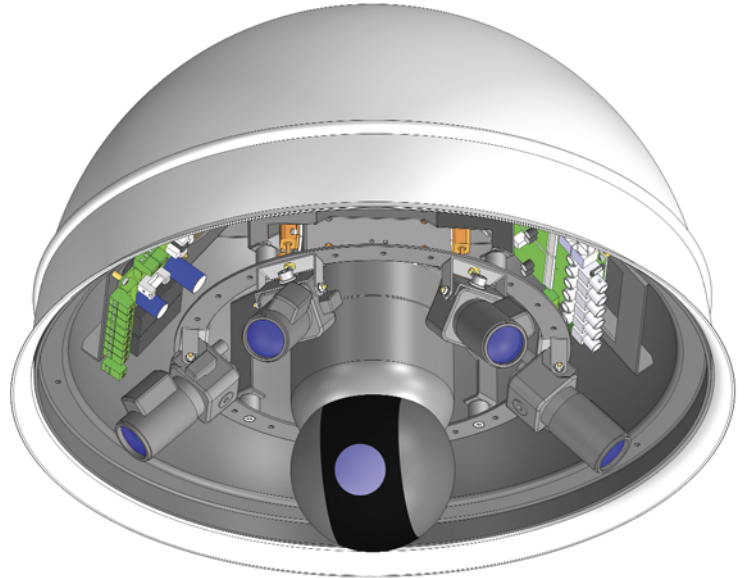


VTF-8S

Scout Automatic Video Object Tracker



Characteristics

- Revolution of public surveillance
- Automatically - detect
 - zooms
 - tracks moving objects
- Recognizes moving objects
- Closes-up onto targets
- Follows the motion of targets
- Identifies more than one targets at the same time
- It can monitor a large area (360 degrees)
- It operates automatically, without remote control
- There is no need for human dome control Permanency detection (unattended or removed static object detection)
- It is an independent unit mounted in a dome housing
- It is suitable for both indoor and outdoor applications
- ADT Sensormatic, BOSCH, Panasonic, Pelco protocol too
- Analogue or TCP/IP streaming transmission

Product Description

The Scout is an automatic video object tracking device that operates independently in a dome housing. It searches for moving objects by analyzing the image of its built-in fixed wide-angle cameras, remote control the Dome camera, onto the target. It is capable of monitoring a large area, and provides a distinguishable close-up image of figures moving within it. This image can be used to take immediate action or for digital or analogue recording. It can identify movement that is too small (distant) to be easily recognized with by human eye. Another application is detecting stopped cars on highway or detecting arriving or leaving cars at a parking lot.

Dome Housing:	WMDBH-45, Dome Diameter 450mm, IP65 Protection
Wall Mount Arm:	WMDBH-WMA 400mm
Powerrequirement:	4V AC/4A With heating, 24V AC/1,5A Without Heating
The Scout installation height:	minimum 4-5m

Advantages of the independence...

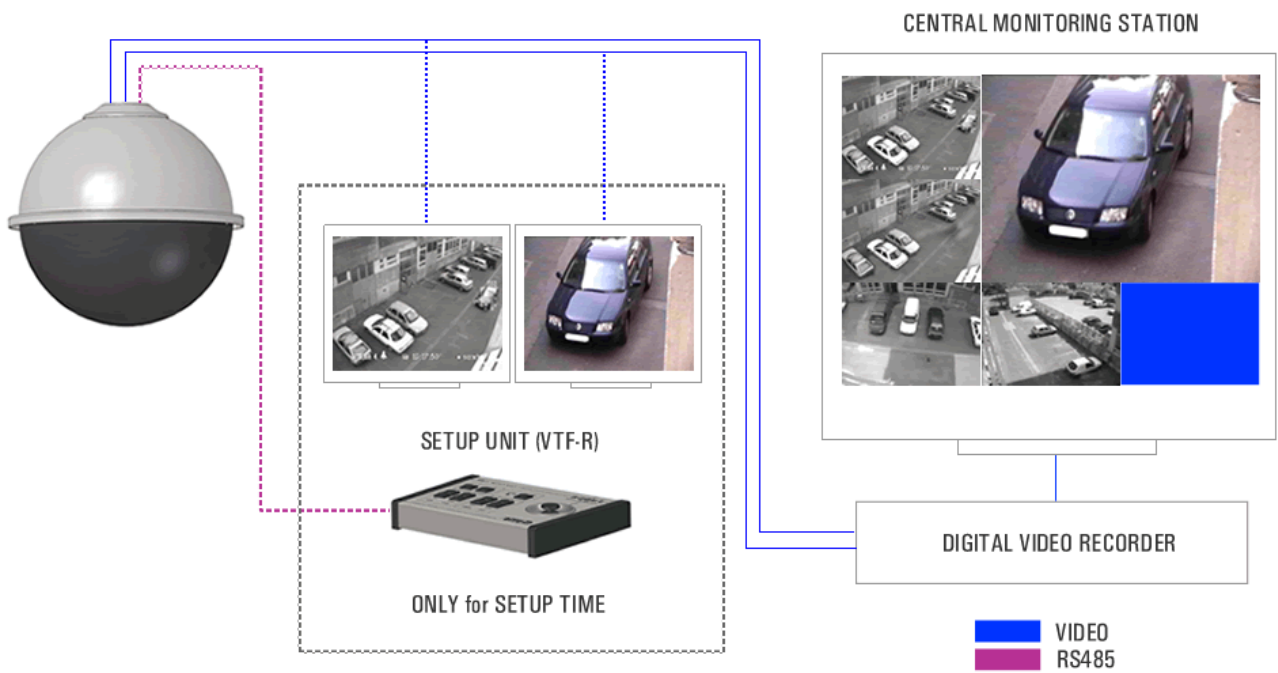
- Simple installation
When adjusting on the spot, only the video signal has to be taken to the monitoring center. No communication is needed between the Scout and the monitoring center.
- When adjusting through remote control, communication between the Scout and the monitoring center is only needed during the adjustments.
- The camera system of Scout is synchronized, therefore there is no image tearing on the video selector output.

