Embedded Common Issues Triage and Error Codes

All Embedded Touchscreens

This guide contains troubleshooting for the most common issues, Audio/Video, Power, Lack of Response, Freezing, and ERROR CODES that may occur on an embedded touch screen.



| Area | Symptom | Possible Cause | Next Action to Take |
|------------|---------------------------------------------|---------------------------------------------------|----------------------------|
| Quadrent 1 | Sound only coming out of one ear | Headphone Jack or Headphones | 637-1433 |
| Audio | Low Volume in Both Ears | Audio gain, volume setting | 637-1426 |
| Issues | Poor Sound Quality | Headphone Jack/Audio Cables/CCB/Headphones | 637-1427 |
| | No Sounds Coming From Headphone Jack | Headphone Jack/Audio Cables/Dock/Headphones | 637-1424 |
| Quadrent 2 | No TV Icon | Loose Coax Connector/Signal | 637-4258 |
| TV/Video | Bad picture quality on some or all channels | Loose Coax Connector/Signal strength | 637-1414 |
| Issues | Green or White Screen Issue | Tuner/Video Card | 637-1411 |
| | Ipod/iPhone Sync Issue | iPod/iPhone connector or CCB | 635-4132 |
| Quadrent 3 | Coach video not working/freezing | Loose USB Stick, needs to be reseated or replaced | 637-4211 |
| Coach Prgm | Coach audio not working at all | Loose USB Stick, needs to be reseated or replaced | 637-4211 |
| Issues | Coach audio works for a few minutes, then | | |
| | stops working (Gen 3 Screens) | GUI software may need to be updated | 637-4211 |

- Sound Issues: Depending on the type of audio issue refer to CSB's 637-1424, 637-1427, 637-1426, or 637-1433 to resolve the issue.
- TV/Video Issues: Most common causes of TV issues are caused by loose connections. Refer to CSB's 637-1411, 637-1414, 637-4132, or 637-4258 to resolve the issue.
- Coach Video Issues: Restarting or power cycling the screen could fix the problem, if not refer to CSB 637-4211 to resolve the issue.



| Embedded I | Embedded Error Codes | | | |
|------------|----------------------|--------------------------------------------------------|---------------------|--|
| Area | Symptom | Possible Cause | Next Action to Take | |
| Quadrent 1 | ERROR 6 | A Time Out Error/needs to be rebooted | Please See 637-1420 | |
| Time Out | ERROR 14 | A Time Out Error/needs to be rebooted | Please See 637-4144 | |
| Errors | ERROR 17 | A Time Out Error/needs to be rebooted | Please See 637-4145 | |
| | ERROR 21 | A Time Out Error/needs to be rebooted | Please See 637-4146 | |
| Quadrent 2 | ERROR 38 | Elevation Stall, Elevation Lost, Elevation Range Error | Please See 637-1329 | |
| Elevation | | | | |
| Errors | ERROR 42 | Elevation Stall - Calibration Required | Please See 637-1334 | |
| Quadrent 3 | | | | |
| Drivetrain | | | | |
| Errors | ERROR 40 | Check Speed/Check Motor System Error | Please See 637-4327 | |

Typically all the "ERROR CODES" found on an embedded screen can be resolved by powering down the unit for one minute, then restart the screen. If the error returns within 24 hours, see the appropriate document listed below to troubleshoot further.



| Embedded Boot-up/Power/Non-Response Issues | | | | |
|--------------------------------------------|------------------------------------------------|------------------------------|---------------------|--|
| Area | Symptom Possible Cause Next Action to 1 | | Next Action to Take | |
| Quadrent 1 | Boot Up Error | Software or hardware issue | 637-1422 | |
| | Embedded Does Not Complete Boot Process | Software or hardware issue | 637-1422 | |
| Quadrent 2 | Intermittently Shutting Down | Loose Power Connection | 637-1383 | |
| | No Power - Screen will not turn on | Loose Power Connection | 637-1383 | |
| Quadrent 3 | Touchscreen Not Responding | Touchscreen Lost Calibration | 637-4152 | |
| | Touchscreen Consistently Beeps (Gen 1) | Loose DOM Card in Display | 637-1410 | |

