in and drag function (So called electronic PTZ function.)
- Support preview by periods to quickly find the scene you needed. Support record synchronization playback of these periods.
- Support intelligent device bit stream playback, can display intelligent event information on the video.
- Support frame verification function to avoid vicious bit stream modification and support bit stream format switch function.
- Support video property view.
- Brightness, Contrast, Saturation, Hue adjustment.
- Shortcut key setup.
- Optimized player plan.
- Optimized audio/video synchronization plan.
- Optimized fast play plan, support various fast play speeds.
- Optimized time line, enhance the way to present video.
- Optimized file list management.
- Support H265, svac bit stream.
- Support avi, mp4, flv, asf, mov, dav,dav_ file play.
- Support fisheye.

2 Operation

2.1 Open Player

Before use, please make sure you obtain the software package.

Step 1. Extract the package, and the software name will show “Smart Player.app”.

Step 2. Double click “Smart Player.app”, run the software, enter homepage. See Figure 2- 1.

2.2 Main Interface

Player main interface is shown as in Figure 2- 1.

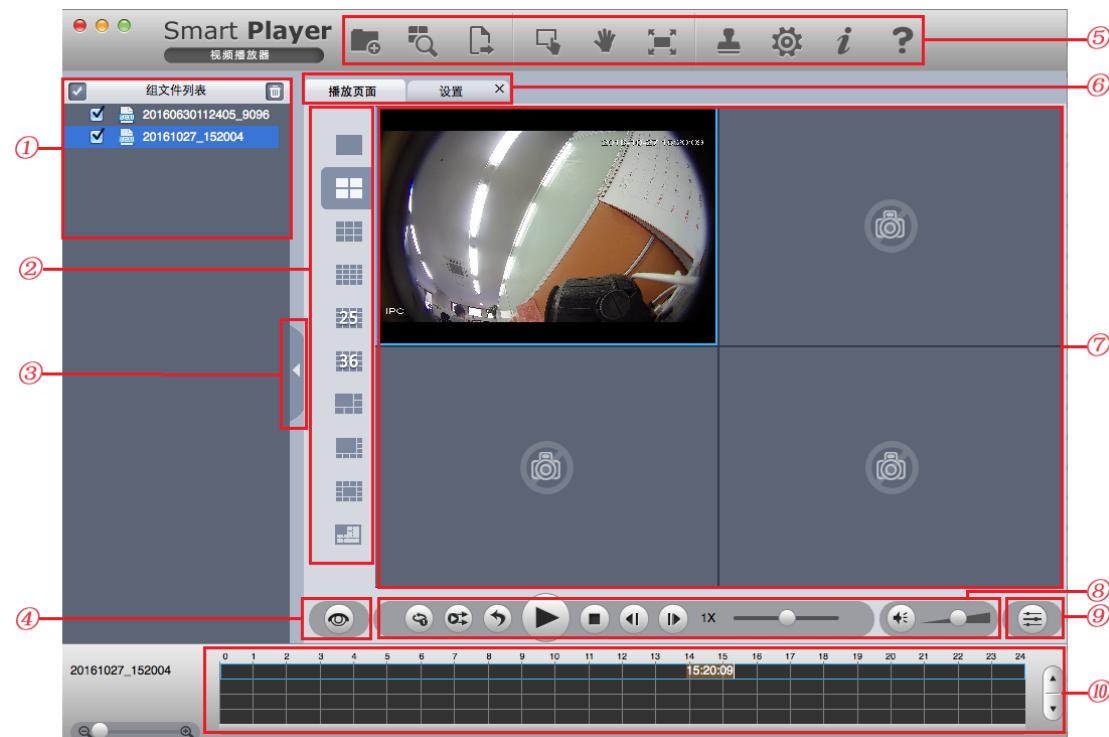


Figure 2- 1

Please refer to the following sheet for detailed information.

SN	Name
1	File list
2	Window layout
3	File list display/hide button
4	Fish eye (Fish eye button is shown only when playing fish eye video.)
5	System toolbar
6	Page tab
7	Video play window
8	Play control column

9	Display adjustment
10	Time axis

Important

Once you close page title tab, corresponding operation will stop too.

2.3 Menu

System menu is shown as below. See Figure 2- 2.

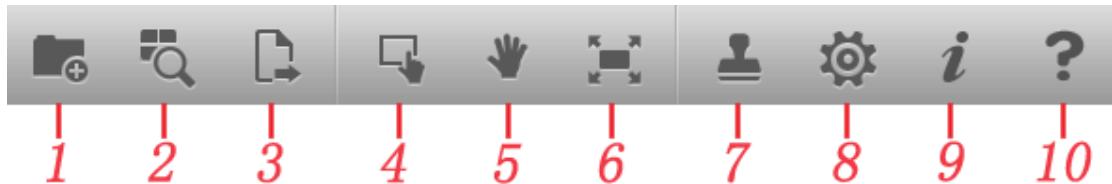


Figure 2- 2

Please refer to the following sheet for detailed information.

SN	Name
1	Add files
2	Preview
3	Export file
4	Digital zoom
5	Drag
6	Full screen
7	Verification
8	Configuration
9	About
10	Help

2.3.1 Add files

Click Add files button in Figure 2- 2, you can see system pops up Open dialogue box and open record. The interface is shown as in Figure 2- 1. Only avi, mp4, flv, asf, mov,dav and dav_ formats are supported.

Note:

Select the record file and then click the OK button, system can automatically add the file on the same directory or the sub-level and add to the corresponding file list. If the file name conforms to the record file name rule, system can relate it to file list of the corresponding channel. Otherwise system creates new list to display current file. Current add file operation is based on the previous operation.

Tips: For your convenience, you can drag the dav file or file directly to the play window. It has the same effect as the Add files button. You can view your latest open file on the file list. Select all files and then click  to clear all list.

