Technical Reference 020-103327-12

# Christie TruLife+ Status System



#### NOTICES

#### COPYRIGHT AND TRADEMARKS

Copyright  $^{\odot}$  2023 Christie Digital Systems USA Inc. All rights reserved.

All brand names and product names are trademarks, registered trademarks or trade names of their respective holders.

#### GENERAL

Every effort has been made to ensure accuracy, however in some cases changes in the products or availability could occur which may not be reflected in this document. Christie reserves the right to make changes to specifications at any time without notice. Performance specifications are typical, but may vary depending on conditions beyond Christie's control such as maintenance of the product in proper working conditions. Performance specifications are based on information available at the time of printing. Christie makes no warranty of any kind with regard to this material, including, but not limited to, implied warranties of fitness for a particular purpose. Christie will not be liable for errors contained herein or for incidental or consequential damages in connection with the performance or use of this material. Our centers of excellence for manufacturing in Kitchener, Ontario, Canada and in Shenzhen, China are ISO 9001:2015 Quality Management System-certified.

Christie is committed to making our documents free from language bias; however, we are not responsible for the language used on any linked or third-party documentation.

For the most current technical documentation and office contact information, visit https://www.christiedigital.com/.

#### Warranty

Products are warranted under Christie's standard limited warranty, the details of which are available at https://www.christiedigital.com/help-center/ warranties/ or by contacting your Christie dealer or Christie.

#### **PREVENTATIVE MAINTENANCE**

Preventative maintenance is an important part of the continued and proper operation of your product. Failure to perform maintenance as required, and in accordance with the maintenance schedule specified by Christie, voids the warranty. For preventative maintenance schedules, refer to *www.christiedigital.com*.

#### REGULATORY

The product has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the product is operated in a commercial environment. The product generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of the product in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at the user's own expense. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment

#### CAN ICES-3 (A) / NMB-3 (A)

이 기기는 업무용(A급)으로 전자파적합등록을 한 기기이오니 판매자 또는 사용자는 이점을 주의하시기 바라며, 가정 외의 지역에서 사용하는 것을 목적으로 합니다.

#### ENVIRONMENTAL

## ٢

The product is designed and manufactured with high-quality materials and components that can be recycled and reused. This symbol means electrical and electronic equipment, at their end-of-life, should be disposed of separately from regular waste. Please dispose of the product appropriately and according to local regulations. In the European Union, separate collection systems are for used electrical and electronic products.

If printing this document, consider printing only the pages you need and select the double-sided option.

Please help us to conserve the environment we live in!

#### Notation

Learn the hazard and information symbols used in the product documentation.



Danger messages indicate a hazardous situation which, if not avoided, results in death or serious injury.

Warning messages indicate a hazardous situation which, if not avoided, could result in death or serious injury.

Caution messages indicate a hazardous situation which, if not avoided, could result in minor or moderate injury.

Notice messages indicate a hazardous situation which, if not avoided, may result in equipment or property damage.

Information messages provide additional information, emphasize or provide a useful tip.

# Content

Christie TruLife+ status system
Model names
Product documentation
Status system states
Configuration Group (SST+CONF?)
System Group (SST+SYST?)
Signal Group (SST+SIGN?)
Illuminator Group (SST+LGHT?).       23
Version Group (SST+VERS?)
Temperature Group (SST+TEMP?)
Cooling Group (SST+COOL?)
Serial Group (SST+SERI?)

# Christie TruLife+ status system

This guide contains information about the values and fault conditions that can be reported by the status system on Christie TruLife+ devices.

The status system provides an overview of the device at the current point in time. It contains a number of groups, which contain a set of status items. Each status item represents a component or sub-component of the system. Obtain specific details regarding a warning or error for a status item using the log system.

The numbers next to the status items in this guide correspond directly to the status item index within each group.

# **Model names**

This guide applies to the following models.

- Christie Eclipse
- Christie M RGB Series
- Griffyn Series

# **Product documentation**

For installation, setup, and user information, see the product documentation available on the Christie website. Read all instructions before using or servicing this product.

- 1. Access the documentation from the Christie website:
  - Go to this URL: *http://bit.ly/3powZic* or *https://www.christiedigital.com/products/projectors/all-projectors/*.
  - Scan the QR code using a QR code reader app on a smartphone or tablet.



- 2. Select the projector series.
- 3. On the product page, select the model and switch to the **Downloads** tab.

# **Status system states**

The status system has three states to indicate the health of the device.

ОК	No known issue
Warning	A problem with this item should be addressed.
Error	A problem with this item prevents the system from properly displaying video or turning on the system.

# **Configuration Group (SST+CONF?)**

The Configuration group provides values and fault conditions for configuration-related items in Christie TruLife+.

#	Status	State	Value	Description
0	Projector Model		<projector model=""></projector>	Displays the model for the Christie TruLife+ projector.
				For Christie M 4K RGB series projectors, when operating in low-line voltage mode, <i>LLV</i> is appended to the projector model.
			Unknown	Cannot retrieve the model information.
			Jig Mode	Reserved for engineering use.
1	Projector S/N		<serial number=""></serial>	Displays the serial number of the projector.
			Unknown	The storage device containing the information is inaccessible or the data on the device is corrupted.
2	Output Resolution		<horizontal>x<vertical></vertical></horizontal>	Displays the native output resolution of the projector.
3	Projector Build Date		<yyyy>/<mm>/<dd></dd></mm></yyyy>	Displays the build date of the projector.
			Unknown	The storage device containing the information is inaccessible or the data on the device is corrupted.

# System Group (SST+SYST?)

The System group provides values and fault conditions relating to the system and its health for Christie TruLife+.

## Christie M RGB Series and Griffyn Series System group status items

#	Status	State	Value	Description
0	Projector Hours		<hours>:<minutes></minutes></hours>	Displays the total amount of time the projector has been on (including warm up and cool down times).
				This does not include the amount of time required to cool down the electronics when turning off the Keep Electronics on in Standby option while the projector is already in standby.
			N/A	Cannot retrieve or update the value.
1	Pitch/Roll		<pitch value="">/<roll value&gt;</roll </pitch>	Provides the physical orientation of the projector:
				<ul> <li>A negative pitch means the projector is pointing down.</li> </ul>
				<ul> <li>A negative roll means the projector is tilted counter clockwise as seen from the rear.</li> </ul>
			Communication Fault	Information is not available due to a hardware fault.
5 6	Lens Motor Horizontal-Axis Lens Motor Vertical-Axis		Calibrating	Currently calibrating the lens motor.
			Calibrated	Properly calibrated the motor range.
			Unknown	The status of the motor is unknown because a problem occurred in the upstream communication path.
			Uncalibrated	The range for the current lens has not been determined and/or the reported position on the axis may be inaccurate.
			Failed	During reset or calibration, an error was detected related to the motor and/or sensor.
7	Lens Motor Zoom- Axis		Calibrating	Currently calibrating the lens motor.
			Calibrated	Properly calibrated the motor range.



#	Status	State	Value	Description
			Unknown	The status of the motor is unknown because a problem occurred in the upstream communication path.
			Zoom Lens Motor Not Present	The lens does not have a zoom motor on it.
			Uncalibrated	The range for the current lens has not been determined and/or the reported position on the axis may be inaccurate.
			Failed	During reset or calibration, an error was detected related to the motor and/or sensor.
8	Lens Motor Focus- Axis		Calibrating	Currently calibrating the lens motor.
			Calibrated	Properly calibrated the motor range.
			Unknown	The status of the motor is unknown because a problem occurred in the upstream communication path.
			Uncalibrated	The range for the current lens has not been determined and/or the reported position on the axis may be inaccurate.
			Failed	During reset or calibration, an error was detected related to the motor and/or sensor.
9	Built-In Self Test		N/A	The built-in self test has not been executed yet.
			Passed	The built-in self test completed successfully.
			Failed	The built-in self-test failed.
10	System ID Board		ОК	Properly detected and initialized the device.
			Unknown	Cannot determine the status of the device.
			Communication Fault	Cannot communicate with the device.
			Invalid Data	The information on the device is missing or corrupted.
11	Housekeeping Board		ОК	Properly detected and initialized the device.
			Unknown	Cannot determine the status of the device.

#	Status	State	Value	Description
			Communication Fault	The device failed to respond or provided a bad response to a command while the light source is on. The projector remains on until AC power is removed, even if this warning condition is fixed.
			Detection Fault	Cannot read the device hardware information.
			Initialization Fault	Cannot properly initialize the device.
			Communication Fault	The device failed to respond or it provided a bad response to a command while the projector is in standby mode.
12	Keypad Display		Auto Detect	The projector is attempting to detect the presence of the keypad display device.
			Programming	Programming the device with the correct firmware.
			ОК	Properly detected and initialized the device.
			Detection Fault	Cannot detect the keypad display device.
			Unexpected Behavior	The device is not responding correctly.
			Upgrade Failed	The device failed to upgrade properly.
13	Power Supply		ОК	Detected the power supply and the output stage is on.
			Off	The power supply output stage is off.
			Unknown	Cannot determine the status of the power supply due to an upstream communication fault.
			Limited Mode	The power supply is running from low voltage input (120 V), if the projector can accept this input.
				<b>Only applies to:</b> Christie M 4K25 RGB, Christie M 4K+25 RGB Griffyn 4K35- RGB, and Griffyn 4K50-RGB
			Communication Fault	Cannot detect the power supply due to a communication failure.
			Failed	A non-catastrophic error occurred. See the logs for more information.

