

# Configuring Irisys IP Counters

## Introduction

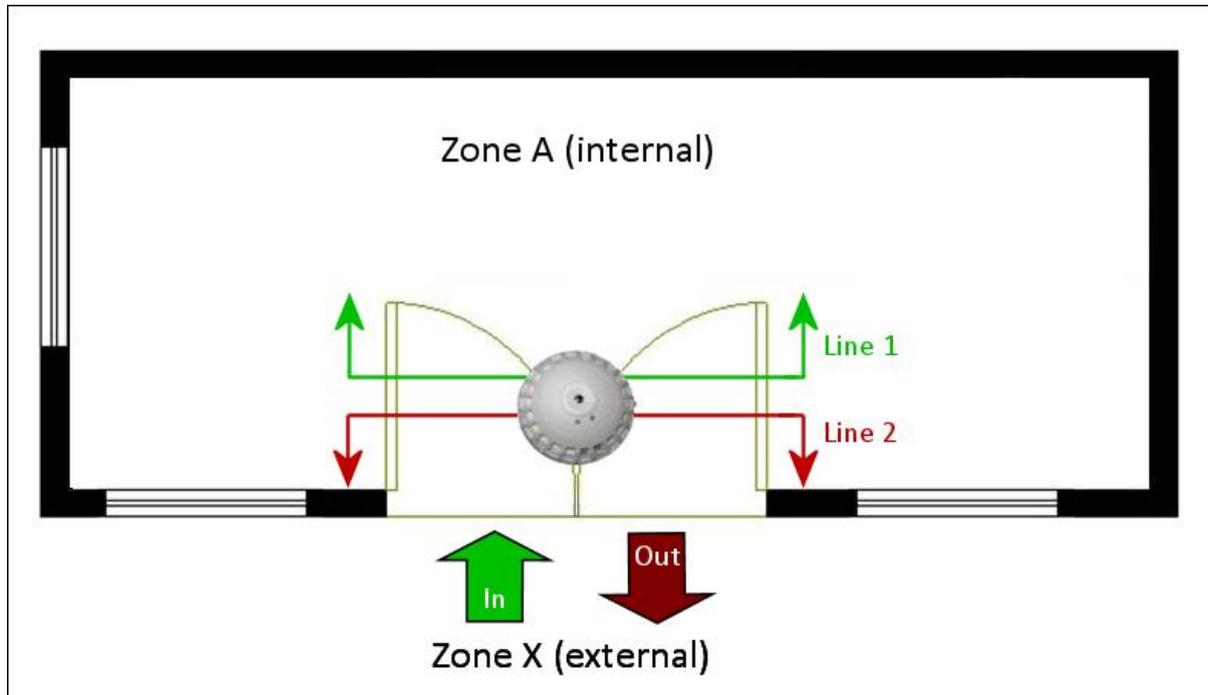
This manual describes how to configure an Irisys IP counter for collection by Xenometric products.

Irisys IP counters can be linked together to form a single view of a wide entrance. The configuration necessary for Xenometric needs only be applied to the master counter (IP node). Xenometric's software sees the wide entrance of  $n$  cameras as a single counting device.

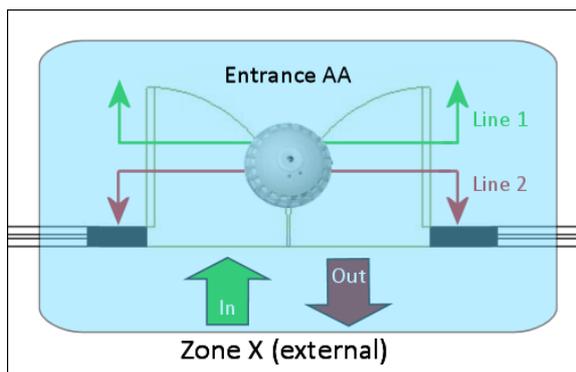
Each Irisys IP counter can monitor multiple lines. Currently (July 2012) one counter can support up to 16 count lines. Count lines are used to count pedestrians in one direction from one zone to another. A simple bi-directional counter would have two lines that form the boundary between two zones, e.g. from the outside world zone to an internal zone within a retailer's property.