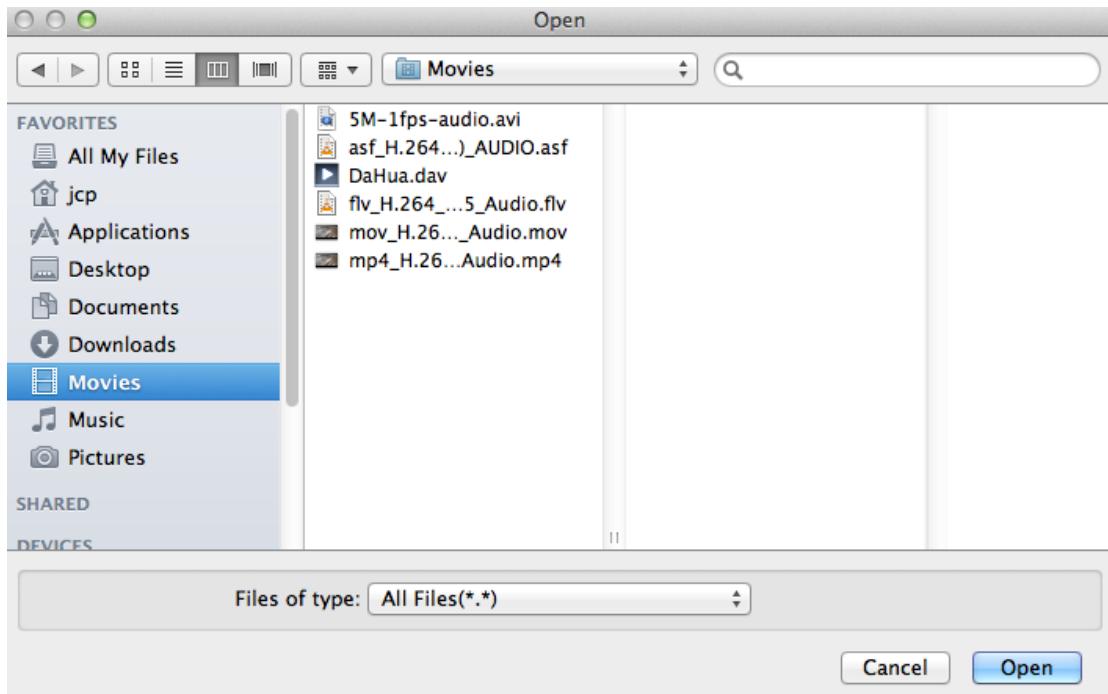


Figure 2- 3

2.3.2 Preview

Click Preview button  in Figure 2- 1, you can open or go to group preview interface. It is mainly for the multiple-group preview of one file. See chapter 2.5 for detailed information.

2.3.3 Export File

Click Export File  in Figure 2- 2, you can open or go to export file interface. It is mainly for the exporting the specified record footages or pictures. See chapter 3.5 for detailed information.

2.3.4 Digital Zoom

On the playback interface, click the Digital Zoom button  and then left click mouse you can draw a red rectangle, release left button, system can zoom in the specified red rectangle. See Figure 2- 4.

Note:

System supports some specified zoom in speeds and can not zoom in as much as you click. You can right click mouse to restore the play window.

Tips:

Use the middle button of the mouse to zoom in the video when the mouse cursor as the centre.



Figure 2- 4

2.3.5 Drag/Child-window Switch

On the play interface, click Drag button or child-window switch button , you can control the play window in these two modes. When system is in drag mode, the mouse indicator becomes palm size. You can use drag operation to view other hidden zones if you have realized digital zoom function. If the system is in child-window switch mode, you can drag one window to another window to realize window switch operation.

2.3.6 Full Screen

On play interface, click Full screen button , you can see the play window occupies the whole window. This function is suitable for the video monitor or playback record for a long time. You can click the “Esc” button on the keyboard to restore player main interface.

2.3.7 Verification

Click the Verification button , you can open or go to Verification interface. It is mainly for one or several record file verification operation. See chapter 3.6 for detailed information.

2.3.8 Config

Click Config button , you can open or go to configuration interface. In this interface, you can set player snap saved path, format, footage clip saved path and format, play window rate, intelligent track enable/disable, and player language. See chapter 3.7 for detailed information.

2.4 Playback Interface

The playback interface is shown as in Figure 2- 5.