#	Status	State	Value	Description
			Overtemperature	The power supply reports a High-Temp alarm but no fan failure is reported.
			Upgrade Failed	Failed to upgrade the power supply.
			Failed	A fatal power supply error occurred. See the logs for more information.
			AC Input Failure	The power supply suffered from an input failure.
			Limited Mode	The power supply is running from low voltage input (120 V) and is not permitted. <b>Only applies to:</b> Griffyn 4K32-RGB
27	Power Supply Input Voltage Only applies to: Griffyn		ОК	The power supply input voltage is OK.
	4K32-RGB		AC Input Low	Displayed when the AC input is less than 180 VAC.
			AC Input Failure	Displayed when the AC input is less than 85 VAC or the power is completely lost.
27	Power Supply Inlet Voltage <b>Only applies to:</b> Christie M RGB Series, Griffyn 4K35- RGB, and Griffyn 4K50-RGB		<value>V</value>	Displays the power supply input voltage. This value is typically 120 or 240 depending on the power feeding the projector.
29	Lens ID		Detected	Detected the lens. Only applies to: Griffyn Series
			<lens></lens>	Displays the description of the lens detected. <b>Only applies to:</b> Christie M RGB Series
			Unknown	Cannot determine the state of the lens as the communication path to the lens is not working.
			Not Detected	Cannot detect the lens.
30	Main Control Board		ОК	The main control board has been initialized at least once and is known to be OK.
			Unknown	Cannot determine the main control board status because it has not been powered up.
			Initialization Fault	Cannot successfully program the main control board.



#	Status	State	Value	Description
32	Power Supply Output Voltage		<value>V</value>	Displays the output voltage from the power supply. This value is typically 54 V.
33	Power Supply 2 Output Voltage <b>Only applies to:</b> Griffyn 4K50-RGB		<value>V</value>	Displays the output voltage from the power supply. This value is typically 54 V.
46	Status LED Board		ОК	The status of the status LED board (SLB) is OK.
			Unknown	Cannot determine the status of the status LED board (SLB) because the backpane (C4BP) is nonfunctional.
			Failed	Failed to detect limit switches and cannot detect shutter status. While power is on this is a warning state.
47	Side Panel NFCT Only applies to: Griffyn		ОК	The side panel NFCT is OK.
	Series		Unknown	The side panel NFCT status is unknown because the integrated keypad board (IKB) is non-functional.
			Not Detected	Cannot detect the side panel NFCT.
50 51	Formatter-Red Formatter-Green		Off	The formatter is in standby without any cached errors or warnings.
52	Formatter-Blue		ОК	Properly detected and initialized the formatter.
			Unknown	Cannot determine the formatter status due to an upstream issue.
			Power Bad	The formatter detected an unexpected power glitch and has started the process of parking the digital micromirror device (DMD). This is often recoverable.
			Detection Fault	Cannot read the formatter hardware.
			Initialization Fault	Cannot properly initialize the formatter.
			Runtime Fault	The formatter experienced an unrecoverable failure during runtime.
58	Shutter		ОК	Detected the shutter and it is operating properly.
			Unknown	Cannot determine the status of the device.



#	Status	State	Value	Description
			Failed	Failed to detect limit switches. Cannot detect shutter status. While the power is on, this is a warning state.
			Failed	Failed to detect limit switches. Cannot detect shutter status. When the power state is off, an error state prevents power up.
96	Power Supply Output Current		<value>A</value>	Displays the output current from the power supply. This value depends on the current drawn from the supply and is informational only.
97	Power Supply 2 Output Current <b>Only applies to:</b> Griffyn 4K50-RGB		1.20A	Displays the output current from the power supply. This value depends on the current drawn from the supply and is informational only.
100	Rotating Diffuser		<value> RPM</value>	The diffuser is spinning at more than 500 RPM.
			Off	The diffuser is off.
			Unknown	Displayed if the housekeeping board is not yet initialized.
			<value> RPM - Low RPM</value>	The diffuser is spinning less than 500 RPM but more than 100 RPM.
			Failed	The diffuser is spinning at less than 100 RPM.
144	Photon Module		ОК	The module is working properly.
			Unknown	Displayed if the housekeeping board is not yet initialized.
			Communication Fault	Lost communication with the module after the module has been detected.
			Programming	Upgrading the photon software.
			Detection Fault	Cannot establish communication with the photon module after system start up.
			Upgrade Failed	The upgrade failed.
145	Variable Option Module Board		ОК	Properly detected and initialized the device.
			Unknown	Cannot determine the status of the device.

#	Status	State	Value	Description
			Communication Fault	The device failed to respond or provided a bad response to a command while the light source is on. The projector remains on until the AC power is removed even if this warning condition is fixed.
			Detection Fault	Cannot read the device hardware information.
			Initialize Fault	Cannot properly initialize the device.
			Communication Fault	The device failed to respond or provided a bad response to a command while the projector is in Standby mode.
204	Power Supply Board Only applies to: Christie M		ОК	The status of the power supply board is OK.
	RGB Series		Unknown	Cannot determine the status of the power supply board.
			Detection Fault	Cannot detect the power supply.
			Initialization Fault	Cannot initialize the power supply board.
207	Wobulator Only applies to: Christie M		ОК	The status of the wobulator (WBD) board is OK.
	RGB Series		Unknown	Cannot determine the status of the wobulator (WBD) board.
			Detection Fault	Cannot detect the wobulator (WBD) board.
208	Actuator Status Only applies to: Christie M		ОК	The status of the actuator is OK.
	RGB Series		Unknown	Cannot determine the status of the actuator.
			<error code=""></error>	The actuator is reporting an error code (non-zero value).
209	Actuator RMS Only applies to: Christie M		Unknown	Cannot determine the status of the actuator.
	RGB Series		< 5%	Reports an error quantity for the actuator.
			> 5%	Error quantity for the actuator exceeds the 5% limit.
210	Power Supply 2 <b>Only applies to:</b> Griffyn 4K50-RGB		ОК	Detected the power supply and the output stage is on.

#	Status	State	Value	Description
			Off	The power supply output stage is off.
			Unknown	Cannot determine the status of the power supply due to an upstream communication fault.
			Limited Mode	The power supply is running from low voltage input (120V), if the projector can accept this input.
			Communication Fault	Cannot detect the power supply due to a communication failure.
			Failed	A non-catastrophic error occurred. See the logs for more information.
			Overtemperature	The power supply reports a High-Temp alarm but no fan failure is reported.
			Upgrade Failed	Failed to upgrade the power supply.
			Failed	A fatal power supply error occurred. See the logs for more information.
			AC Input Failure	The power supply suffered from an input failure.
			Limited Mode	The power supply is running from low voltage input (120 V) and is not permitted.
211	Power Supply 2 Inlet Voltage <b>Only applies to:</b> Griffyn 4K50-RGB		<value>V</value>	Displays the power supply input voltage. This value is typically 120 or 240 depending on the power feeding the projector.
217	E-convergence to Light Engine Sync		ОК	Light engine has valid electronic convergence settings.
	Only applies to: Christie M RGB Series		Unknown	Cannot determine the status of the light engine.
			Out of Sync - New convergence required	Detected a light engine replacement. Rerun electronic convergence and save the settings factory defaults.

## Christie Eclipse System group status items

#	Status	State	Value	Description
0	Projector Hours		<hours>:<minutes></minutes></hours>	Displays the total amount of time the projector has been on (including warm up and cool down times). This does not include the amount of time required to cool down the electronics

#	Status	State	Value	Description
				when turning off the Keep Electronics on in Standby option while the projector is already in standby.
			N/A	Cannot retrieve or update the value.
1	Pitch/Roll		<pitch value="">/<roll value&gt;</roll </pitch>	<ul> <li>Provides the physical orientation of the projector:</li> <li>A negative pitch means the projector is pointing down.</li> <li>A negative roll means the projector is tilted counter clockwise as seen from the rear.</li> </ul>
			Communication Fault	Information is not available due to a hardware fault.
5 6	Lens Motor Horizontal-Axis Lens Motor Vertical-Axis		Calibrating	Currently calibrating the lens motor.
			Calibrated	Properly calibrated the motor range.
			Unknown	The status of the motor is unknown because a problem occurred in the upstream communication path.
			Uncalibrated	The range for the current lens has not been determined and/or the reported position on the axis may be inaccurate.
			Failed	During reset or calibration, an error was detected related to the motor and/or sensor.
7	Lens Motor Zoom- Axis		Calibrating	Currently calibrating the lens motor.
			Calibrated	Properly calibrated the motor range.
			Unknown	The status of the motor is unknown because a problem occurred in the upstream communication path.
			Zoom Lens Motor Not Present	The lens does not have a zoom motor on it.
			Uncalibrated	The range for the current lens has not been determined and/or the reported position on the axis may be inaccurate.
			Failed	During reset or calibration, an error was detected related to the motor and/or sensor.



