

AV6010 Troubleshooting Matrix



CAUTION: Because of the complexity of the AccuVision AV6010 Long-Range Camera System, it is recommended that training from Accu-Sort be considered before attempting to diagnose problems without the assistance of Accu-Sort Technical Support.

Prerequisites

- Comprehension of AV6010 system during normal operations and the use of the browser-based interface
 - Completion of technician training for AV6010 troubleshooting and FRU replacement
 - Reference Materials: AV6010 Product Documentation CD (1000065742)
- (See Chapter 8, Chapter 9, Appendix F and the FRU Guides and Videos)

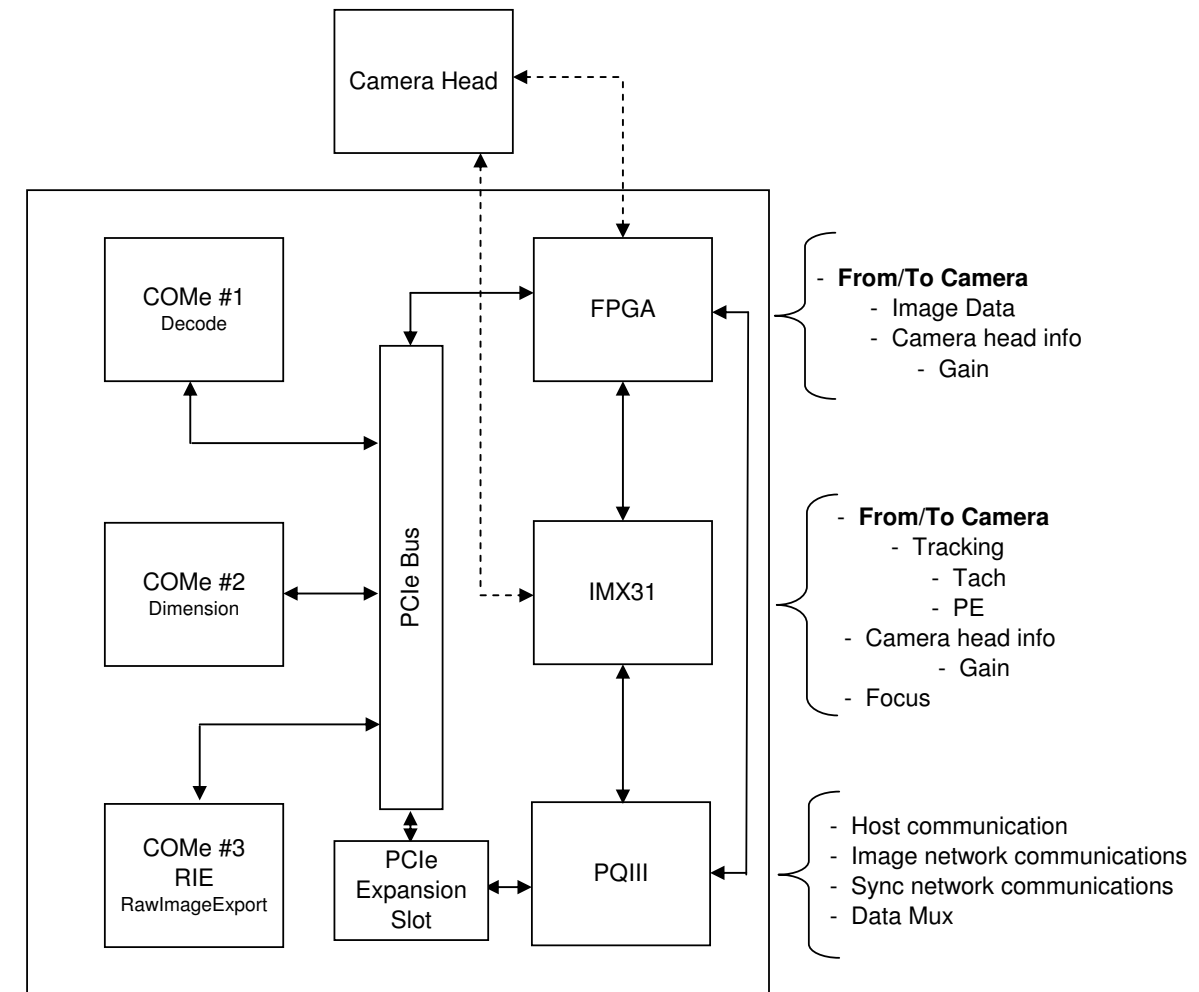
Error Codes Overview

You can view the AV6010 error codes in one of the following ways:

- **Diagnostics > RangeFinder Status**
- **Diagnostics > Camera Status** (*by camera location*)
- Optional FAST Monitor System

The error codes are identified by 4-digit series numbers and are provided in the following tables:

- 1000: Software Critical Errors
- 2000: Software Serious Errors
- 3000: System Errors
- 4000: COME Errors
- 5000: Focus and Illumination Errors
- 6000: RangeFinder Errors



Software Critical Errors

1001-1034 SW Init Failure: xxxxxxxx

Note: When the system does not boot, some of these errors are not displayed on the user interface nor do they appear in the debug log. Normal course of action is rebooting the system.

All the 2000 notes posted are of the information type, so there is no actions needed.
However, if a message persists, it may indicate that something could be going bad, and
that the DCM may need to be changed out.

Software Serious Errors

Error Code	Description	Status LED	Severity	Explanation
2001	Info: Unable to set 'Send Socket' buffer size	n/a	n/a	This item is not posted in the GUI. It is for programming diagnostic only. An ASI representative will instruct you on how to locate this error message
2002	Info: Unable to set 'Receive Socket' buffer size	n/a	n/a	This item is not posted in the GUI. It is for programming diagnostic only. An ASI representative will instruct you on how to locate this error message
2003	Info: Unable to write to socket	n/a	n/a	This item is not posted in the GUI. It is for programming diagnostic only. An ASI representative will instruct you on how to locate this error message
2004	Info: Unable to read from socket	n/a	n/a	This item is not posted in the GUI. It is for programming diagnostic only. An ASI representative will instruct you on how to locate this error message
2005	Info: Unable to write to message queue	n/a	n/a	This item is not posted in the GUI. It is for programming diagnostic only. An ASI representative will instruct you on how to locate this error message
2006	Info: Unable to read from message queue	n/a	n/a	This item is not posted in the GUI. It is for programming diagnostic only. An ASI representative will instruct you on how to locate this error message
2007	Info: Unable to stop FTP Server	n/a	n/a	This item is not posted in the GUI. It is for programming diagnostic only. An ASI representative will instruct you on how to locate this error message
2008	Info: Unable to stop TFTP Server	n/a	n/a	This item is not posted in the GUI. It is for programming diagnostic only. An ASI representative will instruct you on how to locate this error message

Software Serious Errors

Error Code	Description	Status LED	Severity	Explanation
2009	Info: Unable to stop DHCP Server	n/a	n/a	This item is not posted in the GUI. It is for programming diagnostic only. An ASI representative will instruct you on how to locate this error message
2010	Info: Unable to disable port of network switch	n/a	n/a	This item is not posted in the GUI. It is for programming diagnostic only. An ASI representative will instruct you on how to locate this error message
2011	Info: Unable to create VLAN in network switch	n/a	n/a	This item is not posted in the GUI. It is for programming diagnostic only. An ASI representative will instruct you on how to locate this error message
2012	Info: Unable to assign static IP to SYNC network	n/a	n/a	This item is not posted in the GUI. It is for programming diagnostic only. An ASI representative will instruct you on how to locate this error message
2013	Info: Unable to assign static IP to IMAGE network	n/a	n/a	This item is not posted in the GUI. It is for programming diagnostic only. An ASI representative will instruct you on how to locate this error message
2014	Info: Unable to assign static IP to HOST network	n/a	n/a	This item is not posted in the GUI. It is for programming diagnostic only. An ASI representative will instruct you on how to locate this error message
2015	Info: Unable to start DHCP client on SYNC network	n/a	n/a	This item is not posted in the GUI. It is for programming diagnostic only. An ASI representative will instruct you on how to locate this error message
2016	Info: Unable to start DHCP client on IMAGE network	n/a	n/a	This item is not posted in the GUI. It is for programming diagnostic only. An ASI representative will instruct you on how to locate this error message
2017	Info: Unable to start DHCP client on HOST network	n/a	n/a	This item is not posted in the GUI. It is for programming diagnostic only. An ASI representative will instruct you on how to locate this error message
2018	Info: Unable to assign netmask to SYNC network	n/a	n/a	This item is not posted in the GUI. It is for programming diagnostic only. An ASI representative will instruct you on how to locate this error message
2019	Info: Unable to assign netmask to IMAGE network	n/a	n/a	This item is not posted in the GUI. It is for programming diagnostic only. An ASI representative will instruct you on how to locate this error message
2020	Info: Unable to assign netmask to HOST network	n/a	n/a	This item is not posted in the GUI. It is for programming diagnostic only. An ASI representative will instruct you on how to locate this error message
2021	Info: Unable to assign gateway to SYNC network	n/a	n/a	This item is not posted in the GUI. It is for programming diagnostic only. An ASI representative will instruct you on how to locate this error message

