PEM2® Error Codes

Serial Number Range: P2_05290–P2_14999

Code #	Description	Action Required
4.0	**Firmware version currently running on logger** One of several low-battery indicators. Battery pack is not producing sufficient voltage to power the Flash Drive without risking damage to the microchip.	Logger should be sent in for firmware upgrade and recalibration ASAP: https://store.imagepermanenceinstitute.org/ipi_recal/
4.1	**Firmware version currently running on logger** One of several low-battery indicators. Battery pack is not producing sufficient voltage to power the Flash Drive without risking damage to the microchip.	Replace batteries in logger If error code reappears after battery replacement, send logger in for troubleshooting and repair: https://store.imagepermanenceinstitute.org/ipi_recal/
-11-	**Reset with no time markers** 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	Reset the Timestamp
-12-	**Bad display mode config** The display mode value is not recognized/bad character string detected in display field	Reset the Display
-13-	**Bad serial number config** Bad character string detected in the serial number field	Contact IPI Service Center at REDCOM: ipiservice@redcom.com 585-924-6510
-60-	**USB overcurrent** 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	Run Error-Checking tool Reformat Flash Drive Replace Flash Drive

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-61-	**Cannot use a hub between PEM2.5 and Flash Drive** Logger cannot communicate with the Flash Drive unless it is directly connected (i.e. no extension cable or USB Hub device)	Insert Flash Drive directly into logger
-62-	**Unsupported USB device** A device has been inserted into the USB Port that the logger does not recognize as a writeable Flash Drive	Remove non-PEM2-related files from flash drive Run Error-Checking tool Reformat Flash Drive Replace Flash Drive
-63-	**USB enumeration error** Logger has failed to identify the inserted Flash Drive as a valid read-write device (flash drive-related error)	Remove non-PEM2-related files from flash drive Run Error-Checking tool Reformat Flash Drive Replace Flash Drive
-64-	**USB initialization error** Logger has failed "handshake" process (flash drive-related error)	Remove non-PEM2-related files from flash drive Run Error-Checking tool Reformat Flash Drive Replace Flash Drive
-65-	**USB memory error** Logger is unable to access Flash Drive memory	Remove non-PEM2-related files from flash drive Run Error-Checking tool Reformat Flash Drive Replace Flash Drive

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

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

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Code #	Description	Action Required
-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