

SD Card Player User Guide

Explains the program for searching and playing data stored on an SD memory card by Hanwha Techwin Network Camera/Encoder.



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Overview

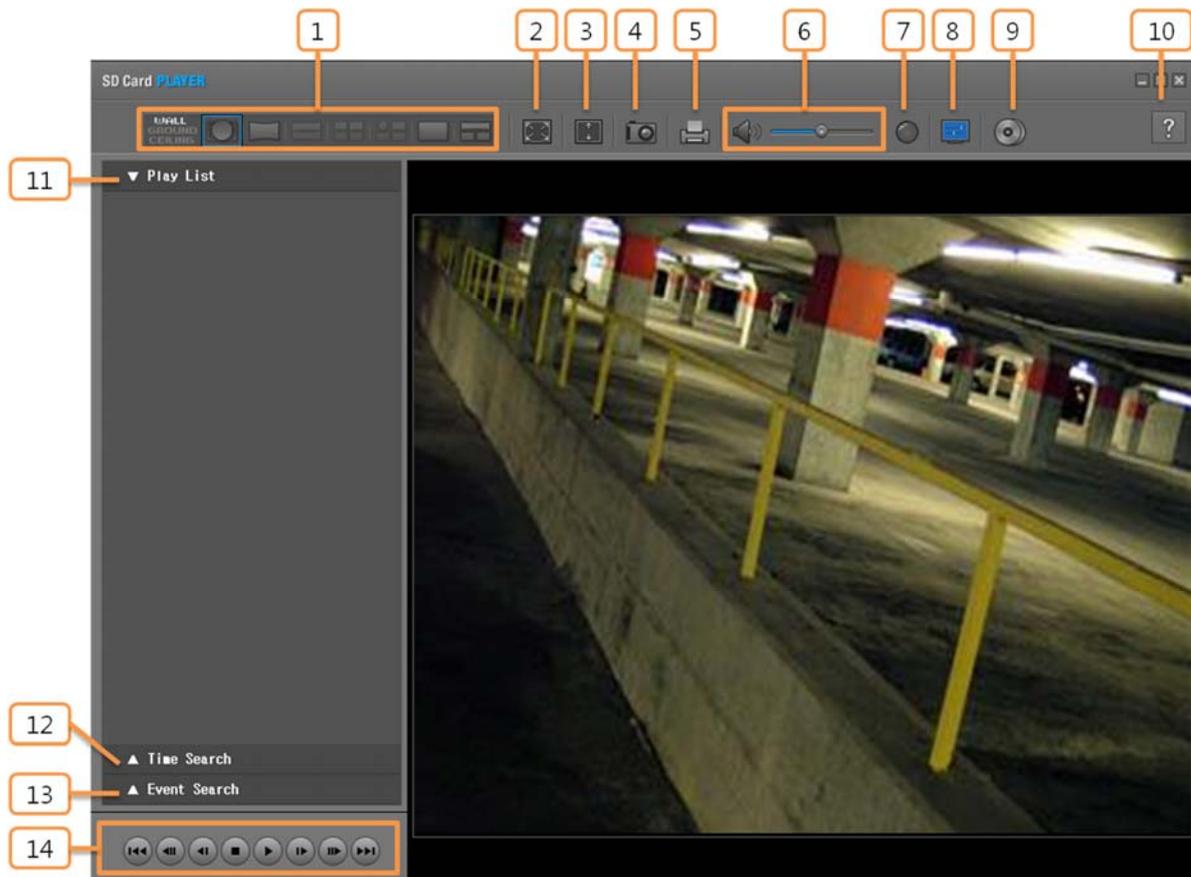
SD Card Player is the program for searching and playing the movie which stored on SD memory card in Samsung Network Camera.

Install/Execute

SD Card Player needs no installation. When you double-click **SDCardPlayer.exe**, the player runs.

