FMX Fault List Information 11/5/09 This is for grey panels with 3 yellow fault lights on top.

The fault lights are arranged from right to left and are numbered 1, 2, and 4. If light 1 is on, the value is 1. If light 1 and 2 is on, the value is 3. If light 1, 2, and 3 is on, the value is 7. Two digits are flashed in sequence. Read the numbers from the list to determine the fault number.

Fault List
1 Internal PLC Critical Error
2 Internal PLC Diagnostic Error
3 Internal PLC Memory Error
4 Internal PLC I/O Error
5 Internal PLC Communication Error
6 Internal PLC Watchdog Timeout Error
7 Internal PLC Logic Error
11 Yaw Drive Fault = A fault signal from the drive indicated an internal problem with the drive.
12 Pitch Drive Fault = A fault signal from the drive indicated an internal problem with the drive.
13 Roll Drive Fault = A fault signal from the drive indicated an internal problem with the drive.
14 Yaw Motor Failed to Run = The motor was supposed to run but the run signal did not come back from the drive
15 Pitch Motor Failed to Run = The motor was supposed to run but the run signal did not come back from the drive
16 Roll Motor Failed to Run = The motor was supposed to run but the run signal did not come back from the drive
17 Both Yaw Limits On = Travel limits were both on at the same time, something is wrong.
21 Both Pitch Limits On = Travel limits were both on at the same time, something is wrong.
22 Both Roll Limits ON = Travel limits were both on at the same time, something is wrong.
23 Yaw Left Limit On at Wrong Time = Based on the sensor, the axis was on the opposite half of travel when this limit came on
24 Yaw Right Limit On at Wrong Time = Based on the sensor, the axis was on the opposite half of travel when this limit came on
25 Pitch Up Limit On at Wrong Time = Based on the sensor, the axis was on the opposite half of travel when this limit came on
26 Pitch Down Limit On at Wrong Time = Based on the sensor, the axis was on the opposite half of travel when this limit came on
27 Roll Right Limit on at Wrong Time = Based on the sensor, the axis was on the opposite half of travel when this limit came on
31 Roll Left Limit on at Wrong Time = Based on the sensor, the axis was on the opposite half of travel when this limit came on
32 Yaw Shaft Encoder Fail = The encoder did not move when expected
33 Roll Sensor Fail = The sensor input reached maximum or minimum, broken wire, failed sensor, or masadjustment will cause this
34 Pitch Sensor Fail = The sensor input reached maximum or minimum, broken wire, failed sensor, or misadjustment will cause this
35 Yaw Axis Did not Stop = Stop was commanded but the yaw axis did not stop moving
36 Yaw Axis wrong direction = Forward was commanded but axis went reverse or vise versa
37 Yaw Analog Problem = Yaw Command does not match Yaw Command Feedback
41 Yaw Axis feedback Failure = Yaw axis moved but analog speed feedback failed to indicate
42 Yaw Axis I/O Fault = Discrete run control and run feedback do not agree

Note: if two faults occur at the same time, the highest number of the list will be displayed.
Faults 35 - 42 are new.

What to do if there is a fault

The system will not run or calibrate when there is a fault. It will be locked out from moving.

There are 2 ways to clear a fault:
1) Turn power off and back on for the platform
2) Turn switch 7 on and back off (8th toggle on the card inside the panel)

If the fault will not clear or the problem is still there, the fault will come back. Use caution with method 2 above because the system may move just as soon as the fault is cleared.

If a fault occurs, we should find out why because if it will most likely come back.

Calibration

During calibration, many faults are disabled because the system does not yet know the limits of travel and such. So, always use caution during calibration because the system may not shut down when it otherwise would in the normal mode.

Summary

If you see a fault that cannot be explained, always call so that I can help and keep track of those types of issues. If you see a fault 33 and the cable for the roll sensor was not plugged in, that is a pretty clear reason why.