Software Serious Errors

Error Code	Description	Status LED	Severity	Explanation
2022	Info: Unable to assign gateway to IMAGE network	n/a	n/a	This item is not posted in the GUI. It is for programming diagnostic only. An ASI representative will instruct you on how to locate this error message
2023	Info: Unable to assign gateway to HOST network	n/a	n/a	This item is not posted in the GUI. It is for programming diagnostic only. An ASI representative will instruct you on how to locate this error message
2024	Info: Unlinking message queue failed	n/a	n/a	This item is not posted in the GUI. It is for programming diagnostic only. An ASI representative will instruct you on how to locate this error message
2025	Info: Closing shared memory failed	n/a	n/a	This item is not posted in the GUI. It is for programming diagnostic only. An ASI representative will instruct you on how to locate this error message
2026	Info: Closing semaphore failed	n/a	n/a	This item is not posted in the GUI. It is for programming diagnostic only. An ASI representative will instruct you on how to locate this error message
2027	Info:: Un-mapping shared memory failed	n/a	n/a	This item is not posted in the GUI. It is for programming diagnostic only. An ASI representative will instruct you on how to locate this error message
2028	Info:: Unlinking semaphore failed	n/a	n/a	This item is not posted in the GUI. It is for programming diagnostic only. An ASI representative will instruct you on how to locate this error message
2029	Info: Invalid argument to mq Read/Write	n/a	n/a	This item is not posted in the GUI. It is for programming diagnostic only. An ASI representative will instruct you on how to locate this error message
2030	Info: Invalid argument to mq Read/Write	n/a	n/a	This item is not posted in the GUI. It is for programming diagnostic only. An ASI representative will instruct you on how to locate this error message
2031	Info: Read on FPGA device failed	n/a	n/a	This item is not posted in the GUI. It is for programming diagnostic only. An ASI representative will instruct you on how to locate this error message
2032	Info: Write to FPGA device failed	n/a	n/a	This item is not posted in the GUI. It is for programming diagnostic only. An ASI representative will instruct you on how to locate this error message
2033	Info: Could not transfer (TFTP) image file	n/a	n/a	This item is not posted in the GUI. It is for programming diagnostic only. An ASI representative will instruct you on how to locate this error message
2034	Info:: Error In validating config file	n/a	n/a	This item is not posted in the GUI. It is for programming diagnostic only. An ASI representative will instruct you on how to locate this error message

Software Serious Errors

Error Code	Description	Status LED	Severity	Explanation
2035	Info: Socket address cannot be reused	n/a	n/a	This item is not posted in the GUI. It is for programming diagnostic only. An ASI representative will instruct you on how to locate this error message
2036	Info: Listen on socket failed	n/a	n/a	This item is not posted in the GUI. It is for programming diagnostic only. An ASI representative will instruct you on how to locate this error message
2037	Info: Accepted connection on socket failed	n/a	n/a	This item is not posted in the GUI. It is for programming diagnostic only. An ASI representative will instruct you on how to locate this error message
2038	Info: Socket connection failure	n/a	n/a	This item is not posted in the GUI. It is for programming diagnostic only. An ASI representative will instruct you on how to locate this error message
2039	Info: SYNC network not connectd in loop	n/a	n/a	In a multi headed system, the SYNC network cable is not looped between all the cameras. This message will always appear in a single headed application
2040	Info: Unable to connect ot FastMonitor	n/a	n/a	This item is not posted in the GUI. It is for programming diagnostic only. An ASI representative will instruct you on how to locate this error message
2041	Info: Maximum packages reached for Side-By-Side Test Mode	n/a	n/a	The AV6010 will no longer identify a SBS condition because there is no registration Key and the test mode max number of trigger cycles have been reached

System Errors

Error ode	Description	Status LED	Severity	Explanation	Symptom	Troubleshooting	Replace	FastMonitor Message
3001	Warning: No response (TFTP ack) from COMe #1.	Blink Red	warning	The COMe #1 card holds the decode engine. This message indicates that, during one of the communication cycles, the DCM did not receive an acknowledgement from the #1 COMe expansion board	No barcodes read, but barcodes in image look readable	This message indicates that the DCM has lost communication with the COMe board. If this warning persists re-boot the camera	DCM	No response (TFTP ack) from COMe #1
3002	Warning: No response (TFTP ack) from COMe #2.	Blink Red	warning	The COMe #2 card holds the Dimensioning engine. This message indicates that the DCM did not receive an acknowledgement from the #2 COMe expansion board	No dimensioning data	This message indicates that the DCM has lost communication with the COMe board. If this warning persists re-boot the camera	DCM	No response (TFTP ack) from COMe #2
3003	Warning: No response (TFTP ack) from COMe #3.	Blink Red	warning	The COMe #3 card holds the Raw Image Export engine. This message indicates that the DCM did not receive an acknowledgement from the #3 COMe expansion board	No raw image data	This message indicates that the DCM has lost communication with the COMe board. If this warning persists re-boot the camera	DCM	No response (TFTP ack) from COMe #3
3004	Warning: No response (Release IP ack) from Decoder (COMe) #1.	Blink Red	warning	Same as 3001			DCM	No response (Release IP ack) from Decoder (COMe) #1
3005	Warning: No response (Release IP ack) from Decoder (COMe) #2.	Blink Red	warning	Same as 3002			DCM	No response (Release IP ack) from Decoder (COMe) #2
3006	Warning: No response (Release IP ack) from Decoder (COMe) #3.	Blink Red	warning	Same as 3003			DCM	No response (Release IP ack) from Decoder (COMe) #3
3007	Error: Communication with COMe #1 lost.	Solid Red	error	The DCM can no longer communicate to the #1 COMe card. This card is where the bar code decode process takes place.	No barcodes read, but barcodes in image look readable	This message indicates that the DCM has lost communication with the COMe board. If this warning persists re-boot the camera	DCM	Communication with COMe #1 lost
3008	Error: Communication with COMe #2 lost.	Solid Red	error	The DCM can no longer communicate to the #1 COMe card. This card is where the dimensioning process takes place.	No dimensioning data	This message indicates that the DCM has lost communication with the COMe board. If this warning persists re-boot the camera	DCM	Communication with COMe #2 lost
3009	Error: Communication with COMe #3 lost.	Solid Red	error	The DCM can no longer communicate to the #1 COMe card. This card is where raw image export takes place.	No raw image data	This message indicates that the DCM has lost communication with the COMe board. If this warning persists re-boot the camera	DCM	Communication with COMe #3 lost
3010	Error: More than maximum allowed COMe modules detected.	Solid Red	error	This error should not occur in a correctly functioning system. It indicates that the DCM is detecting a COMe in a slot number that does not exist. Only slot numbers 1,2,and 3 are valid.	This should not impact performance, however it does indicate that the DCM is flawed, and should be replaced	Cycle power, and if the problem persists change the DCM board	DCM	More than maximum allowed COMe modules detected
3011	Error: iMX31 processor failed to boot.	Solid Red	error	The iMX31 processor failed to boot.	The STAT light should be red and the TRIG and TACH lights should be on. The camera will not track packages. Resulting in no barcodes, dimensions, illumination, or images.	Cycle power, and if the problem persists change the DCM	DCM	Camera Control Processor (iMX31) failed to boot
3012	Error: Communication with iMX31 processor lost.	Solid Red	error	The PQIII lost communication with the iMX31 processor.	This could happen if a status message from the iMX31 is late. If something happened to the iMX31 the AV6010 will not track packages. Resulting in no barcodes, dimensions, illumination, or images.	Cycle power, and if the problem persists change the DCM	DCM	Commucation with Camera Control Processor (iMX31) lost
3013	Info: Invalid packet received over serial/Ethernet link.	No Change	info	The PQIII received an invalid packet.	n/a	No action required	n/a	Invalid packet received over serial/ethernet link
3014	Error: Failure in configuring internal network switch	Solid Red	error	The internal network switch was not configured properly on boot up.	One or more of the networks (Sync, Image, or Host) may not be functioning	Cycle power, and if the problem persists change the DCM	DCM	Failure in configuration internal network switch
3015	Error: Unable to load and start the FPGA	Solid Red	error	Field Programmable Gate Array (FPGA) did not load during boot up.	The AV6010 will not function if this happens. The internal bank of 8 LED's (D3 - D10) between COMe #1 and the pan heatsink will all be off.	User should be able to telnet to 192.168.0.50 (sync network) or 192.168.3.10 (host network). Running read_debug (/leapfrog/apps) should show the FPGA load failure.	DCM	Unable to load and start the FPGA
3016	Info: Maximum bar codes for a package exceeded	No Change	info	More than 50 barcodes were read on a single package.	Only the first 50 barcodes on the package will be sent to the host.	Nothing to do. Custom software would be required to read more than 50 barcodes on a single package.	n/a	Maximum bar codes for a package exceeded
3017	Error: Transmit point interrupt error	Solid Red	error	An error occurred while trying to program the transmit point interrupt.	No host message will be sent to the host	Cycle power, and if the problem persists change the DCM	DCM	Transmit point interrupt error
3018	Info: Bar code data received after transmit	No Change	info	A barcode was received from the decode engine for a package that has reached the transmit point.	The host message will not contain the data for the late barcode. No images seen in Image Viewer.	Transmit point may be set too close, or the decode engine was busy and sent the barcode late. See * below for internal tach issue	n/a	Bar code data received too late