Functions

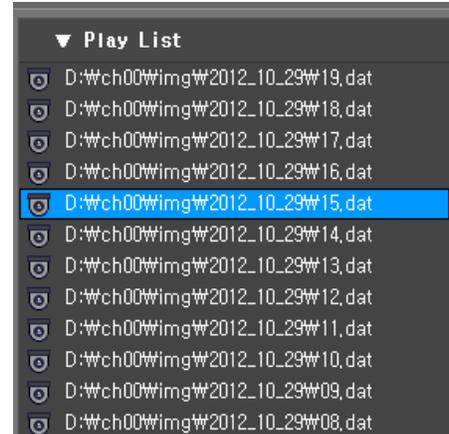
0. Part Names and Functions



Name		Description	
1	Dewarping	Display played images in adherence to your dewarping mode selection	
2	Full Screen	 Plays movie on full screen mode. If <ESC> button is pressed at full screen mode, you can move back to the window play mode.	
3	Fit Screen	 Press it once to play movie on original resolution. And press it again when playing original resolution to make playing movie size on fitting current window.	
4	Screen Save	 Saves the current screen as an image file. Supported file formats include JPEG. Also you can include camera's name, date/time and description on capturing image.	
5	Screen Printout	 Prints out the current screen. You should have installed the appropriate printer driver before you can print out the screen.	
6	Audio	Audio off/on	 Each time you press this button, the audio output will toggle between activated and deactivated.
		Volume level	 You can adjust the volume level from 0 to 100.
7	De-interlace	 You can enable the De-interlace function. If you set the de-interlace mode on, system reduce grid noise of movie.	
8	OSD function	 Display the OSD information on the backup playback screen. Information such as recording date, time, file name, extension, resolution and codec information of video and audio will be displayed on the screen.	
9	Convert to AVI	 Convert .dat file is saved in SD Card to .avi file	
10	About	 Displays version and copyright information of SD Card Player	
11	Play List	Open and play [.dat] movie file be stored in SD memory card.	
12	Time Search	Marks and search the movie was recorded at specified date on Timeline.	
13	Event Search	Searches events during setting period. If events exist at setting period, system prints out the list of events and you can play the movie of specific event.	
14	Play control	Previous Frame	 Displays the previous frame. This is available only if the playback is stopped.
		Backward/Forward Slow Play	 Used for backward/forward frame-by-frame search while in PAUSE.
		Stop	 Stops playing the current video
		Play/Pause	 Press it once to start playing the video and switch the button mode to 'Pause', and press it again to switch the button mode to Play and stop playing temporarily
		Backward/Forward Fast Play	 Used for quick backward/forward playback. You can transit playing speed to 1x, 2x, 4x, 8x, 16x, 32x and 64x. If you set the playing speed over than 4x, system only play I frames. This is available only if the playback is played.
		Next Frame	 Displays the next frame. This is available only if the playback is stopped.
		Previous	 Used for playing previous video of current video on the play list. When played first video, system play last video on the play list. This is available only using the play list.
		Next	 Used for playing next video of current video on the play list. When played last video, system play first video on the play list. This is available only using the play list.

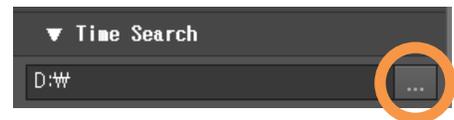
1. Play List

- Step 1.** Click the **<Play List>** tab for opening play list.
- Step 2.** Drag and drop files which you want to play from window explorer to play list.
- Step 3.** Double-click the file or select the file and click the **<Play ▶>** button for playing the movie.
- If it finished playing file, play next file automatically
 - If it finished playing the last file of play list, play the first file of play list automatically

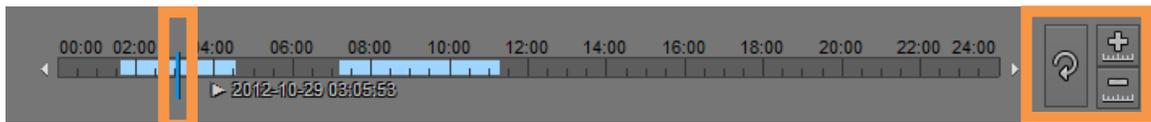


2. Time Search

- Click the **<Time Search >** tab for opening time searching window.
- Click the  button and specify the path of SD memory card for using time searching.
- If the video data has been recorded on a date, the date is distinguished in blue. If you click the date and search button, the recorded video information is displayed in the time line section from 0hr to 24hr.



