Chronos Software Version 0.5.0 Release Notes

Purpose

This document outlines the improvements to Chronos 1.4 and 2.1 software as released in Version 0.5.0: http://debian.krontech.ca/builds/chronos-voyager-20200617.img.xz

2020-06-17, Kron Technologies Inc.

New Features and Improvements

- New Graphical User Interface with Dark and Light Modes

- Ability to set preferred exposure units on the main screen

- Double-tap video display area to zoom

- Ability to record live footage to H.264 mp4 @ 60 FPS in parallel with high-speed recordings, including audio from the built-in microphone or line-in jack

- Automatic input detection and switching between the microphone and line-in jack when recording audio in Live Record Mode

- Toggle Trigger Mode to allow BNC trigger to both START and STOP a recording

- Ability to configure most camera settings via the web page

- Ability to configure Triggers and I/O configuration via the web page

- Power Manager firmware update allowing for a longer button press (up to 3 sec.) to boot the camera

- Power Manager firmware update to perform graceful shutdown when the battery is critically low

- General bug fixes and stability improvements

Known Issues

- If the camera is being controlled via the web page, no messages will be shown on the back-of-camera display if the video output mode is changed between LIVE/RECORDING and PLAYBACK through the web interface.

- If the camera is powered on while connected to 10/100 (non-gigabit) network equipment, the back-of-camera display will fail to start.

- When using Live Record Mode to simultaneously record 60 FPS MP4 footage to an external storage device, the video display may momentarily blank or freeze while the stream is being written to the storage device. This will not affect the high-speed recording.

Updating Your Camera

There are two methods to update to Version 0.5.0. *Please ensure that you have an AC adapter connected to the camera, and your calibration settings are backed up before proceeding with the update procedure.*

During this update, the power controller will also be updated, which will cause the power status indicator LED on the top of the camera to blink green and red while the fan runs at 100% momentarily. Do not interrupt or power down the camera while this is taking place..

Method 1 - for cameras on version 0.4.0+

Cameras using Version 0.4.0 may be updated via the internet. Calibration data does not need to be restored using this method.

1) Connect your Chronos to the internet via the ethernet port.

2) Navigate to Util->Storage, then tap Apply Software Update -> Check for Updates

   Approximately 15 packages will be upgraded, and then the camera will reboot automatically. This procedure will take approximately 3 minutes.

Method 2 - for cameras on any software version

Cameras using Versions 0.2.x and 0.3.x require a reflash of the microSD card in the bottom of the camera.

1) Download the software update package here:
   http://debian.krontech.ca/builds/chronos-voyager-20200617.img.xz

2) Use Balena Etcher to write the software to a microSD card. This is recommended as it verifies the integrity of the data written to the microSD card.

   For additional information on update procedures, please see this forum post:
   http://forum.krontech.ca/index.php?topic=531.0