System Errors

Error ode	Description	Status LED	Severity	Explanation	Symptom	Troubleshooting	Replace	FastMonitor Message
3019	Info: Invalid bar code data received	No Change	info	An unknown barcode type was received from the decode engine.	info message will be displayed in the GUI	No action required	n/a	Invalid bar code data received from decoder
3020	Unassigned						n/a	Package database was empty
3021	Info: Bar code sequence number does not match any package	No Change	info	A barcode was received for a package that does not exist.	A barcode may be missing from the host message for a package.	If problem persists cycle power on the AV6010	n/a	Bar code data received for 'missing package'
3022	Info: Bar code data does not match any enabled type	No Change	info	A valid barcode was received but not used because it was not enabled.	info message will be displayed in the GUI	Enable the barcode type if it is required.	n/a	Bar code data does not match any enabled type
3023	Info: Package less than min package size detected	No Change	info	A package below the minimum package size requirements was detected.	No host or image data will be sent for this package.	Lower the minimum package size requirements in the GUI if this package is larger than the specified AV6010 minimum package size.	n/a	Package less than min package size detected
3024	Warning: Belt speed detected by all cameras does not match	Blink Red	warning	Belt speed reported by cameras in a tunnel does not match.	Possible tracking issues.	Monitor the belt speed reported by each camera in the GUI. Check Sync network cabling and tachometer	DCM or tach	Belt speed detected by all cameras does not match
3025	Warning: More than maximum allowed cameras detected	Blink Red	warning	More then 11 cameras (including the RangeFinder) were detected in a tunnel	warning displayed in the GUI.	Never use more than 11 devices in a tunnel	n/a	More than maximum allowed cameras detected
3026	Warning: Camera with same name detected	Blink Red	warning	A camera with the same name was detected in the tunnel.	Two cameras with the same name will be visible in the GUI.	Change the name of one of the cameras. Cycle power		Camera with the same name detected
3027	Warning: Communication with Left-Front Camera lost	Blink Red	warning	The Left-Front camera is no longer reporting status.	warning displayed in the GUI. The camera will show up as "Not Present" in the "System Status" page of the GUI.	Determine why the camera went offline. Try to telnet to the camera. If successful, run read_debug (/leapfrog/apps) to view debug information reported by the camera.	DCM	Communication with Left-Front Camera lost
3028	Warning: Communication with Right-Front Camera lost	Blink Red	warning	The Right-Front camera is no longer reporting status.	warning displayed in the GUI. The camera will show up as "Not Present" in the "System Status" page of the GUI.	Determine why the camera went offline. Try to telnet to the camera. If successful, run read_debug (/leapfrog/apps) to view debug information reported by the camera.	DCM	Communication with Right-Front Camera lost
3029	Warning: Communication with Left-Back Camera lost	Blink Red	warning	The Left-Back camera is no longer reporting status.	warning displayed in the GUI. The camera will show up as "Not Present" in the "System Status" page of the GUI.	Determine why the camera went offline. Try to telnet to the camera. If successful, run read_debug (/leapfrog/apps) to view debug information reported by the camera.	DCM	Communication with Left-Back Camera lost
3030	Warning: Communication with Right-Back Camera lost	Blink Red	warning	The Right-Back camera is no longer reporting status.	warning displayed in the GUI. The camera will show up as "Not Present" in the "System Status" page of the GUI.	Determine why the camera went offline. Try to telnet to the camera. If successful, run read_debug (/leapfrog/apps) to view debug information reported by the camera.	DCM	Communication with Right-Back Camera lost
3031	Warning: Communication with Top Camera lost	Blink Red	warning	The Top camera is no longer reporting status.	warning displayed in the GUI. The camera will show up as "Not Present" in the "System Status" page of the GUI.	Determine why the camera went offline. Try to telnet to the camera. If successful, run read_debug (/leapfrog/apps) to view debug information reported by the camera.	DCM	Communication with Top Camera lost
3032	Warning: Communication with Left Camera lost	Blink Red	warning	The Left camera is no longer reporting status.	warning displayed in the GUI. The camera will show up as "Not Present" in the "System Status" page of the GUI.	Determine why the camera went offline. Try to telnet to the camera. If successful, run read_debug (/leapfrog/apps) to view debug information reported by the camera.	DCM	Communication with Left Camera lost
3033	Warning: Communication with Right Camera lost	Blink Red	warning	The Right camera is no longer reporting status.	warning displayed in the GUI. The camera will show up as "Not Present" in the "System Status" page of the GUI.	Determine why the camera went offline. Try to telnet to the camera. If successful, run read_debug (/leapfrog/apps) to view debug information reported by the camera.	DCM	Communication with Right Camera lost
3034	Warning: Communication with Back Camera lost	Blink Red	warning	The Back camera is no longer reporting status.	warning displayed in the GUI. The camera will show up as "Not Present" in the "System Status" page of the GUI.	Determine why the camera went offline. Try to telnet to the camera. If successful, run read_debug (/leapfrog/apps) to view debug information reported by the camera.	DCM	Communication with Back Camera lost
3035	Warning: Communication with Front Camera lost	Blink Red	warning	The Front camera is no longer reporting status.	warning displayed in the GUI. The camera will show up as "Not Present" in the "System Status" page of the GUI.	Determine why the camera went offline. Try to telnet to the camera. If successful, run read_debug (/leapfrog/apps) to view debug information reported by the camera.	DCM	Communication with Front Camera lost
3036	Warning: Communication with Bottom Camera lost	Blink Red	warning	The Bottom camera is no longer reporting status.	warning displayed in the GUI. The camera will show up as "Not Present" in the "System Status" page of the GUI.	Determine why the camera went offline. Try to telnet to the camera. If successful, run read_debug (/leapfrog/apps) to view debug information reported by the camera.	DCM	Communication with Bottom Camera lost