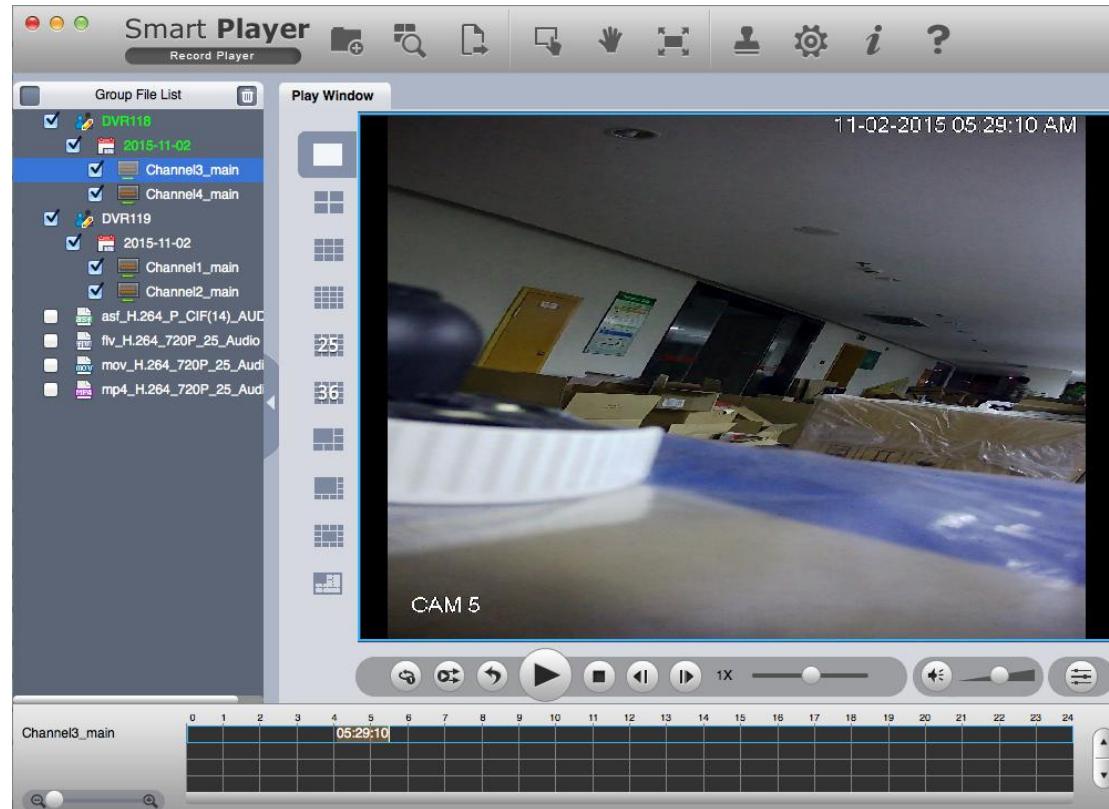


Figure 2- 5

2.4.1 File List

The file list interface is shown as in Figure 2- 6.

The group file list is to display group name, date, channel name, file and the record file on the same directory. Current playback file is shown as green.

When record file has the same group name, date and their file name formats are: group_ch channel no._[main/sub stream no._] start time_end time. avi/mp4/flv/asf/mov/dav/dav_, they are displayed in group file list in group record format.

Example: ChannelGroup_ch1_main_20121008000000_20121008000030.dav

ChannelGroup_ch2_main_20121008000000_20121008000030.dav

With the same group name and date, displayed in group record format in group file list of the figure below.

When you check group name or date, and double click date option, and then click sync

playback button. Group record on the same date can be played synchronously; or you can select one or more groups of record on the same date, and then click sync play button to synchronously play.

Seven formats of avi, mp4, flv, asf, mov, dav and dav_ are shown in different icons. Check the group name or double-click the group name; you can select the entire record

group. Click  to delete selected file(s) on the list. If you are trying to delete record under playing, exporting and searching, you can follow program instructions.

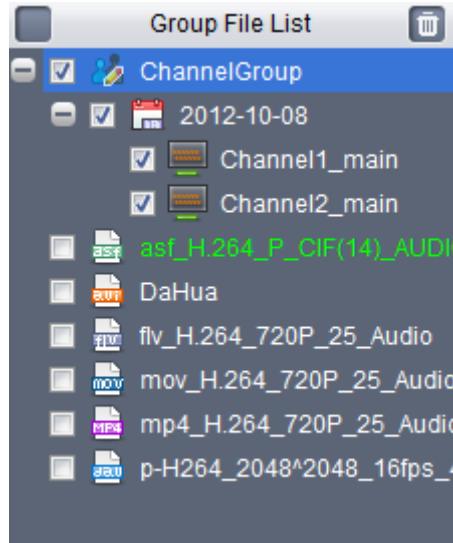


Figure 2- 6

2.4.2 Window Layout

Here is to define playback window size and position. Usually there are nine types. You can also customize some special window layouts. You can click the layout button to select the window display mode. See Figure 2- 7.



Figure 2- 7

Once you click Custom layout button , you can see the following interface. Click Edit button, you can edit layout line, row and pane size. Then click OK to save. See Figure 2-8.

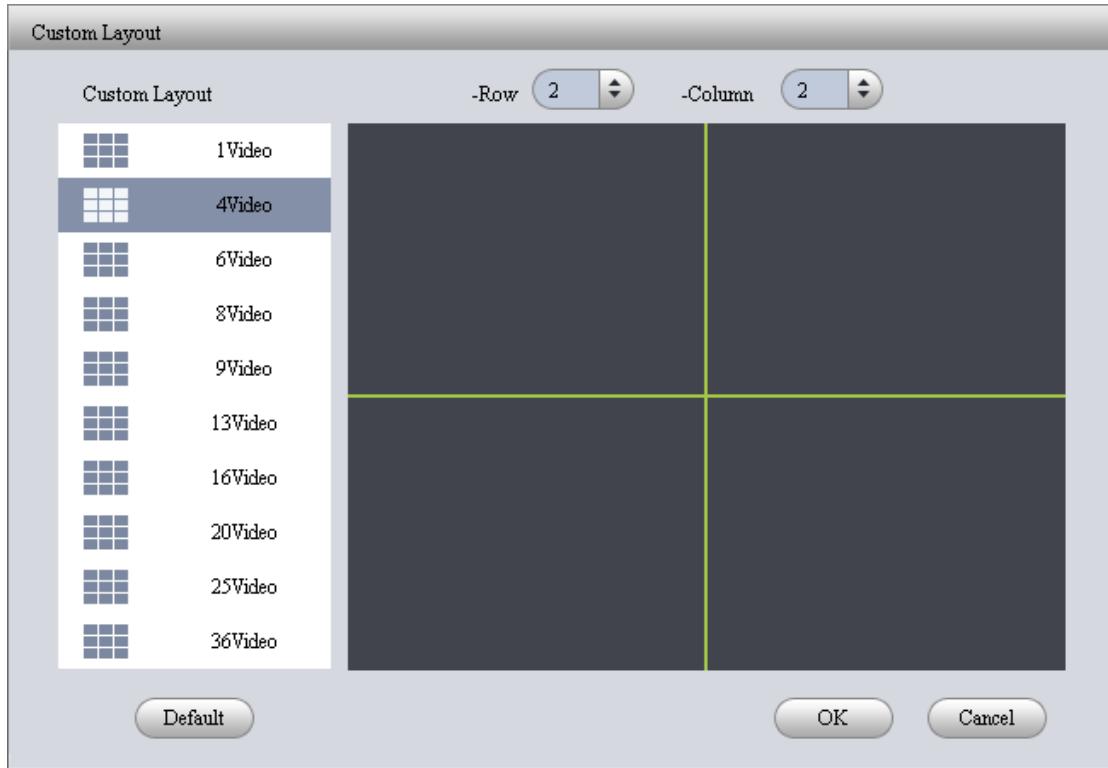


Figure 2- 8

Note:

For all pop-up window, you can press ESC to exit.

