PEM2® Error Codes

Serial Number Range: P2_00001–P2_05289

Code #	Description	Action Required
2.5, 2.6, 2.7	**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/
2.8, 2.9	**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/
-4-, -5-, -8-	**-Undefined-** Will often appear in conjunction with low-battery state. Battery pack is not producing sufficient voltage to power the Flash Drive operation.	Replace batteries in logger
-61-	**Cannot use a hub between PEM2 and Flash Drive** Logger cannot communicate with Flash Drive unless it is directly connected (i.e. no extension cable or USB Hub device)	Insert Flash Drive directly into logger
-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	Reformat Flash Drive Eject Flash Drive properly before removing from computer

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Code #	Description	Action Required
-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
-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/
-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/

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Code #	Description	Action Required
-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
-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