System Errors								
Error ode	Description	Status LED	Severity	Explanation	Symptom	Troubleshooting	Replace	FastMonitor Message
3037	Warning: Communication with RangeFinder lost	Blink Red	warning	The RangeFinder is no longer reporting status.	warning displayed in the GUI. The Rangefinder will show up as "Not Present" in the "System Status" page of the GUI.	Check network connections and cabling Check RangeFinder power supply	R/F or R/F power supply	Communication with Ranger lost
3038	Info: Start Trigger from RangeFinder missed	No Change	info	The start trigger message from the RangeFinder was not received. An end trigger must be received to cause this info message.	The AV6010 will not produce an image or host message for the package	Check network connections and cabling	R/F	Start Trigger from Rangefinder missed
3039	Info: Start/End Trigger from RangeFinder missed	No Change	info	The end trigger message from the RangeFinder was not received. A start trigger message for the next package must be received to cause this info message.	The AV6010 will not produce an image or host message for the package	Check network connections and cabling	R/F	Start/End Trigger from Rangefinder missed
3040	Info: Start Trigger from Camera missed	No Change	info	The start of image valid message was not received from the iMX31 processor.	The AV6010 will not produce an image or host message for the package	The package may have been completely shadowed by another package.	n/a	Start Trigger from Camera missed
3041	Warning: No response (Config param ack) from Ranger	Blink Red	warning	The RangeFinder did not receive parameters.	The RangeFinder will not be configured properly and will not function properly. Possible wrong height information or false triggers.	Check network connections and cabling Check RangeFinder power supply	R/F	No response (Config param ack) from Rangefinder
3042	Warning: Failure in merging configuration files	Blink Red	warning	No longer valid. This option has been removed from the GUI.				Failure in merging configuration files
3043	Warning: Unable to transfer (TFTP) configuration file	Blink Red	warning	The AV6010 reports this error if it was unable to get the XML from another camera in the tunnel (stand alone cameras will not report this error)	New AV6010 will not see the other cameras in the tunnel and will not have the tunnel XML.	Reboot the AV6010.	DCM	Failure when TFTPing configuration file
3044	Warning: No free 'CAM Entry' In config file	Blink Red	warning	After replacing an AV6010 (or just a DCM) in an existing tunnel the camera will attempt to find an empty slot in the XML for the replaced AV6010/DCM. The empty slot will exist for the AV6010/DCM that was removed. If no empty slot is found this warning will be generated.	The replacement AV6010/DCM MAC will not be added to the existing tunnel XML.	Manually edit the existing XML to change the MAC address of the DCM removed with the new DCM MAC.		No free 'CAM Entry' In config file
3045	Warning: Current tach greater than transmit point tach	Blink Red	warning	The current tach count is greater than the tach count being programmed for a given package.	The AV6010 will not send a host message until the tach count rolls over (this could be weeks) No images seen in Image Viewer.	Reboot the AV6010. See * below for internal tach issue	DCM	Current Tach greater than transmit point tach
3046	Warning: Failure when deleting all nodes in config file	Blink Red	warning	The AV6010 with tach ("Tach Master") will attempt to merge the XML's from each camera in the tunnel on power up. If it fails to initialize (delete) all nodes for each camera in the tunnel this warning is generated.	This should not have an effect on the tunnel.	Reboot the AV6010.	n/a	Failure when deleting all nodes in config file
3047	Error: Right Side Fan disconnected or failed	Solid Red	error	Fan assembly closest to the AC connection. The DCM does not see the diagnostic signal from the right fan assembly.	Check to see if the right fan assembly is pushing air out of the cooling chamber.	Check to see if the fans are still running	Right Fan Assembly	Right side fan disconnected or failed
3048	Error: Left Side Fan disconnected or failed	Solid Red	error	Fan assembly farthest from the AC connection. The DCM does not see the diagnostic signal from the right fan assembly.	Check to see if the left fan assembly is pulling air into the cooling chamber.	Check to see if the fans are still running	Left Fan Assembly	Left side fan disconnected or failed
3049	Warning: Right Side Fan at reduced speed	Blink Red	warning	Fan assembly closest to the AC connection. The fan assembly is either blocked or nearing end of life.	Tach on fan. Check for obstruction	Right Fan Assembly	Right Fan Assembly	Right side fan at reduced speed
3050	Warning: Left Side Fan at reduced speed	Blink Red	warning	Fan assembly farthest from the AC connection. The fan assembly is either blocked or nearing end of life.	Tach on fan. Check for obstruction	Left Fan Assembly	Left Fan Assembly	Left side fan at reduced speed
3051	Error: FPGA PCIe link is less than 8x	Solid Red	error	The PCIe link did not initialize properly	Issue can only happen at boot up. The AV6010 may not be able to keep up with high data rates.	Reboot the AV6010.	DCM	FPGA PCIe link is at less than 8x
3052	Error: COMe #1 failed to boot	Solid Red	error	COMe 1 failed to boot				
3053	Error: COMe #2 failed to boot	Solid Red	error	COMe 2 failed to boot				
3054	Error: COMe #3 failed to boot	Blink Red	warning	COMe 3 failed to boot				
3055	Warning: COMe #1 reboot detected	Blink Red	warning	Reboot of COMe 1 detected				
3056	Warning: COMe #2 reboot detected	Blink Red	warning	Reboot of COMe 2 detected				
3057	Warning: COMe #3 reboot detected	Blink Red	warning	Reboot of COMe 3 detected				
3058	Warning: Max number of COMe reboots detected	Blink Red	warning	Maximum number of COMe reboots detected				

System Errors								
Error ode	Description	Status LED	Severity	Explanation	Symptom	Troubleshooting	Replace	FastMonitor Message
* When going from External tach to internal tach complete the following steps first. <ul style="list-style-type: none">• Power down camera• Disconnect the existing tach cable, and connect a tach dongle• Restart AV6010• Select Tachometer option in the menu• While in external tach select 20 for the tach resolution• Select internal tach• Select the correct conveyor speed								

COMe

Error Code	Description	Status LED	Severity	Explanation	Symptom	Troubleshooting	Replace	FastMonitor Message
4000	Error: COMe unable to multicast decode results	Solid Red	error	Decode engine could not multicast decode results to the PQIII	The camera will no read every package	Decode results will not be sent to the PQIII. No barcode results will be available to anything other than the COMe.	DCM	COMe Errors are NOT reported to FM
4001	Error: COMe unable to create multicast socket	Solid Red	error	Decode engine could not create the multicast socket and will not be able to multicast decode results to the PQIII	The camera will no read every package	Decode results will not be sent to the PQIII. No barcode results will be available to anything other than the COMe.	DCM	COMe Errors are NOT reported to FM
4002	Error: COMe unable to create host message queue	Solid Red	error	Decode engine could not create the host message queue.	The camera will no read every package	Decode results will not be sent to the PQIII. No barcode results will be available to anything other than the COMe.	DCM	COMe Errors are NOT reported to FM
4003	Error: COMe unable to create decode message queue	Solid Red	error	Decode engine could not create the decode message queue.	The camera will no read every package	Decode results will not be sent to the PQIII. No barcode results will be available to anything other than the COMe.	DCM	COMe Errors are NOT reported to FM
4004	Error: COMe unable to start decode engine	Solid Red	error	The decode engine could not be started.	The camera will no read every package	Decode results will not be sent to the PQIII. No barcode results will be available.	DCM	COMe Errors are NOT reported to FM
4005	Error: COMe unable to verify decode engine version	Solid Red	error	Decode engine library reported an invalid version	The camera will no read every package	Decode results will not be sent to the PQIII. No barcode results will be available.	DCM	COMe Errors are NOT reported to FM
4006	Error: COMe detected a problem while decoding	Solid Red	error	NOT USED			n/a	COMe Errors are NOT reported to FM
4007	Error: COMe detected an error with the image buffer	Solid Red	error	NOT USED			n/a	COMe Errors are NOT reported to FM
4008	Error: COMe unable to open the PCIe driver	Solid Red	error	Decode engine could not connect to the PCIe driver and will not be able to access the image buffer.	The camera will no read every package	Decode results will not be sent to the PQIII. No barcode results will be available.	DCM	COMe Errors are NOT reported to FM
4009	Error: COMe unable to attached to mapped memory	Solid Red	error	Decode engine could not attached to mapped memory and will not be able to access the image buffer.	The camera will no read every package	Decode results will not be sent to the PQIII. No barcode results will be available.	DCM	COMe Errors are NOT reported to FM
4010	[Unassigned]							COMe Errors are NOT reported to FM
4011	Info: COMe started dimensioning software	--	info	Dimensioning software started	n/a	No action required	n/a	COMe Errors are NOT reported to FM
4012	Info: COMe restarted dimensioning software	--	info	Dimensioning software restarted	n/a	No action required	n/a	COMe Errors are NOT reported to FM
4013	Info: COMe received parameter update	--	info	NOT USED	n/a	No action required	n/a	COMe Errors are NOT reported to FM
4014	Info: COMe started decoding software	--	info	Decode engine started	n/a	No action required	n/a	COMe Errors are NOT reported to FM
4015	Info: COMe restarted decoding software	--	info	Decode engine restarted	n/a	No action required	n/a	COMe Errors are NOT reported to FM
4016	Error: COMe rangefinder application mismatch OR Error: RangeFinder Ver/CRC Failure	Solid Red	error	*** Dimensioning Only *** The version/CRC reported by the RangeFinder does not match the stored (certified) version.	System will go "Not Ready"	Load software with the correct metrologically significant software	Software	COMe Errors are NOT reported to FM
4017	Error: COMe status monitor AATM failure	Solid Red	error	*** Dimensioning Only *** An error occurred when status_mon attempted to write to the AATM library.	NODIM's will be sent to the host if CERT mode is ON because system will go "Not Ready"	Check the USB flash device connected to the COMe.	DCM	COMe Errors are NOT reported to FM
4018	Error: COMe dimensioner AATM failure	Solid Red	error	*** Dimensioning Only *** An error occurred when ImgBuffHandler attempted to write to the AATM library.	NODIM's will be sent to the host if CERT mode is ON because system will go "Not Ready"	Check the USB flash device connected to the COMe.	DCM	COMe Errors are NOT reported to FM
4019	Error: COMe AATM version mismatch OR COMe AATM Ver/CRC Failure	Solid Red	error	*** Dimensioning Only *** The version/CRC reported by the AATM library does not match the stored (certified) version.	NODIM's will be sent to the host if CERT mode is ON because system will go "Not Ready"	Load software with the correct metrologically significant software	Software	COMe Errors are NOT reported to FM
4020	Error: COMe parameter CRC failure	Solid Red	error	*** Dimensioning Only *** The CRC calculated for the parameter file does not match the stored CRC. This error may occur during Initiation.	System will go "Not Ready"	Check the USB flash device connected to the COMe. This error cannot be corrected without reloading software.	Software	COMe Errors are NOT reported to FM
4021	Error: COMe unable to retrieve parameters	Solid Red	error	*** Dimensioning Only *** status_mon could not read parameters from flash	System will go "Not Ready"	Check the USB flash device connected to the COMe.	DCM	COMe Errors are NOT reported to FM

