



White paper

# Video Summary

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The most important prospective trend in the recent video surveillance market, as selected by many experts, is the intelligent video analysis. As a result, many leading companies in the video surveillance market have increased investment in the development of intelligent video analysis technology, and customers' demands related to intelligent video analysis have been diversified due to the enhancement of video surveillance device.

In the video security system, the storage device receives video, audio, and metadata from the network camera to generate an alarm based on the user's event setting and conducts recording. Hanwha Techwin is not limited to the general role of storage device, providing the intelligent video analysis function related to the storage device developed using Hanwha Techwin's original technology.

This document describes Video Summary technology, a function to save metadata received from network data in the storage device and provide a summarized video according to the information on the object (human/car), color (13 colors), and Virtual Line & ROI.

In a general video security system, the user must search a specific date or event to find a specific video from the saved videos. If an MD (Motion Detection) event generated at a specific time or section is searched, all MD events generated at that time or section will be searched. Therefore, if the search period is long, the amount of video data to be checked from the search result will increase, and the user must spend a lot of time identifying the video that the user wants to see. To resolve such inconvenience, Video Summary technology was developed.

Video Summary technology is a solution that allows fast and efficient searching of videos and by providing the summaries of only the videos desired by the user.

### 3. Video Summary technology

To generate a Video Summary, metadata containing VA (Video Analytic) event information is required. The network camera generates an event and delivers the metadata to the storage device using the VA function. Data saved in the storage device can be searched by various VA events, and Video Summary can be generated by extracting videos related to a specific event.

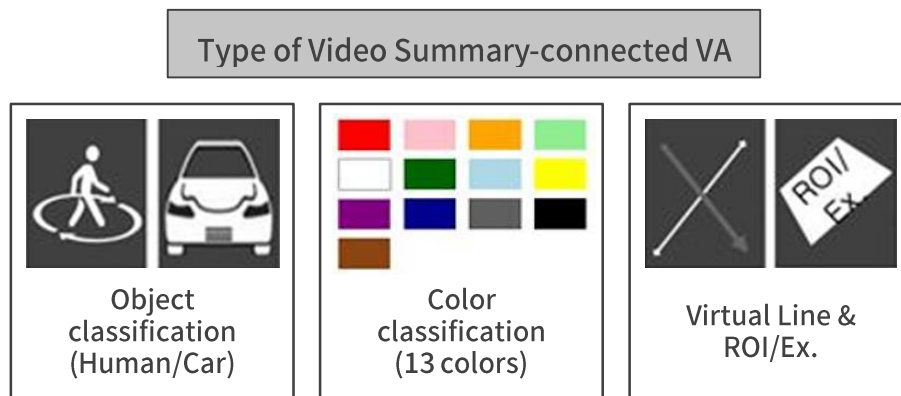


Image 1. Type of VA event

Based on accumulated know-how, Hanwha Techwin developed its own Video Summary technology. In particular, it boasts of higher accuracy by utilizing various classification standards such as color (13 colors) and object (human/car) and supports fast processing and convenience because the storage device provides its own Video Summary technology.

## 4.1. How to set metadata

Metadata can be the data generated by the camera or generated from the DSP of the storage device. As shown below, check "Use Video Summary" and set the event type (VS, AMD/VS) according to the information.

- VS: Video Summary / AMD: Advanced Motion Detection
- When using Video Summary: Select whether to use AMD/VS or VS motion sensing (If VS motion sensing is selected, the camera's MD/VA setting must be activated.)
- When not using Video Summary: Select whether to use AMD motion sensing