#	Status	State	Value	Description
8	Lens Motor Focus- Axis		Calibrating	Currently calibrating the lens motor.
			Calibrated	Properly calibrated the motor range.
			Unknown	The status of the motor is unknown because a problem occurred in the upstream communication path.
			Uncalibrated	The range for the current lens has not been determined and/or the reported position on the axis may be inaccurate.
			Failed	During reset or calibration, an error was detected related to the motor and/or sensor.
9	Built-In Self Test		N/A	The built-in self test has not been executed yet.
			Passed	The built-in self test completed successfully.
			Failed	The built-in self-test failed.
10	System ID Board		ОК	Properly detected and initialized the device.
			Unknown	Cannot determine the status of the device.
			Communication Fault	Cannot communicate with the device.
			Invalid Data	The information on the device is missing or corrupted.
11	Housekeeping Board		ОК	Properly detected and initialized the device.
			Unknown	Cannot determine the status of the device.
			Communication Fault	The device failed to respond or provided a bad response to a command while the light source is on.
				The projector remains on until AC power is removed, even if this warning condition is fixed.
			Detection Fault	Cannot read the device hardware information.
			Initialization Fault	Cannot properly initialize the device.

Image: Supply       OK       Properly detected and initialized the device.         Image: OK       Properly detected and initialized the device.         Image: OK       Detection Fault       Cannot detect the keypad display device.         Image: OK       Unexpected Behavior       The device is not responding correctly.         Image: OK       Detected the power supply and the output stage is on.         Image: OK       Detected the power supply and the output stage is on.         Image: OK       Detected the power supply and the output stage is on.         Image: OK       Detected the power supply and the output stage is on.         Image: OK       Detected the power supply and the output stage is on.         Image: OK       Detected the power supply and the output stage is on.         Image: OK       Detected the power supply and the output stage is on.         Image: OK       Detected the power supply and the output stage is on.         Image: OK       Detection Fault         Image: OK       Cornor temperature shutdown or high temperature alarm is reported.         Image: OK       Overtemperature/Fan       The power supply reports a High-Temp alarm and fan failure.         Image: OK       Overtemperature/Fan       The power supply reports both a High-Temp alarm and fan failure.         Image: OK       Detection Fault       Communication timed out at startup	#	Status	State	Value	Description
Normation       Programming       Programming the device with the correct firmware.         OK       Properly detected and initialized the device.         Detection Fault       Cannot detect the keypad display device.         Unexpected Behavior       The device is not responding correctly.         Upgrade Failed       The device failed to upgrade properly.         U       Upgrade Failed       The device failed to upgrade properly.         U       Unknown       Cannot detect the power supply and the output stage is on.         Unknown       Cannot determine the status of the power supply due to an upstream communication fault.         Fan Problem       The power supply reports fan failure but no over temperature subdown or high temperature alarm is reported.         Overtemperature       The power supply reports both a High-Temp alarm but no fan failure.         Overtemperature/Fan       The power supply reports both a High-Temp alarm but no fan failure.         Detection Fault       Communication timed out at startup         Communication Fault       Communication timed out or there was an error in the transmission/reception of data.         Overcurrent Detected       The power supply reports over voltage shutdown condition.         Overcurrent Detected       The power supply reports over current shutdown condition.         Overcurrent Detected       The power supply reports over current shutdown condition. <td></td> <td></td> <td></td> <td>Communication Fault</td> <td>provided a bad response to a command</td>				Communication Fault	provided a bad response to a command
Image: Supply       OK       Properly detected and initialized the device.         Image: OK       Properly detected and initialized the device.         Image: OK       Detection Fault       Cannot detect the keypad display device.         Image: OK       Unexpected Behavior       The device is not responding correctly.         Image: OK       Detected the power supply and the output stage is on.         Image: OK       Detected the power supply and the output stage is on.         Image: OK       Detected the power supply and the output stage is on.         Image: OK       Detected the power supply and the output stage is on.         Image: OK       Detected the power supply and the output stage is on.         Image: OK       Detected the power supply and the output stage is on.         Image: OK       Detected the power supply and the output stage is on.         Image: OK       Detected the power supply and the output stage is on.         Image: OK       Detection Fault         Image: OK       Cornor temperature shutdown or high temperature alarm is reported.         Image: OK       Overtemperature/Fan       The power supply reports a High-Temp alarm and fan failure.         Image: OK       Overtemperature/Fan       The power supply reports both a High-Temp alarm and fan failure.         Image: OK       Detection Fault       Communication timed out at startup	12	Keypad Display		Auto Detect	
Image: series of the series				Programming	Programming the device with the correct firmware.
Image: Section of the section of th				ОК	
13       Power Supply       OK       Detected the power supply and the output stage is on.         13       Power Supply       OK       Detected the power supply and the output stage is on.         14       Unknown       Cannot determine the status of the power supply due to an upstream communication fault.         15       Fan Problem       The power supply reports fan failure but no over temperature shutdown or high temperature alarm is reported.         16       Overtemperature       The power supply reports a High-Temp alarm but no fan failure is reported.         17       Overtemperature/Fan Problem       The power supply reports both a High-Temp alarm and fan failure.         17       Detection Fault       Communication timed out at startup         18       Overvoltage Detected       The power supply reports over voltage shutdown condition.         19       Overvoltage Detected       The power supply reports over voltage shutdown condition.				Detection Fault	Cannot detect the keypad display device.
13       Power Supply       OK       Detected the power supply and the output stage is on.         13       Power Supply       OK       Detected the power supply and the output stage is on.         13       Unknown       Cannot determine the status of the power supply due to an upstream communication fault.         Image: Communication fault.       Fan Problem       The power supply reports fan failure but no over temperature shutdown or high temperature alarm is reported.         Image: Overtemperature       The power supply reports a High-Temp alarm but no fan failure is reported.         Image: Overtemperature/Fan Problem       The power supply reports both a High-Temp alarm but no fan failure.         Image: Overtemperature/Fan Problem       The power supply reports both a High-Temp alarm and fan failure.         Image: Overtemperature/Fan Problem       Communication timed out at startup         Image: Overtemperature fault       Communication timed out or there was an error in the transmission/reception of data.         Image: Overcurrent Detected       The power supply reports over voltage shutdown condition.         Image: Overcurrent Detected       The power supply reports over current shutdown condition.				Unexpected Behavior	The device is not responding correctly.
Image: Second				Upgrade Failed	The device failed to upgrade properly.
Image: second	13	Power Supply		ОК	
Image: Second				Unknown	power supply due to an upstream
Image: second state       alarm but no fan failure is reported.         Image: second state       Overtemperature/Fan Problem       The power supply reports both a High-Temp alarm and fan failure.         Image: second state       Detection Fault       Communication timed out at startup         Image: second state       Communication Fault       Communication timed out or there was an error in the transmission/reception of data.         Image: second state       Overvoltage Detected       The power supply reports over voltage shutdown condition.         Image: shutdown condition.       Overcurrent Detected       The power supply reports over current shutdown condition.         Image: shutdown condition.       Overtemperature       The power supply reports over				Fan Problem	no over temperature shutdown or high
Problem       Temp alarm and fan failure.         Detection Fault       Communication timed out at startup         Communication Fault       Communication timed out or there was an error in the transmission/reception of data.         Overvoltage Detected       The power supply reports over voltage shutdown condition.         Overcurrent Detected       The power supply reports over current shutdown condition.         Overtemperature       The power supply reports over				Overtemperature	
Image: Second state of the second s				-	
Image: state of the state				Detection Fault	Communication timed out at startup
Image: Second				Communication Fault	an error in the transmission/reception of
Shutdown condition.       Overtemperature       The power supply reports over				Overvoltage Detected	
				Overcurrent Detected	
				Overtemperature	The power supply reports over temperature shutdown.
Overtemperature / Fan ProblemThe power supply reports over temperature shutdown and fan failure.				-	
Control Fault The power supply reports internal circuit failure.				Control Fault	



#	Status	State	Value	Description
			AC Input Low	The power supply reports AC input is too low for full power mode.
			AC Input Failure	The power supply input has experienced a failure.
30	Main Control Board		ок	The main control board has been initialized at least once and is known to be OK.
			Unknown	Cannot determine the main control board status because it has not been powered up.
			Initialization Fault	Cannot successfully program the main control board.
32	Power Supply Output Voltage		<value>V</value>	Displays the output voltage from the power supply. This value is typically 54 V.
			Unknown	Indicates the housekeeping board is not initialized.
46	Status LED Board		ОК	The status of the status LED board (SLB) is OK.
			Unknown	Cannot determine the status of the status LED board (SLB) because the backpane (C4BP) is nonfunctional.
			Communication Fault	Cannot communicate with the status LED board (SLB).
47	Side Panel NFCT		ОК	The side panel NFCT is OK.
			Unknown	The side panel NFCT status is unknown because the IKB is non-functional.
			Not Detected	The side panel NFCT could not be written to or read from.
50 51	Formatter-Red Formatter-Green		Off	The formatter is in standby without any cached errors or warnings.
52	Formatter-Blue		ОК	Properly detected and initialized the formatter.
			Unknown	Cannot determine the formatter status due to an upstream issue.
			Power Bad	The formatter detected an unexpected power glitch and has started the process of parking the DMD. This is often recoverable.
			Detection Fault	Cannot read the formatter hardware.