COMe

Error Code	Description	Status LED	Severity	Explanation	Symptom	Troubleshooting	Replace	FastMonitor Message
4022	Warning: COMe dimensioning token mismatch	Blink Red	warning	*** Dimensioning Only *** RangeFinder and ImgBuffHandler token mismatch detected.	No dimensions will be reported for the package.	This warning may be displayed on boot up if packages are being run. Peanuts or unusual objects on the belt will also cause this warning to be displayed.	n/a	COMe Errors are NOT reported to FM
4023	Error: COMe unable to allocate buffer for image	Solid Red	error	*** Dimensioning Only *** ImgBuffHandler could not allocate memory for the current image.	No dimensions will be reported for the package.	This could be fatal if every package is NODIM'd because of this error. Reboot the camera.	DCM	COMe Errors are NOT reported to FM
4024	Error: COMe failed during app initialization	Solid Red	error	*** Dimensioning Only *** Dimensioning applications failed to initialize.	No dimensions will be reported for the package.	Reboot the camera.	DCM	COMe Errors are NOT reported to FM
4025	Warning: Dimensioning NOT Ready	Blink Red	warning	*** Dimensioning Only *** CERT mode is ON but system is "Not Ready" to report certified dimensions.	No dimensions will be reported for the package.	Only NODIM's will be sent to the host if CERT mode is ON. (Reboot the camera)	DCM	COMe Errors are NOT reported to FM
4026	Info: Dimensioning Ready	--	info	*** Dimensioning Only *** CERT mode is ON and system is "Ready" to report certified dimensions.	n/a	No action required	n/a	COMe Errors are NOT reported to FM
4027	Warning: RangeFinder Not Ready for Dimensioning	Blink Red	warning	*** Dimensioning Only *** A RangeFinder warning/error has been detected.	NODIM's will be sent to the host if CERT mode is ON because system will go "Not Ready"	Check RangeFinder status from the GUI to determine the reason for the warning/error.	n/a	COMe Errors are NOT reported to FM
4028	Warning: Dim Verification Failure	Blink Red	warning	*** Dimensioning Only *** A package with a verification barcode was run through the system, but the reported dimensions were out of tolerance.	NODIM's will be sent to the host if CERT mode is ON because system will go "Not Ready"	Recalibrate dimensioning parameters (LPI factor, DPI factor, and RangeFinder height).	n/a	COMe Errors are NOT reported to FM
4029	Error: Dimensioner Version Failure OR Error: Ver/CRC Failure	Solid Red	error	*** Dimensioning Only *** The version/CRC reported by ImgBuffHandler does not match the stored (certified) version.	NODIM's will be sent to the host if CERT mode is ON because system will go "Not Ready"	Load software with the correct metrologically significant software	Software	COMe Errors are NOT reported to FM
4030	Error: Dimension Lib Ver/CRC Failure	Solid Red	error	*** Dimensioning Only *** The version/CRC reported by the Dimensioning library does not match the stored (certified) version.	NODIM's will be sent to the host if CERT mode is ON because system will go "Not Ready"	Load software with the correct metrologically significant software	Software	COMe Errors are NOT reported to FM
4031	Info: CERT Mode Off	--	info	*** Dimensioning Only *** CERT mode is OFF	n/a	No action required	n/a	COMe Errors are NOT reported to FM
4032	Info: RFU 1	--	info		n/a	No action required	n/a	
4033	Info: RFU 2	--	info		n/a	No action required	n/a	
4034	Info: RFU 3	--	info		n/a	No action required	n/a	
4035	Info: RFU 4	--	info		n/a	No action required	n/a	
4036	Info: RFU 5	--	info		n/a	No action required	n/a	
4037	Info: COMe started Raw Image Export	--	info		n/a	No action required	n/a	COMe Errors are NOT reported to FM
4038	Info: COMe restarted Raw Image Export	--	info		n/a	No action required	n/a	COMe Errors are NOT reported to FM

COMe								
Error Code	Description	Status LED	Severity	Explanation	Symptom	Troubleshooting	Replace	FastMonitor Message
COMe #2 Errors								
4300	Error: COMe unable to multicast decode results	Solid Red	Error	n/a				COMe Errors are NOT reported to FM
4301	Error: COMe unable to create multicast socket	Solid Red	Error	n/a				COMe Errors are NOT reported to FM
4302	Error: COMe unable to create host messsage queue	Solid Red	Error	n/a				COMe Errors are NOT reported to FM
4303	Error: COMe unable to create decode message queue	Solid Red	Error	n/a				COMe Errors are NOT reported to FM
4304	Error: COMe unable to start decode engine	Solid Red	Error	n/a				COMe Errors are NOT reported to FM
4305	Error: COMe unable to verify decode engine version	Solid Red	Error	n/a				COMe Errors are NOT reported to FM
4306	Error: COMe detected a problem while decoding	Solid Red	Error	n/a				COMe Errors are NOT reported to FM
4307	Error: COMe detected an error with the image buffer	Solid Red	Error	n/a				COMe Errors are NOT reported to FM
4308	Error: COMe unable to open the PCIe driver	Solid Red	Error	n/a				COMe Errors are NOT reported to FM
4309	Error: COMe unable to attached to mapped memory	Solid Red	Error	n/a				COMe Errors are NOT reported to FM
4310	[Unassigned]			n/a				COMe Errors are NOT reported to FM
4311	Info: COMe started dimensioning	--	Info	n/a				COMe Errors are NOT reported to FM
4312	Info: COMe restarted dimensioning software	--	Info	n/a				COMe Errors are NOT reported to FM
4313	Info: COMe received parameter update	--	Info	n/a				COMe Errors are NOT reported to FM
4314	Info: COMe started decoding software	--	Info	n/a				COMe Errors are NOT reported to FM
4315	Info: COMe restarted decoding software	--	Info	n/a				COMe Errors are NOT reported to FM
4316	Error: COMe rangefinder application mismatch	Solid Red	Error	RangeFinder software is not compatible with the AV4000 dimensioning software				COMe Errors are NOT reported to FM
4317	Error: COMe status monitor AATM failure	Solid Red	Error	n/a				COMe Errors are NOT reported to FM
4318	Error: COMe dimensioner AATM failure	Solid Red	Error	n/a				COMe Errors are NOT reported to FM
4319	Error: COMe AATM version mismatch	Solid Red	Error	n/a				COMe Errors are NOT reported to FM
4320	Error: COMe parameter CRC failure	Solid Red	Error	n/a				COMe Errors are NOT reported to FM
4321	Error: COMe unable to retrieve parameters	Solid Red	Error	n/a				COMe Errors are NOT reported to FM
4322	Warning: COMe dimensioning token mismatch	Blink Red	Error	Remote and Host Msg Codes = Bad Token				COMe Errors are NOT reported to FM
4323	Error: COMe unable to allocate buffer for image	Solid Red	Error	n/a				COMe Errors are NOT reported to FM
4324	Error: COMe failed during app initialization	Solid Red	Error	n/a				COMe Errors are NOT reported to FM
4325	Warning: Dimensioning NOT Ready	Blink Red	Error	n/a				COMe Errors are NOT reported to FM
4326	Info: Dimensioning Ready	--	Info	n/a				COMe Errors are NOT reported to FM
4327	Info: Rangefinder Warning/Error Detected	--	Info	n/a				COMe Errors are NOT reported to FM
4328	Warning: Dim Verification Failure	Solid Red	Error	n/a				COMe Errors are NOT reported to FM
4329	Error: ImgBuffHandler Ver/CRC Failure	Solid Red	Error	n/a				COMe Errors are NOT reported to FM
4330	Error: Dimension Lib Ver/CRC Failure	Blink Red	Warning	n/a				COMe Errors are NOT reported to FM
4331	Info: CERT Mode Off	Blink Red	Info	n/a				COMe Errors are NOT reported to FM
4332	Info: RFU 1							
4333	Info: RFU 2							
4334	Info: RFU 3							
4335	Info: RFU 4							
4336	Info: RFU 5							
4337	Info: COMe started Raw Image Export							
4338	Info: COMe restarted Raw Image Export							

COMe								
Error Code	Description	Status LED	Severity	Explanation	Symptom	Troubleshooting	Replace	FastMonitor Message
COMe #3 Errors								
4600	Error: COMe unable to multicast decode results	Solid Red	Error					
4601	Error: COMe unable to create multicast socket	Solid Red	Error					
4602	Error: COMe unable to create host messsage queue	Solid Red	Error					
4603	Error: COMe unable to create decode message queue	Solid Red	Error					
4604	Error: COMe unable to start decode engine	Solid Red	Error					
4605	Error: COMe unable to verify decode engine version	Solid Red	Error					
4606	Error: COMe detected a problem while decoding	Solid Red	Error					
4607	Error: COMe detected an error with the image buffer	Solid Red	Error					
4608	Error: COMe unable to open the PCIe driver	Solid Red	Error					
4609	Error: COMe unable to attached to mapped memory	Solid Red	Error					
4610	[Unassigned]							
4611	Info: COMe started dimensioning	--	Info					
4612	Info: COMe restarted dimensioning software	--	Info					
4613	Info: COMe received parameter update	--	Info					
4614	Info: COMe started decoding software	--	Info					
4615	Info: COMe restarted decoding software	--	Info					
4616	Error: COMe Rangefinder Ver/CRC Failure	Solid Red	Error					
4617	Error: COMe status monitor AATM failure	Solid Red	Error					
4618	Error: COMe Dimensioner AATM failure	Solid Red	Error					
4619	Error: COMe AATM Ver/CRC mismatch	Solid Red	Error					
4620	Error: COMe Parameter CRC failure	Solid Red	Error					
4621	Error: COMe unable to retrieve parameters	Solid Red	Error					
4622	Warning: COMe dimensioning token mismatch	Blink Red	Error					
4623	Error: COMe unable to allocate buffer for image	Solid Red	Error					
4624	Error: COMe failed during app initialization	Solid Red	Error					
4625	Warning: Dimensioning NOT Ready	Blink Red	Error					

