Error / Info Messages

Overview

The following table lists the error or informational messages a user or service can see including a description of what they mean. Applies to the current Elevation based treadmill products (Engage, Inspire). This information is intended to be used in the service manuals with input from the software and hardware group. It is based on the current SBC (v1.10), MIB (w/ Rev E support) and DSP motor controller software releases.

MESSAGE	DESCRIPTION	POSSIBLE CAUSE	SECTION	PAGE
“Error launching application. Please reload using USB memory stick.”	SBC application was unable to launch.	Application missing	Reload application using USB setup utility.	
"Interface board in Boot mode - please start Flash update now"	MIB application checksum error detected.	Software update was interrupted via a power failure or bad connection with the USB stick, PC update application or widget box.	Re-flash/update the MIB software.	
"Motor controller in Boot mode - please start Flash update now"	Motor controller checksum error detected.	Software update was interrupted via a power failure or bad connection with the USB stick, PC update application or widget box.	Re-flash/update the motor controller software.	
"Stuck hard key detected"	Indicates at least one hard key on any of the keypads is being detected as closed when the MIB initially powers up. Intent is to detect a faulty keypad and prevent any subsequent key events from being sent to the SBC.	One or more keys are either shorted closed or are being held down at power up.	Replace keypad(s) or if user is purposely holding down a key at power up then cycle power to recover.	
"Interface board not detected"	Communications between the SBC and MIB board were not able to be established .	Faulty connection between SBC and MIB boards.	Check board to board connection.	
"Module communication error" [2]	MIB (or Achieve console) is unable to communicate with the motor controller module (i.e. module no communication).	Power up communication test to base failed or lost communication with base.	Check/replace cabling down to the M/C.	

Error / Info Messages

MESSAGE	DESCRIPTION	POSSIBLE CAUSE	SECTION	PAGE
"Module communication error. RetroFit DSP MC detected"	SBC has detected that a "RetroFit" DSP motor controller has been installed. RetroFit controllers are not to be used on Elevation products.	SBC has detected that an invalid DSP motor controller has been installed.	Replace the M/C with one with the correct assembly number.	
"Edit base assembly serial #"	This is a prompt to enter in the base serial number and then the product type.	The prompt will occur if there is no valid configuration data in both the SBC registry and the motor controller. This will also occur if both the console and motor controller are replaced at the same time.	Enter the base serial number located on the label attached to the frame and set the correct product type when prompted.	
"Maintenance" at the top of the screen	This is a data entry prompt that will ask the tech. to select either "Replacing Console" or "Replacing Motor Controller".	This prompt occurs if the basic configuration data stored in both the registry and motor controller doesn't match. This will occur if the console or motor controller is replaced with assemblies that already have configuration data stored in them (These assemblies are typically sent out with blank basic configuration data in which case you wouldn't see this prompt).	If you replaced the console, then select "Replacing Console". Otherwise select "Replacing Motor Controller".	
"Please pedal" [2]	Initialization does not finish (stuck in this mode) due to lack of communication between MIB & motor controller.	**Most likely:** JW3 installed on DSP M/C. **Less likely:** Broken Rx/Tx lines in cable, MIB or M/C.	Remove JW3. Check/replace cabling down to the M/C.	

Error / Info Messages

MESSAGE	DESCRIPTION	POSSIBLE CAUSE	SECTION	PAGE
“Notify maintenance communication timeout (motor controller)” [2]	Lost communications with the motor controller (i.e. module communication timeout).	Broken communication lines, JW3 installed on DSP M/C.	Remove JW3. Check/replace cabling down to the M/C. Vibration is causing intermittent operation from loose connection.	
“Notify maintenance motor controller error (thermal shutdown)”	Motor controller shut down due to excessive temperature.	M/C compartment airflow restricted, hot air is being blown on it, located in direct sunlight. Excessively worn belt/deck.	Clean the M/C compartment, insure adequate ventilation is available and it is not being heated by a heating register, move from direct sunlight. Replace belt/deck if power level is excessive.	
“Notify maintenance motor temperature trip”	Motor shut down due to excessive temperature.	Faulty/intermittent thermal switch in motor. M/C compartment airflow restricted, hot air is being blown on it, located in direct sunlight. Excessively worn belt/deck.	Check motor thermal switch connections. Check clean the M/C compartment, insure adequate ventilation is available and it is not being heated by a heating register, move from direct sunlight. Replace belt/deck if power level is excessive. Replace motor if error keeps occurring after the motor has cooled down and no other solution has worked.	
“Warning - step off belt, maximum voltage trip”	Excessive belt motor bus voltage detected.	User is driving the belt with sufficient energy to raise the bus voltage, most likely at high inclines. Input line has voltage surge problems.	Instruct the user to not drive the belt at high inclines or use a lower incline. Contact an electrician to diagnose/correct a power line problem.	
“Notify maintenance motor controller error (hardware current trip)”	Excessive motor current detected.	Excessive motor current caused by a failed motor, intermittent motor or motor connection(s). A possible but unlikely cause would be a severely worn belt/deck.	Verify that all motor connections and cables are solid. If start-up power is very weak a phase may be faulty. Perform a phase test to verify the system or diagnose a problem.	