#	Status	State	Value	Description
			Initialization Fault	Cannot properly initialize the formatter.
			Runtime Fault	The formatter experienced an unrecoverable failure during runtime.
58	Shutter		ОК	Detected the shutter and it is operating properly.
			Unknown	Cannot detect the shutter.
			Failed	Failed to detect limit switches. Cannot detect shutter status. When the power state is off, an error state prevents power up.
85	Color Sensor Board		ОК	Properly detected and initialized the device.
			Unknown	Cannot determine the status of the device.
			Communication Fault	Cannot communicate with the color sensor board.
			Detection Fault	Cannot detect the color sensor board.
			Initialization Fault	Cannot properly initialize the color sensor board.
88	Calibration		ОК	Properly calibrated the projector.
			Uncalibrated	Cannot properly calibrate the projector.
115 116	Premod Formatter-Red Premod Formatter-Green		Off	The formatter is in standby without any cached errors or warnings.
117	Premod Formatter-Blue		ОК	Properly detected and initialized the formatter.
			Unknown	Cannot determine the formatter status due to an upstream issue.
			Power Bad	The formatter detected an unexpected power glitch and has started the process of parking the DMD. This is often recoverable.
			Detection Fault	Cannot read the formatter hardware.
			Initialization Fault	Cannot properly initialize the formatter.
			Runtime Fault	The formatter experienced an unrecoverable failure during runtime.



#	Status	State	Value	Description		
145	Variable Option Module Board		ОК	Properly detected and initialized the device.		
			Unknown	Cannot determine the status of the device.		
			Communication Fault	The device failed to respond or provided a bad response to a command while the light source is on.		
				The projector remains on until the AC power is removed even if this warning condition is fixed.		
				Detection Fault	Cannot read the device hardware information.	
						Initialize Fault
			Communication Fault	The device failed to respond or provided a bad response to a command while the projector is in Standby mode.		

# Signal Group (SST+SIGN?)

The Signal group provides values and fault conditions relating to the video signal status for Christie TruLife+.

## Christie M RGB Series and Griffyn Series Signal group status items

#	Status	State	Value	Description	
50	Output Frequency		N/A	No video is being displayed.	
			<rate>Hz</rate>	Where <rate> : the output frame rate, in Hertz</rate>	
51	Frame Locked		N/A	No video is being displayed or an internal test pattern is being displayed.	
				Locked	The output is locked to the selected input(s).
52	3D Sync		N/A	There is no 3D signal or 3D mode is set to Off.	
			Valid 3D Sync	Detected a valid external 3D synch.	



#	Status	State	Value	Description
			Internal 3D Sync	The system is using the internal v- sync signal because the video is configured as a Dual-Input. External synch is ignored.
			Valid HDMI 3D Sync	Properly detected built-in HDMI 3D sync signal.
			Invalid 3D Sync (using internal sync)	Detected an external 3D sync but it is not locked and/or in phase with the 3D video signal(s). The system uses the internal v-sync signal instead but may have L/R swapped.
			No 3D Sync (using internal sync)	No external 3D sync is detected. The system uses the internal v-sync signal instead but may have L/R swapped.
53	SDVoE Connection		N/A	SDVoE is not connected to the projector.
			<alias ip=""></alias>	Displays the alias IP address of the SDVoE used to communicate with the projector over the SDVoE network.
54	3D Darktime Status		Achieved	3D content is being displayed and the dark time request is within the sequence limits.
			N/A	3D content was not received or the projector is off.
			Not Achieved	3D content is being displayed and the dark time request is out of the sequence limits. The displayed content will not be correct and will show artifacts.
5001 5002	HDMI Port 1 HDMI Port 2		N/A	The projector is in standby and the video path is not active.
5003	SDI Port 1		<input type=""/> , (No Signal)	No signal is detected.
5004 5005	SDI Port 2 SDI Port 3			Where <input type=""/> : { HDMI, DP, SDI, VOM }
5006 5007 5008 5010 5011 5012 5013 5014 5015	SDI Port 4 DP Port 1 DP Port 2 CVOF Port 1 CVOF Port 2 CVOF Port 3 CVOF Port 4 SDVoE Port HDBaseT Input		<input type=""/> , <active window&gt;@ <v-sync rate=""> (<status>)</status></v-sync></active 	Where <input type=""/> : { HDMI, DP, SDI, VOM } <active window=""> : <columns>x<rows> <v-sync rate=""> : the input frame rate, in Hz (##.##Hz) <status> : { "Good signal", "Inactive" }</status></v-sync></rows></columns></active>
5017	HDMI Port 3			



#	Status	State	Value	Description
5018 5019	DP Port 3 DP Port 4		<input type=""/> <active window=""> @ <v-sync rate=""> (<status>)</status></v-sync></active>	Where <input type=""/> : { HDMI, DP, SDI, VOM } <active window=""> : <columns>x<rows> <v-sync rate=""> : the input frame rate, in Hz (##.##Hz) <status> : { "Unlocked", "Bad signal" }</status></v-sync></rows></columns></active>
5020 5021			N/A	Port is off (projector powered down, LED is off).
			Ready for plug-in	Christie Link is ready to be plugged in (LED is off).
			Waiting on peer	Christie Link is waiting on the other side of the connection (LED is yellow).
			Link established	Christie Link connection is established (LED is white).
			Transmitting video	Christie Link is transmitting video (LED is blue).
			Receiving video	Christie Link is receiving video (LED is green).
			Incoming video ignored	Video ignored (LED is red).

## Christie Eclipse Signal group status items

#	Status	State	Value	Description
50	Output Frequency		N/A	No video is being displayed.
			<rate>Hz</rate>	Where <rate> : the output frame rate, in Hertz</rate>
51	Frame Locked		N/A	No video is being displayed or an internal test pattern is being displayed.
			Locked	The output is locked to the selected input(s).
			Unlocked	The output is not locked to the selected input(s).
53	SDVoE Connection		N/A	SDVoE is not connected to the projector.



#	Status	State	Value	Description
			<alias ip=""></alias>	Displays the alias IP address of the SDVoE used to communicate with the projector over the SDVoE network.
54	3D Darktime Status		Achieved	3D content is being displayed and the dark time request is within the sequence limits.
			N/A	3D content was not received or the projector is off.
			Not Achieved	3D content is being displayed and the dark time request is out of the sequence limits. The displayed content will not be correct and will show artifacts.
5001 5002	HDMI Port 1 HDMI Port 2		N/A	The projector is in standby and the video path is not active.
5003 5004 5005	SDI Port 1 SDI Port 2 SDI Port 3		<input type=""/> , (No Signal)	No signal is detected. Where <input type=""/> : { HDMI, DP, SDI, VOM }
5006 5007 5008 5010 5011 5012 5013 5014	SDI Port 4 DP Port 1 DP Port 2 CVOF Port 1 CVOF Port 2 CVOF Port 3 CVOF Port 4 SDVoE Port HDBaseT Input		<input type=""/> , <active window&gt;@ <v-sync rate=""> (<status>)</status></v-sync></active 	Where <input type=""/> : { HDMI, DP, SDI, VOM } <active window=""> : <columns>x<rows> <v-sync rate=""> : the input frame rate, in Hz (##.##Hz) <status> : { "Good signal", "Inactive" }</status></v-sync></rows></columns></active>
			<input type=""/> <active window=""> @ <v-sync rate=""> (<status>)</status></v-sync></active>	<pre>Where     <input type=""/> : { HDMI, DP, SDI,     VOM }     <active window=""> :         <columns>x<rows>         <v-sync rate=""> : the input frame         rate, in Hz (##.##Hz)         <status> : { "Unlocked", "Bad         signal" }</status></v-sync></rows></columns></active></pre>
5017 5018	ChristieLink-1 ChristieLink-2		N/A	Port is off (projector powered down, LED is off).
			Ready for plug-in	Christie Link is ready to be plugged in (LED is off).
			Waiting on peer	Christie Link is waiting on the other side of the connection (LED is yellow).

#	Status	State	Value	Description
			Link established	Christie Link connection is established (LED is white).
			Transmitting video	Christie Link is transmitting video (LED is blue).
			Receiving video	Christie Link is receiving video (LED is green).
			Incoming video ignored	Video ignored (LED is red).

# Illuminator Group (SST+LGHT?)

The Illuminator group provides values and fault conditions relating to the light source status for Christie TruLife+.

#### Christie M RGB Series and Griffyn Series Illuminator group status items



X in the status name represents a number between 1 and the number of drivers in the system. The Illuminator group returns the status for each driver.

Status	State	Value	Description
LOS State		On	Lasers are on.
		Off	Lasers are off.
		Warming Up	Lasers are in the process of turning on.
		Cooling Down	Lasers are off and are cooling down.
		Waiting to Strike	Lasers will start getting ready to turn on when the lasers have cooled down sufficiently.
Main Code CRC		ОК	The CRC is OK.
CPU Temperature		<value>°C</value>	Displays the CPU temperature in Celsius.
		<value>°C</value>	Temperature exceeds the warning threshold.
CSB Temperature		<value>°C</value>	Displays the CSB temperature in Celsius.
LiteLOC <sup>™</sup>		ОК	LiteLOC is enabled and OK.