COMe

Error Code	Description	Status LED	Severity
4626	Info: Dimensioning Ready	--	Info
4627	Info: Rangefinder Not Ready for Dimensioning	--	Info
4628	Warning: Dim Verification Failure	Blink Red	Error
4629	Error: ImgBuffHandler Ver/CRC Failure	Solid Red	Error
4630	Error: Dimension Lib Ver/CRC Failure	Solid Red	Error
4631	Info: CERT Mode Off	--	Info
4632	Info: RFU 1	--	Info
4633	Info: RFU 2	--	Info
4634	Info: RFU 3	--	Info
4635	Info: RFU 4	--	Info
4636	Info: RFU 5	--	Info
4637	Info: COMe started Raw Image Export	--	Info
4638	Info: COMe restarted Raw Image Export	--	Info

Explanation

Symptom

Troubleshooting

Replace

FastMonitor Message

**Focus and
Illumination Errors**

Error Code	Description	Status LED	Severity	Explanation	Symptom	Troubleshooting	Replace	FastMonitor Message
5000	Error: Focus Servo coil is locked	Solid Red	error	Shipping screw locked	Focus servo cannot be moved.	Check shipping screw	Camera Head	Focus Servo coil is locked
5001	Error: Focus Servo PWM over limit	Solid Red	error	The Servo PWM is located in the camera head. The camera was unable to move focus mechanism to the requested focal point	Out of focus images.	Check shipping screw	Camera Head	Focus Servo PWM over limit.
5002	Error: Focus Servo PWM time-out	Solid Red	error	Focus servo failed to reach destination before timing out.	Out of focus images.	Replace camera head.	Camera Head	Focus Servo PWM time-out
5003	Error: CRC error on Focus Servo parameters	Solid Red	error	The DCM attempted to communicate to the camera head, but identified an CRC error when validating the message.	Out of focus images.	Replace camera head.	Camera Head	CRC Error on Focus Servo parameters.
5004	Error: Focus Servo detected 'Bad Stops'	Solid Red	error	The camera head focus mechanism has two mechanical stops, upper and lower. The stops that the servo identified do not match the original setup values.	Out of focus images.	Replace camera head.	Camera Head	Focus Servo detected 'Bad Stops'
5005	Info: Unable to transmit to Focus Servo	No Change	info	This message is associated with error 5006, Focus Servo response messages.	Out of focus section in image.	Image viewer shows focus range changing but focus in a section(s) of the image did not change. Check cabling.	Same as 5006	Unable to transmit Focus Servo
5006	Error: Focus Servo not responding	Solid Red	error	The DCM does not see the heart beat message from camera	Out of focus images.	Image viewer shows focus range changing but focus in the image has not changed. Check cabling. Possibly replace camera head.	Camera Head	Focus Servo not responding.
5007	Info: Invalid packet received from Focus Servo	No Change	info	The Communication from/to the DCM was interrupted	Out of focus section in image.	Image viewer shows focus range changing but focus in a section(s) of the image did not change.	Camera Head	Invalid packet received from Focus Servo.
5008	Info: Invalid command received from Focus Servo	No Change	info	The Communication from/to the DCM was interrupted	Out of focus section in image.	Image viewer shows focus range changing but focus in a section(s) of the image did not change.	Camera Head	Invalid command received from Focus Servo.
5009	Warning: LED Board 0 near end of life	Blink Red	warning	The LED control board will monitor the current flow to the LED module. If the module exceeds a pre-defined value it will report this warning.	There may be no visible symptoms or some of the LED's on the board may be out	- Visually inspect the LED to see if the all the lights are on - Since there may be no visible symptom the decision to react to this error will be determined by the company's maintenance philosophy. They may be pro-active and change the LED assy, or they may choose to wait until the unit fails	LED assy	LED Board 0 near end of life
5010	Warning: LED Board 1 near end of life	Blink Red	warning	The LED control board will monitor the current flow to the LED module. If the module exceeds a pre-defined value it will report this warning.	There may be no visible symptoms or some of the LED's on the board may be out	- Visually inspect the LED to see if the all the lights are on - Since there may be no visible symptom the decision to react to this error will be determined by the company's maintenance philosophy. They may be pro-active and change the LED assy, or they may choose to wait until the unit fails	LED assy	LED Board 1 near end of life
5011	Warning: LED Board 2 near end of life	Blink Red	warning	The LED control board will monitor the current flow to the LED module. If the module exceeds a pre-defined value it will report this warning.	There may be no visible symptoms or some of the LED's on the board may be out	- Visually inspect the LED to see if the all the lights are on - Since there may be no visible symptom the decision to react to this error will be determined by the company's maintenance philosophy. They may be pro-active and change the LED assy, or they may choose to wait until the unit fails	LED assy	LED Board 2 near end of life
5012	Warning: LED Board 3 near end of life	Blink Red	warning	The LED control board will monitor the current flow to the LED module. If the module exceeds a pre-defined value it will report this warning.	There may be no visible symptoms or some of the LED's on the board may be out	- Visually inspect the LED to see if the all the lights are on - Since there may be no visible symptom the decision to react to this error will be determined by the company's maintenance philosophy. They may be pro-active and change the LED assy, or they may choose to wait until the unit fails	LED assy	LED Board 3 near end of life

Focus and Illumination Errors

Error Code	Description	Status LED	Severity	Explanation	Symptom	Troubleshooting	Replace	FastMonitor Message
5013	Warning: LED Board 4 near end of life	Blink Red	warning	The LED control board will monitor the current flow to the LED module. If the module exceeds a pre-defined value it will report this warning.	There may be no visible symptoms or some of the LED's on the board may be out	<ul style="list-style-type: none"> - Visually inspect the LED to see if the all the lights are on - Since there may be no visible symptom the decision to react to this error will be determined by the company's maintenance philosophy. They may be pro-active and change the LED assy, or they may choose to wait until the unit fails 	LED assy	LED Board 4 near end of life
5014	Warning: LED Board 5 near end of life	Blink Red	warning	The LED control board will monitor the current flow to the LED module. If the module exceeds a pre-defined value it will report this warning.	There may be no visible symptoms or some of the LED's on the board may be out	<ul style="list-style-type: none"> - Visually inspect the LED to see if the all the lights are on - Since there may be no visible symptom the decision to react to this error will be determined by the company's maintenance philosophy. They may be pro-active and change the LED assy, or they may choose to wait until the unit fails 	LED assy	LED Board 5 near end of life
5015	Error: Failure of LED Board 0	Solid Red	error	LED 0 assembly is the one closest to the AC connection. The illu control board Identified that this board is no longer functioning	The LED's on the board will no longer be lit	Visually inspect the LED to see if the all the lights are on	LED Module	Failure of LED Board 0
5016	Error: Failure of LED Board 1	Solid Red	error	LED 1 assembly is the second board from the AC connection. The illu control board Identified that this board is no longer functioning	The LED's on the board will no longer be lit	Visually inspect the LED to see if the all the lights are on	LED Module	Failure of LED Board 1
5017	Error: Failure of LED Board 2	Solid Red	error	The LED's on the board will no longer be lit LED 2 assembly is the third board from the AC connection. The illu control board Identified that this board is no longer functioning	The LED's on the board will no longer be lit	Visually inspect the LED to see if the all the lights are on	LED Module	Failure of LED Board 2
5018	Error: Failure of LED Board 3	Solid Red	error	LED 3 assembly is the fourth board from the AC connection. The illu control board Identified that this board is no longer functioning	The LED's on the board will no longer be lit	Visually inspect the LED to see if the all the lights are on	LED Module	Failure of LED Board 3
5019	Error: Failure of LED Board 4	Solid Red	error	LED 4 assembly is the fifth board from the AC connection. The illu control board Identified that this board is no longer functioning	The LED's on the board will no longer be lit	Visually inspect the LED to see if the all the lights are on	LED Module	Failure of LED Board 4
5020	Error: Failure of LED Board 5	Solid Red	error	LED 5 assembly is the sixth board from the AC connection. The illu control board Identified that this board is no longer functioning	The LED's on the board will no longer be lit	Visually inspect the LED to see if the all the lights are on	LED Module	Failure of LED Board 5
5021	Error: LED Board 0 CRC check failed	Solid Red	error	Upon power up the illumination control board will read the LED's offset values. If the CRC value does not match, then the control board will give this error message	The LED's on the board will no longer be lit	Visually inspect the LED to see if the all the lights are on	LED Module	LED Board 0 CRC check failed.
5022	Error: LED Board 1 CRC check failed	Solid Red	error	Upon power up the illumination control board will read the LED's offset values. If the CRC value does not match, then the control board will give this error message	The LED's on the board will no longer be lit	Visually inspect the LED to see if the all the lights are on	LED Module	LED Board 1 CRC check failed.
5023	Error: LED Board 2 CRC check failed	Solid Red	error	Upon power up the illumination control board will read the LED's offset values. If the CRC value does not match, then the control board will give this error message	The LED's on the board will no longer be lit	Visually inspect the LED to see if the all the lights are on	LED Module	LED Board 2 CRC check failed.
5024	Error: LED Board 3 CRC check failed	Solid Red	error	Upon power up the illumination control board will read the LED's offset values. If the CRC value does not match, then the control board will give this error message	The LED's on the board will no longer be lit	Visually inspect the LED to see if the all the lights are on	LED Module	LED Board 3 CRC check failed.
5025	Error: LED Board 4 CRC check failed	Solid Red	error	Upon power up the illumination control board will read the LED's offset values. If the CRC value does not match, then the control board will give this error message	The LED's on the board will no longer be lit	Visually inspect the LED to see if the all the lights are on	LED Module	LED Board 4 CRC check failed.
5026	Error: LED Board 5 CRC check failed	Solid Red	error	Upon power up the illumination control board will read the LED's offset values. If the CRC value does not match, then the control board will give this error message	The LED's on the board will no longer be lit	Visually inspect the LED to see if the all the lights are on	LED Module	LED Board 5 CRC check failed.