## Two-line example

The example below shows a simple retail store with one Irisys IP Counter. The counter has been configured with two lines (**Line 1** and **Line 2**). The pedestrians entering the store are recorded by line 1, whilst the pedestrians exiting the store are captured by line 2. Pedestrians outside the store are labelled as being in Zone X, whilst pedestrians inside the store are labelled as being in Zone A.



In order to represent this scenario we will need to program the Irisys IP counter with the correct IDs for each line. To do this we will allocate a 2-character ID to the entrance. Both lines belong to the same entrance, as one counts the *In* direction and the other the *Out* direction.



The entrance has an ID of AA. Consequently both lines 1 and 2 will also have AA as a component of their ID.

The complete ID for each of the lines comprises of the entrance component (AA) and a 2-character zone direction descriptor.

The zone direction descriptor for line 1 is based on the direction of travel for a pedestrian entering (In) the store. The pedestrian travels into Zone A from Zone X. Line 1's zone direction descriptor is AX.

The zone direction descriptor for line 2 is based on the direction of travel for a pedestrian exiting (Out) the store. The pedestrian travels into Zone X from Zone A. Line 2's zone direction descriptor is XA.

Combining the Entrance ID with the zone direction descriptors gives the following IDs for lines 1 and 2.

Line 1: AAAX

Line 2: AAXA

When recording these IDs in the Irisys Device Settings form the IDs are entered in the Device ID field and are separated by a colon : Each ID is entered in numerical order for each line number.

For example, the two line example would be entered as AAAX:AAXA

**Device Settings**

Mounting Height	300	cm	
X,Y	0	0	cm
Comms ID	1		
Unit Descriptor	Example Entrance		
Device ID	AAAX:AAXA		
Site Name	Example Store		
Site ID	EXAMPLE01		
Locale	085		

Hardware Flag	0
Serial Number	I030126
Lens	60
Build Version	42.4.0.404
Board Type	IP