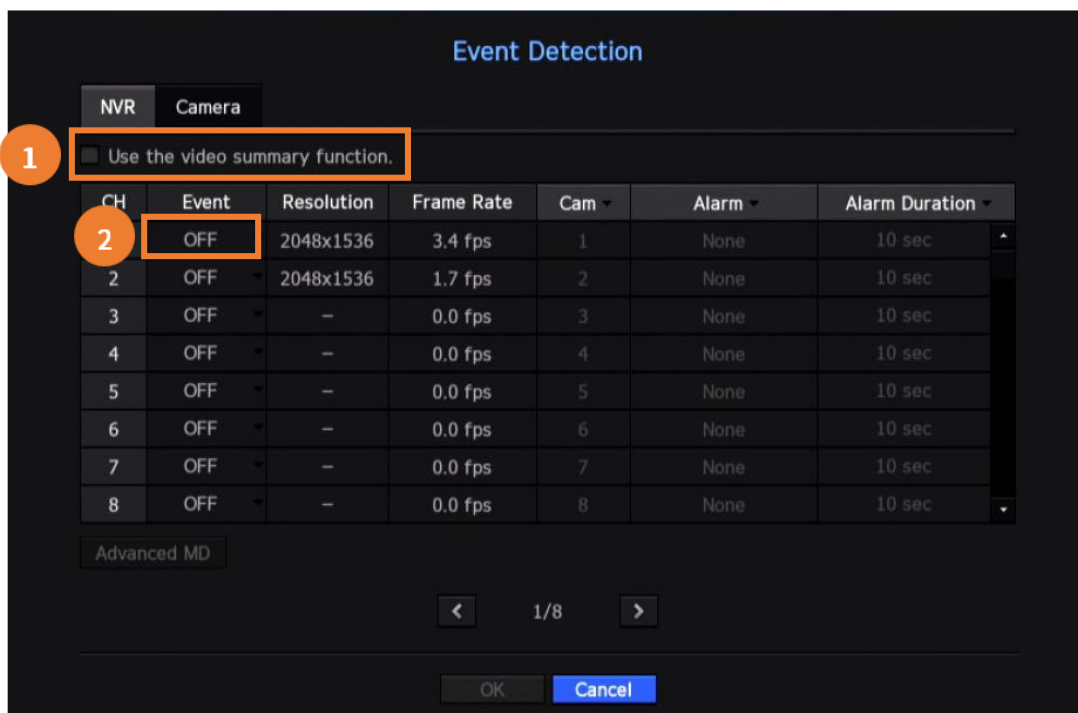


Image 2. Metadata setting screen

## 4.2. How to generate a Video Summary

The Video Summary Search function can be used after setting the time, event type, and area information. The order is as follows;

Time section setting → Event type and area setting  
→ Screen display setting

1. Select the channel to be searched and set the start/end of search.
2. Set the event type. (Include Region, Exclude Region, Virtual line, event direction, category etc.)
3. Set the information to be displayed. (time stamp, object box)
  - Time stamp: Information on video recording time
  - Object box: Displays the recognized object

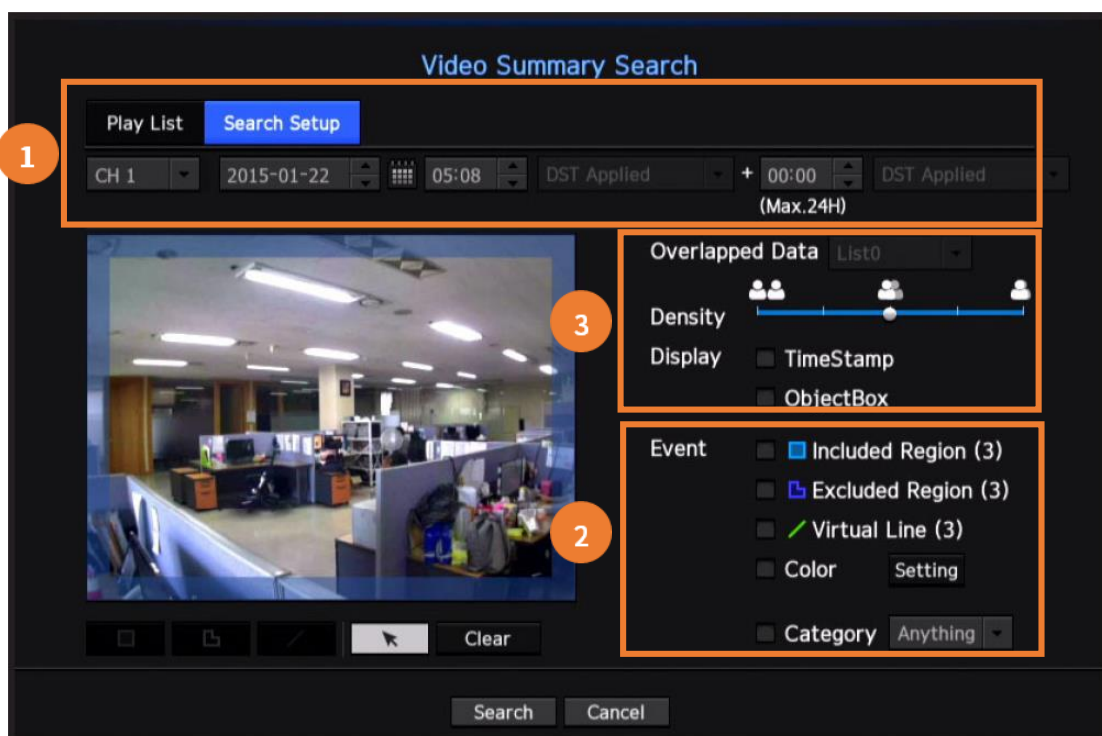


Image 3. Video Summary Search screen

### 4.3. Video Summary result

As described above, the Video Summary function of the video surveillance camera can be set easily and seen as a video with the selected display information.



Image 4. Result of car and total searches using Video Summary

#### ※ Cautions

*When Video Summary is not used, AMD motion sensing setting can select up to 4 channels. When Video Summary is used, AMD/VS motion sensing setting can select only 1 channel.*

*The recording profile setting must be higher than 10 fps; 30 fps less than the 2M resolution is recommended. (If the recording profile's fps setting exceeds the range, AMD motion sensing may not work properly.)*



Hanwha Techwin's Video Summary technology reduces the time to search a VA event by summarizing long video data as the video data desired by the user.

Normally additional PC software is used to provide Video Summary technology because the generation of Video Summary requires many system resources. In contrast, our storage device provides excellent cost-effectiveness since it uses its own Video Summary technology.

- *Model that supports Video Summary technology*  
*: SRN-4000 (this list will be updated if another model is added.)*

# WISENET

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