# **Software Release Notes**

## **CineLife Main Software v2.2.0**

This software release introduces changes to the projector which prevent software downgrading. Once the software is upgraded to version 2.2.0 you will not be able to downgrade below this version.

E3LH projectors running software older than 2.0.0-1 will require two upgrades. The initial upgrade will indicate a failure on the upgrade of the VPU\_NX image, the second upgrade attempt will clear the upgrade failed alarm.

### **Affected products**

The following products should perform this software upgrade.

- CP2308
- CP2308-C

- CP4325-RGB
- E3LH

### Upgrading the software

Use the following instructions when upgrading the software on your projector.

- When upgrading from Fusion Main Software v1.3.2 or earlier, you must install v1.4.0 before installing v1.4.1. The v1.4.0 software release provides support to upgrade to v1.4.1. Do not operate a projector with v1.4.0 software.
- When upgrading from Fusion Main Software v101.0.2.x, installation of the Dolby Atmos support package is not required.
- When upgrading from Fusion Main Software v101.0.1.x, Dolby Atmos support in the Security Manager (SM) is disabled. To enable Dolby Atmos support you must install sm atmos enable.pkg.
- 1. Download the upgrade package cinelife\_release\_2.2.0-xxx.pkg to a USB flash drive.
- 2. Insert the USB flash drive into the Management USB port on the projector communications panel.
- 3. On the projector touch panel, tap **Service Setup** > **System Upgrade**.
- 4. Tap Add New Package.
- Browse to the location of the upgrade package.
   Typically, the upgrade package is located in the folder named USB101.
- 6. Select the upgrade package cinelife\_release\_2.2.0-xxx and tap Accept.
- 7. In the right pane, tap **Upgrade Differences Only** (Recommended).
- 8. Tap Upgrade twice.
- 9. Once the upgrade is complete, reboot the projector.
  - If the upgrade is unsuccessful, contact Christie technical support.
  - If the ILS is disconnected, the ILS upgrade fails.



- If the Security Manager Dolby ATMOS Security Not Installed error appears, install the file sm\_atmos\_enable\_v2.2.0-xxx.pkg following the same steps as above.
- 10. Copy the file sm\_atmos\_enable\_v2.2.0-xxx.pkg to a USB flash drive and insert this into the projector.
- 11. On the projector touch panel, tap **Service Setup** > **System Upgrade**.
- 12. Tap **Add New Package** and browse to the location of the upgrade package, such as USB101.
- 13. Select the upgrade package and tap **Accept**.
- 14. In the left pane, select the upgrade package sm\_atmos\_enable\_v2.2.0-xxx.pkg and tap Upgrade Differences Only (Recommended).
- 15. Once the upgrade is complete, reboot the projector. Atmos support should now be enabled on the SM and all SM related errors should be cleared.
- 16. Power off the projector and then turn it on again.

#### **New features**

The following new features are included in this software release.

- Support for the Christie CP4325-RGB projector.
- Support for laser module groupings on E3LH projectors, allowing laser modules to have independent settings.
- New light-on soft start feature, providing a dim light level for the first 1.5 seconds after the light source is turned on and the shutter is opened. (This feature is available on CP2308-C, CP2308, and CP4325-RGB only.)
- New rental licensing feature, allowing dealers to rent projectors to customers. Depending on the chosen settings, the rental license can disable HDMI functionality, the light source, or both.
- Enhanced diagnostics, including the recording of sensor data for the last 10 days of projector operation.
- Support for third-party Dolby IMBs for Christie CP2308 and CP4325-RGB projectors.
- PSF diffuser support for E3LH 1.0 projectors.
- Support for RealD 3D ghost busting.

#### **Fixed issues**

The following fixed issues are included in this software release.

- The scheduler page now correctly displays warning icons for short content playlists (less than 30 minutes in duration).
- 96 Hz audio no longer plays at 48Hz.
- SM log reports no longer hang at 99%. Log reports now complete successfully.
- The projector no longer crashes when registering a NAS as a Christie NAS-S2.
- 4K content with PNG subtitles now scales correctly when played on a 2K projector.
- The getCPLDetails API command now reports the correct FTP download path.
- Jogging 3D content no longer shows video artifacts on CP2308 projectors.
- Removing an Ethernet cable between two NAS devices no longer causes the projector to indicate that content replication is occurring.