2.4.3 Playback Window

The playback window is to display record file corresponding information such as file name, time and etc. See Figure 2- 9.

Note:

You can view time on the playback window if current record has overlaid time. Otherwise, you can not see time information.

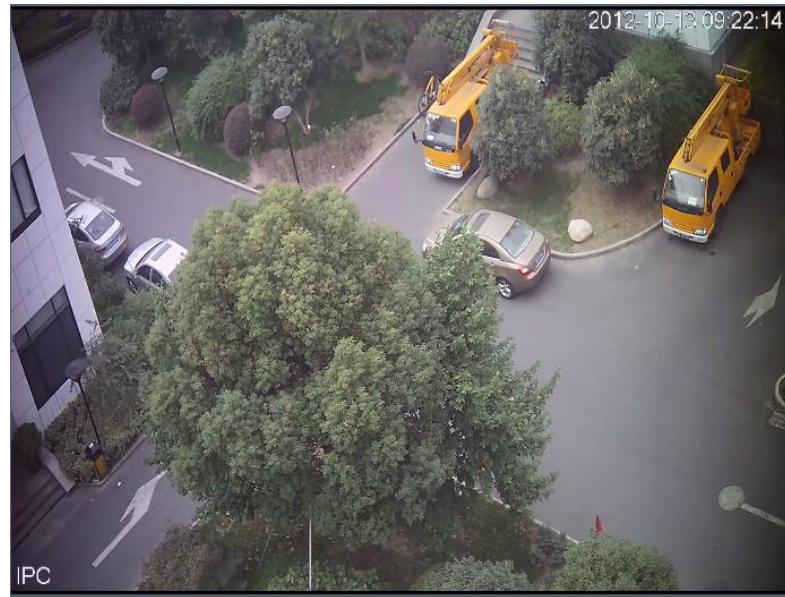


Figure 2- 9

Move your mouse to any window; you can see the following control bar at the top right corner. See Figure 2- 10.

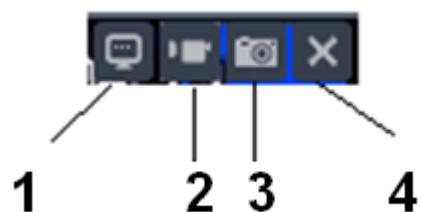


Figure 2- 10

Please refer to the following sheet for detailed information.

SN	Name
1	Video property
2	Clip
3	Snapshot
4	Close video

- Property: Click it to view video property. See Figure 2- 11.



Figure 2- 11

- Clip: It is to edit a record. Please play a file first and then click this button to begin clip. Click this button again, clip operation is complete. Now you get a new file. You can go to Configuration to set save path.
- Snapshot: Click it to snap one picture. You can go to Configuration to set save path.
- Close video: Click it to close current video window.

2.4.4 Fish Eye

Click , preview interface shows installation mode and display method, see Figure 2-12 Ceiling, Figure 2- 13 Wall Mount and Figure 2- 14 Ground.

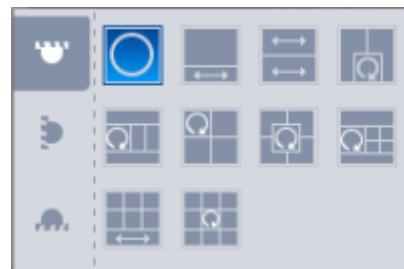


Figure 2- 12 Ceiling

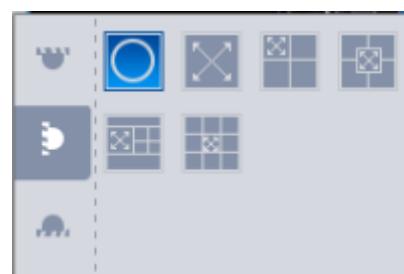


Figure 2- 13 Wall Mount

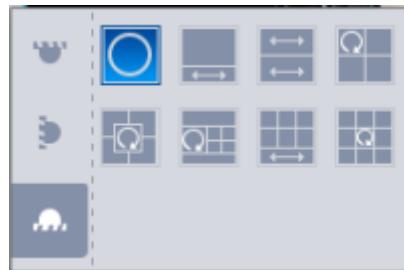


Figure 2- 14 Ground

Parameter	Note
Installation Mode	There are three modes: ceiling, wall mount and ground.
Display	<p>Display method is the way to show current video (Original image mode by default), according to different installation modes, the way of display are:</p> <ul style="list-style-type: none"> • Ceiling: 1P+1, 2P, 1+2, 1+3, 1+4, 1P+6, 1+8. • Wall mount: 1P, 1P+3, 1P+4, 1P+8. • Ground: 1P+1, 2P, 1+3, 1+4, 1P+6, 1+8. <p>Note: When you switch mode, video is shown in original image mode.</p>
Ceiling, wall, ground	 Original Image The original image without correction.
Ceiling, ground	 1P+1 360 °rectangular panorama + independent sub window, sub window and rectangular expansion panorama sub frame support zoom, movement operation, rectangular expansion panorama also supports left-right starting point move.
	 2P Two associated 180 °rectangular expanded screen, two sub-windows form 360 °panoramic view any time, also known as "double Panorama", two rectangular expanded pictures support left-right starting point move and mutual interaction.
	 1+2 That original image +2 independent sub windows, sub window and the original image of the sub-frame support zoom, move operation, the original image also supports changing the starting rotation operation (Ground has no such display mode).
	 1+3 Original image +3 independent sub windows, sub window and the original image of the sub-frame support zoom, movement operation, the original image also supports rotation changing the starting point.
	 1+4 Original image +4 independent sub windows, sub window and the original image of the sub-frame support zoom, movement operation, the original image also supports rotation changing the starting point.

