Gazelle People Counter
LED Indicators

Irisys Gazelle People Counters incorporate two LEDs (red and green) indicators on the front of the unit that are used to indicate counter state and any error status within the device.

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

The Irisys Gazelle people counter is a thermal sensing device and, as such, it must first stabilise to its installed environment. This fully automatic stabilisation stage lasts between 45 seconds and 2 minutes, dependant on the temperature of the counter and the surrounding ambient temperature. 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 every second. Additionally, if the counter is connected to the setup tool an animation will be displayed in place of the target view during counter stabilisation.

- Occasional LED 'Blip' - Functioning

Following a successful warm-up period, a counter 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.

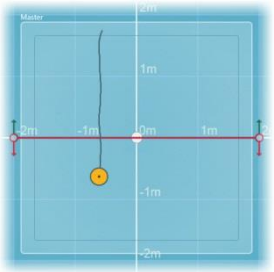

Figure 1

- 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. To make identification of individual counters simple during the configuration of multiple device networks an LED flash sequence is initiated by the counter setup software to indicate which counter on the network you are currently configuring. The sequence is both the RED and GREEN LEDs flashing together very quickly.

- Both LEDs Flashing Alternately Very Quickly – IP Reset

The Gazelle counter provides a reset button that can be used to either temporarily reset the IP address back to the default state or to fully reset the unit back to factory defaults. The reset button is accessed through the small hole between the LEDs on the front face of the Gazelle People Counter Unit. Pressing this button will initially result in the LEDs flashing alternately quickly – this indicates that the IP address has temporarily been reset back to the default 192.168.0.10. If the reset button continues to be pressed then the unit will perform a full reset back to factory defaults which will be indicated by both LEDs coming on solidly as described in Unit Start above.

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

This indicates that the unit is un-configured and requires height and ground plane positioning information. Remember that correct count line positioning and counter configuration is the key to accurate counting.

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

This error can only occur on a master counter in a network; it indicates that the master is not receiving responses from nodes or CAN I/O modules 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

This error can only occur on a node unit; it indicates that the node is not being 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

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.

Critically 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).

Once supply voltage has been discounted as the source of the error, the other most likely cause is a configuration problem and 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 PoE, check the CAT5 cabling using a CAT5 ‘Patch lead tester’ for correct terminations. 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 IPU40521
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. Re-run configuration using PCST.

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