

PEM2® Error Codes

Serial Number Range: P2_15000+

Code #	Description	Action Required
4.1	<p>Firmware version currently running on logger</p> <p>One of several low-battery indicators. Battery pack is not producing sufficient voltage to power the Flash Drive without risking damage to the microchip.</p>	<p>Replace batteries in logger</p> <p>If error code reappears after battery replacement, send logger in for troubleshooting and repair: https://store.imagepermanenceinstitute.org/ipi_recal/</p>
-41-	<p>Reset with no time markers</p> <p>Logger temporarily lost power while in Sleep/Ship Mode and lost timestamp. No data in memory means no reference point for time stamp to reset internally</p>	<p>Reset the Timestamp</p>
-42-	<p>Bad display mode config</p> <p>The display mode value is not recognized/bad character string detected in display field</p>	<p>Reset the Display</p>
-43-	<p>Bad serial number config</p> <p>Bad character string detected in the serial number field</p>	<p>Contact IPI Service Center at REDCOM: ipiservice@redcom.com 585-924-6510</p>
-44-	<p>Watchdog reset</p> <p>The USB Watchdog, which monitors the timing of handshake and enumeration routines, is reset</p>	<p>Run Error-Checking tool</p> <p>Reformat Flash Drive</p> <p>Replace Flash Drive</p> <p>If error code reappears after these steps, send logger in for troubleshooting and repair: https://store.imagepermanenceinstitute.org/ipi_recal/</p>
-60-	<p>USB overcurrent</p> <p>Flash Drive is drawing higher than specified voltage from battery pack. This will result in drained batteries and possible damage to the microchip over time.</p>	<p>Run Error-Checking tool</p> <p>Reformat Flash Drive</p> <p>Replace Flash Drive</p>

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-61-	<p>Cannot use a hub between PEM2.6 and Flash Drive</p> <p>Logger cannot communicate with the Flash Drive unless it is directly connected (i.e. no extension cable or USB Hub device)</p>	<p>Insert Flash Drive directly into logger</p>
-62-	<p>Unsupported USB device</p> <p>A device has been inserted into the USB Port that the logger does not recognize as a writeable Flash Drive</p>	<p>Remove non-PEM2-related files from flash drive</p> <p>Run Error-Checking tool</p> <p>Reformat Flash Drive</p> <p>Replace Flash Drive</p>
-63-	<p>USB enumeration error</p> <p>Logger has failed to identify the inserted Flash Drive as a valid read-write device (flash drive-related error)</p>	<p>Remove non-PEM2-related files from flash drive</p> <p>Run Error-Checking tool</p> <p>Reformat Flash Drive</p> <p>Replace Flash Drive</p>
-64-	<p>USB initialization error</p> <p>Logger has failed “handshake” process (flash drive-related error)</p>	<p>Remove non-PEM2-related files from flash drive</p> <p>Run Error-Checking tool</p> <p>Reformat Flash Drive</p> <p>Replace Flash Drive</p>
-65-	<p>USB memory error</p> <p>Logger is unable to access Flash Drive memory</p>	<p>Remove non-PEM2-related files from flash drive</p> <p>Run Error-Checking tool</p> <p>Reformat Flash Drive</p> <p>Replace Flash Drive</p>

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-66-	<p>USB unknown error</p> <p>Communication failure between Flash Drive and Logger, cause unknown</p>	<p>Remove non-PEM2-related files from flash drive</p> <p>Run Error-Checking tool</p> <p>Reformat Flash Drive</p> <p>Replace Flash Drive</p>
-70-	<p>Write Failure</p> <p>Generic error indicating logger cannot write data onto Flash Drive</p>	<p>Remove non-PEM2-related files from flash drive</p> <p>Run Error-Checking tool</p> <p>Reformat Flash Drive</p>
-71-	<p>Could not open a file</p> <p>Flash Drive is write-protected and the logger cannot create a data file</p>	<p>Replace Flash Drive</p> <p>Eject Flash Drive properly before removing from computer</p>
-72-	<p>File system removed while writing</p> <p>Flash Drive was removed while the Logger was still writing data to it</p>	<p>Run Error-Checking tool</p> <p>Wait for error to clear, then reinsert Flash Drive</p>
-73-	<p>Write block error</p> <p>Logger encountered a problem while writing data to Flash Drive. This could be caused by damaged storage sectors.</p>	<p>Run Error-Checking tool</p> <p>Wait for error to clear, then reinsert Flash Drive</p>
-74-	<p>Could not close file</p> <p>Logger was able to create a file and begin writing data to it, but was unable to complete it</p>	<p>Reformat Flash Drive</p> <p>Eject Flash Drive properly before removing from computer</p>
-75-	<p>Write header error</p> <p>Logger encountered an error while creating the header information on the data file (can be firmware or Flash Drive related)</p>	<p>Run Error-Checking tool</p> <p>Wait for error to clear, then reinsert Flash Drive</p> <p>Reformat Flash Drive</p> <p>Replace Flash Drive</p>