Parameter	Note
Wall Mount	 1P+6 360 ° panoramic +6 separate rectangular expansion sub windows, sub windows and rectangular expansion panorama sub frame support zoom, movement operation, rectangular expansion also support left-right starting point move.
	 1+8 Original image +8 independent sub windows, sub windows and the original image of the sub-frame support zoom, movement operation, the original image also supports rotation changing the starting point.
	 1P From left to right 180 °rectangle panoramic view, 180 °rectangle panoramic view support moves up and down to change the vertical viewing angle.
	 1P+3 180 ° panoramic +3 independent rectangular expansion sub windows, sub windows and rectangular expansion panorama sub frame support zoom, movement operation, move up and down panorama, change the vertical viewing angle.
	 1P+4 180 ° panoramic +4 independent rectangular expansion sub windows, sub windows and rectangular expansion panorama sub frame support zoom, movement operation, move up and down panorama, change the vertical viewing angle.
	 1P+8 180 ° panoramic +8 independent rectangular expansion sub windows, sub windows and rectangular expansion panorama sub frame support zoom, movement operation, move up and down panorama, change the vertical viewing angle.

2.4.5 Playback Control Bar

The playback control bar is shown as in Figure 2- 15.

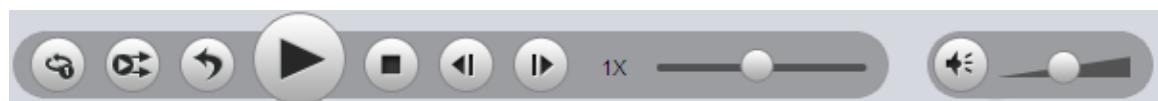


Figure 2- 15

Please refer to the following sheet for detailed information.

Button	Note
 	<ul style="list-style-type: none"> System is in single repeated process when the button is highlighted. System is in sequence play process when the button is grey. <p>Note: It is valid when play is not synchronous.</p>

	<ul style="list-style-type: none"> ● System is in synchronization playback process when the button is highlighted. ● System is in asynchronous process when the button is grey. <p>Note: it is for group playback mode.</p>
	<ul style="list-style-type: none"> ● System is in backward playback process when the button is highlighted. ● System is in normal playback process when the button is grey. <p>Note: It is valid when play is not synchronous.</p>
	Play and stop button can realize multiple-window pause, playback.
	Stop: Stop all playback windows.
	<ul style="list-style-type: none"> ● In pause mode, it is the previous frame, next frame playback. ● In play mode, it is the preview group, next group playback. <p>Note: It is for the whole group when system is in group playback. It is for current window only when system is not in group playback mode.</p>
	<p>Speed setup:</p> <ul style="list-style-type: none"> ● 1/2, 1/4, 1/8, 1/16, 1/32, 1/64 ● 1x, 2x, 4x, 8x, 16x, 32x, 64x ● -1/2, -1/4, -1/8, -1/16, -1/32, -1/64, -1, -2, -4, -8, -16, -32, -64
	Volume setup: You can set volume value and mute. System can play audio when in normal playback process.

2.4.6 Display Adjustment

Click , preview interface pops up display adjustment interface, See Figure 2-16. By dragging the bar you can adjust Brightness, Contrast, Saturation and Hue. Click reset if you want to restore default settings.

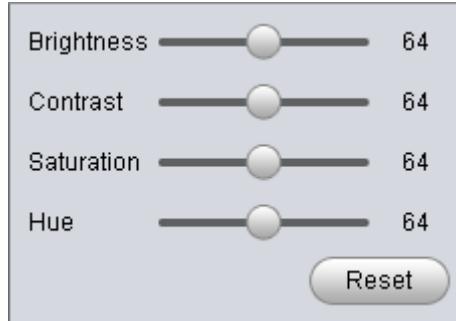


Figure 2- 16

2.4.7 Time Line

After you double click to playback a file, system can automatically add a time line and display the real-time playback time of each window.

Once you check synchronization playback for the whole record group, there is only one time line. See Figure 2-17.

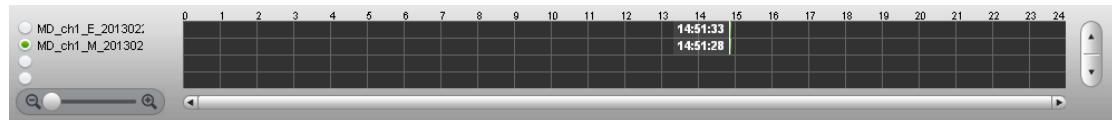


Figure 2- 17

Otherwise, it is shown as in Figure 2- 18.

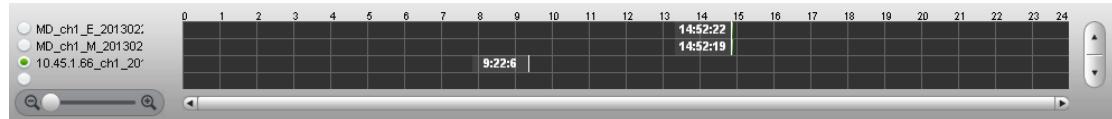


Figure 2- 18

When system is playbacking in multiple-window mode, click switch focus window, the time line displays time of the current selected window as its centre.