Further installation advantages...

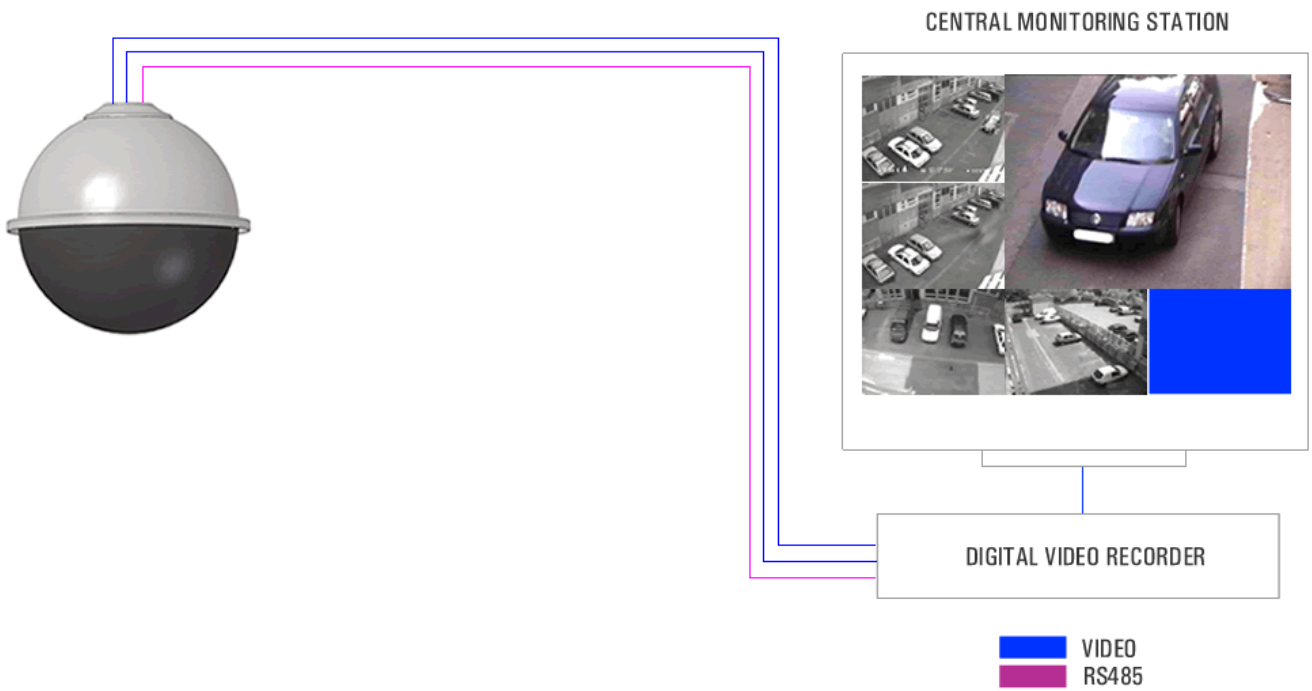
- It is reducing the installation cost, because in case of surveillance large areas only a few video signal must be transmitted to the video control center. (one or two channel per Scout). It could be via coax cable, UTP, optical fiber, radio/microwave, laser, LAN/WAN, Internet, GSM, GPRS or satellite video signal transmission.
- The low number of the recorded channel reduces of the cost of video recording, and makes possible to increase the quality and the frame rate of the recorded video.
(In case of digital video recording especially).