- The scheduler now provides a warning if the slave projector has an issue with the content being scheduled.
- On CP2308 projectors, the 3D MCGD left and right files are no longer reversed in a multiprojector setup.
- Test patterns with duplicate names but different extensions no longer prevent the selection of a second test pattern.
- The Pureformity Color<sup>™</sup> Technology (PCT) screen now turns on uncorrected test patterns for setup.
- Content loaded by the scheduler now disables the loop mode option automatically.
- Updated test patterns as follows:

RGB-8Bit Split Ramp Pattern



To see the new test patterns, you must reset your patterns to the factory default. On the projector touch panel, tap **Service Setup** > **Backup and Restore**, tap **Factory Restore**, and then select **Test Patterns**. After resetting the test patterns to the factory default, reboot the projector (using the Reboot button) or perform a full restart.

**RGB-8Bit Vertical Ramp** 

#### New hardware-based test patterns

RGB-12Bit Horizontal Ramp	RGB-12Bit Alternating Checker Board
RGB-12Bit Vertical Ramp	RGB-12Bit Color Board

# Removed ramp test patterns RGB-8Bit Log Step Patterns RGB-8Bit Horizontal Ramp

New DCI XYZ test patterns for image verification		
XYZ-4K-Blue40.png	XYZ-4K-DCI Green.png	
XYZ-4K-Red40.png	XYZ-4K-DCI Yellow.png	
XYZ-4K-DCI Blue.png	XYZ-4K-DCI Cyan.png	
XYZ-4K-DCI Red.png	XYZ-4K-DCI Magenta.png	

#### New enhanced test patterns to support CP4325-RGB

RGB-4K-Boresight.png	RGB-4K-Focus Fidelity.png
RGB-4K-Convergence.png	RGB-4K-3Pos 1Point 2Color EachBox.png
RGB-4K-Integrator Rod.png	

- Multiple back-to-back macros sent to the CP850 now correctly trigger events. A one-second delay is inserted automatically.
- LM software updated to 1.4.3-1, which increases the thermal limit warning points to minimize nuisance alarms in rooms with higher ambient temperature conditions.
- Added support for new TI Passivision DMD updates.



#### **Known issues**

The following are known issues in this software release.

- On CP4325-RGB, there are two pumps (Pump 0 and Pump 1) that deliver liquid coolant to the projector when the laser light source is on. Alarms are displayed correctly for Pump 0; however, no alarm is displayed if Pump 1 is not connected or has failed.
   *Workaround*: Temperature alarms are triggered if the projector is overheating. Tap Status > Fans to verify that both Pump 0 and Pump 1 are running. If Pump 1 is displaying 0 RPM, make sure it is connected.
- The first two lines of video from a GDC IMB are not displayed.
- Folder names that start with a # symbol cannot be opened.
   Workaround: Rename the folder without using the # symbol.
- In certain cases, the projector displays a gray X-Window login prompt after booting up. *Workaround*: Power cycle the projector.
- If there are more than nine laser modules, no scroll bar is displayed on the laser module selection page.
- Currently, the projector does not support HDMI PSF or HDMI Interlace content playback.
- Deleting content on the master projector does not result in deleting content on the slave projector.

Workaround: Manually delete the content from the slave projector.

Subtitles will display on the screen while on an HDMI channel if the IMB is playing content or is
paused while displaying a subtitle.

Workaround: Prevent IMB content from playing while on the HDMI channel.

• Audio from the IMB will play out if you are on the HDMI channel with the IMB content playing in a loop.

*Workaround*: Prevent the IMB content from playing in a loop while on an HDMI channel or switch the audio to a different input source.

- Vertical subtitle rendering does not account for grapheme (characters with accents or marks) character sets and the marks are not printed above the character. This issue may affect the following languages: Hebrew, Arabic, Devanagari, Bengali, Gurmukhi, Oriya, Tamil, Telugo, Kannada, Malayalam, Thai, and Lao.
- The ingest source list displays duplicate source locations for projectors that are detected automatically.
- The upcoming shows on the main screen incorrectly displays content metadata (for example, the 3D, Flat, or EDR icons).

Workaround: To confirm the content metadata, go to the Content Manager.

• The skip back button does not return to the start of the previous clip, but instead returns to the start of the current clip.

Workaround: Use the playlist pop-up drawer to return to the previous clip.

• Certain third-party IMB devices do not respond to the reset signal. A system reboot and the projector reset button does not reset some IMB devices.

*Workaround*: After a projector upgrade with a third-party IMB, remove and restore AC power to do a full system reset.

• Upgrading the projector software does not result in an upgrade of the CAT444 SDI input card.