- Boot-Up Issues: Perform the steps in CSB 637-1422. The failure point could reside in either hardware or a simple software upgrade can resolve it.
- Power Issues: Check for loose connections from the power cord all the way up to the touchscreen. Refer to CSB 637-1383 to resolve the issue.
- Lack of Response Issues: Performing a touchscreen resolves the problem most of the time. Refer to CSB's 637-4152 and or 637-1410 to resolve the issue.

| <u>Error</u> | <u>Description</u> | <u>Diagnosis</u> |
|--------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <u>Code</u> | | |
| 1 | Display watchdog timeout. This is reported when there is no communication between the Display and the FitCPU for more than 2 seconds. | Re-boot the unit and see if the problem goes away. If the problem persists, check the comms cable between the FitCPU and the Display. If the problem still persists change the comms cable. |
| 2 | XCB watchdog timeout. This is reported when there is no communication between the FitCPU and the xCB for more than 2 seconds. | Re-boot the unit and see if the problem goes away. If the problem persists, check the comms cable between the FitCPU and the xCB. If the problem still persists change the comms cable. |
| 3 | Timeout waiting for touch display ready. This is reported when the FitCPU does not receive a touch ready message from the display during boot up. | (This error is currently disabled and will not be seen on any units) |
| 4 | Timeout waiting for query id response from display. This is reported when the FitCPU does not receive a query id response from the display during boot up. | Re-boot the unit and see if the problem goes away. If the problem persists, check the comms cable between the FitCPU and the Display. If the problem still persists change the comms cable. |
| 5 | No query id response received from display or XCB. This is reported when the FitCPU does not receive a query id response from both the display and xCB during boot up. | Re-boot the unit and see if the problem goes away. If the problem persists, check the comms cables between the FitCPU and the Display and xCB. If the problem still persists change both of the comms cable. |

| 6 | Timeout waiting for query id response from XCB. This is reported when the FitCPU does not receive a query id response from the xCB during boot up. | Re-boot the unit and see if the problem goes away. If the problem persists, check the comms cable between the FitCPU and the xCB. If the problem still persists change the comms cable. |
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| 7 | Invalid display and XCB combination. This is reported when the FitCPU detects an invalid display and xCB combination during boot up. | (This error is currently disabled and will not be seen on any units) |
| 8 | Error creating GUI queue. This is reported when the computer has an internal error during boot up. | Re-boot the unit and see if the problem goes away. If the problem persists, replace the computer. |
| 9 | Error opening Fit FIFO. This is reported when the computer has an internal error during boot up. | Re-boot the unit and see if the problem goes away. If the problem persists, replace the computer. |
| 10 | Error reading Fit FIFO. This is reported when the computer has an internal error during boot up. | Re-boot the unit and see if the problem goes away. If the problem persists, replace the computer. |
| 11 | Error creating CV queue. This is reported when the computer has an internal error during boot up. | Re-boot the unit and see if the problem goes away. If the problem persists, replace the computer. |
| 12 | Error opening CCB FIFO. This is reported when the computer has an internal error during boot up. | Re-boot the unit and see if the problem goes away. If the problem persists, replace the computer. |
| 13 | Error reading CCB FIFO. This is reported when the computer has an internal error during boot up. | Re-boot the unit and see if the problem goes away. If the problem persists, replace the computer. |

| 14 | Timeout waiting for query id response from CCB. This is reported when the Display does not receive a query id response from the CCB during boot up. | Re-boot the unit and see if the problem goes away. If the problem persists, check the comms/power cable between the Display and the CCB. If the problem still persists change the comms/power cable. |
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| 15 | Timeout during EEPROM read from CCB. This is reported when the Display times out waiting for a read from the EEPROM on the CCB. | Re-boot the unit and see if the problem goes away. If the problem persists, check the comms cable between the Display and the CCB. If the problem still persists change the comms cable. |
| 16 | CCB reports EEPROM read failure. This reports an EEPROM read failure on the CCB. | Re-boot the unit and see if the problem goes away. If the problem persists, replace the CCB. |
| 17 | Timeout while writing to EEPROM on CCB. This is reported when the Display times out waiting for a write to the EEPROM on the CCB. | Re-boot the unit and see if the problem goes away. If the problem persists, check the comms cable between the Display and the CCB. If the problem still persists change the comms cable. |
| 18 | CCB reports EEPROM write failure. This reports an EEPROM write failure on the CCB. | Re-boot the unit and see if the problem goes away. If the problem persists, replace the CCB. |
| 19 | Invalid config data received from CCB. This reports that invalid configuration data was received from the CCB. | (This error is currently disabled and will not be seen on any units) |
| 20 | Invalid stats data received from CCB. This reports that invalid statistics data was received from the CCB. | (This error is currently disabled and will not be seen on any units) |