Status	State	Value	Description
		Not Active	LiteLOC is disabled.
		Not Reachable	LiteLOC may not be able to reach brightness or color targets.
Power State		Power.On	Lasers are on.
		Power. Off	Lasers are off.
		Power.Warm Up	Lasers are in the process of turning on.
		Power.Cool Down	Lasers are off and cooling down.
		Power.Standby	Lasers will start getting ready to turn on when the lasers have cooled down sufficiently.
		Power.Halt	A critical hardware issue exists. The laser subsystem remains off until the issue is resolved and the system s AC power cycled.
CSB DAC Calibration		ОК	The color sensor board (CSBD) DAC calibration exists.
LiteLOC Sensor to Screen Calibration		ОК	LiteLOC sensor-to-screen calibration exists.
		Achieve additional performance by performing Sensor to Screen calibration	LiteLOC sensor-to-screen calibration does not exist.
LiteLOC LOS to Sensor Calibration		ОК	LiteLOC LOS-to-screen calibration exists.
LaserCrossPlugDetect		ОК	Lasers are wired correctly.
		<description failure="" of=""></description>	Lasers are wired incorrectly and cannot power on.
Laser Reds		<value></value>	Displays the health status of the red lasers.
Laser Greens		<value></value>	Displays the health status of the green lasers.
Laser Blues		<value></value>	Displays the health status of the blue lasers.
Laser Tecs <b>Only applies to:</b> Griffyn 4K32-RGB		<value></value>	Displays the health status of the TECs.



Status	State	Value	Description
Laser Cold Plate Temp Only applies to: Griffyn		<value>°C</value>	Displays the temperature inside the laser optical subsystem (LOS).
4K32-RGB		<value>°C</value>	Temperature exceeds the warning threshold.
Laser LOS Temp Only applies to: Griffyn		<value>°C</value>	Displays the temperature inside LOS.
4K32-RGB		<value>°C</value>	Temperature exceeds the warning threshold.
Laser LOS Humidity Only applies to: Griffyn		<rh value=""> %</rh>	Displays the humidity in the LOS.
4K32-RGB		<rh value=""> %</rh>	Humidity exceeds the warning threshold.
Laser Standby Hours		<standby hours=""></standby>	Displays the hours spent by the LOS in Standby mode. These hours are not the same as the projector standby hours.
Laser On Hours		<laser hours="" on=""></laser>	Displays the laser on hours.
Laser On Cycles		<count></count>	Displays the number of cycles the lasers were turned on from off.
UCD MFG Calibration		ОК	UCD calibrations are OK.
		Warning	One or more UCDs are missing calibration.
LOS Dewpoint Only applies to: Griffyn		ОК	Displays the dew point inside the LOS.
4K32-RGB		Approaching limit	User dew point (set using Max Ambient Temperature) is approaching the LOS dew point.
		Reached limit	User dew point (set using Max Ambient Temperature) has reached the LOS dew point. Brightness may be reduced.
Laser Boot SW Version		<version></version>	Version is OK.
		<invalid number="" version=""></invalid>	A version mismatch exists.
Laser Main SW Version		<version></version>	Version is OK.
		<invalid number="" version=""></invalid>	A version mismatch exists.
Laser UCD SW Version		<version></version>	UCD version is OK.



Status	State	Value	Description
		<invalid number="" version=""></invalid>	At least one UCD version mismatch exists (upgrade failed).
Laser HKB FPGA Version		<version></version>	Housekeeping board (HKB) FPGA version is OK.
		<invalid number="" version=""></invalid>	A housekeeping board (HKB) FPGA version mismatch exists.
Laser HKB HW Version		<type>.<version>.<mod></mod></version></type>	Housekeeping board (HKB) hardware version is OK.
		<invalid number="" version=""></invalid>	A housekeeping board (HKB) hardware version mismatch exists.
Laser CSB HW Version		<type>.<version>.<mod></mod></version></type>	Color sensor board (CSB) hardware version is OK.
		<invalid number="" version=""></invalid>	A color sensor board (CSB) version mismatch exists or the board could not be read.
CSxxxx Version		<type>.<version>.<mod></mod></version></type>	CS18G6 version is OK.
		<invalid number="" version=""></invalid>	A CS18G6 version mismatch exists or the board could not be read.
LBD RGB Version		<type>.<version>.<mod></mod></version></type>	The laser driver board RGB version is OK.
		<invalid number="" version=""></invalid>	A laser driver board RGB version mismatch exists or the board could not be read.
Laser CSB HW S/N		<serial number=""></serial>	Displays the color sensor board (CSB) serial number.
		<invalid number="" serial=""></invalid>	Color sensor board (CSB) serial number is missing.
CSxxxx S/N		<serial number=""></serial>	Displays the CS18G6 serial number.
		<invalid number="" serial=""></invalid>	CS18G6 serial number is missing.
LBD RGB S/N		<serial number=""></serial>	Displays the laser driver board RGB serial number.
		<invalid number="" serial=""></invalid>	Laser driver board RGB serial number is missing.
Laser Red Bank X Temps		<value>°C</value>	Displays the current temperature of the sensor.
		<value>°C</value>	Temperature exceeds the warning threshold.

Status	State	Value	Description
Laser Red Driver X Amps		<value> A</value>	Displays the current amperage of the sensor.
		<value> A</value>	Amperage exceeds the warning threshold.
Laser Red Driver X Volts		<value> V</value>	Displays the current voltage of the sensor.
		<value> V</value>	Voltage exceeds the warning threshold.
Laser Red Driver X Temp		<value>°C</value>	Displays the current temperature of the sensor.
		<value>°C</value>	Temperature exceeds the warning threshold.
Laser Green Bank X Temps		<value>°C</value>	Displays the current temperature of the sensor.
		<value>°C</value>	Temperature exceeds the warning threshold.
Laser Green Driver X Amps		<value> A</value>	Displays the current amperage of the sensor.
		<value> A</value>	Amperage exceeds the warning threshold.
Laser Green Driver X Volts		<value> V</value>	Displays the current voltage of the sensor.
		<value> V</value>	Voltage exceeds the warning threshold.
Laser Green Driver X Temp		<value>°C</value>	Displays the current temperature of the sensor.
		<value>°C</value>	Temperature exceeds the warning threshold.
Laser Blue Bank X Temps		<value>°C</value>	Displays the current temperature of the sensor.
		<value>°C</value>	Temperature exceeds the warning threshold.
Laser Blue Driver X Amps		<value> A</value>	Displays the current amperage of the sensor.
		<value> A</value>	Amperage exceeds the warning threshold.
Laser Blue Driver X Volts		<value> V</value>	Displays the current voltage of the sensor.
		<value> V</value>	Voltage exceeds the warning threshold.



Status	State	Value	Description
Laser Blue Driver X Temp		<value>°C</value>	Displays the current temperature of the sensor.
		<value>°C</value>	Temperature exceeds the warning threshold.
Laser Tec X Bank Temps Only applies to: Griffyn		<value>°C</value>	Displays the current temperature of the sensor.
4K32-RGB		<value>°C</value>	Temperature exceeds the warning threshold.
Laser Tec X Driver Amps Only applies to: Griffyn		<value> A</value>	Displays the current amperage of the sensor.
4K32-RGB		<value> A</value>	Amperage exceeds the warning threshold.
Laser Tec X Driver Volts Only applies to: Griffyn		<value> V</value>	Displays the current voltage of the sensor.
4K32-RGB		<value> V</value>	Voltage exceeds the warning threshold.
Laser Tec X Driver Temp Only applies to: Griffyn		<value>°C</value>	Displays the current temperature of the sensor.
4K32-RGB		<value>°C</value>	Temperature exceeds the warning threshold.
Ambient Temperature		<value>°C</value>	Displays the current temperature of the sensor.
		<value>°C</value>	Temperature exceeds the warning threshold.

### Christie Eclipse Illuminator group status items

Status	State	Value	Description
Laser Bank Firmware		<version></version>	Displays the firmware version running on the IPG laser rack.
		Unknown	Cannot determine the firmware version information.
Laser Bank State		Standby	Laser bank is in standby mode.
		Warming Up	Laser bank is warming up.
		On	Laser bank is on.

Status	State	Value	Description
		Cooling Down	Laser bank is cooling down.
		Unknown	Cannot retrieve the status of the laser rack.
		Connecting	Projector is attempting to connect to the laser bank.
		Handshaking	Projector handshaking with laser bank.
		Disconnected	Communications with the laser rack could not be established after attempting to connect for 10 seconds.
Laser Bank Status		ОК	Laser bank reports status OK.
		Unknown	Cannot communicate with laser bank to retrieve the laser bank status.
		Warning	Laser bank reports status as Warning.
Laser System Interlock		Closed	The system interlock is closed.
		Unknown	The system interlock is unknown because the communication path is non-functional.
		Open	The system interlock is open.
Laser Bank Serial No.		<serial #=""></serial>	Displays the serial number of the laser rack.
		Unknown	Cannot determine the serial number information.
Laser Bank Color Balance		ОК	Color balance reported from the laser rack is OK
		Unknown	Cannot determine the color balance from the laser rack.
		Warning	Color balance reported from the laser rack is Warning.
		Error	Color balance reported from the laser rack is Error.



Status	State	Value	Description
Laser Bank Model		<model></model>	Displays the model reported from the laser bank.
		Unknown	Cannot determine the model information.
		Unsupported - <model></model>	Connected rack model is not supported.
Ambient Temperature		ОК	Ambient temperature is below the maximum expected entered by the user.
		Unknown	An upstream communication fault exists.
		High than the maximum value	Intake temperature is reading higher than the maximum ambient entered by the user.
Applied Laser Power		<applied laser="" power=""> - OK</applied>	Displays the current power applied to the laser bank.
		<applied laser="" power=""> - Ambient Approaching Limits</applied>	Displays the current laser power applied to the laser bank when the intake temperature is nearing the maximum ambient temperature set by the user.
		<applied laser="" power=""> - Reduced Due to Ambient</applied>	Displays the current power applied to the laser bank when it has been reduced due to high ambient temperature.
Laser Bank Armed State		Armed	Laser bank is currently armed (green button is lit).
		Unknown	Cannot retrieve status from the laser bank.
		Not Armed	Laser bank is currently not armed (green button is not lit).
Color Sensor - Red Color Sensor - Green		<value></value>	Displays the current color sensor value.
Color Sensor - Blue		Unknown	Cannot retrieve the value because the CSENSE board is not detected or is non-functional.