*Workaround*: After upgrading the projector software, upgrade the CAT444 with the Dolby generated upgrade package.

- In rare cases after an upgrade, the projector may display a CSBD Alarm. *Workaround*: AC power cycle the projector.
- The Cinelife 2.2.0 release does not support high frame rates (> 48fps), this will be corrected in the next release.
- An on-screen color shift to red may occur when jogging between a 2D and 3D clip on a laser projector. This instantaneous laser power change takes some time to stabilize. *Workaround*: Make a 3D channel that has the 2D and 3D laser files set to the same file.

## **CineLife Main Software v2.1.0**

This software release is applicable to Christie CP2308, CP2308-C, and E3LH projectors.

Please note that all future software releases will be under the new name of Christie CineLife which replaces Fusion.

This software release introduces changes to the projector which prevents software downgrading. Once the software is upgraded to version 2.1.0 you will not be able to downgrade below this version.

E3LH projectors running software older than 2.0.0-1 will require two upgrades. The initial upgrade will indicate a fail on the upgrade of the VPU\_NX image, the second upgrade attempt will clear the upgrade failed alarm.

### **Affected products**

The following products should perform this software upgrade.

- CP2308
- CP2308-C
- E3LH

#### **New features**

The following new features are included in this software release.

- Added support for GDC third-party IMBs. Not available on E3LH projector models.
- Added support for LTC output on the IMB.
- Changed the E3LH rotating diffuser so it is only on when the light source is on.
- Updated the boot logo.

#### **Fixed issues**

The following fixed issues are included in this software release.

- Fusion naming has changed to CineLife.
- Source file resolutions now take effect when the custom aspect ratio is set to zero.
- Marriage setup checklist improved to provide more appropriate wording for the E3LH Dolby Vision projector.



- The logic for triggering external GPI macros was inverted in previous releases, it has been fixed so the low to high, and high to low stimulus works as expected.
- Unexpected light source off events are no longer triggering unexpected off automation macros.
- Error now displays on the home screen when a slave projector is missing content from a playlist.
- CP2308-C fans will now decrease in speed when the projector is in standby mode.
- Audio no longer crackles while transitioning between 48 to 96kHz audio content.
- Automation macros that are attached to the content after the intermission no longer trigger early based on the intermission rewind time.
- Deleting a large number of content clips from the system no longer causes the projector to lock up the user interface for a long period of time.
- The playback of Dolby Atmos content (15 seconds or less) is no longer played as PCM, but in Atmos mode.
- Playlists with Before Clip Start macros no longer prevent the slave projector from playing content.
- The first few frames on the slave projector are now consistently shown in a multi-projector setup.
- The Pause macro set to Before Clip Start now properly transitions the play / pause control to allow you to resume playback.
- The system is now able to load a playlist during an ingest of a DCP.
- Sorting logs on the diagnostics page no longer locks the UI up for long periods of time.
- The projector no longer crashes when a backup file is restored.
- Gamma files were only automatically changed at the start of playback leaving the last active gamma file on screen. The gamma file is now set back to the active channel setting after playback is complete.
- Content will now pause at the end of a clip where MPEG is the next clip coming up in the playlist.
- An automation macro that is set to the exact last second of the playlist will now trigger consistently.
- Single CPL feature and trailer content where the Dolby Atmos would play in PCM mode for the feature component no longer occurs.
- Audio channel mapping can now be backed up and restored from another projector.
- Test patterns with duplicate names no longer break test pattern functionality.
- The projector no longer crashes after adding a slave projector in the multi-projector setup screen.
- Slave projectors no longer generate an offline alarm when they are not enabled on the multiprojector page.
- Playlists with content that includes a 'Not Yet Valid' key are now properly showing a warning sliver on the user interface.
- The projector no longer crashes when canceling an interrogator.
- Displaying 2D test patterns on the screen while 3D content was playing no longer causes the test patterns to flicker on and off.
- 4K 3D content now plays properly on E3LH units.