| 21 | Timeout waiting for query id from FitCPU. This is reported when the Display times out waiting for a query id command from the FitCPU during boot up. | Re-boot the unit and see if the problem goes away. If the problem persists, check the comms cable between the Display and the FitCPU. If the problem still persists change the comms cable. If the problem still persists change the FitCPU board. |
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| 22 | Timeout during startup hand shaking. This is reported when the Display times out waiting for a go to idle command from the FitCPU during boot up. | 1). Re-boot the unit and see if the problem goes away. 2). If the problem persists, check the comms cable between the FitCPU and the xCB. Also check the comms cable between the Display and FitCPU. 3). Also check the error code that is being flashed on the FitCPU. It may be different than the one being displayed on the display. Check this error code in the error codes table. 4). If the problem still persists change both of the comms cable. |
| 23 | Fit CPU watchdog response timeout. This is reported when there is no communication between the Display and the FitCPU for more than 2 seconds. | Re-boot the unit and see if the problem goes away. If the problem persists, check the comms cable between the FitCPU and the Display. If the problem still persists change the comms cable. |
| 24 | Fit reports invalid program parameters. This indicates that the program parameters were reported as invalid by the FitCPU. | Re-boot the unit and see if the problem goes away. If the problem persists, check the comms cable between the FitCPU and the Display. If the problem still persists change the comms cable. |

| 25 | Fit reports invalid program profile. This indicates that the program profile was reported as invalid by the FitCPU. | Re-boot the unit and see if the problem goes away. If the problem persists, check the comms cable between the FitCPU and the Display. If the problem still persists change the comms cable. |
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| 26 | Fit CPU and Display are out of sync. This is reported if the FitCPU and Display workout modes are not synchronized. | Re-boot the unit and see if the problem goes away. If the problem persists, check the comms cable between the FitCPU and the Display. If the problem still persists change the comms cable. |
| 27 | Timeout waiting for a program parameters response from the Fit CPU. This is reported when the display times out waiting for a program parameters response from the FitCPU. | Re-boot the unit and see if the problem goes away. If the problem persists, check the comms cable between the FitCPU and the Display. If the problem still persists change the comms cable. |
| 28 | Timeout waiting for a program profile response from the Fit CPU. This is reported when the display times out waiting for a program profile response from the FitCPU. | 1). Re-boot the unit and see if the problem goes away. 2). If the problem persists, check the comms cable between the FitCPU and the Display. 3). If the problem still persists change the comms cable. |
| 29 | Error writing to gui queue. This is reported when the computer has an internal error. | Re-boot the unit and see if the problem goes away. If the problem persists, replace the computer. |
| 30 | Error writing to cv queue. This is reported when the computer has an internal error. | 1). Re-boot the unit and see if the problem goes away. 2). If the problem persists, replace the computer. |
| 31 | Error writing to Fit FIFO. This is reported when the computer has an internal error. | Re-boot the unit and see if the problem goes away. If the problem persists, replace the computer. |

| 32 | Error writing to CCB FIFO. This is reported when the computer has an internal error | Re-boot the unit and see if the problem goes away. If the problem persists, replace the computer. |
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| 33 | Invalid Product Id. This is reported if the product id is invalid. | Re-boot the unit and see if the problem goes away. If the problem persists, replace the computer. |
| 34 | Timeout waiting for the Fit CPU to change mode. This is reported when the Display times out waiting for the FitCPU to change to the specified service mode. | Re-boot the unit and see if the problem goes away. If the problem persists, check the comms cable between the FitCPU and the Display. If the problem still persists change the comms cable. |
| 35 | Timeout waiting for duration response from Fit CPU. This is reported when the Display times out waiting for the FitCPU to respond to a new duration time command. | 1). Re-boot the unit and see if the problem goes away. 2). If the problem persists, check the comms cable between the FitCPU and the Display. 3). If the problem still persists change the comms cable. |
| 36 | Fit CPU reports invalid duration setting. This indicates that the duration parameter was reported as invalid by the FitCPU. | Re-boot the unit and see if the problem goes away. If the problem persists, check the comms cable between the FitCPU and the Display. If the problem still persists change the comms cable. |
| 37 | Timeout waiting for CCB config message response. This is reported when the Display does not receive a config message response from the CCB during boot up. | Re-boot the unit and see if the problem goes away. If the problem persists, check the comms cable between the Display and the FitCPU. If the problem still persists change the comms cable. |