Timeline



- Searching information through time searching appear on timeline under the movie as above.
- If the video data has been recorded on time, operating time is distinguished in light blue. Or else it is distinguished in gray.
- Search the movie to move blue line on timeline.

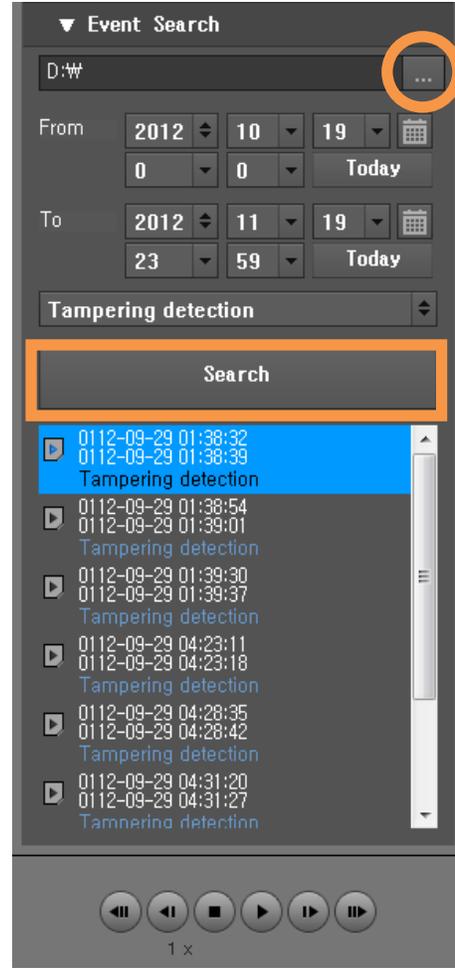
 Timeline is only available in time search.

Timeline Control

Name		Description
1	Recover 	Recover the time range that is displayed on the range bar of the timeline to default. Default range is 24 hours.
2	Zoom in 	Enlarges the time range that is displayed on the range bar of the timeline. You can enlarge the range bar until the overall range is extended to 1 minute.
3	Zoom out 	Collapses the time range that is displayed on the range bar of the timeline. You can collapse the range bar until the overall range is shortened to 24 hours.

3. Event Search

- Step 1.** Click the <Event Search> tab for opening event searching window.
- Step 2.** Click the  button and specify the path of SD memory card for using event searching.
- Step 3.** Input the date from beginning to end, and select type of event you want to searching.
- When you click <Today>, it will be synchronized with the system time (date) of the current PC.
 - The entire list of possible choices is as follow.
 - Alarm Input
 - Tampering detection
 - Motion detection
 - Video analytics
 - Face detection
 - Audio detection
 - Network disconnection
- Step 4.** When you click the <Search> button after setting, all results which satisfy all the criteria of settings are appeared by list.
- Step 5.** Select the result file and click the <Play>  button for playing the movie.



4. Dewarp images from Fisheye Camera

Images from Fisheye camera are distorted spherical images. You can display stretched images in adherence to your dewarping mode selection.

Images, in your SD memory card, don't have any information of which camera recorded. So, SD Card Player judges whether it is dewarpable by resolution of images.

[Dewarpable Resolutions: 2048 * 1536, 1600 * 1200, 1280 * 960, 1024 * 768, 800 * 600, 640 * 480]

So, Dewarping function can be activated undistorted images from normal camera.

There are three-modes for dewarping. Dewarping methods depend on the dewarping modes of your selection.

