IRISYS 3000 SERIES LED ERROR CODE FLASHES

Irisys counters incorporate built-in error detection routines; these will signal any detected errors (and other counter states) using the two LEDs on the front of the counter. Note that one LED is green and the other LED is red.

Normal Operation

- Both LEDs ON - Unit Start

As soon as power is applied to the counter it will start a boot up stage, this lasts approximately 10 seconds and is indicated by both the RED and GREEN LEDs on solidly. Close examination of the LEDs will reveal two small (<100ms) off periods as different code sections are booted. Once the counter finishes its boot up stage, it will begin its array stabilisation stage.

- LEDs Alternate Flashing - Array Stabilisation

As each counter is a thermal sensing device, it must first stabilise to its installed environment. This stabilisation stage lasts between 45 seconds and 2 minutes, dependant on ambient temperature - if a counter is powered up after being moved from a cold location to a warm location, it will take two minutes to stabilise, but subsequent power cycles will mean that the counter stabilises much quicker. During the stabilisation time, the two LEDs will alternately flash starting with Red ON and Green OFF, then changing to Red OFF and Green ON, repeating, and changing every second. Whilst the counter is stabilising (if connected to it via the setup tool) an animation will be displayed in place of the target view in the setup software.

- Occasional LED 'Blip' - Functioning

Following a successful warm-up period, counters will begin tracking targets and counting normally (Figure 1). If the counter is not yet configured then it will flash an error sequence as below. If the counter is configured, then, at this point, counters will blip both of their LEDs, together, every 5 seconds to indicate correct operation (a 'Heart beat'). Each LED will also blip independently when a person is counted; the Green LED for a Line 1 count and the Red LED for a Line 2 count.

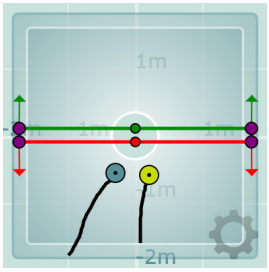

Figure 1

- Both LEDs Flashing Together Very Quickly - Unit Identification

All counters must be configured before they will count correctly – details such as the height and ground plane position must be entered along with giving each counter a unique CAN address. Because every counter will have the same default address when installed, an LED flash sequence is instigated by the counter setup software to indicate which counter you are currently configuring. The sequence is both the RED and GREEN LEDs flashing together very quickly. This is essential when configured a network of more than one counter as it is extremely important to verify the correct counter is being configured by recognizing this identification sequence.

Error Conditions

Error conditions are denoted by the red LED staying on permanently to indicate an error of some kind, with the green LED denoting the actual error.

- Red LED ON Permanently, Green LED Off.

This indicates an internal fault which is not resolvable by the user. The only course of action available is to power down the unit, wait 10 seconds and power on again. This will rectify the problem in the majority of cases. If this does not correct the fault then the unit should be returned to your supplier for repair.

- Red LED ON Permanently, Green LED Flashing Once A Second, Repeating

This indicates that the counter is has not been configured and is at factory default address of 127. This is perfectly normal for a new unit and merely indicates that it requires configuring. All units should be configured as part of the installation process to ensure accurate count data, and a COMMs ID of between 1 and 120 should be entered for each counter. Remember that correct count line positioning and counter configuration is the key to accurate counting.

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- Red LED ON Permanently, Green LED Flashing Twice A Second, Repeating

This error can only occur on a master counter; it indicates that the master is not receiving responses from nodes that were previously connected. This will occur if a node is removed or disconnected; or if a node has been powered off; or there is a wiring break between the master and the node(s). This error should not be confused with the Green LED flashing three times error (below) which can only occur on a node - although these errors are often seen together in certain circumstances (see box out below).

- Red LED ON Permanently, Green LED Flashing Three Times A Second, Repeating

This error can only occur on a node unit; it indicates that the node is not been polled by the master unit. This will occur if the master is removed or disconnected; or if the master is powered off; or if there is a wiring break between the master and the node(s). This error should not be confused with the Green LED flashing twice error (above) which can only occur on a master - although these errors are often seen together in certain circumstances (see box out below).

If a master and node are configured and working correctly, but then there is a break in the CAN bus cable, both the master and the node would report errors – both would have their Red LED on permanently; master would also flash green LED twice to report no node connection; and node would also flash green LED three times to report no master connection.

- Red LED ON Permanently, Green LED Flashing Four Times A Second, Repeating

This error can occur on any type of unit and indicates any other error condition that can occur which is not covered by any of the error LED flash sequences mentioned above.

Firstly, it can indicate an under voltage, or potentially dangerous, over voltage situation, and power should be switched off immediately if this error is seen. Power should not be re-applied until correct voltage levels have been confirmed in order to prevent permanent damage occurring to the unit(s). It should be noted that IP enabled counters should use the Irisys Power Injector as the preferred method of power and should not be connected directly to a PoE switch, see below.

Secondly, this error flash could indicate a configuration problem. If voltage levels are found to be correct then the counter(s) should be re-configured using the people counter setup tool software, paying particular attention to the height settings and ground plane coordinate settings.

Power Supply Faults

The counter should always flash its LEDs in some way, either; the routine LED blip of both of the LEDs together, every 5 seconds, to indicate correct operation (and occasional single blip as people are counted); or one of the error conditions mentioned above. If there is no LED activity at all then this would indicate a wiring or power supply problem. In this instance you should check the cabling to the counter for shorts or breaks, and measure the voltage at the counter to ensure that it is between 10 and 28V DC, and of the correct polarity. If powering an IP enabled counter via the Irisys Power Injector accessory (part number IWC3060), check the CAT5 cabling using a CAT5 'Patch lead tester' for correct terminations. Beware of non-compliant PoE switches delivering 50V to the counter! Never connect to a PoE switch directly without the isolation protection of an Irisys Power Injector. If voltage and wiring are correct, test the counter(s) on a separate known-functioning power supply before contacting support.

LED Error Codes Quick Lookup Table

Red LED	Green LED	Unit Type	Error	Fix
ON	OFF	All Units	Internal error	Reboot unit – if fault re-occurs contact your supplier for technical support
ON	Single Flash	All Units	Not Configured	Configure Unit as per Setup Software manual IPU40183
ON	Double Flash	Master Only	A Node is not responding	Check connections, ensure node(s) are powered, configured and functioning correctly
ON	Flash Three Times	Node Only	Master not found	Check connections, ensure master is powered, configured and functioning correctly
ON	Flash Four Times	All Units	Power Supply or Configuration Problem	Ensure between 10 and 28V DC at the counter. Never connect directly to a PoE switch – use an Irisys power injector for protection against rogue PoE voltage. Re-run configuration routine.

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