Applications

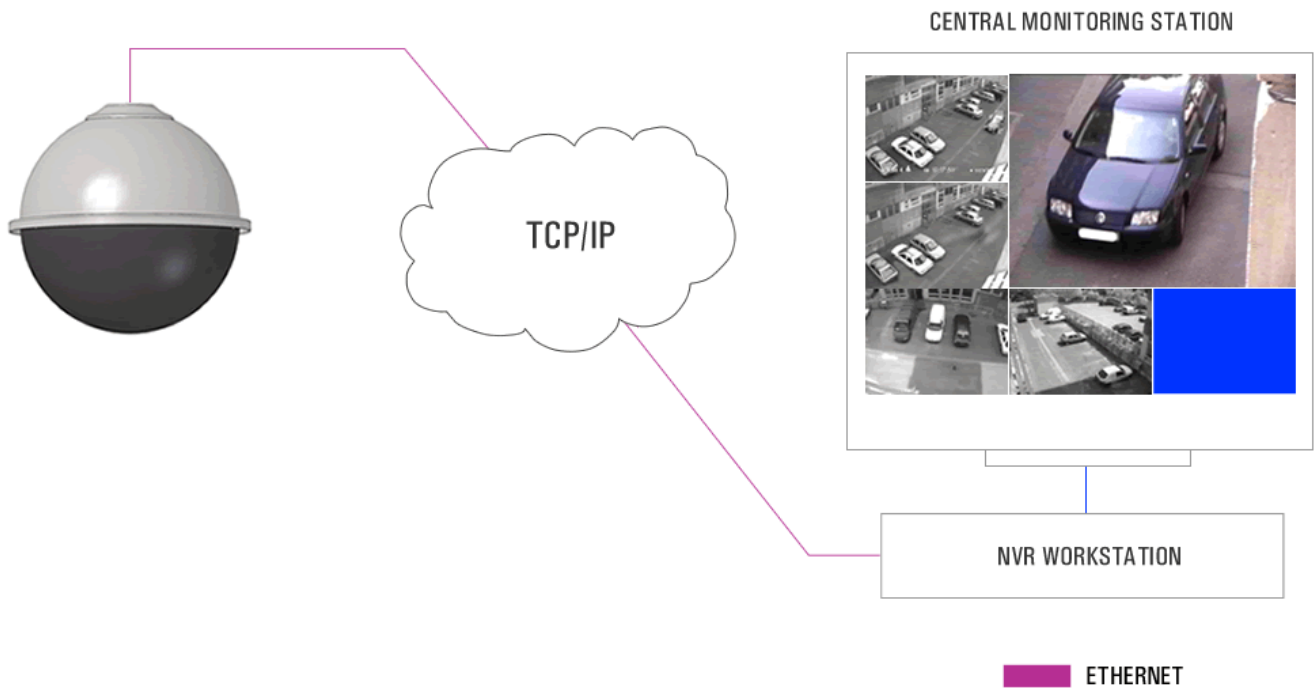
Local Setup



Central Setup



TCP/IP Setup



Maint Content

Image Analysis and Control Units (VMD960x2-4SC)

Continuously analyses the video signals of the reference cameras. It determines the place of movement and directs the dome camera to focus and zoom on it.

The motion detector modules can store eight active image surface textures and settings by each camera. Which means that on one camera image at different times we can activate different camera Images.

The active detail and setting for an image surface changed according to the time gives the possibility to comfort needs such as for example over or during work time, day / night, weekdays / weekend and other needs. The automatic change of settings is done by a built-in time processor.

The settings can be managed from a menu. The menu of the dome is also accessible. The menu is password protected. It has a built-in video selector. The video selector changes the images of the reference cameras.

Apart from the reference cameras, the dome camera can be controlled also from the menu.

In this case the selector changes sequentially the reference images, when finding an identified target then switches to the image of the dome camera.

It is practical to get the video signal of the video selector and the dome camera to the surveillance center, because then it is possible to view the zoomed in Image together with the scene.