**Focus and
Illumination Errors**

Error Code	Description	Status LED	Severity	Explanation	Symptom	Troubleshooting	Replace	FastMonitor Message
5027	Info: Unable to transmit to Illumination	No Change	info	The DCM connects to the illumination control board, which in turn monitors the LED boards. The DCM was unable to communicate to the illumination controller board.	Illumination will not light when a package enters the system	Check internal control board wiring connection	Illumination Controller board	Unable to transmit to Illumination
5028	Error: Illumination Controller not responding	Solid Red	error	The DCM connects to the illumination control board, which in turn monitors the LED boards. The DCM did not see the heartbeat from the ill controller.	Illumination will not light when a package enters the system	- Check the 28VDC power supply. - Check internal control board wiring connection.	28VDC P/S or Illu CTRL board	Illumination Controller not responding.
5029	Info: Invalid packet received from Illumination	No Change	info	The Communication from/to the DCM was interrupted	Illumination will not light when a package enters the system	Check internal control board wiring connection	Illumination Controller board	Invalid packet received from Illumination
5030	Info: Invalid command received from Illumination	No Change	info	The Communication from/to the DCM was interrupted	Illumination will not light when a package enters the system	Check internal control board wiring connection	Illumination Controller board	Invalid command received from Illumination
5031	Info: Belt or Tachometer stopped	No Change	info	The AV6010 is not recognizing any tachometer signal	information posted when the AV6010 does not receive a tach signal	Check tach source	Tach	Belt or Tachometer stopped.
5032	Warning: Tach Sync ISR was "Out of Sync"	Blink Red	warning	The tach count when tach sync was received was too large.	Noise on tach or tach sync	Check tach and tach cable connections	Tach	Tach Sync ISR was "Out of Sync"
5033	Warning: Photoeye ISR failure	Blink Red	warning	Photoeye ISR was not initialized	PE will not function		DCM	Photoeye ISR failure.
5034	Error: Unable to read directory table	Solid Red	error	Focus table will not be created because depth of field information is not available. Digital zoom will not function. Gain table will not exist. Pixel correction will not exist. The Directory table indentifies the location of all the other camera tables.	Image may look very noisy	Check camera head connectivity	Camera head/DCM	Unable to read directory table
5035	Error: Unable to read header table	Solid Red	error	Focus table will not be created because depth of field information is not available. Digital zoom will not function. The camera head assembly is calibrated at the factory, and a header table is created which stores such information as the type of lens and sensor used in the camera	Images out of focus	Check camera head connectivity	Camera head/DCM	Unable to read header table
5036	Error: Unable to read gain table	Solid Red	error	Gain table will not be created The camera head assembly is calibrated at the factory, and a gain table is created. This table identifies what intensity is usable for various distances from the scanner	Images too dark or too bright	Check camera head connectivity	Camera head/DCM	Unable to read gain table
5037	Error: Unable to read focus table	Solid Red	error	Focus table will not be created The camera head assembly is calibrated at the factory, and a read focus table is created that stores the factory calibration parameters.	Images out of focus	Check camera head connectivity	Camera head/DCM	Unable to read focus table
5038	Error: Unable to read gain correction table	Solid Red	error	The gain correction table is part of the initial factory calibration. This table provides image consistency across the scan line.	Pixel correction will not exist. Images may look very noisy.	Check camera head connectivity	Camera head/DCM	Unable to read gain correction table
5039	Error: Unable to read offset correction table	Solid Red	error	The offset correction table is part of the initial factory calibration. This table provides image consistency across the scan line.	Pixel correction will not exist. Images may look very noisy.	Check camera head connectivity	Camera head/DCM	Error: Unable to read offset correcton table
5040	Info: Invalid start of 'image valid' detected	No Change	info	No image or host message created. Start of image valid without an end of image valid.	Package will be lost.	Was a parameter change made during a trigger cycle?		Invalid start of 'image valid' detected
5041	Info: Invalid end of 'image valid' detected	No Change	info	No image or host message created. End of image valid without a start of image valid.	Package will be lost.	Was a parameter change made during a trigger cycle?		Invalid end of 'image valid' detected
5042	Info: Invalid 'image valid' state detected	No Change	info	No image or host message created. Two image valid starts or two image valid ends were detected back to back.	Package will be lost.	Was a parameter change made during a trigger cycle?		Invalid 'image valid' state detected
5043	Info: Sensor Board I2C communication failure	Solid Red	error	Image gain will not change if this happened. Could not communicate with the camera head.	Image quality	Check camera head connectivity	Camera head/DCM	Sensor Board I2C communication failure

**Focus and
Illumination Errors**

Error Code	Description	Status LED	Severity	Explanation	Symptom	Troubleshooting	Replace	FastMonitor Message
5044	Info: Attempt to focus beyond maximum range	Solid Red	info	Focus data will be ignored. If this persists for the entire package the package will be lost. If it's a single point no symptom will exist. The focus information received from the RangeFinder was beyond the AV6010's physical maximum capability	Image quality	Make sure the camera is mounted within it's working range.		Attempt to focus beyond maximum range
5045	Info: Attempt to focus below minimum range	Solid Red	info	Focus data will be ignored. If this persists for the entire package the package will be lost. If it's a single point no symptom will exist. The focus information received from the RangeFinder was beyond the AV6010's physical minimum capability Cameras may be mounted outside its range	Image quality	Make sure the camera is mounted within it's working range.		Attempt to focus below minimum range
5046	Error: Unable to load gain table (invalid table) Invalid gain table read from camera head.	Solid Red	error	Gain table will not be created iMX31 could not load gain table read from the camera head.	Images too dark or too bright	Check camera head connectivity	Camera Head	Unable to load gain table (invalid table)
5047	Error: Unable to load focus table (invalid table) Invalid gain table read from camera head.	Solid Red	error	Focus table will not be created iMX31 could not load gain table read from the camera head.	Image quality	Check camera head connectivity	Camera Head	Unable to load focus table (invalid table)
5048	Info: Invalid Height from RangeFinder	No Change	info	the RangeFinder provides focus information for the top mounted camera. The camera will post this message if the focus information is outside of the focal range stored in the camera header table.	Focus data will be ignored. If this persists for the entire package the package will be lost. If it's a single point no symptom will exist.	If this message persists there may be a problem with the RangeFinder	No action required	Invalid Height from Rangefinder
5049	Info: Invalid Left Position from RangeFinder	No Change	info	the RangeFinder provides focus information for the left mounted camera. The camera will post this message if the focus information is outside of the focal range stored in the camera header table.	Focus data will be ignored. If this persists for the entire package the package will be lost. If it's a single point no symptom will exist.	If this message persists there may be a problem with the RangeFinder	No action required	Invalid Left Position from Rangefinder
5050	Info: Invalid Right Position from RangeFinder	No Change	info	the RangeFinder provides focus information for the right mounted camera. The camera will post this message if the focus information is outside of the focal range stored in the camera header table.	Focus data will be ignored. If this persists for the entire package the package will be lost. If it's a single point no symptom will exist.	If this message persists there may be a problem with the RangeFinder	No action required	Invalid Right Position from Rangefinder

RangeFinder

When facing the RangeFinder (with the ACCU-SORT silk-screen to the right): Laser 1 / DOE 1 (Left) and Laser 2 / DOE 2 (Right)

