V3100

Video Security System

training

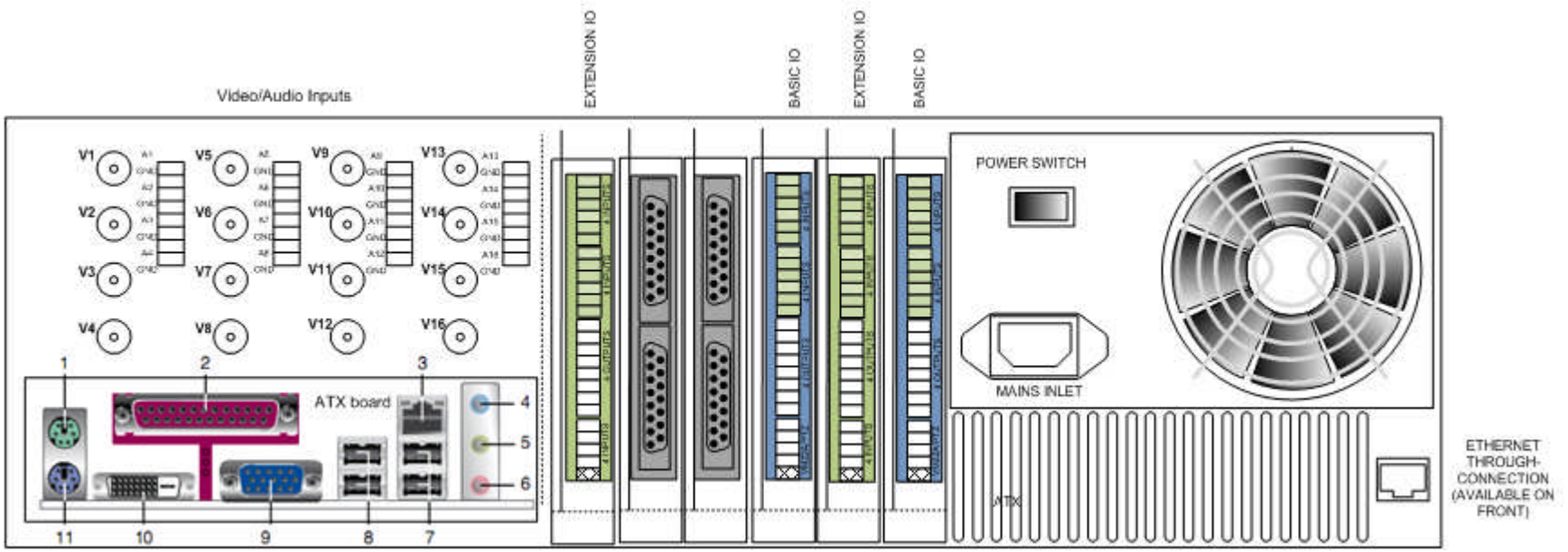
specifications (1)

Video input	4, 8, 12 or 16 cameras PAL/NTSC
Video output	SVGA, DVI-D
Video compression	H.264 ACE
Video resolution (PAL)	352 x 288 (CIF), 704 x 288 (2CIF)
	528 x 384 (DCIF)
	704 x 576 (4CIF)
Video resolution (NTSC)	352 x 240 (CIF), 704 x 240 (2CIF)
	528 x 320 (DCIF)
	704 x 480 (4CIF)
Images/second	25 ips/camera (PAL); 30 ips/camera (NTSC)
	CIF, 2CIF, DCIF, 4CIF*
Bandwidth consumption	6 ips CIF: 70kb/sec, 12ips 4CIF: 400kb/sec in optimum quality
Bandwidth	Remotely adjustable: compression, ips and quality
Audio input	1 per camera
Motion detection	4 zones adjustable per camera
System	PC platform - Linux OS
Audio compression	OggVorbis Codec 16Kbps
Relay outputs	4 relay outputs on BASIC I/O card; 4 relay outputs on EXTENSION I/O card
Command inputs	8 monitored inputs on BASIC I/O card; 12 monitored inputs on EXTENSION I/O card
External I/O	Up to 128 inputs and 128 outputs through Ethernet IO modules

specifications (2)