Specifications

Video standard: PAL/NTSC automatic selection

Reference camera video inputs: 1 to 4 channel 1 Vpp/75 ohm, Black & White and color, range: 0.5Vpp..2Vpp

Dome camera video input: 1 channel 1 Vpp/75 ohm, Black & White and Color

Video outputs: 1 to 4 channels (module) 1 Vpp/75 ohm, +20% frame, alarm signal: 7 line in VERTICAL BLANK

Dome camera video output: 1Vpp/75 ohm

Video selector output: 1 Vpp/75 ohm, +20% alarm signal: 7 line in VERTICAL BLANK

Synchron output: Synchron output for the synchronization of reference cameras
1Vpp/270 ohm

VMD960x2-MS module settings:

- Number of settings: 8 + 1 (8 can be set)
- Area selection: number of pixels: 1920
- Movement analysis: 1 to 3
- Direction detection: OFF/RIGHT/LEFT/UP/DOWN
- Object size: (pixels) × S
available selections S = 1 to 32
applies for the whole of the image, or the top only if perspective is enabled
- Perspective: S × P
S = object size for top of the monitored area
S × P = object size for bottom of the monitored area
P = 1 to 32
P = 1 perspective is disabled
- Modes for screen display:
ON - the active field markings and the displaying of the image's changes are both visible.
CHANGE - only the image's change displaying is visible.
ALARM - only the alarming motion displaying is visible.
OFF - the displaying is switched off.

Time processor: changing the 8 + 1 settings of the VMD960x2-MS module according to time
Weekly timing, program numbers: 32

Remote:

- Remote video selector functions: Image selection
- Remote central Unit settings: - automatic stepping: 0 to 99seconds (possible to turn off)
- auto reset, 1 to 99 seconds
- object tracking time: 1 to 99 seconds.

Dome (PTZF) settings for the operation of the automatic object tracker:

- dome movement range (for each reference camera)
- dome camera zoom range (for each reference camera)

Remotely controlled manual dome control:

- movement
- zoom
- focus

Condition for alarm: Dome movement

Alarm outputs: • I n video signal: 7 line after equalizer pulse in VERTICAL BLANK
(insert: ON/OFF)
• Open Collector (alarm state: closed)

Displaying the alarm on the output reference image: Marking the moving figure and its path

Number of serial ports: 2

1. dome control (RS422)
2. remote control from VTF-R Setup Unit or other System Controller (RS485)
Protocol: ADT Sensormatic, Bosch, Panasonic, Pelco
protection of serial port: 600W until 1 msec

Address: Selectable: 1 to 9

Remote Control Unit: VTF-R Setup Unit or other System Controller

Power Source: + 5 V DC/0.5A

Dimensions: 121mmx141mmx35mm

Dome Camera (SpeedDome Camera Ultra VIII)

The SpeedDome Ultra VIII camera dome could be installed indoors or outdoors, and can communicate with the video controller over SensorNet, RS422 or Manchester communication lines.

The housing and eyeball is an assembly that connects to the base using a twist and lock action

- The Ultra Dome is incorporate the new 35x optical Zoom camera.
- Total zoom (optical and digital combined) is 184x.

The Dome has built in a sixth generation digital signal processing (DSP6).

The "Wide Dynamic Range" function can be activated manually or automatically, which makes a difference between the locations, colors, even with 0.5 lux lighting conditions.

The camera is able to work with 0.01 lux lighting condition in Black & White infrared mode and in the case of 0.009 lux Black & White mode with open blend. The camera can easily be adjusted to the base.



Specifications

Manual / Pan Tilt Speed	0,25° -100° per second
Preset / Pan Tilt Speed	220° per second max.
Pan travel	360° continuous rotation
Tilt travel	>110°
Zoom	Optical Zoom 23x
	Digital Zoom 10x
	Zoom Pause 35x
	Total Zoom 35x
	Zoom Stop 35x
	Zoom / Focus Accuracy +/- 0.5%
Electrical	Input voltage 16-30V AC, 50-60Hz
	Current 0,85A max
Surge protection	Video Output 100A
	Power Line 60V, 1,5 joules, 250A
	RS422 TVS rated at 9,8V/1A500W, 8/20 msec impulse
Environmental	Environmental -10 to 50°C
	Relative Humidity 0 to 95% non-condensing
Mechanical	Eyeball Diameter 205 mm
	Weight 120 mm
	Housing and Eyeball 1,18 kg
	Base (standard) 0,09 kg
	Base With I/O board 0,16 kg
Colour camera	Imager Interline transfer 1/4"CCD array
	Video Out 1.0 Vp-p / 75ohms composite
	Signal-to-noise 50 dB (typical)
	H. resolution 470 lines at center
	Min. Illumination 0,5 lux (AGC on, 20 IRE)
	0,03 lux with 1/4 sec open shutter
	0,01 lux in IR mode
	0,009 lux in IR mode with 1/4 sec open shutter
	White balance Through the lens (TTL)
	automatic Tracing White balance (ATW)
NTSC	Effective Pixels 724 (H) X 494 (V) pixels
	Scanning 525 lines, 60 fields, 30 frames
PAL	Effective Pixels 752 (H) x 582 (V) pixels
	Scanning 625 lines, 50 fields, 25 frames
	Horizontal 15,625 kHz
	Vertical 50 Hz
Lens Design	Type Aspherical
	Focal length 3,6 to 82,8 mm
	Aperture f1,6 (wide angle) f3,7 (telephoto)

