Vision USB Video Recording Instructions

Autoscope Vision

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Introduction

The purpose of the document is to describe the procedure for collecting unsupervised video clips from Autoscope Vision Sensors.

Note: Video can be recorded from a maximum of two sensors at a time.

Equipment Required

A USB storage device that is at least 32GB or greater. When recording is taking place, 16GB of free space will be maintained by the system. When there is only 16GB of free space left, the system will delete the oldest clips to make room for newer ones.   It is recommended that a 64GB or great storage device be used for recording over more than one day.

Preparing and Configuring the USB Storage Device

To prepare and configure the USB storage device do the following.

Note: The volume must have at least 16GB free at configuration time.

1) Connect the USB storage device to a computer.

2) Which version of the Supervisor is being used?

Ver. 2.3.1 or above
Partition the USB storage device to a single **exfat** volume (this can be done in Windows Explorer).

3) Format the volume.

4) Create the following subdirectory at the root directory level of the volume: **/VideoClips/**.

5) Create one or two of the following configuration subdirectories under VideoClips: **/configure/xxxx/yyyy/**

- xxxx = Specifies the device (cam1, cam2, cam3, or cam4).

- yyyy = (Optional) **User** specifies that graphic overlays will be included in the clip if the Show Video Overlay check box is selected on the Device screen in the Supervisor. A value of **none** specifies that only raw data (no overlays) will be included in the clip. If no specification is made, then **none** is assumed.

Examples: To record video from the first two cameras and not include overlays, create the following:

/VideoClips/configure/cam1

/VideoClips/configure/cam2

6) Safely remove the drive from the computer.

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Note: You can setup one of the folders for no overlay and the other for overlay (ex: cam1/none, cam2/user) if desired.

Starting Video Collection

Notes:

- The quality of the video is dependent on the bit rate set for the sensor on the Device Settings screen in the Supervisor. For the best quality, set the bitrate to its maximum. At the maximum quality/bitrate of 5000 kbps the recording size is approximately 2.3GB per hour per recording.   At the default bitrate of 2048 kps the size is approximately 1GB per hour per recording.

- Each video clip will record for one hour. After one hour, a new video clip is started for each device. The files for each device are distinguished by the timestamp in the file name.   Note that if a device is removed after less than 1 hour there will be no successful recordings.

- The subdirectories do not contain any video files. Instead, all of the files are located under the directory, /VideoClips/.

- 16GB of free space will be maintained by the system. When there is only 16GB of free space left, the system will delete the oldest clips to make room for newer ones.

IMPORTANT! Once inserted, DO NOT remove the USB storage device from the Comm Manager without first performing the procedure described in the "Stopping Video Collection" section, otherwise the last files recorded will be corrupted.

To begin collecting video, connect the USB storage device to one of the USB ports on the back of the Comm Manager. Op Log messages are generated for the Comm Manager indicating that a collection volume has been mounted and that recording has started for each device. The activity LED on the USB storage device should begin blinking.

Video collection begins immediately.

The video file names have the following format: wwww_xxxx_yyyy_VideoClip_zzzz.mp4

wwww = Device indicator: cam1, cam2, cam3, or cam4

xxxx = Overlay collection type: "user" indicates video includes graphic overlays if the Show Video Overlay check box is selected on the Device screen in the Supervisor. A value of **none** indicates raw video only (no graphic overlays, even if the Show Video Overlay check box is selected).

yyyy = Device ID

zzzz = Timestamp of when the video collection began. The timestamp is displayed as a UNIX EPOCH date in nanoseconds.

Changing Options while Recording

If you are in "user" mode for including graphic overlays for video collection (the subdirectories are defined as user instead of none), you can change the option while recording is taking place by starting the Supervisor and selecting or de-selecting the Show Video Overlay check box on the Device screen.

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Stopping Video Collection

To stop the collection of video, do the following.

1) Insert a different USB device in the second USB port on the Comm Manager.

2) Wait for the LED on the video recording USB drive to stop flashing. An Op Log message will be posted for the Comm Manager indicating that the collection volume has been unmounted.

3) Remove the collection USB drive.

4) Remove the second USB drive.

Note: If you simply remove the USB drive, the last files being recorded will be corrupt. However the remaining files should be viewable.

To restart collecting video, re-insert the collection USB drive into the Comm Manager.

Viewing Collected Video

To view any of the collected video, connect the USB storage device to a computer, then locate and start a video clip.

Note: At this time, the full video cannot be viewed through VLC with normal fast forward and random time access. Download MPC-HC (Media Player Classic Home Cinema) video player as an alternative which will allow you to play the video as well as scroll to specific times to play.

Changing the Recording Method

To change the video recording configuration, do the following.

Note: The volume must have at least 16GB free at re-configuration time.

1) Safely remove the collection drive from the Comm Manager (see "Stopping VideoCollection").

2) Connect the drive to a computer.

3) Change the name of the subdirectories as needed.

For example, to change from collecting video with overlays to collecting only raw video, change the name of subdirectory **VideoClips/configure/cam1/user** to **VideoClips/configure/cam1/none**.