Modes for Dewarping

Name		Description	Supported dewarping method
1	Wall mode 	If your fisheye camera placed on wall, select Wall mode.	Overview, 1 Panorama, Single View, 1Panorama+2Rectangles

2	Ground mode		If your fisheye camera placed on floor or ground select Ground mode.	Overview, 2 Panoramas, Quad view, Overview+3Rectangles, Single View
3	Ceiling mode		If your fisheye camera hangs from the ceiling, select Ceiling mode.	Overview, 2 Panoramas, Quad view, Overview+3Rectangles, Single View

SD Card Player support Zoom In/Out and Digital PT movement function for dewarped images.

Some dewarping method could not support digital zoom and digital PT movement.

More information of supported digital zoom and digital PT movement according to each dewarping method, refer the table as follow.

A. Digital Zoom In/Out

- ◆ Zooming in and out your images
- ◆ How to? : Click the displayed image section which you want to use digital zoom function, and handle your mouse wheel.
 - Zoom out: Scroll up your mouse wheel.
 - Zoom in: Scroll down your mouse wheel.

B. Digital PT movement

- ◆ Adjust Pan and Tilt value of your images
- ◆ How to? : Click the displayed image section which you want to use digital PT movement, and drag your mouse to your position.

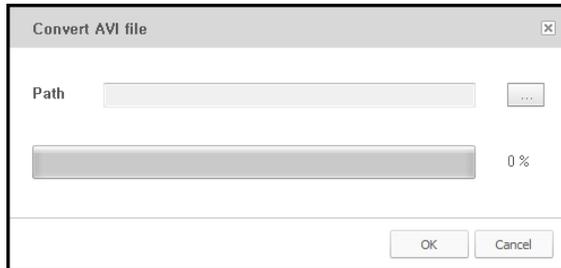
Method for Dewarping

Name		Description	Control images	
			Digital Zoom	Digital PT movement
1	Overview	 Display original spherical images	N/A	N/A
2	1 Panorama View	 Stretch original spherical images to 1 panorama image	N/A	N/A
3	2 Panoramas View	 Stretch original spherical images to 2 panorama images	N/A	Available (Moved 2 panoramas at once)
4	Quad View	 Stretch original spherical images and display that after divide into 4 sections.	N/A	Available
5	Overview + 3 Rectangles	 Display original spherical images with 3 sections of stretched images	Available (Not available on Overview section)	Available (Not available on Overview section)
6	Single View	 Stretch original spherical images to single squared image	Available	Available
7	1 Panorama + 2 Rectangles	 Display single stretched panorama image with 2sections of stretched images	Available (Not available on panorama section)	Available (Not available on panorama section)

5. Convert to AVI file

Images from Samsung Network camera on SD memory card use extension type of *.dat. You can convert from *.dat to *.avi for general movie player using [Convert AVI file] function.

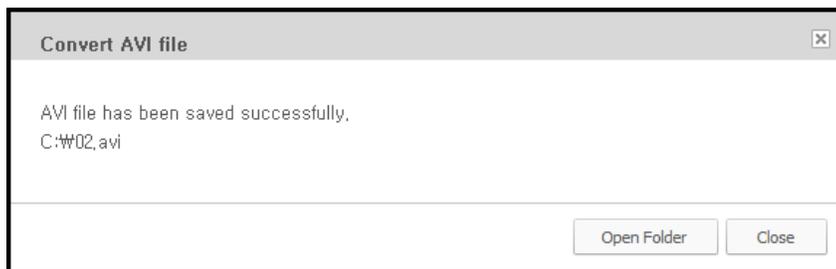
Step 1. Click [Convert AVI file] ()



Step 2. Click this  button, and select *.dat file to convert to AVI file

Step 3. After click [OK] you can check progression of converting through the progress bar.

Step 4. After converting, SD Card Player displays success window as follow. You can open your directory, which avi file saved on, through [Open Folder] button. Or, you can also close success window using [Close] button.



Converted AVI file saves same path with original DAT file.

Converted AVI file saves same name with original DAT file.

APPENDIX 1. Release History of SD Card Player

version	Release Date	Release History
1.2.0	2013-12-20	[New Feature] <ul style="list-style-type: none">· Add Dewarping function for images from fisheye camera· Add converting function to AVI from DAT This document revised 1-2018
1.0.0	2012-11-21	First Release



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