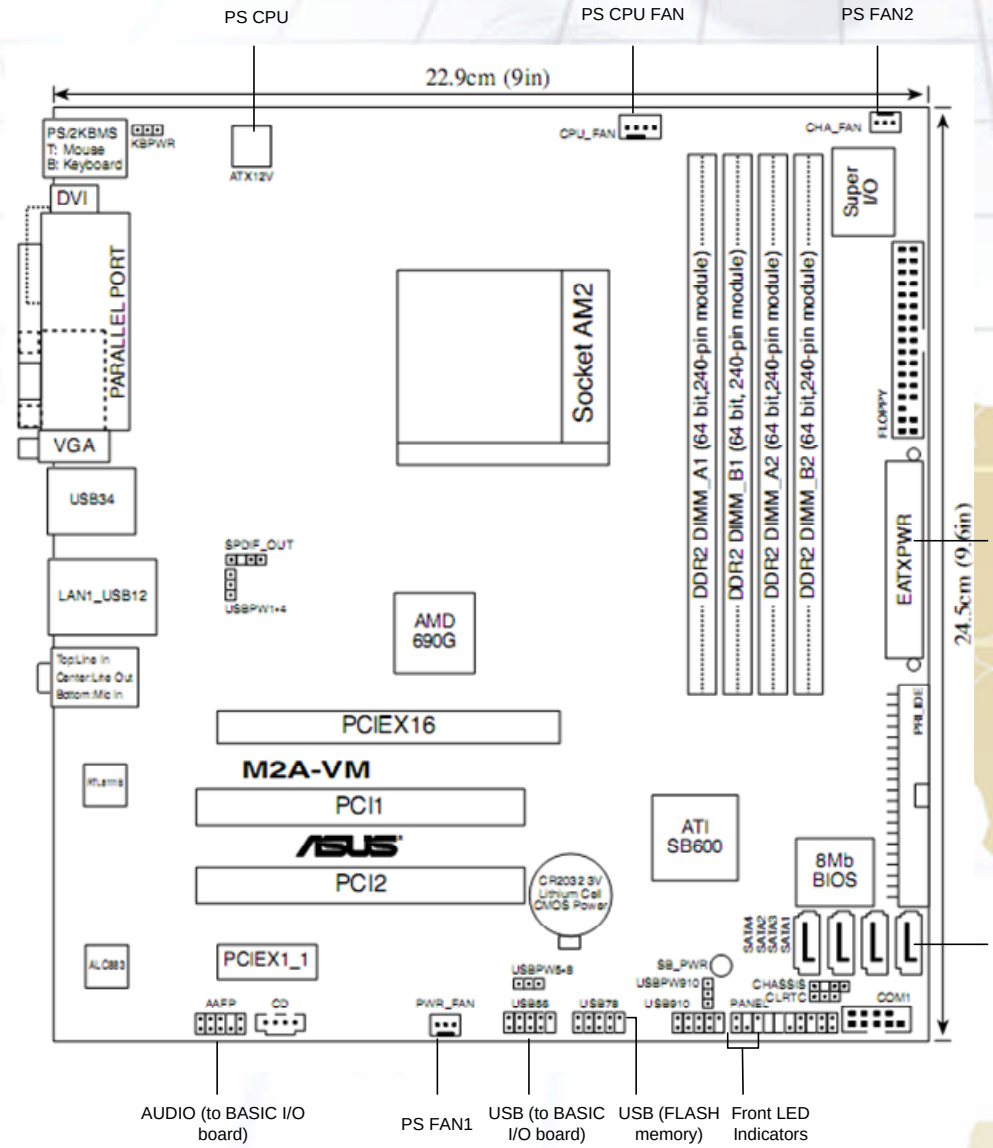
Network protocols	TCP, UDP, FTP, TELNET, HTTP, SMTP, RTSP, RTP, ...
Application update	Local and remote
Web server	Integrated
COM ports	4 USB interfaces, used for:
	camera control (requires an USB to RS485 convertor)
	terminal or ATM (requires an USB to RS232 convertor)
Ethernet	10/100/1000 Base-T, auto detection,
	full duplex, RJ45
Storage	Up to 4 devices (connected through SATA interfaces), following arrangements are possible:
	1 to 4 internal hard disks (160/320/500GB)
	1 to 2 removable devices, such as a DVD writer or a removable hard disk; each removable device replaces an internal hard disk! Remarks: different fronts are available for the 19" model, to accomodate 1 or 2 removable storage devices .
Recording type	Continuous, event, input, motion detection,
	Alarm over IP (FOXnet®Plus)
Remote visualisation	Internet Explorer; Windows XP, Vista,
	Server 2003
PTZ cameras	Yes, extensive list available (Visca, Kalatel, Pelco, JVC)

rear connectors (19”)



