i-VISION

Object Tracking with Dual-Layer Design

i-VISION

i-VISION is an application that sits on a surveillance system of CCTV cameras and Digital Video Recorders (DVRs) and gives it 'intelligence' by monitoring actively within the entire camera view. It transforms ordinary passive system into an active one.


Immediate intruder alert

It has the ability to detect, track, trace and alert an operator by means of visual and audible modes on any individual or group present within a surveillance zone. Any unattended objects such as bags and people who stopped moving along its path will be detected and alerted to the operator.

Additional features are available to minimize false positive. External interferences such as reflections of raindrops, changes in brightness and background in outdoor environment; are being filtered out in the detection and tracking processes. One example is the tracking and sending of immediate alarm when human-like objects are confirmed walking among moving vehicles in restricted zone of busy multi-lane motorway.

The solution is also suitable for long distance wide area surveillance with high pixel resolution. Recorded folder size is small as we record only true events triggered by suspected objects. Closed-up view of intruders are being tracked and captured with the help of pan-tilt-zoom camera. Solutions are available in PAL colour, CCIR monochrome and infrared spectrums.

On duty round the clock without any day off and showing signs of fatigue, distraction or loss of concentration, i-VISION can *help to avert* an unwanted incident.

DETECT AND ANALYSE ALL MOVING AND STATIONARY OBJECTS OF DESIRED SHAPES & SIZES

Design advantage

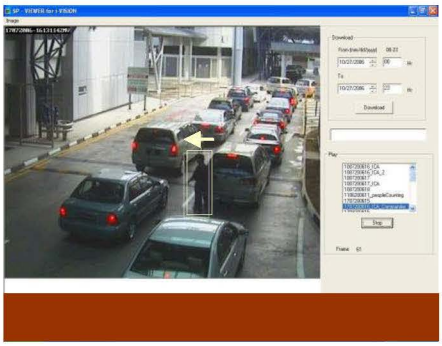
i-VISION has dual layers of operations to give it the unsurpassed level of accuracy and reliability; (i) Detection Layer (*Core Engine*) and (ii) Application Layer (*Filtering Engine*).


Perimeter suverillance

Its Core Engine detects objects based on parameter sets while moving and stationary objects are tracked and distinguished with different markers. Conventional solution also lacks i-VISION Application Layer which has the ability to filter unwanted blobs due to fast moving camera, shapes classification, color & position, timing & distance, path tracing, vehicle headlights and etc. Additional 'plug-in' is available for specified applications.

Real time alerts are also available in the forms of SMS, MMS and CMS. The central monitoring system (CMS) is capable of monitoring 24 cameras and reporting of positive events with queue buffers. i-VISION also controls Pelco-D and Sony pan-tilt-zoom (PTZ) cameras to capture closed-up view of the intruder(s).

Features



- Menu driven for ease of configuration and setting. Minimum on-site calibration and adjustment needed, set up time within 30 minutes for most scenes.
- Records only when object is detected, small folder size.
- Slow frame rate background recording (optional).
- Immediate visual and audio alerts of set situations and recording of footage.
- D1 resolution and higher at 768 x 576 pixel for all channels, 15/22 fps.
- Applicable to monochrome (CCIR/RS170), colour (PAL/NTSC) and infrared (IR) spectrums.
- Bundler with i-VIEWER program to view recorded JPG files and movie files locally or via internet.
- Able to track and continue to follow multiple objects in entire screen, not necessary to pre-define any area of interest. Automatic PTZ tracking for capturing of close-up view.
- Ability to detect both moving and stationary objects concurrently (with different markers), including any unattended and stationary ones.
- Additional and customize 'plug-in' is possible, e.g. detection of linear movement, loitering, human tail-gating. Customize and new filtering features can be included by own development team or upon request.
- Masking, half masking and multi-point masking (optional).
- Different file extension to highlight movement and confirmed detection, including stationary objects (fileM.jpg, fileS.jpg, fileSS.jpg, fileSSAL.jpg, fileXLAL.jpg, fileMV.jpg, fileAA.jpg and fileAL.jpg).
- Path tracing and behavioral analysis, including tracking and detection of objects that stopped in its path.
- Automatic detection of video signal lost, too bright and too dark scenes. Filtering of vehicle head light and shadows (optional). MMS alert if video signal is lost, too weak and too strong.
- Immediate SMS messaging, MMS with 2-3 positive snap shots to hand phone.
- CMS for real time viewing with queue buffers.
- Cross Lines (XL) detection for moving objects, to protect mission critical zones.
- Designed for wide outdoor application with minimum number of cameras. E.g. Outdoor coverage of 50m x 40m by a single camera at full PAL resolution (768px by 576px).
- Plug-Ins: *Outdoor Fire detection, Outdoor Smoke detection, Critical area/zone alarms, Loitering, Human Tailgating, Object colour detection, Linear Movement detection, Basic People Counting, Directional detection, Ship Intrusion detection, and etc...*

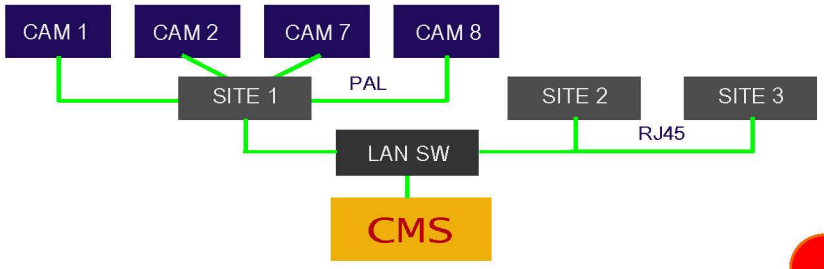
Configuration

i-VISION C1, C2, .., C12: one, two, to twelve channels i-VISION Object Tracker respectively.

i-VISION C4-PTZ: four channels i-VISION Object Tracker and four channels pan-tilt-zoom (PTZ Pelco-D/Sony format). Site calibration needed.

i-VISION C6-PTZ: six channels i-VISION Object Tracker and two channels pan-tilt-zoom (PTZ Pelco-D/Sony format). Site calibration needed.

- PCI and PCIe frame grabber board (provided). IP network cameras.
- i-VISION Core module (Detection Layer) as standard package.
- I-VISION Application Layer with necessary 'plug-in' (optional).
- i-VIEWER software for viewing (optional).
- Entry-level device driver for frame grabber board (provided).
- Central Monitoring System (CMS) for managing positive events with queue buffers (optional).



Information given is subject to change without prior notice.

Authorised Dealer

i-VISION
Object Tracking Module
Detection Layer, Application Layer

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Version 3.3