- HDMI side-by-side (full) no longer causes the detection logic to determine the content as 4K instead of a dual packed 2K.
- 3D HDMI side-by-side (half) now displays in the correct aspect ratio on screen.
- Jogging in to Dolby Atmos content no longer causes a delay of 9-10 seconds before Atmos starts.
- Image now displays at full height with 3D HDMI top-and-bottom.
- IMB serial numbers are now unique every time they are armed, so RMA boards will no longer have the same serial number but a different certificate.
- Laser modules on the E3LH are now turned off in projector standby mode to extend the life of the chillers.
- DMD pumps are now turned off as soon as the light source is turned off to prevent the DMD's from cooling down too fast.
- 4K P59/P60 video from Dolby CAT444 now displays correctly.
- Dolby CAT444 upgrades properly the first time on new projectors.
- The CP2308-C lens mount list is correct for the projector model.
- The remote ingest test connection feature for PureFTP file servers is fixed.
- A canceled remote ingest scan no longer results in subsequent scans indicating scan in progress.
- Changed the source file setup so the offset values are relative to the center of the screen and not the upper left corner (for consistency with Series 2). If you are currently using source files in your channel setup, then these source files must be redefined after upgrading to v2.1.0. The behavior of "Auto Square Pixels" source files will not be affected and only user modified source files will need to be updated.
- "Active Dual" replaced with "Active 3D Glasses" on the multi-projector page to clarify the purpose of the feature.
- Improved the projector boot up to automatically detect and repair any corruption found on the F-Main.
- The DCI 3D content mastered for 14fl is no longer clipped.

#### **Known issues**

The following are known issues in this software release.

- Warning icons on the scheduler page are not shown in short content playlists of less than 30 minutes.
- On occasion, the projector displays a gray X-Window login prompt after booting up. *Workaround:* Power cycle the projector.
- The laser module selection page will not display a scroll bar if there are more than nine laser modules.
- The projector currently does not support HDMI PSF, or HDMI Interlace content playback.
- Deleting content on the master projector does not result in deleting content on the slave projector.

*Workaround:* Manually delete the content from the slave projector.

• The ILS File Setup page displays zoom controls even when selecting a generic non-zoom lens. *Workaround:* Do not use the zoom controls.



• Subtitles will display on the screen while on an HDMI channel if the IMB is playing content or is paused while displaying a subtitle.

Workaround: Prevent IMB content from playing while on the HDMI channel.

 Audio from the IMB will play out if you are on the HDMI channel with the IMB content playing in a loop.

*Workaround:* Prevent the IMB content from playing in a loop while on an HDMI channel or switch the audio to a different input source.

- On rare occasions, the projector software will fail while setting up the storage configuration. *Workaround:* Reboot the projector.
- On occasion, the controller will fail when registering a NAS as a Christie NAS-S2. *Workaround:* Reboot the projector.
- The screen flickers quickly when transitioning from a one-second black clip between 2D and 3D.
- Vertical subtitle rendering does not account for grapheme (characters with accents or marks) character sets and the marks are not printed above the character. This issue may affect the following languages: Hebrew, Arabic, Devanagari, Bengali, Gurmukhi, Oriya, Tamil, Telugo, Kannada, Malayalam, Thai, and Lao.
- The ingest source drop down list displays duplicate source locations.
- The upcoming shows on the main screen incorrectly displays the content meta data (3D, Flat, EDR).
- Test patterns will not display after a power cycle until a DCP content clip is played. In this case the **blank image** checkbox is usually active.

Workaround: Play a DCP clip to display test patterns.

- Using the skip back button does not return you to the start of the previous clip; instead it brings you to the start of the current clip.
   *Workaround:* Use the playlist pop-up drawer to get to the previous clip.
- Many third-party IMB devices will not respond to the reset signal. System reboots and the projector reset button will not reset some IMB devices.

Workaround: Remove and restore AC power to do a full system reset.

- 4K content with PNG subtitles will not scale properly when played on a 2K only projector. *Workaround:* Ingest and play 2K only DCP's on the 2K projectors.
- Upgrading the projector software does not result in an upgrade of the CAT444 SDI input card. *Workaround:* After upgrading the projector software, use the Dolby-generated upgrade package to upgrade the CAT444.
- Sending multiple back-to-back macros to the CP850 will not always trigger events. *Workaround:* Insert one-second delays between the macros.
- The CineLife software release does not include the YCbCr Full Range CSC file. On older systems, this file must be deleted, or for the color settings to be set to the factory default. *Workaround:* On older systems, do not select this option in the channel drop down list, or use the factory default color settings.
- On E3LH projectors, if you jog EDR content while playing in EDR Auto mode, the slave projector reverts to a Gamma 2.6 instead of remaining in PQ mode.

## Fusion Main Software v2.0.1-4

This software release is applicable to Christie CP2308-C projectors.

It introduces changes to the projector which prevents software downgrading. Once the software is upgraded to version 2.0.0 you will not be able to downgrade below this version.