Error / Info Messages

MESSAGE	DESCRIPTION	POSSIBLE CAUSE	SECTION	PAGE
“Notify maintenance motor controller error (low voltage detected)	Non-fatal error. Line voltage dropped to an insufficient level to sustain proper operation.	Line cord is not securely plugged into the wall or machine. Loose/intermittent receptacle wiring. Machine is not plugged into a proper dedicated line. Incoming voltage is fluctuating, dipping to an insufficient level.	Confirm that the cord is solidly plugged into the wall receptacle and the machine. Contact an electrician to diagnose/correct a power line problem.	
“Start up error”	Non-fatal error. No/low motor current is detected at start-up.	Motor unplugged or connector loose. A possible but unlikely cause would be the user driving the belt at startup.	Verify that the motor connections are solid. Perform a phase test to verify the system or diagnose a phase problem.	
“Motor disabled”	Non-fatal error. The M/C has detected an open stop switch when operating that the console has not detected.	An intermittent console/motor controller cable or emergency stop switch.	Confirm that all connections are solid, all wires are properly seated into the connector and the cable is not pinched and being shorted/open. Verify proper operation of the emergency stop switch.	
“Incline inoperative - continue if desired”	Indicates the incline system has a problem but system can still be used. Occurs if DSP reports a lift Home Switch error or timeout error.	Improper home or decline switch operation / adjustment / cable. Incline motor connection unplugged / loose. A possible but unlikely cause would be incline motor overheating from excessive operation.	Verify that all motor and switch connections and cables are solid. Verify incline switch operation using diagnostic switch LEDS (LED 9&10). Verify incline motor activation using diagnostic LEDS (LED 4&5). Readjust or replace switches/cables.	

Error / Info Messages

MESSAGE	DESCRIPTION	POSSIBLE CAUSE	SECTION	PAGE
“Unexpected interface board reset”	Indicates the MIB board has gone through an unexpected reset.	MIB board lost and then regained power or was reset. This can be caused by electrostatic discharge.	Verify connection from console’s rear plastic to 92353 Polar Board is tight. Verify that the lower right screw (viewed from rear) that holds the console to the base is tight, has a star washer, and is 8mm long.	
“Activity Zone keypad not detected”	The absence of a loopback signal indicates the Activity Zone keypad is not properly connected.	If it used to work, and now doesn’t, it is likely due to an intermittent or unplugged Activity Zone connector. If it has not worked since the console or MIB was replaced (which automatically enables the Activity Zone detect feature), the console - Activity Zone cable may be out of date.	Confirm that all connections are solid, all wires are properly seated into the connector and the cable is not pinched. If the console (or MIB) has been replaced with a newer, larger MIB (“A080-92334-0001” on Polar Board silk screen), verify that the Console Activity Zone cable is AK65-00043-0001, Rev A2 or later. Replace cable if it is AK65-00043-0000 or AK65-00043-0001, Rev A1.	
“Emergency stop drive trip”	MIB EStop drive circuitry detects a shorted condition.	Tether / magnet loose or not installed; Poly-resettable fuse (PTC2) or Q5 on MIB are open; Over current condition on emergency stop relay on motor controller.	Verify tether / magnet are properly replaced / installed. Replace MIB. Replace Motor Controller.	
"Console over temperature”	MIB has detected an internal console temperature of over 50 degrees celsius.	Console vents may have been blocked by a towel, etc.	This is an informational message and is intended for engineering only.	
"Network voltage driver trip"	MIB voltage drive circuitry to CSAFE port detected a shorted condition.	Faulty accessory plugged into the CSAFE port.	Remove CSAFE accessory.	

Error / Info Messages

MESSAGE	DESCRIPTION	POSSIBLE CAUSE	SECTION	PAGE
“Stop key activated”	MIB has decoded a Stop key press. System aborts workout.	Faulty Activity Zone keypad.	Check proper operation of keypad in diagnostics and replace if necessary.	
“Unable to attain target speed”[1]	Reported if the motor controller was unable to attain the desired user’s speed after a given amount of time.	Line voltage low, unit overloaded; too much weight for speed requested. Worn belt and/or deck.	Check belt & deck for signs of excessive wear and replace if necessary.	
"Miscellaneous interface communication error"	Typically this is reported if SBC was unable to properly activate the belt and/ or incline motors.	Communications error with the motor controller.	See “Module communication error”	
“Workout initialization time-out. Resetting system.....”	System was unable to enable the belt and/or incline motors while starting a workout	Communications error with the motor controller.	See “Module communication error”	
“Please replace emergency stop switch”	Emergency stop (tether) is replaced, but console still gives this message.	Tether / magnet loose or not installed; Poly-resettable fuse (PTC2) or Q5 on MIB are open; Over-current condition on emergency stop relay on motor controller.	Verify tether / magnet are properly replaced / installed. Replace MIB. Replace motor controller.	

[1] When user sees this message the belt speed will decrease automatically. If user is already at minimum speed (i.e. 0.5 mph) then workout will enter Pause mode. If speed is more than one mph/kph below target speed then speed is reduced by ½. If speed is closer to target when an “Unattained…” occurs then speed is decremented between 0.1 to 0.3 mph/kph.

[2] A simple test to determine if console is communicating with the motor controller is to cycle power and listen for beeps from the MIB board. The MIB will beep once after it gets power followed by three additional beeps if it can successfully communicate with the motor controller. This process is done before the main Application on the SBC is up and running (i.e. before you see the “Splash” screen which contains the word “initializing” on it).