Status	State	Value	Description
		<value> - Unexpected</value>	The color sensor detects light when there should not be any light.

# Version Group (SST+VERS?)

The Version group provides values and fault conditions related to software and hardware versions for Christie TruLife+.

Christie M RGB Series and Griffyn Series Vers	sion group status Items
---	-------------------------

#	Status	State	Value	Description
0	Main Control Board SW Version		<version></version>	Displays the software version running on the main control board.
			Unknown	Cannot determine the software version information.
1	1 Main Control Board HW Version		<name>.<level>.<mod< td=""><td><name> = Short name of the board <level> = Version of the board <mod> = Modification level of the board</mod></level></name></td></mod<></level></name>	<name> = Short name of the board <level> = Version of the board <mod> = Modification level of the board</mod></level></name>
			Detection Fault	Failed to read the board type information.
4 5 6	Formatter-Red HW Version Formatter-Green HW Version Formatter-Blue HW Version		<name>.<level>.<mod< td=""><td><name> = Short name of the board <level> = Version of the board <mod> = Modification level of the board This information is cached while the projector is in standby.</mod></level></name></td></mod<></level></name>	<name> = Short name of the board <level> = Version of the board <mod> = Modification level of the board This information is cached while the projector is in standby.</mod></level></name>
			N/A	The formatter has never been turned on or initialized.
17	Power Supply HW Version		<model>.<version>.<n ame&gt;</n </version></model>	The version information of the 48V power supply.
			Unknown	Cannot retrieve the hardware version. Displayed if the housekeeping board is not yet initialized.



#	Status	State	Value	Description
18	Housekeeping Board HW Version		<name>.<level>.<mod &gt;</mod </level></name>	<name> = Name of the board (such as HKBC)</name>
				<level> = Hardware version of the board</level>
				<mod> = Modification level of the board</mod>
			Unknown	Cannot retrieve the hardware version.
19	Keypad Display HW Version		<name>.<level>.<mod &gt;</mod </level></name>	<name> = Name of the board (such as IKB)</name>
				<level> = Hardware version of the board</level>
				<mod> = Modification level of the board</mod>
			Unknown	Cannot retrieve the hardware version as the board is not ready.
59	Photon SW Version		<major>.<minor>.<mo d&gt;-<rev>(Boot)/ <major>.<minor>.<mo d&gt;-<rev>(Main)</rev></mo </minor></major></rev></mo </minor></major>	Displays the Photon bootloader software version and Photon Main firmware software version.
			Unknown	Cannot communicate with the Photon module or programming firmware.
68	Variable Option Module HW Version		<name>.<level>.<mod< td=""><td><name> = Short name of the board</name></td></mod<></level></name>	<name> = Short name of the board</name>
				<level> = Version of the board</level>
				<mod> = Modification level of the board</mod>
			Unknown	Cannot retrieve the hardware version as the board is not ready.
69	BIOS SW Version		<version></version>	Displays the BIOS software version.
71	Power Supply HW Version Only applies to: Christie M RGB Series		<name>.<level>.<mod &gt;</mod </level></name>	<name> = Short name of the board</name>
				<level> = Version of the board</level>
				<mod> = Modification level of the board</mod>
			Unknown	Cannot retrieve the hardware version as the board is not ready.

#	Status	State	Value	Description
72	Wobulator SW Version Only applies to: Christie M RGB Series		<major>.<minor>.<mo d&gt;</mo </minor></major>	Displays the wobulator software version.
			Unknown	Cannot communicate with the wobulator module or programming firmware.
			<major>.<minor>.<mo d&gt;</mo </minor></major>	Displays the wobulator software version but it is not the expected release version.
			Programming	The wobulator software is currently being upgarded.
			Upgrade Failed	The wobulator software upgrade failed.
			Communication Fault	Failed to communicate with the wobulator.
73	Wobulator HW Version Only applies to: Christie M RGB Series		<name>.<level>.<mod< td=""><td><name> = Short name of the board <level> = Version of the board <mod> = Modification level of the board</mod></level></name></td></mod<></level></name>	<name> = Short name of the board <level> = Version of the board <mod> = Modification level of the board</mod></level></name>
			Unknown	Cannot retrieve the hardware version as the board is not ready.
74	Power Supply 2 HW Version Only applies to: Griffyn 4K50-RGB		<model>.<version>.<n ame&gt;</n </version></model>	The version information of the 48V power supply.
			Unknown	Cannot retrieve the hardware version. Displayed if the housekeeping board is not yet initialized.

## Christie Eclipse Version group status Items

#	Status	State	Value	Description
0	Main Control Board SW Version		<version></version>	Displays the software version running on the main control board.
			Unknown	Cannot determine the software version information.
1	Main Control Board HW Version		<name>.<level>.<mod></mod></level></name>	<name> = Short name of the board</name>
				<level> = Version of the board</level>

#	Status	State	Value	Description
				<mod> = Modification level of the board</mod>
			Detection Fault	Failed to read the board type information.
4 5 6	Formatter-Red HW Version Formatter-Green HW Version Formatter-Blue HW Version		<name>.<level>.<mod></mod></level></name>	<name> = Short name of the board <level> = Version of the board <mod> = Modification level of the board This information is cached while the projector is in standby.</mod></level></name>
			N/A	The formatter has never been turned on or initialized.
15	Lens Motor Board SW Version		<boot version=""> <main version=""></main></boot>	Displays the software version as reported by the board.
			N/A	Software version is not available because the board failed to initialize properly.
			<boot version=""> <main </main version&gt; - backup firmware not found</boot>	Cannot find or validate (corrupt) the upgrade (RFF).
			Programming	Cannot use the board at this point because it is being programmed.
			Unexpected Behavior	The board is not behaving as expected. For excample, it is in the wrong state or it is not responding to commands correctly.
16	Lens Motor Board HW Version		<name>.<level>.<mod></mod></level></name>	<name> = Short name of the board <level> = Version of the board <mod> = Modification level of the board</mod></level></name>
			Unknown	The upstream communication path is non-functional.
			Detection fault	Failed to read board type information.
17	Power Supply HW Version		<model>.<version>.<na me&gt;</na </version></model>	The version information of the 48V power supply.
			Unknown	Cannot retrieve the hardware version.



#	Status	State	Value	Description
				Displayed if the housekeeping board is not yet initialized.
18	Housekeeping Board HW Version		<name>.<level>.<mod></mod></level></name>	<name> = Name of the board (such as HKBC) <level> = Hardware version of the board <mod> = Modification level of the board</mod></level></name>
			Unknown	Cannot retrieve the hardware version.
19	19 Keypad Display HW Version		<name>.<level>.<mod></mod></level></name>	<name> = Name of the board (such as IKB) <level> = Hardware version of the board <mod> = Modification level of the board</mod></level></name>
			Unknown	Cannot retrieve the hardware version as the board is not ready.
56	Color Sensor Board HW Version		<version></version>	Displays the hardware version running on the color sensor board.
			Unknown	Cannot retrieve the hardware version.
58	Calibration Version		text string with Hawkeye version	Displays the calibration software used to calibrate projector.
			Uncalibrated	Indicates an uncalibrated projector.
62 63 64	Premod Formatter-Red HW Version Premod Formatter-Green HW Version Premod Formatter-Blue HW Version		<name>.<level>.<mod></mod></level></name>	<name> = Short name of the board <level> = Version of the board <mod> = Modification level of the board This is cached information while the projector is in Standby mode.</mod></level></name>
			N/A	The formatter has never been turned on or initialized.
68	VOM HW Version		<name>.<level>.<mod></mod></level></name>	<name> = Short name of the board <level> = Version of the board <mod> = Modification level of the board</mod></level></name>



#	Status	State	Value	Description
			Unknown	Cannot retrieve the hardware version as the board is not ready.
69	BIOS SW Version		<version></version>	Displays the BIOS software version.

# **Temperature Group (SST+TEMP?)**

The Temperature group provides values and fault conditions for temperature-related items in Christie TruLife+.

## Christie M RGB Series and Griffyn Series Temperature group status items

#	Status	State	Value	Description
2	Air Intake Temperature		<value> °C</value>	Displays the current
4	Main Control Board Temperature			temperature of the sensor.
6	Image Processor Scaler Temperature		Unknown	Temperature reading is
10	Formatter-Red Temperature			unavailable.
11	DMD Waterblock Temperature		<value> °C - Low</value>	Temperature is sitting inside
12	Formatter-Green Temperature		Temperature	the warning band.
14	Formatter-Blue Temperature		<value> °C - High</value>	Temperature is sitting inside
20	Housekeeping Board Temperature		Temperature	the warning band.
29	Main Control Board FPGA Temperature		<value> °C - Too Hot (shutdown)</value>	Temperature is exceeding the error threshold.
123	Variable Option Module FPGA Temperature			
124	Power Supply Temperature		Communication Fault	Cannot retrieve the
125	Power Supply 2 Temperature		(shutdown)	temperature from sensor.
126	Actuator Temperature		<value> °C - Too Cold (shutdown)</value>	Temperature is below the error threshold.
127	WBD Temperature			
131	Coolant Temperature			
	125 Only applies to: Griffyn 4K50-RGB			
	126 and 127 Only apply to: Christie M RGB Series			
	131 Only apply to: Christie M 4K15 RGB models			

#### Christie Eclipse Temperature group status items

#	Status	State	Value	Description
0	Integrator Rod Temperature		<value>° C</value>	Displays the current
2	Air Intake Temperature			temperature of the sensor.
4	Main Control Board Temperature		Unknown	Temperature reading is
6	Image Processor Scaler Temperature			unavailable.