Reference Camera (WAT-535EX2, 0,0003 lux)

They are equipped with varifocal lenses so that their angle of vision can be adjusted some what to suit the site being monitored. The reference cameras can be mounted in an arc onto a cornice within the dome. During the installation we can adjust the vertical direction of the cameras. External synchron input: for receiving the synchron signal from VMD960x2-4SC (via distributor)



Specifications

CCD	1/3 inch interline transfer CCD image sensor
Pixel No	795x596
Effective Pixel No	752x582
Cell Size	752x582
Synchron System	internal/external
External Synchron System	C.Sync/C.Videó
External Synchron Signal	0.2-4.0Vpp
Video Output	Composite Video, 1Vp-p, 75 ohm Unbalanced
Resolution	550 TV sor (center)
Minimal Light Sensitivity	0.003 lx F1.4 (AGC 32dB)
Gamma Characteristics	0.45 / ki
AGC	ON HI: 5~32dB (AGC) LO: 5~20dB (AGC)
	OFF 5~32dB (kézi)
Backlight Compensation	GC ON/OFF
	EI ON/OFF
S/N Ratio	50dB (GAIN 5dB)
Autoiris	DC/VIDEO
AE	EI 1/50sec.~1/100000sec
	ES 1/250sec., 1/500sec., 1/1000sec., 1/2000sec.,
	1/5000sec., 1/10000sec., 1/100000sec
	FL 1/120sec
	OFF 1/50sec
Optics	CS-mount
Power Supply	DC 10.8~13.2V (12V +/- 10%)
Current	Max. 150mA
Operating Temperature	-30 C~+70 C
Dimensions	44mmx43.5mmx53mm
Weigh	approx 130g

Setup Unit (VTF-R)

It is used to adjust and control the scout automatic video object tracker. It can communicate with the scout device via serial port. Its video input receives the signals of the reference cameras (chosen with the video selector) via its video in connector.



In case of automatic working, the Setup Unit is required only during the setup.

If a Setup Unit is installed at the central monitoring station, it is possible to enable manual dome camera control in the menu.

Enabling manual dome camera control suspends searching for new target after a given time. In this case Scout's dome camera follows the current target for 20 sec., or stays on target, if it stopped moving. It is possible to extend manual mode for another 20 sec., but during manual mode there will be no zoomed image of other incidences.

This is the responsibility of the operator!

The Setup Unit detects the alarm signal of the motion detectors (via the vertical blanking signal) even if the communication is not used, gives a sound signal and its alarm output can be used for example to start a VCR or DVR device. The Setup UNIT works without a video signal, in that case it will not generate any alarm signal.

Specifications

Video standard: PAL/NTSC automatic selection

Video input: 1 Vpp/75 ohm, Black & White and Color, acceptable range: 0.5Vpp to 2Vpp

Video Output: 1 Vpp/75 ohm

Directly reachable functions:

- manual scout selection
- manual image selection
- manual dome camera movement with joystick, zoom, focus (if the dome is enabled from the menu)
- suspending automatic searching for new target (if the dome is enabled from the menu)
- suspending automatic searching for new target

Setting of the Scout: from the scout menu, with joystick

Alarm conditions: alarm detection from the incoming video signal

Alarm clear: automatic

Alarm output: RELAY ground independent Morse 30V / 300mA

Displaying the alarm:

- On the front keyboard: the LED will change to a red color
- Other: sound effect (can be switched off)

RS485 port: for the remote control of the VMD960x2-4SC (Scout)

Protection of the series port: 600W until 1 msec

Power supply: + 9 to 12 V DC / 180mA

Dimensions: 210mm x 165mm x 40mm