Error Code	Description	Status LED	Severity	Explanation	Symptom	Troubleshooting	Replace	FastMonitor Message
				Note: - Some errors that are manifested by the RangeFinder are caused by its power supply - Measure the 5 and 12 volt supply. The supply housing will list the proper connector pinout				
6000	Error: Image Sensor Read Failure	Solid Red	error	The RangeFinders software was unable to read the image data from the sensor. This is an internal hardware error.	No trigger or focusing information from RangeFinder	Reboot the RF and see if the error persists. Otherwise, replace the unit.	RangeFinder	Image Sensor Read Failure
6001	Error: Sensor data always from DOE #1	Solid Red	error	The RangeFinder is only receiving image data tagged as from Diffractive Optical Element (DOE) #1 (laser #1). This is an internal hardware error.	No trigger or focusing information from RangeFinder	Reboot the RF and see if the error persists. Otherwise, replace the unit.	RangeFinder	Sensor data always from DOE #1
6002	Error: Sensor data always from DOE #2	Solid Red	error	The RangeFinder is only receiving image data tagged as from Diffractive Optical Element (DOE) #2 (laser #2). This is an internal hardware error.	No trigger or focusing information from RangeFinder	Reboot the RF and see if the error persists. Otherwise, replace the unit.	RangeFinder	Sensor data always from DOE #2
6003	Error: Laser #1 current exceeds limit	Solid Red	error	The RangeFinder will monitor the current draw of the laser. If the laser current exceeds the per-determined value this error will be posted.	There are two current thresholds for the laser. One the laser will continue to function, but has the potential for failure. The second will shut down power to the laser. There is no visible symptom for the first threshold. The second will turn off the laser.	- Since there may be no visible symptom the decision to react to the first threshold error will be determined by the company's maintenance philosophy. They may be pro-active and change the rangefinder, or they may choose to wait until the unit fails - With the second condition the laser will not light	RangeFinder	Laser #1 current exceeds limit
6004	Error: Laser #2 current exceeds limit	Solid Red	error	The RangeFinder will monitor the current draw of the laser. If the laser current exceeds the per-determined value this error will be posted.	There are two current thresholds for the laser. One the laser will continue to function, but has the potential for failure. The second will shut down power to the laser. There is no visible symptom for the first threshold. The second will turn off the laser.	- Since there may be no visible symptom the decision to react to the first threshold error will be determined by the company's maintenance philosophy. They may be pro-active and change the rangefinder, or they may choose to wait until the unit fails - With the second condition the laser will not light	RangeFinder	Laser #2 current exceeds limit
6005	Error: Laser #1 temperature exceeds limit	Solid Red	error	The RangeFinder will monitor the temperature of the laser. If the laser temperature exceeds the values for which this unit was calibrated, this error will be posted.	There may not be any visible symptom to the error. If the unit is operating outside of the range of the calibrated temperature (roughly 0 to 50 deg C), then the accuracy of the height measurements will degrade.	Since there may be no visible symptom the decision to react to this error will be determined by the company's maintenance philosophy. They may be pro-active and change the rangefinder, or they may choose to wait until the unit fails	RangeFinder	Laser #1 temperature exceeds limit
6006	Error: Laser #2 temperature exceeds limit	Solid Red	error	The RangeFinder will monitor the temperature of the laser. If the laser temperature exceeds the values for which this unit was calibrated, this error will be posted.	There may not be any visible symptom to the error. If the unit is operating outside of the range of the calibrated temperature (roughly 0 to 50 deg C), then the accuracy of the height measurements will degrade	Since there may be no visible symptom the decision to react to this error will be determined by the company's maintenance philosophy. They may be pro-active and change the rangefinder, or they may choose to wait until the unit fails	RangeFinder	Laser #2 temperature exceeds limit
6007	Error: No valid temperature for laser #1	Solid Red	error	The software in the RangeFinder is unable to determine the temperature of the laser so the temperature calibration cannot be applied.	There may not be any visible symptom to the error. The accuracy of the height measurements may degrade.	Since there may be no visible symptom the decision to react to this error will be determined by the company's maintenance philosophy. They may be pro-active and change the rangefinder, or they may choose to wait until the unit fails	RangeFinder	No valid temperature for laser #1
6008	Error: No valid temperature for laser #2	Solid Red	error	The software in the RangeFinder is unable to determine the temperature of the laser so the temperature calibration cannot be applied.	There may not be any visible symptom to the error. The accuracy of the height measurements may degrade.	Since there may be no visible symptom the decision to react to this error will be determined by the company's maintenance philosophy. They may be pro-active and change the rangefinder, or they may choose to wait until the unit fails	RangeFinder	No valid temperature for laser #2
6009	Error: Tach or Tach Sync problem (invalid speed)	Solid Red	error	RangeFinder is receiving 'extra' tach sync signals causing the tachometer value to 'jump around.'	Unit may trigger at the wrong time or not at all.	Normally the result of 'tach noise' on the Ethernet cables. Often this is resolved through the use of shielded cables.	Ethernet cable	Tach or Tach Sync problem (invalid speed)
6010	Error: Sensor or laser problem (no codewords)	Solid Red	error	The software in the RangeFinder is unable to 'read' codewords when the pattern from either laser is present.	No trigger signal or focus data from RangeFinder.	- Check to see if there are any objects in the RangeFinder sensor field of view. - Run the codeword viewer program to determine if the RangeFinder reports any height data. - Reboot the RF and see if the problem persists (perhaps gain did not get set on power-up?) - Replace RF power supply (Bad Power Supplies can case this error)	RangeFinder	Sensor or laser problem (no codewords)

RangeFinder

When facing the RangeFinder (with the ACCU-SORT silk-screen to the right): Laser 1 / DOE 1 (Left) and Laser 2 / DOE 2 (Right)

Error Code	Description	Status LED	Severity	Explanation	Symptom	Troubleshooting	Replace	FastMonitor Message
6011	Error: CERT accuracy exceeds calibration	Solid Red	Error	Certified dimensioning accuracy exceeds calibration				Certified dimensioning accuracy exceeds calibration
6012	Error: Dimensioning not support	Solid Red	Error	Rangefinder does not support dimensioning.	AV6010 will not allow enabling of dimensioning option	Replace RangeFinder with a unit that supports dimensioning	RangeFinder	Rangefinder does not support dimensioning.
6032	Warning: Laser 1 is off or blocked (no codewords)	Blinking Red	warning	The software in the RangeFinder is unable to 'read' the codewords when the laser #1 pattern is present.	Invalid focus data from RangeFinder (part of the belt is not visible).	<ul style="list-style-type: none">- Check to see if there are any objects in the RangeFinder laser path- Run the codeword viewer program to determine if the RangeFinder reports any height data.- Reboot the RF and see if the problem persists (perhaps gain did not get set on power-up?)- Replace RF power supply (Bad Power Supplies can case this error)	RangeFinder	Laser 1 is off or blocked (no codewords)
6033	Warning: Laser 2 is off or blocked (no codewords)	Blinking Red	warning	The software in the RangeFinder is unable to 'read' and codewords when the laser #2 pattern is present.	Invalid focus data from RangeFinder (part of the belt is not visible).	<ul style="list-style-type: none">- Check to see if there are any objects in the RangeFinder laser path- Run the codeword viewer program to determine if the RangeFinder reports any height data.- Reboot the RF and see if the problem persists (perhaps gain did not get set on power-up?)- Replace RF power supply (Bad Power Supplies can case this error)	RangeFinder	Laser 2 is off or blocked (no codewords)
6034	Warning: RangeFinder is not level	Blinking Red	warning	The dimensioning option needs to have the RangeFinder level. It will identify if the RangeFinder is not level with the conveyor surface	The product will have incorrect dimensions reported	Check the Leveling LED's on the RangeFinder, or use a level to reposition the RangeFinder	N/A	RangeFinder is not level
6035	Warning: Object stuck in rangefinder view	Blinking Red	warning	The RangeFinder will monitor the tach cycle, and will report if an object is longer than the max box in the system.	No trigger signal or focus data from RangeFinder	<ul style="list-style-type: none">- Check to see if there are any objects in the RangeFinder laser path- If using a PE with the RF, verify that is it not blocked and the polarity is set correctly.- Run the codeword viewer program to determine if the RangeFinder reports any height data.	N/A	Object stuck in rangefinder view
6036	Warning: Belt Speed is out of valid range	Blinking Red	warning	The belt speed is either greater than 620 fpm or less than 50 fpm.	RangeFinder may not operate correctly.	<ul style="list-style-type: none">- Verify the reported belt speed is correct (application issue).- Verify the tachs/inch is set correctly	Tach	Belt speed is out of valid range
6064	Info: Belt or Tachometer stopped	Blinking Green	info	Informational message indicating belt is stopped.	N/A	N/A	N/A	N/A
6065	Info: Waiting to Sync Tachometer	Blinking Green	info	Informational message indicated RF is waiting for a tachometer tach signal before generating valid results.		N/A	N/A	N/A
6066	Info: Calibrated for 0.1 inch height	n/a	Info	n/a		N/A	N/A	N/A
6067	Info: Calibrated for 0.2 inch height	n/a	Info	n/a		N/A	N/A	N/A
6068	Info: Calibrated for 0.5 inch height	n/a	Info	n/a		N/A	N/A	N/A