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-76-	<p>Write loop timeout</p> <p>Logger is unable to write data to the Flash Drive because it is stuck in a processing loop</p>	<p>Remove battery pack from logger; let sit for 5 minutes then reconnect</p> <p>Reset the timestamp</p> <p>Run Error-Checking tool</p>
-77-	<p>Write bad name</p> <p>Logger is writing bad character strings to file</p>	<p>Remove battery pack from logger; let sit for 5 minutes then reconnect</p> <p>Reset the timestamp</p> <p>Run Error-Checking tool</p>
-78-	<p>Root directory has no more file entries</p> <p>Logger cannot locate valid write location on Flash Drive</p>	<p>Reformat Flash Drive</p> <p>Eject Flash Drive properly before removing from computer</p>
-80-	<p>Lost communication with microchip</p> <p>The initial “handshake” between the logger and the Flash Drive failed</p>	<p>Logger should be sent in for firmware reinstall/ repair: https://store.imagepermanenceinstitute.org/ipi_recal/</p>
-81-, -86-	<p>Ready line did not respond in a timely fashion</p> <p>The “handshake” process timed out before the microchip responded</p>	<p>Logger should be sent in for firmware reinstall/ repair: https://store.imagepermanenceinstitute.org/ipi_recal/</p>
-82-, -87-	<p>Ready line did not respond in a timely fashion: did not reply to a poll in within 12 seconds</p> <p>The “handshake” process timed out before the microchip responded a poll (an “are you there” query)</p>	<p>Logger should be sent in for firmware reinstall/ repair: https://store.imagepermanenceinstitute.org/ipi_recal/</p>
-83-	<p>Ready line did not respond in a timely fashion: did not block write within 6 seconds</p> <p>The “handshake” process timed out before the microchip wrote test data to the flash drive</p>	<p>Logger should be sent in for firmware reinstall/ repair: https://store.imagepermanenceinstitute.org/ipi_recal/</p>

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-84-, -85-	Block Write responded with 0,0. Microchip may have died Microchip failure, logger not functioning	Logger should be sent in for firmware reinstall/repair: https://store.imagepermanenceinstitute.org/ipi_recal/
-90-	Media removed while locked for writing Flash Drive was removed while still in “write data” mode – can be triggered by removing from either the logger OR the computer	Run Error-Checking tool Reformat Flash Drive Eject Flash Drive properly before removing from computer Wait until hourglass clears before removing Flash Drive from logger
-96-	Overcurrent draw detected Flash Drive is drawing so much voltage from the battery pack that it doesn’t maintain a safe current level to power the logger	Run Error-Checking tool Replace batteries in logger If error code reappears after battery replacement, send logger in for troubleshooting and repair: https://store.imagepermanenceinstitute.org/ipi_recal/
-97-	Mount timeout Undefined timeout while initializing connection between Flash Drive and logger (Flash Drive-related failure)	Run Error-Checking tool Reformat Flash Drive
-98-	Mount issue. Known bad stick. Flash Drive is non-functioning or not recognized as a valid storage device	Replace Flash Drive
-99-	Could not initialize media Could not connect with Flash Drive and prepare for data transfer (Flash Drive-related failure)	Run Error-Checking tool Reformat Flash Drive Replace Flash Drive