Counting system
ViFence3
Vicon C

Vaelsys
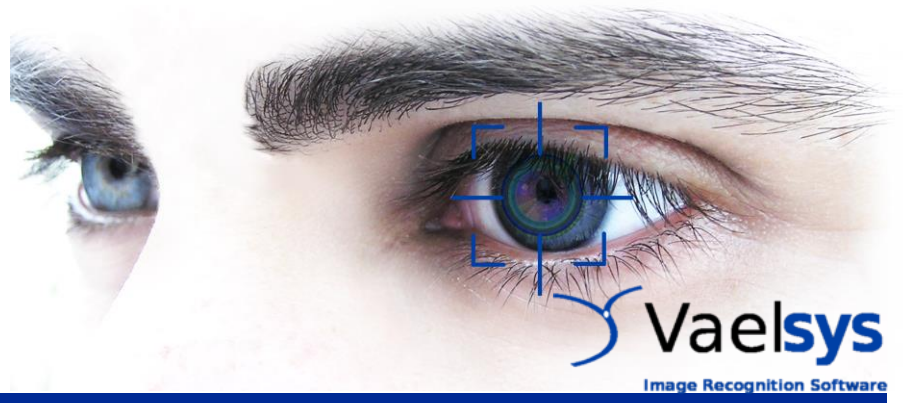Image Recognition Software

Specifications

Vicon C is a software that analyzes video flows, and it makes possible the counting of persons or other elements that cross a virtual line defined over the image, in one direction or the other. Is a solution easy to configure that gives real time information and it is especially useful to evaluate the crossing frequency, the volume of persons that access a certain place, control the capacity of defined zone, know the rush hours, etc. In combination with Vaelsys Vistat, a data collection system, it offers simple ways to visualize the data obtained grouped in terms of time (e.g, hours, days, months), of a group of cameras, and it simplifies the sending of information to third parties applications.

Requirements: ViFence Stryker or ViFence Booster.

Management system: Web 2.0.

Cameras: Vicon-C supports cameras with the following characteristics:

- Analogue and IP (MJPEG)
- At a minimum, CIF resolution
- Colour
- Black and white

Installation recommendations:

- Minimum height of 3 meters – 5 meters maximum.
- Cover an area of at least 6 square meters.
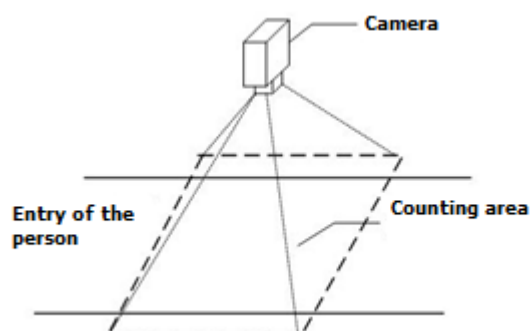- Avoid zones with moving elements (doors turning)

Directions, it detects elements that go in a direction and in the contrary simultaneously, making possible the association with entries and exits.

Automatic filters, through which the system can self-adjust to most environments.

Advanced filters reduce the rate of false alarms outdoors.

Integration with:

- Electromechanical devices (with Stryker)
- Third-party VMS systems
- Vaelsys Vistat.

Benefits:

- Knowing how many people entries and exists of your office, store, bank, gass station, etc.
- Inexpensive solution
- Plug & Play, the most part of the installation doesn't require configuration at all.
- Simple to integrate with third-party software to build up most complex solutions.
- Capacity control (this operation it's carried out through other applications that integrate the data generate by Vicon-C)

How does it work?

1. Locate the camera installed directly over the area that wants to be controlled.

2. Vicon-C can be configured automatically learning by itself the average mass of a person. This operation is calculated through the first persons that entry and exist (10 or 20). During this process, it is important that only one person enters and exists at a time.

3. Make sure that the direction is set correctly using the configuration tools.

4. Each time that a person crosses the red line, the system determines the direction of the cross and generates a type of event. The events are processed by the video platform (Stryker or Booster). This data can be used with the statistics applications, Vistat, or can send alerts to other systems through XML or HTTP.

Applications:

Vicon-C is a simple but very powerful tool focused to better comprehend what happens in your installation or business. With the information obtained through Vicon-C you will be able to analyze the clue information, for example:

- What day/week/month has more activity?
- What store has more activity? And compare the information with, for example, the sales time.
- What is the busiest hour?
- How many people are in average in the store at a given moment?
- How many people above X are in a store at a given moment?

To make the most of Vicon-C we recommend Vaelsys Vistat (data storage, graphic samples, comparison between days, counting combination for places with multiple entries, etc).

About the counting precision:

In optimal conditions the precision is over 95%. However, you should bear in mind that:

- The shadows and the moving objects (like for example doors opening in the scene) can worsen the precision.
- The doors with many people entering at a time normally give a precision of 80%.
- The shopping carts and the baby carriages can make the precision go down to the 80% - 85%.