2.5 Preview

Click the Preview button , you can go to the following interface. Here you can view the video by periods and quick find out the video you want. Double click the file or folder you want to implement group preview, system can divide record to N (N= interface amount you set)sections by time. You can preview each period respectively. See Figure 2- 19.

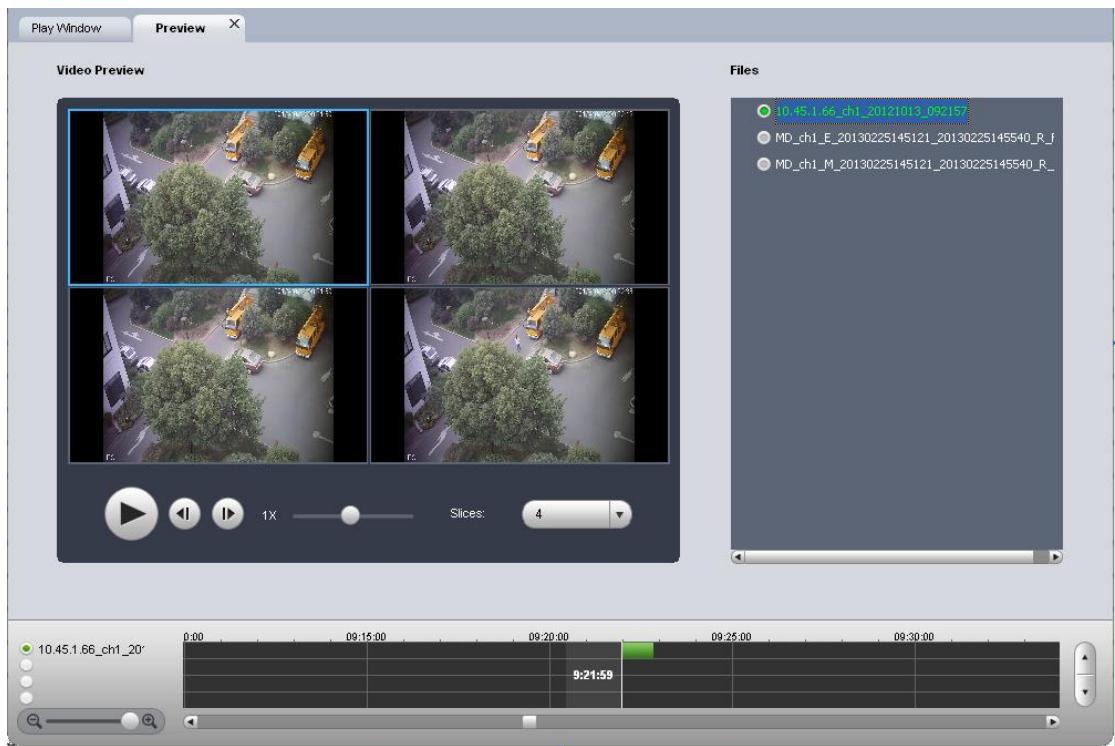


Figure 2- 19

2.5.1 File List

All dav format records of the selected folder are shown on the right. See Figure 2-20.

Note:

Group preview is for single record only. For record list, there is no record group.



Figure 2- 20

2.5.2 Video Preview

Double click a file in the list, system can divide the record period according to the section amount and then display corresponding picture. See Figure 2- 21. For example, record is from 2:00 to 3:00, the selected section amount is 4, the system displays 2: 00, 2:15, 2:30, and 2:45.

Note:

System may take time to create index. Please be patient. .

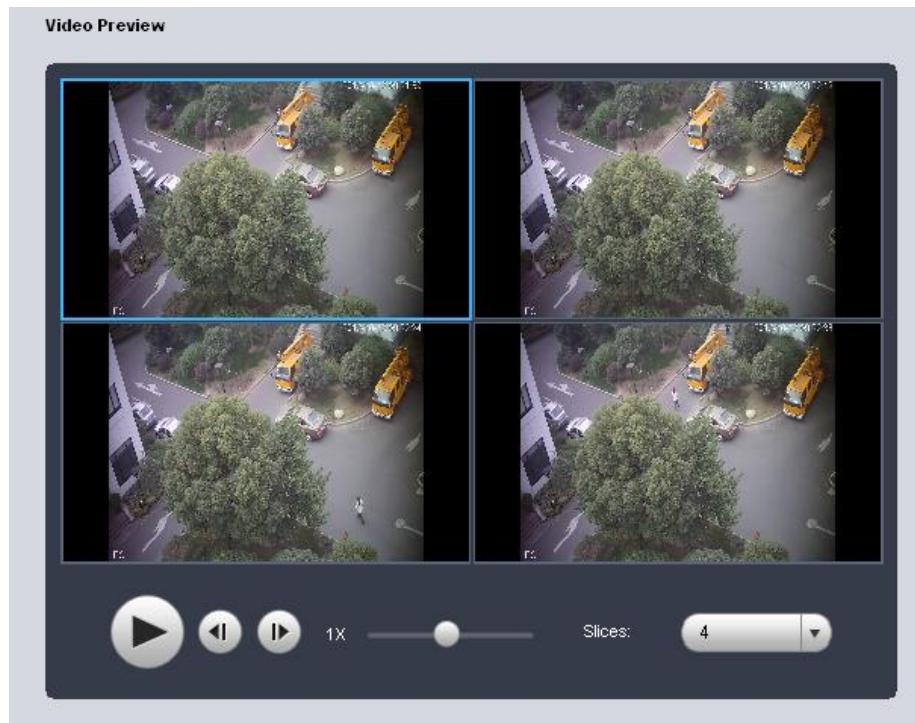


Figure 2- 21

After system created sections, you can select the corresponding time to play.

Select corresponding play time window.