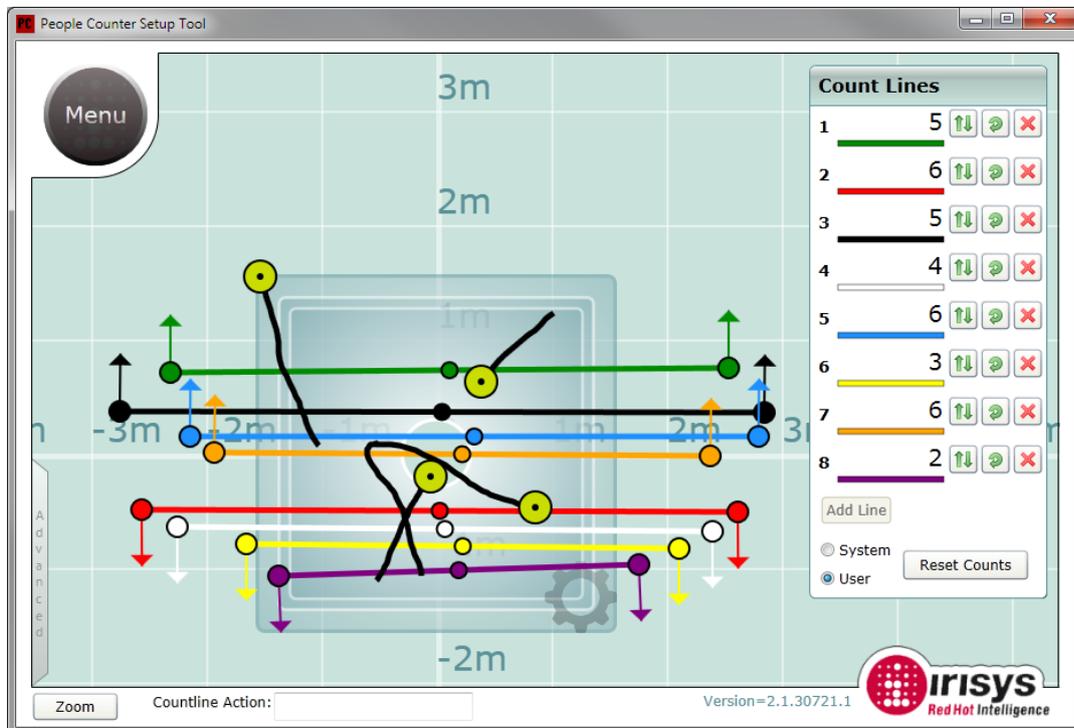
Reset Errors and Warnings

Default Program Permanent Close

The two fields that must be completed correctly to unique identify each line are the Site ID and Device ID. The combination of these IDs unique identifies each entrance. The Unit Descriptor on the Irisys form will become the default Device Name and Entrance Name in the Xenometric software.

## Multiple (>2) Line Example

This example illustrates the use of 8 count lines on one Irisys IP counter. As before, it is possible that the IP counter represents several counters covering a wide entrance. Only the IP counter communicates with Xenometric's software, so it is this counter that is configured with the details of all count lines.



Each line must be given a code that allows the Harvester to uniquely identify the line and its counts.

Unit Descriptor	IP 200 Mono Test Unit
Device ID	AAAX:ABAX:ACAX:ADAX:AEAX:AFAX
Site Name	Example Site
Site ID	SITE0001

The unique identifier per line is combination of the Site ID and part of the Device ID.

The Device ID string contains the individual code for each of the lines present. Each line's code is delimited by a colon :

For example, the following Device ID string represents 8 lines.

AAAX:ABAX:ACAX:ADAX:AEAX:AFAX:AGAX:AHAX

This can be decoded as

Line	Device ID code	Device ID	Zone ID
1	AAAX	AA	AX
2	ABAX	AB	AX
3	ACAX	AC	AX
4	ADAX	AD	AX
5	AEAX	AE	AX
6	AFAX	AF	AX
7	AGAX	AG	AX
8	AHAX	AH	AX

For each line created there must be a Device ID code applied. If lines are deleted the Device ID string must be amended to reflect the new order of the lines.

No two lines can be given the same Site ID and Device ID, as this is the unique code for each line in the Harvester, unless they are treated as a line pair (bi-directional device).

The 8 line example above will be resolved as 8 mono-directional devices in the Harvester. Each line will form its own device which will only have an IN or OUT count. Each device will be configured to represent pedestrians travelling from Zone X (outside) to Zone A.

It is possible to provide a Device ID string for 8 lines that represent 4 bi-directional devices in the Harvester. For example,

AAAX:AAXA:ABAX:ABXA:ACAX:ACXA:ADAB:ADXA

This string can be split into four constituent devices.

AAAX:AAXA ABAX:ABXA ACAX:ACXA ADAB:ADXA

The first two Device ID codes (for line 1 and line 2) are AAAX and AAXA. Since both of these codes share the same Device ID component (AA) they can be considered part of the same device. The Zone IDs are mirrored for these two lines, AX and XA. This indicates that Line 1 will provide the IN counts for device AA and Line 2 will provide the OUT counts for the same device.

The fourth pair (lines 7 and 8) has the codes ADAB and ADBA. These lines will form device AD. The 7<sup>th</sup> line's counts measure pedestrians from zone B to zone A and the 8<sup>th</sup> line's counts measure pedestrians from zone A to B. In this scenario the pedestrians moving from zone B to zone A (line 7) will be considered the IN counts and the OUT counts will come from line 8.

Line	Device ID code	Device ID	Zone ID
1	AAAX	AA	AX
2	AAXA		
3	ABAX	AB	AX
4	ABXA		
5	ACAX	AC	AX
6	ACXA		
7	ADAB	AD	AB
8	ADBA		