### **CHKISTIE**<sup>®</sup>

10	Formatter-Red Temperature	<value>° C - Low</value>	Temperature is sitting inside
11	DMD Waterblock Temperature	Temperature	the warning band.
12 14	Formatter-Green Temperature Formatter-Blue Temperature	<value>° C - High Temperature</value>	Temperature is sitting inside the warning band.
20 29	Housekeeping Board Temperature Main Control Board FPGA Temperature	<value>° C - Too Hot (shutdown)</value>	Temperature is exceeding error threshold.
31 32	Fiber Bundles Temperature Diffuser Temperature	Communication fault (shutdown)	Failed to retrieve temperature from sensor.
		<value>° C - Too Cold (shutdown)</value>	Temperature is below error threshold.
34	Power Supply Temperature	<value>° C</value>	Displays the current temperature of the sensor
		Unknown	Temperature reading is unavailable
		<value>° C - Low Temperature</value>	Temperature is sitting inside the warning band.
		<value>° C - High Temperature</value>	Temperature is sitting inside the warning band.
		<value>° C - Too Hot (shutdown)</value>	Temperature is exceeding error threshold.
		Communication fault (shutdown)	Failed to retrieve temperature from sensor.
		<value>° C - Too Cold (shutdown)</value>	Temperature is below error threshold.
114 115	Exhaust Temperature Static Diffuser Temperature	<value>° C</value>	Displays the current temperature of the sensor.
116 117	<ul> <li>PSF2 Temperature</li> <li>Premod Formatter-Red Temperature</li> <li>Premod Formatter-Green Temperature</li> <li>Premod Formatter-Blue Temperature</li> <li>Premod DMD Waterblock Temperature</li> </ul>	Unknown	Temperature reading is unavailable.
118 119		<value>° C - Low Temperature</value>	Temperature is sitting inside the warning band.
120 123		<value>° C - High Temperature</value>	Temperature is sitting inside the warning band.
		<value>° C - Too Hot (shutdown)</value>	Temperature is exceeding error threshold.
		Communication fault (shutdown)	Failed to retrieve temperature from sensor.
		<value>° C - Too Cold (shutdown)</value>	Temperature is below error threshold.

# **Cooling Group (SST+COOL?)**

The Cooling Group provides values and fault conditions related to the cooling and fans for Christie TruLife+.

Griffyn Series Cooling group status items

#	Status	State	Value	Description
3 6			<tach> RPM</tach>	Displays the current tachometer reading, if fan has not gone through fan calibration step.
			<%max>% - <tach> RPM</tach>	Displays current tachometer reading and percentage of maximum speed determined at calibration.
			Off	Fan is off.
			Unknown	The tachometer reading is unavailable.
			Off - Overridden	Fan is off. The fan speed has been changed from its default recommended value.
			<tach> RPM - Overridden</tach>	Fan is on. The fan speed has been changed from its default recommended value.
			<tach> RPM - Low RPM</tach>	Fan tachometer reading is lower than the minimum recommended speed.
12	Liquid Cooling Flow Detect		On	Liquid cooling flow is normal.
			Off	Liquid cooling is off.
			Unknown	Cannot determine the cooling flow.
			Low Flow	Flow reading is lower than expected.
			Flow Implemented	Flow reading is critically lower than the minimum recommended threshold.
31 33 34 35	Formatter-Red (Fan 5) Laser Driver Intake (Fan 24) Light Engine Intake (Fan 25) Laser Driver Intake (Fan 26)		<tach> RPM</tach>	Displays the current tachometer reading, if fan has not gone through fan calibration step.



#	Status	State	Value	Description
36 45 47 48	36 Laser Driver Intake (Fan 27) Formatter-Blue (Fan 3) Power Supply (Fan 47) Power Supply 2 Fan		<%max>% - <tach> RPM</tach>	Displays current tachometer reading and percentage of maximum speed determined at calibration.
40 55 56	Radiator 1 Fan A (Fan 6) Radiator 1 Fan B (Fan 7)		Off	Fan is off.
57 58	Radiator 1 Fan C (Fan 8) Radiator 1 Fan C (Fan 9)		Unknown	The tachometer reading is unavailable.
59 60	Radiator 1 Fan E (Fan 10) Radiator 1 Fan F (Fan 11)		Off - Overridden	Fan is off. The fan speed has been changed from its default recommended value.
	<b>35, 36, 48 Only apply to:</b> Griffyn 4K35-RGB and Griffyn 4K50-RGB		<tach> RPM - Overridden</tach>	Fan is on. The fan speed has been changed from its default recommended value.
			<tach> RPM - Low RPM</tach>	Fan tachometer reading is lower than the minimum recommended speed.
99	Liquid Cooling Pump		<value> RPM</value>	Displays the RPM value indicating the pump is operating normally.
			Off	Liquid cooling is off.
			Unknown	The liquid cooling status is unavailable.
			<value> RPM - Low RPM</value>	Pump is running under expected RPM.
			<value> RPM - High RPM</value>	Pump is running above expected RPM.
			<value> RPM - Low RPM</value>	Pump is running under critical RPM.
			<value> RPM - High RPM</value>	Pump is running above critical RPM.
123	Liquid Cooling LOS Flow Detect Only applies to: Griffyn 4K35-		On	Liquid cooling flow is normal.
	RGB and Griffyn 4K50-RGB		Off	Liquid cooling is off.
			Unknown	Cannot determine the cooling flow.
			Low Flow	Flow reading is lower than expected.

#	Status	State	Value	Description
			Flow Implemented	Flow reading is critically lower than the minimum recommended threshold.
124	Liquid Cooling LOS Pump <b>Only applies to:</b> Griffyn 4K35- RGB and Griffyn 4K50-RGB		<value> RPM</value>	Displays the RPM value indicating the pump is operating normally.
			Off	Liquid cooling is off.
			Unknown	The liquid cooling status is unavailable.
			<value> RPM - Low RPM</value>	Pump is running under expected RPM.
			<value> RPM - High RPM</value>	Pump is running above expected RPM.
			<value> RPM - Low RPM</value>	Pump is running under critical RPM.
			<value> RPM - High RPM</value>	Pump is running above critical RPM.
125	Fan Speed Profile		<mode></mode>	Reflects the fan mode.
126	126 Liquid Cooling Coolant Level Only applies to: Griffyn 4K35-		ОК	Indicates the coolant level is normal.
	RGB and Griffyn 4K50-RGB		Unknown	The liquid cooling coolant level status is unavailable.
			Low	Indicates the coolant level is low and must be filled at next service call.

#### Christie M 4K RGB series Cooling group status items

#	Status	State	Value	Description
3	3 Blue LOS Blower (Fan 4) Only applies to: Christie M 4K25 RGB models		<tach> RPM</tach>	Displays the current tachometer reading, if fan has not gone through fan calibration step.
			<%max>% - <tach> RPM</tach>	Displays current tachometer reading and percentage of maximum speed determined at calibration.
			Off	Fan is off.
			Unknown	The tachometer reading is unavailable.



#	Status	State	Value	Description
			Off - Overridden	Fan is off. The fan speed has been changed from its default recommended value.
			<tach> RPM - Overridden</tach>	Fan is on. The fan speed has been changed from its default recommended value.
			<tach> RPM - Low RPM</tach>	Fan tachometer reading is lower than the minimum recommended speed.
6	Cave Blower Fan (Fan 102)		<tach> RPM</tach>	Displays the current tachometer reading, if fan has not gone through fan calibration step.
			<%max>% - <tach> RPM</tach>	Displays current tachometer reading and percentage of maximum speed determined at calibration.
			Off	Fan is off.
			Unknown	The tachometer reading is unavailable.
			Off - Overridden	Fan is off. The fan speed has been changed from its default recommended value.
			<tach> RPM - Overridden</tach>	Fan is on. The fan speed has been changed from its default recommended value.
			<tach> RPM - Low RPM</tach>	Fan tachometer reading is lower than the minimum recommended speed.
12	Liquid Cooling Flow Detect Only applies to: Christie M		On	Liquid cooling flow is normal.
	4K25 RGB models		Off	Liquid cooling is off.
			Unknown	Cannot determine the cooling flow.
			Low Flow	Flow reading is lower than expected.
			Flow Implemented	Flow reading is critically lower than the minimum recommended threshold.
45 47	Light Engine (Fan 3) Power Supply (Fan 47)		<tach> RPM</tach>	Displays the current tachometer reading, if fan



#	Status	State	Value	Description
55 56	Radiator 1 Fan A (Fan 6) Radiator 1 Fan B (Fan 7)			has not gone through fan calibration step.
57	Radiator 1 Fan C (Fan 8)		<%max>% - <tach> RPM</tach>	Displays current tachometer reading and percentage of maximum speed determined at calibration.
			Off	Fan is off.
			Unknown	The tachometer reading is unavailable.
			Off - Overridden	Fan is off. The fan speed has been changed from its default recommended value.
			<tach> RPM - Overridden</tach>	Fan is on. The fan speed has been changed from its default recommended value.
			<tach> RPM - Low RPM</tach>	Fan tachometer reading is lower than the minimum recommended speed.
99	Liquid Cooling Pump Only applies to: Christie M 4K25 RGB models		<value>RPM</value>	Displays the RPM value indicating the pump is operating normally.
			Off	Liquid cooling is off.
			Unknown	The liquid cooling status is unavailable.
			<value> RPM - Low RPM</value>	Pump is running under expected RPM.
			<value> RPM - High RPM</value>	Pump is running above expected RPM.
			<value> RPM - Low RPM</value>	Pump is running under critical RPM.
			<value> RPM - High RPM</value>	Pump is running above critical RPM.
123	Liquid Cooling LOS Flow Detect		On	Indicating the liquid cooling flow is operating normally.
			Off	Liquid cooling is off.
			Unknown	Cannot determine the cooling flow.
			Low Flow	Flow reading is lower than expected.