Click Play button, the corresponding window begin play at the displayed time. You can implement pause, frame by frame playback, fast play, slow play and etc.

Slices: System needs to slice again if there is record in the group preview. See Figure 2- 22.

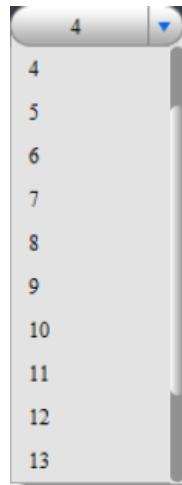


Figure 2- 22

2.6 Export File

Click Export button , you can see export file interface is shown as in Figure 2- 23.

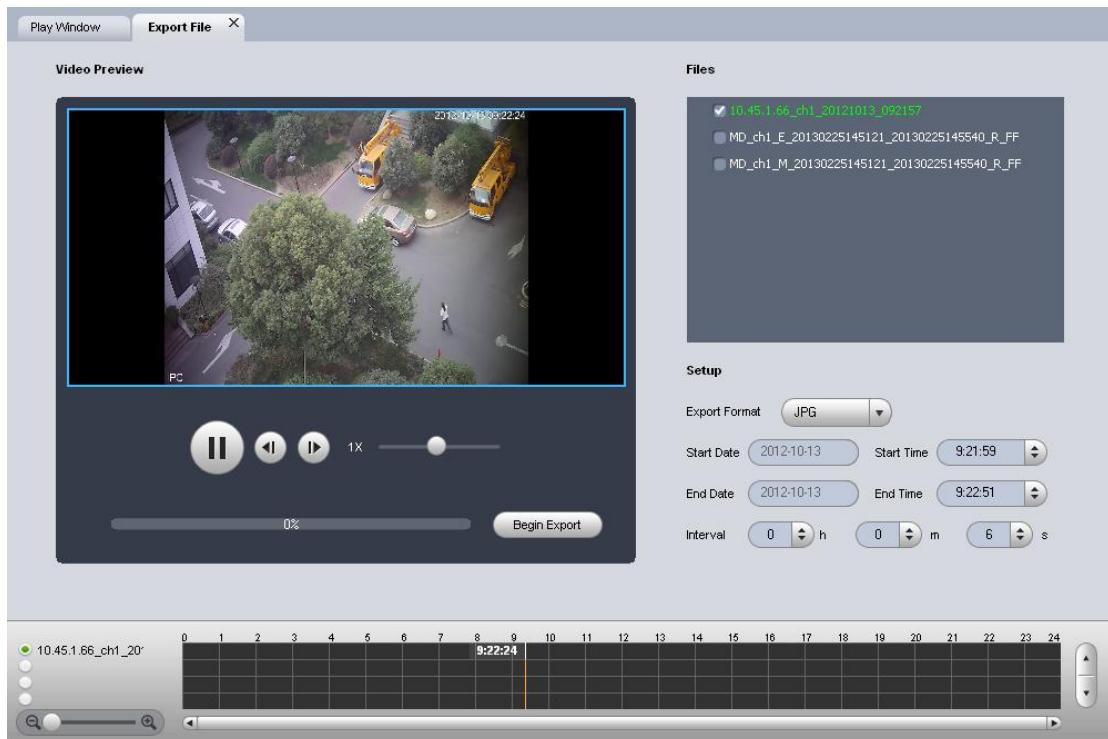


Figure 2- 23

Select the file(s) you want to export and use the preview to set period, file(s). The export format supports JPG, BMP, DAV, and AVI.

Note:

When you export file, to export an AVI file thus cause frame rate change of DAV record, it will generate multiple AVI files.

2.6.1 File List

All dav format records of the selected folder are shown on the right.

There are group record and general record. You can batch export record of the same group of the same day. See Figure 2- 24.

You need to check to select the record you want to export.

- Check a date of one group to select records of all channels of one day.
- Check some channels of one group of one day.
- Check one file; you can see current preview channel is highlighted.



Figure 2- 24

2.6.2 Setup

The Setup interface is shown as in Figure 2- 25.

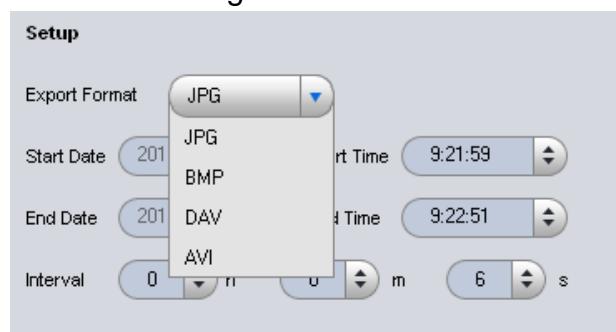


Figure 2- 25

Please refer to the following sheet for detailed information.

Item	Note
Export format	Export modes support JPG, BMP, DAV and AVI. The former two are picture modes and the later two are record modes.
Start time	It is to set file start time; it is corresponding to the left value of the time line.
End time	It is to set file end time; it is corresponding to the right value of the time line.

Interval	It is to set picture export interface. It is for picture export only.
----------	---

2.6.3 Video Preview

Playback: Check a file, video preview interface will play the file from the playback list or the record or picture of the highlighted channel. At the same time, you can implement pause, frame by frame playback, slow playback, fast playback and etc. See Figure 2-26.



Figure 2- 26

Export: After you set parameters, click the Begin export button to set save path and then begin. You can view export process bar or you can click the Stop export button to terminate. You can see export succeeded dialogue box after the export operation. See Figure 2- 27.

