

SmartCatch™ | Human Loitering(Indoor) Technical Specification

Vident SmartCatch is an accurate and effective solution for detecting loitering in sensitive areas. Using existing CCTV infrastructure, SmartCatch software monitors, identifies and tracks objects for security policy violations and enables quick response through real-time alerts and instant video replays. At the core of SmartCatch is a set of advanced video algorithms capable of performing complex behavioral analysis, tracking numerous objects and simultaneously identifying security threats in even the most complex environments. Human Loitering is one of many available SmartCatch behaviors.

DEFINITION

The human loitering algorithm detects humans from a CCTV camera and tracks their movement. Loitering is detected by SmartCatch when the human movement remains within the camera view or part of a camera view (as specified by the user) for a minimum period of time (also specified by the user.) Loitering includes any type of human movement such as running or walking within a loitering range by at least one human in the camera view. Multiple humans may loiter near or at the same time and SmartCatch tracks each loiterer individually.



SPECIFICATIONS

□ General

- Type of use: indoor
- Maximum number of concurrent human tracks: 5
- Input video processing format: CIF, MPEG4
- Video processing size: 320x240(NTSC) or 352x288(PAL) minimum; higher resolutions fully supported if processing capacity is available. High resolutions can also be downsized or cropped to minimum processing size
- Minimum video size to detect human: 6x6 pixels (head size) at 320x240
- Number of regions of interest: 0 to 10
- Recommended minimum camera distance from human: 6 meters or 20 feet with standard lens*

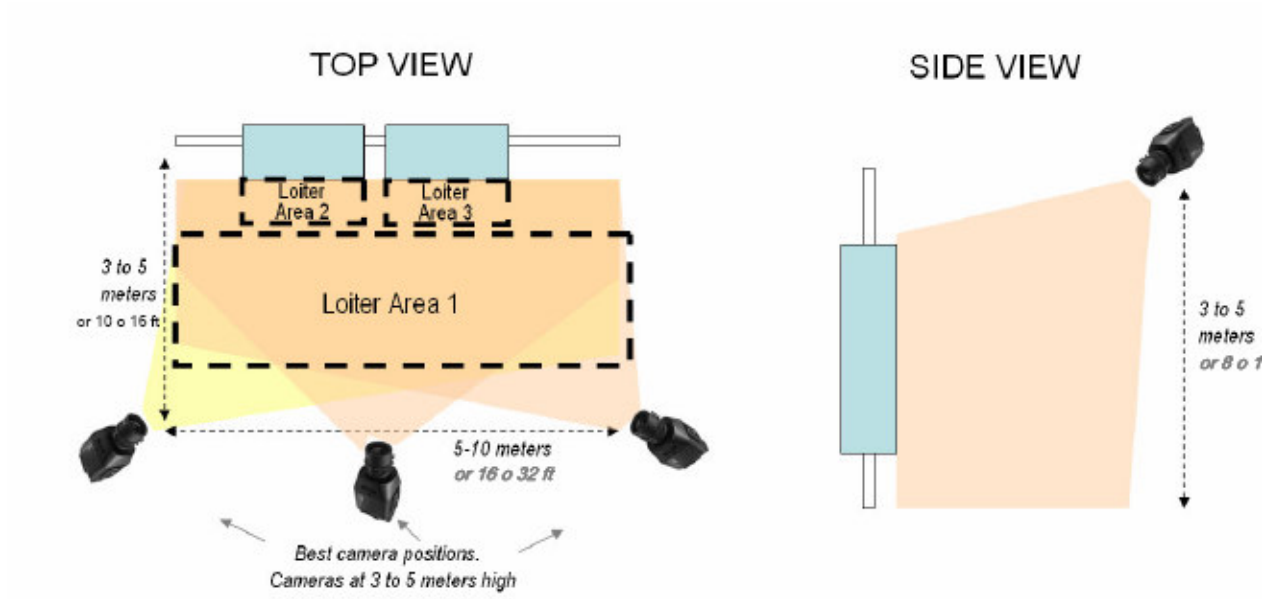
- Recommended maximum camera distance from human: 30 meters or 98 feet with standard lens*

□ Hardware Usage

- SmartCatch Video Processing Unit (VPU) Software with Windows 2003 Server
- Minimum hardware specifications: Intel Xeon 2.8GHz, 1GB RAM, 80 GB HDD
- Xeon consumption: 20% of Xeon processor per human tracks
- Maximum number of cameras with loitering behavior per Xeon CPU: 2

□ User Configurations

- Minimum loiter time setting: 5 seconds
- Maximum loiter time setting: 10 minutes
- Regions of interests may be defined by rectangles, ovals, or any polygon

RECOMMENDED CAMERA POSITIONS**HUMAN LOITERING CALIBRATION PARAMETERS**

- Loitering time
- Detector parameter file
- Region of interest settings
- Maximum number of humans
- Image processing scale