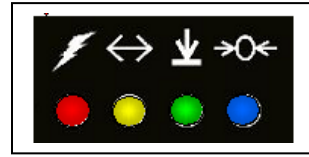


3.2. LED Status Indicators – Diagnostic Indicators









The first stage of troubleshooting should always begin with the status LEDs located on the front of the ExpressCube Resolution. While these LEDs provide basic operating activities when in the steady state, the built in system diagnostics uses them to signal detected problems in the circuitry functions. Any LED that is flashing instead of a constant illumination – it is operating in a diagnostic mode.







Diagnostic LED Indication:

Illumination	Pattern
Pulse	One flash once every 2 seconds
Three Pulse	Three rapid flashes every two seconds
Slow Blinking	Two flashes every second
Fast Blinking	Five flashes every second

In the table below the LED state Not Flashing exists if the LED is either off or steady but not pulsing or flashing.

Power	Dimension	Weight	Zero	Comment
 	 	 	 	
Pulse	Not Flashing	Not Flashing	Not Flashing	Indicates a communications failure between status board and the main CPU board. Check the operation board by using Prog button on LCD Controller to check CPU board operation. Fault can also indicate a failure in the cable between LED Status Board and main CPU board.
Slow Blinking	Not Flashing	Not Flashing	Slow Blinking	Indicates input power supply is too low. Replace power adapter. Note: the unit will stop measurements when power is too low.
Steady	Not Flashing	Never On	<u>Always</u> On	This indicates that the main CPU is reading a constant value from the A/D circuitry for all platform loads. Causes 1) improper calibration 2) A/D failure on network hub

Power	Dimension	Weight	Zero	Comment
				
Slow Blinking	Slow Blinking	Not Flashing	Not Flashing	Indicates that there is a failure with one of the array bank processors on the A/D network hub board.
Steady	Three Pulse	Not Flashing	Not Flashing	This indicates that there is an incorrect number of arrays responding. Either the system is configured incorrectly or there is an array failure in one of the banks.
Slow Blinking	Not Flashing	Slow Blinking	Not Flashing	The main CPU is unable to get a response from the A/D digital processor.
Slow Blinking	Slow Blinking	Slow Blinking	Not Flashing	This indicates that there is a failure in the 485 buss between the motherboard and the A/D network hub. The failure could be in either the A/D network hub circuitry, the cable/connection, or, the main CPU board. 1) Replace the CPU/HUB cable. 2) Replace the A/D network hub. 3) If 1) & 2) have no effect – replace the main CPU board.
Steady	Fast Blinking	Fast Blinking	Fast Blinking	These sequential blinking LED's indicate that a lens calibration is in process.