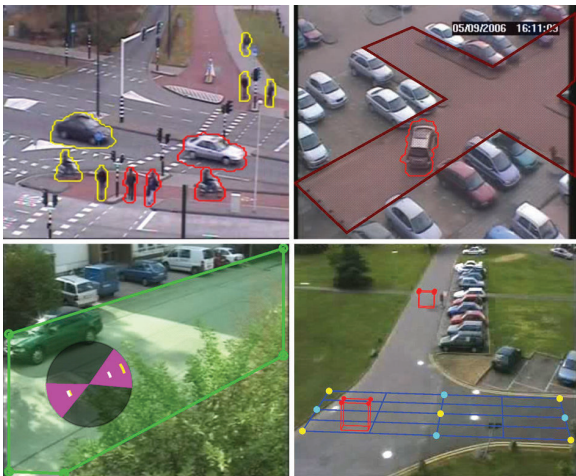




# IVMD 1.0 Intelligent Video Motion Detection



- ▶ **Intelligent digital video motion detector**
- ▶ **Detects, tracks and stores motion objects**
- ▶ **Automatic self-adaptation to changing environmental conditions**
- ▶ **Maximizes detection rate and reduces unwanted alarms**
- ▶ **Intuitive graphical interface for fast, effective set-up**
- ▶ **Licensable option for Dinion IP and FlexiDome IP cameras, and all Bosch video encoders**

Whenever you need reliable video motion detection for indoor or outdoor use, the Bosch IVMD 1.0, incorporated in Bosch IP Network Video products, is the system of choice.

IVMD 1.0 is an intelligent digital video motion detector that uses advanced video content analysis to reliably detect moving objects, while suppressing unwanted alarms from spurious sources in the image. The algorithm intelligently adapts to changing lighting and environmental conditions such as rain, snow and leaves blowing in the wind.

IVMD 1.0 can easily be configured to select the required sensitive areas of the image, the minimum object size and the motion direction that triggers an alarm, so that it only detects the important moving objects in a scene. Configuration is done by the Configuration Manager with its intuitive plug-in that provides all the necessary tools, including a 3D-grid for camera calibration. A graphical display allows the sensitive area, size, speed and perspective for objects, and movement direction to be simply superimposed on the image.

Once movement has been detected, the object is outlined in yellow on the display and motion is tracked on the monitor. If an object and its motion match the conditions defined for one of the 16 detector fields, it creates an alarm and switches the outlines to red.

The alarm condition can be signaled by means of a standard relay output on the unit or created by an alarm connection to stream video to a receiver. Alarms can also be transmitted to a video management system, like Bosch VMS, to start extended alarm scenarios.

## Functions

- Licensable option for advanced VCA feature for all VIP X and VideoJet X units and Dinion IP and FlexiDome IP cameras
- Robust motion detection
- Background learning algorithm from Bosch's own research group
- Up to 16 independent detector fields for alarm generation
- Detects objects entering or leaving an area (detector field) or loitering within an area
- Object size, speed, and direction filters used to create specific detection rules
- Built-in tamper monitoring detects camera hooding/masking, blinding, defocusing, and repositioning

## Configuration

- Simple and intuitive via the graphical user interface
- Flexible selection of sensitive areas
- Single or multiple detector fields
- Perspective correction using 3D-grid set-up
- Camera calibration for more accurate metric or imperial measures
- Size and speed filter

- Two-way motion direction filter
- Statistics for fine tuning object filters

### Installation/Configuration Notes

The software functionality of IVMD 1.0 is part of the firmware release 2.0 and above for the products that IVMD 1.0 is available for. It only needs to be licensed to make it operational.

Set-up of IVMD 1.0 is achieved using the Configuration Manager that is included on the product's DVD. It is also available for download via the Bosch website.

The Configuration Manager can be installed as often as required on any PC that shall be used for configuration of the IVMD 1.0 and the products themselves.

Video content analysis may require up to 40% of the available calculation power, which reduces video encoding performance. Proper encoder settings, however, should compensate for any performance reductions.

### Parts Included

Quantity	Component
1	Configuration Instructions (English, printed manual)
1	License activation information
1	Product DVD with test video clips

### Ordering Information

<b>VIP-X1-FS1</b> VIP X1 IVMD 1.0 VCA software license	<b>VIP-X1-FS1</b>
<b>VIP-X2-FS1</b> VIP X2 IVMD 1.0 VCA software license, valid for all 2 channels	<b>VIP-X2-FS1</b>
<b>VIP-X1600-FS1</b> VIP X1600 IVMD 1.0 VCA software license per module, valid for all 4 channels	<b>VIP-X1600-FS1</b>
<b>VJT-X10-FS1</b> VideoJet X10 IVMD 1.0 VCA software license	<b>VJT-X10-FS1</b>
<b>VJT-X20-FS1</b> VideoJet X20 IVMD 1.0 VCA software license, valid for all 2 channels	<b>VJT-X20-FS1</b>
<b>VJT-X40-FS1</b> VideoJet X40 IVMD 1.0 VCA software license, valid for all 4 channels	<b>VJT-X40-FS1</b>
<b>VJT-X10SN-FS1</b> VideoJet X10 SN IVMD 1.0 VCA software license	<b>VJT-X10SN-FS1</b>

### Ordering Information

<b>VJT-X20SN-FS1</b> VideoJet X20 SN IVMD 1.0 VCA software license, valid for all 2 channels	<b>VJT-X20SN-FS1</b>
<b>VJT-X40SN-FS1</b> VideoJet X40 SN IVMD 1.0 VCA software license, valid for all 4 channels	<b>VJT-X40SN-FS1</b>
<b>NWC-04X5-FS1</b> Dinon IP IVMD 1.0 VCA software license	<b>NWC-04X5-FS1</b>
<b>NWD-4X5-FS1</b> FlexiDome IP IVMD 1.0 VCA software license	<b>NWD-4X5-FS1</b>

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