| 38 | Fit CPU reports MCB error status:- Incline calibration value out of range | Re-boot the unit and see if the problem goes away. If the problem persists, check the Product Model in Maintenance Mode and ensure it is correct. Re-calibrate the Incline. |
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| 39 | Fit CPU reports MCB error status:- Speed calibration value out of range | Re-boot the unit and see if the problem goes away. If the problem persists, check the Product Model in Maintenance Mode and ensure it is correct. Re-calibrate the Speed. |
| 40 | Fit CPU reports MCB error status:- Speed lost (RPM Sensor) | Re-boot the unit and see if the problem goes away. If the problem persists, check the Product Model in Maintenance Mode and ensure it is correct. Re-calibrate the Speed. If the problem persists check the speed sensor. Rotate the flywheel on the motor and ensure that the speed sensor LED on the MCB blinks as the flywheel is moving. Check to ensure isolation washer is present between the sensor and mounting plate, this will keep the sensor from grounding out via the plate. Replace speed sensor. |
| 41 | Fit CPU reports MCB error status:- Incline feedback out of range | 1). Re-boot the unit and see if the problem goes away. 2). If the problem persists, check the Product Model in Maintenance Mode and ensure it is correct. 3). Re-calibrate the Incline. 4). If the problem persists, check to see that the Incline Counts value in the Incline Calibration Screen is changing during incline calibration. The Incline Counts should go down as the elevation goes up. 5). If the Incline Counts is not changing during calibration, then the cable from the elevation motor to the MCB should be checked. If the cable is OK then the elevation motor should be replaced. |

| 42 | Fit CPU reports MCB error status:- Incline stuck | 1). Re-boot the unit and see if the problem goes away. 2). If the problem persists, check the Product Model in Maintenance Mode and ensure it is correct. 3). Re-calibrate the Incline. 4). If the problem persists, check to see that the Incline Counts value in the Incline Calibration Screen is changing during incline calibration. The Incline Counts should go down as the elevation goes up. 5). If the Incline Counts is not changing during calibration, then the cable from the elevation motor to the MCB should be checked. If the cable is OK then the elevation motor should be replaced. |
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| 43 | Fit CPU reports MCB error status:- Unknown error status from MCB | (This error is a place holder for future error codes from the MCB) |
| 44 | Fit CPU reports LCB error status:- Received SPM over safety limit. | 1). Re-boot the unit and see if the problem goes away. 2) If the problem persists, check the cable/connectors in the lower control board (LCB), specifically between the LCB and the brake. 3) Check to ensure resistance across alternator brushes is less than 15 ohms. 4) Check for worn brushes (<1/4" long and the brushes need to be replaced). 4) Replace LCB. |
| 45 | Fit CPU reports LCB error status:- Received SPM over max safety limit (steps exceeding 185 SPM). | 1). Re-boot the unit and see if the problem goes away. 2) If the problem persists, check the cable/connectors in the lower control board (LCB), specifically between the LCB and the brake. 3) Check to ensure resistance across alternator brushes is less than 15 ohms. 4) Check for worn brushes (<1/4" long and the brushes need to be replaced). 5) If brushes are OK, replace alternator. 4) If all of the above is OK, replace LCB or brake. |



| 255 | Fit CPU detected emergency stop condition | Reset the E-Stop switch and the product will become operational again. If the problem persists, check the cables/connections in the Hot Bar. Also check the e-stop cable from the Hot Bar that plugs into the FitCPU. If the problem still persists, check the comms cable between the FitCPU and the Translator Board. If all of the above is OK then replace the |
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| | | 4). If all of the above is OK then replace the Translator Board. |