#	Status	State	Value	Description
			Flow Impeded	Flow reading is critically lower than the minimum recommended threshold.
124	124 Liquid Cooling LOS Pump		On	Displays the RPM value indicating the pump is operating normally.
			Off	Liquid cooling is off.
			Unknown	The liquid cooling status is unavailable.
			<value> RPM - Low RPM</value>	Pump is running under expected RPM.
			<value> RPM - High RPM</value>	Pump is running above expected RPM.
			<value> RPM - Low RPM</value>	Pump is running under critical RPM.
			<value> RPM - High RPM</value>	Pump is running above critical RPM.
125	Fan Speed Profile		<mode></mode>	Reflects the fan mode.

#### Christie Eclipse Cooling Group status items

#	Status	State	Value	Description
6	6 Cave Blower (Fan 102)		<tach> RPM</tach>	Displays the current tachometer reading, if fan has not gone through the fan calibration step.
			<%max>% - <tach> RPM</tach>	Displays the current tachometer reading and percentage of maximum speed determined at calibration.
			Off	Fan is off.
			Unknown	The tachometer reading is unavailable.
			<tach> RPM - Low RPM</tach>	Fan tachometer reading is lower than the minimum recommended speed.
			Off - Overridden	Fan is off. Fan speed has been changed from its default recommended value.

#	Status	State	Value	Description
			<tach> RPM - Overridden</tach>	Fan is on. Fan speed has been changed from its default recommended value.
12	Liquid Cooling Flow Meter Prime		On	Liquid cooling flow is normal.
			Off	Liquid cooling is off.
			Unknown	Cannot determine cooling flow.
			Low Flow	Liquid cooling flow reading is lower than expected.
		Error	Flow Impeded	Liquid cooling flow reading is critically lower than the minimum recommended threshold.
13	Liquid Cooling Pump Prime		<value> RPM</value>	Pump operating normally. Displays the RPM value
			Off	Liquid cooling is off.
			Unknown	Status is unavailable.
			<value> RPM - Low RPM</value>	Pump running under expected RPM.
			<value> RPM - High RPM</value>	Pump running above expected RPM.
			<value> RPM - Low RPM</value>	Pump running under critical RPM.
			<value> RPM - High RPM</value>	Pump running above critical RPM.
33 34 35 36	CC Rad Bot-R (Fan 1) CC Rad Top-L (Fan 2) CC Rad Top-R (Fan 3) CC Rad Bot-L (Fan 0)		<tach> RPM</tach>	Displays the current tachometer reading, if fan has not gone through the fan calibration step.
42 55 56 57	Ferrule/Diffuser LAD (Fan 11) Prime-LE Rad Top-L (Fan 4) Prime-LE Rad Top-R (Fan 5) Prime-LE Rad Bot-L (Fan 6)		<%max>% - <tach> RPM</tach>	Displays the current tachometer reading and percentage of maximum speed determined at calibration.
58 70	Prime-LE Rad Bot-R (Fan 7) Pre-LE Intake Bot-L (Fan 14)		Off	Fan is off.
71 72 73	Pre-LE Intake Bot-R (Fan 15) Pre-LE Intake Top-L (Fan 16) Pre-LE Intake Top-R (Fan 17)		Unknown	The tachometer reading is unavailable.



#	Status	State	Value	Description
108 109 117	Prime-LE Exhaust Left (Fan 9) Prime-LE Exhaust Right (Fan 10) Pre-LE LAD Left (Fan 18)		<tach> RPM - Low RPM</tach>	Fan tachometer reading is lower than the minimum recommended speed.
118 119	Pre-LE LAD Right (Fan 20) Pre-LE Exhaust (Fan 19)		Off - Overridden	Fan is off. Fan speed has been changed from its default recommended value.
			<tach> RPM - Overridden</tach>	Fan is on. Fan speed has been changed from its default recommended value.
121	Liquid Cooling Flow Meter Premod		On	Liquid cooling flow is normal.
			Off	Liquid cooling is off.
			Unknown	Cannot determine liquid cooling flow.
			Low Flow	Liquid cooling flow reading is lower than expected.
			Flow Impeded	Flow reading is critically lower than the minimum recommended threshold.
122	Liquid Cooling Pump Premod		<value> RPM</value>	Pump operating normally. Displays the RPM value
			Off	Liquid cooling is off.
			Unknown	Status is unavailable.
			<value> RPM - Low RPM</value>	Pump running under expected RPM.
			<value> RPM - High RPM</value>	Pump running above expected RPM.
			<value> RPM - Low RPM</value>	Pump running under critical RPM.
			<value> RPM - High RPM</value>	Pump running above critical RPM.

# Serial Group (SST+SERI?)

The Serial group provides values and fault conditions related to hardware serial numbers for Christie TruLife+.

#### Christie M RGB Series and Griffyn Series Serial group status items

#	Status	State	Value	Description
0	Main Control Board S/N		<serial number=""></serial>	Displays the electronic serial number of the main control board.
			Missing S/N	Cannot retrieve the value because the serial number was not programmed into the board correctly.
3 4	Formatter-Red S/N Formatter-Green S/N		<serial number=""></serial>	Displays the electronic serial number of the formatter.
5	Formatter-Blue S/N		N/A	The information is not currently available (card not present or not powered).
			Missing S/N	Cannot retrieve the value because the serial number was not programmed into the board correctly
14 15	Housekeeping Board S/N Keypad Display S/N		<serial number=""></serial>	Displays the electronic serial number of the board.
			Unknown	The serial number is unavailable because the board is not ready.
			Missing Serial Number	Cannot retrieve the value because the serial number was not programmed into the board correctly.
67	Variable Option Module S/N		<serial number=""></serial>	Displays the electronic serial number of the board.
			Unknown	The serial number is unavailable because the board is not ready.
			Missing S/N	Cannot retrieve the value because the serial number was not programmed into the board correctly
68 69	Power Supply Board S/N Wobulator S/N		<serial number=""></serial>	Displays the electronic serial number of the board.
	Only applies to: Christie M RGB Series		Unknown	The serial number is unavailable because the board is not ready.
			Missing Serial Number	Cannot retrieve the value because the serial number was not

#	Status	State	Value	Description
				programmed into the board correctly
71	Laser Optical System S/N		<serial number=""></serial>	Displays the electronic serial number of the laser optical subsystem (LOS).
			Unknown	The serial number is unavailable because the board is not ready.
			Missing Serial Number	Cannot retrieve the value because the serial number was not programmed into the board correctly

### Christie Eclipse Serial group status items

#	Status	State	Value	Description
0	Main Control Board S/N		<serial number=""></serial>	Displays the electronic serial number of the main control board.
			Missing S/N	Cannot retrieve the value because the serial number was not programmed into the board correctly.
3 4	Formatter-Red S/N Formatter-Green S/N Formatter-Blue S/N		<serial number=""></serial>	Displays the electronic serial number of the formatter.
5			N/A	The information is not currently available (card not present or not powered).
			Missing S/N	Cannot retrieve the value because the serial number was not programmed into the board correctly
12	Lens Motor Board S/N		<serial number=""></serial>	Displays the electronic serial number of the board.
			N/A	Cannot retrieve the value due to an error with the board
14 15	Housekeeping Board S/N Keypad Display S/N		<serial number=""></serial>	Displays the electronic serial number of the board.
			Unknown	The serial number is unavailable because the board is not ready.
			Missing Serial Number	Cannot retrieve the value because the serial number was not programmed into the board correctly.



#	Status	State	Value	Description
61	Color Sensor Board S/N		<serial number=""></serial>	Displays the electronic serial number of the color sensor board.
			Missing S/N	Cannot retrieve the value because the serial number was not programmed into the board correctly.
64 65	Premod Formatter-Red S/N Premod Formatter-Green S/N		<serial number=""></serial>	Displays the electronic serial number of the formatter.
66	Premod Formatter-Blue S/N		N/A	The information is not currently available (card not present or not powered).
			Missing S/N	Cannot retrieve the value because the serial number was not programmed into the board correctly.
67	Variable Option Module S/N		<serial number=""></serial>	Displays the electronic serial number of the board.
			Unknown	The serial number is unavailable because the board is not ready.
			Missing S/N	Cannot retrieve the value because the serial number was not programmed into the board correctly