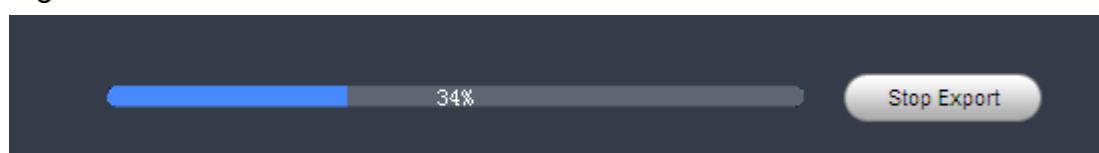


Figure 2- 27

2.7 Verification

Click the Verification button of the system menu; you can go to the verification interface.

Verification function is to check the selected record file has been tampered with or not.

2.7.1 File List

All dav format records of the selected folder are shown on the right.

There can be record group or general record. Please check the corresponding box to select a file to check. See Figure 2- 28.

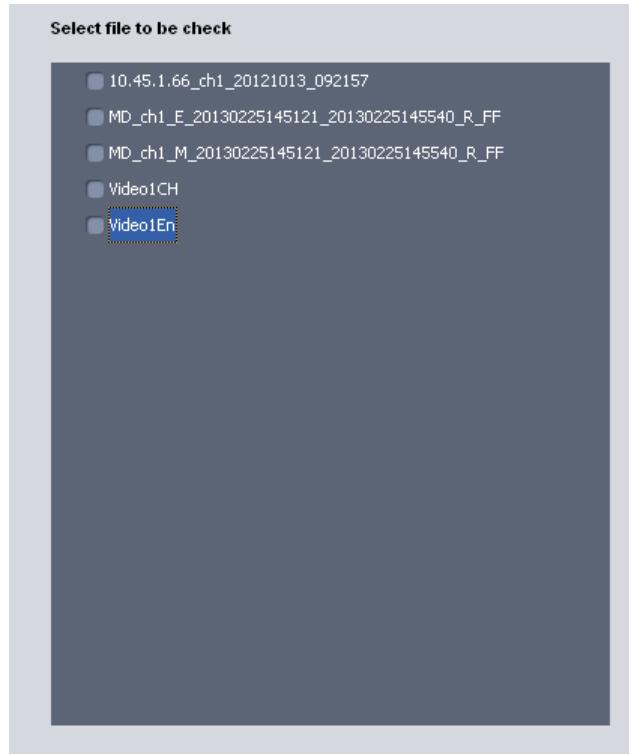


Figure 2- 28

2.7.2 Verification and Verification Info

Select a record file first and then click the Start Check button to begin the process. You can view record path, percentage, check result and etc. See Figure 2- 29.

Watermark Info		
File Name	Percentage	Results
D:\\MD_ch1_E_20130225145121_201...	100	Original
D:\\MD_ch1_M_20130225145121_201...	100	Original
D:\\\\Test.dav	100	Original
D:\\\\Video1CH.dav	100	Tampered with
D:\\\\Video1En.dav	100	Tampered with

Figure 2- 29

During the check process, you can click Stop check button to terminate current operation. You can click the corresponding record column of verification information to view the tamper information. See Figure 2-30.

Detail	
Error Info	Detailed Time
Length information error.	20091130151141
Length information error.	20091130151143
Length information error.	20091130151150
Length information error.	20091130151152

Figure 2- 30

2.8 Config

Click Config button  on the system menu, you can see an interface shown as in Figure 2- 31.

Play Window		Config	
Snap Path	Browse	Snap Format	Shortcut Key Setting
/Users/rrn/Pictures/	<input type="button" value="Browse"/>	BMP	Operation Shortcut Key
Video Path	Browse	Record Format	Play/Pause Space
/Users/rrn/Movies/	<input type="button" value="Browse"/>	DAV	Exit Full Screen Esc
Video Proportion	4:3	Audio NR Level	Play Back/Forward Backspace
Language	English	Not Rotate	Instructions F1
	<input type="button" value="Clear temp files"/>	<input checked="" type="checkbox" value="Audio NR"/>	Snapshot F4
			Full Screen Ctrl + F
			Open File Ctrl + O
			Stop Ctrl + S
			Customer Layout Ctrl + U
			Switch Layout Ctrl + X
			Step Backward Left
			Speed Increase Up
			Step Forward Right
			Speed Decrease Down
			Volume Decrease Ctrl + Left
			Volume Increase Ctrl + Right
			<input type="button" value="Default"/>

Figure 2- 31

Please refer to the following sheet for detailed information.

Item	Note
Snap path/format	On the playback interface, you click the snap button, system can save picture to the specified path as your set format.
Video path/format	On the playback interface, you click the record button, system can save record file to the specified path as your set format.
Video proportion	It is to set video window proportion. There are four options: 4:3, 16:9, 100% and Original Scale.
Audio NR Level	Set audio NR level, range 1-5, level 5 is the max NR level. The higher the level, the higher the extent of damage of tone quality.
Show trace	It is to set display intelligent track or not. Please note it is for intelligent device only.
Language	You can select English/Chinese. Please note system needs to reboot to activate current setup.
Vertical Synchronization	You can select to enable/disable vertical synchronization.
Video Rotation	Set image flip angle, there are no rotate, left rotate 90°, right rotate 90°, rotate 180°available.
Shortcut Key	Set shortcut key as you wish. Select option you want to set (selected in blue), and press keys you want to set as shortcut of the selected function. Click Default to restore default settings.

Note:

System can save current setup even after you close the player.

3 Compatible OS

Optimal Requirement	2.3 GHz Intel Core i7
	4G memory
	50MB free HDD space
	Resolution 24bit 1200x768
	Mouse, keyboard,USB
	MAC OSX 10.8.3/ mac OSX 10.10.3

Note:

- This manual is for reference only. Slight difference may be found in the user interface.
- All the designs and software here are subject to change without prior written notice.
- All trademarks and registered trademarks mentioned are the properties of their respective owners.
- If there is any uncertainty or controversy, please refer to the final explanation of us.
- Please visit our website or contact your local retailer for more information.