#### **Affected products**

The following products should perform this software upgrade.

• CP2308-C

#### **Fixed issues**

The following issues are fixed in this software release.

- An intermittent video link issue no longer prevents the IMB video from playing through the projector.
- An intermittent SM crash no longer occurs on GetTime calls.
- The SM no longer breaks marriage randomly while power is on.
- An intermittent SM crash no longer occurs requesting secure logs.
- An intermittent SM crash no longer occurs when loading and unloading content.

#### **Known issues**

The following are known issues in this software release.

- Automation macros that are set to the exact last second of the playlist will not always trigger. *Workaround:* Set the automation macro at least one second before the end of the playlist.
- The reset button can become lodged behind the projector faceplate. *Workaround:* Wiggle the button until it becomes dislodged.
- In some cases, the X Windows login page can appear on projector power up. *Workaround:* Power cycle the projector.
- 3D HDMI side-by-side (half and full) formats are not functional in this release. *Workaround:* If possible, configure your input device to one of the other 3D HDMI formats.

## Fusion Main Software v2.0.0

Fusion main software v2.0.0 replaces the previous version 1.4.1 and is only applicable for the CP2308-C projector model.

This software release makes changes to the projector to prevent software downgrading. Once the projector is upgraded to v2.0.0 you will be unable to downgrade below this version.



#### **New features**

The following new features are included in this software release.

- Added support for the CP2308-C projector model.
- Added intermission support.
- Added new pop-out press and hold timer for buttons that allow the user to see the hold time while their finger is over the button.
- Ingested content is now stored on the NAS in its original format. Content can be downloaded directly from the NAS in its original format.
- Improved SM error reporting to provide more specific details about what is wrong with a KDM or content.
- Added support for custom NAS user names and passwords that are entered in to the content storage setup.
- Added a new serial API command to allow external devices to trigger projector automation actions (AUT+EXEC).

#### **Fixed issues**

The following issues are fixed in this software release.

- The Gateway timeout error no longer occurs while uploading the upgrade packages.
- The press and hold times on the main screen of the projector are reduced to half a second to increase responsiveness.
- The EDR flag no longer appears for content specified as gamma 2.6.
- The content is no longer showing different durations between the ingest and the content management page.
- The scheduler enabled state is now backed up and restored during a backup and restore operation.
- The upgrade package list no longer goes blank after uploading an upgrade package.
- If BeforeClipEnd and BeforeClipStart macros are scheduled to execute at the same time, the system will now execute the BeforeClipEnd first.
- Added a warning if the root file system storage goes below 2 GB in size.
- Enabling NTP time sync will now keep the SM time in sync up to DCI limits.
- The "Projector Healthy" status item will now be reported regardless of the power state of the projector.
- The user interface will now display special characters for the Keep Alive automation messages.
- Christie NAS S2 detection now only works on the primary content drive.
- The projector will now reset the connection to the SM prior to the 24 hour window while content is in an unloaded state. This prevents content load failures if content is loaded at the exact time the SM connection is re-established.
- The disable subtitle macro now properly disables subtitles on the content it is attached to and not the entire playlist.
- Remote ingests now properly show icons for the content (for example, Subtitles, 2D/3D, 2K/ 4K).
- CAT2015 API requests that fail or are offline no longer fill the logs with error messages.



- Fixed intermittent MPEG2 reset issues causing MPEG2 content not to play.
- Fixed an intermittent crash when changing the content storage configuration.
- Fixed an intermittent issue where pausing of content would not work.
- Fixed an issue where you were unable to resume content playback if you paused at the end of a clip that did not contain an audio track.
- Fixed an issue where subtitles would be out of sync with audio after different frame rate changes.
- Fixed a small audio crackle when transitioning between MPEG2 and Dolby Atmos content.
- Fixed an intermittent issue where the projector would stop responding after a factory defaults.
- Fixed an issue where Dolby Atmos sync would be lost after the first clip in a playlist.
- Fixed an intermittent issue where canceling an ingest would cause the projector to crash.

## **Technical support**

Technical support for Christie products is available at:

- North and South America: +1-800-221-8025 or Support.Americas@christiedigital.com
- Europe, Middle East, and Africa: +44 (0) 1189 778111 or Support.EMEA@christiedigital.com
- Asia Pacific: +65 6877-8737 or Support.APAC@christiedigital.com
- Christie Managed Services: +1-800-550-3061 or NOC@christiedigital.com