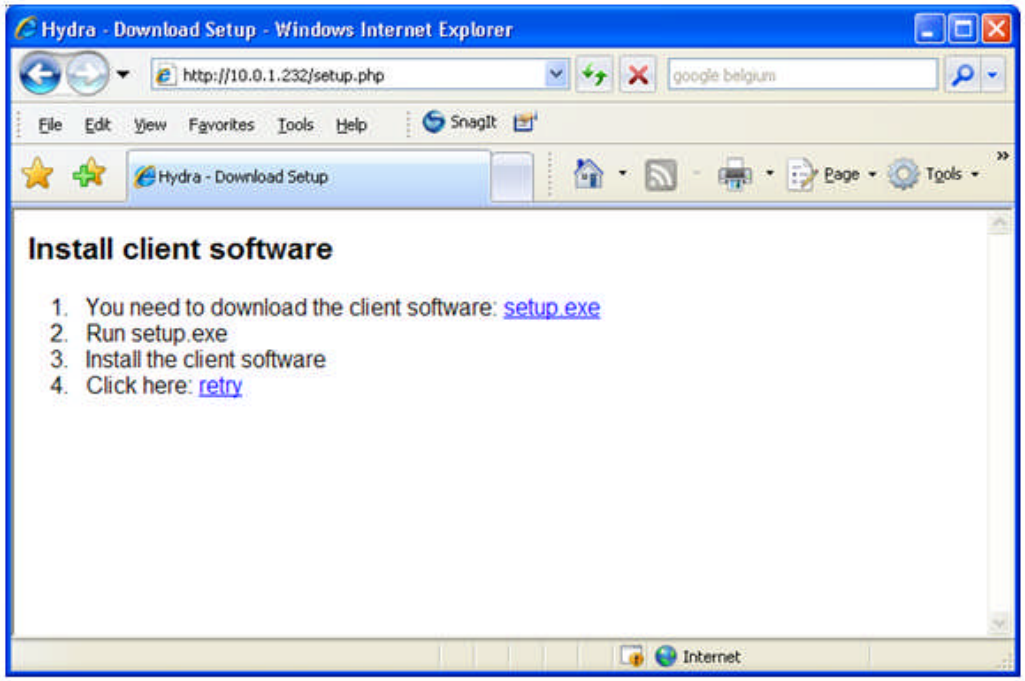
rear connectors (desktop)

main processor board



install V3100 application

- Open Internet Explorer
- type the IP address of the V3100 in the Address bar (including the setup page: example http://10.0.0.10/setup.php)

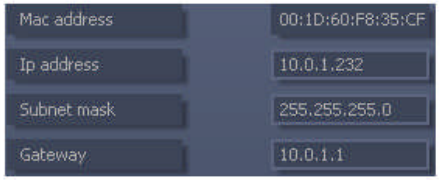
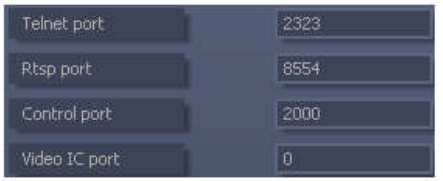
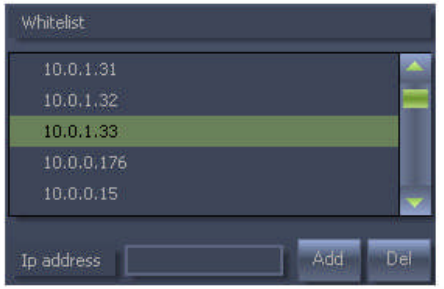
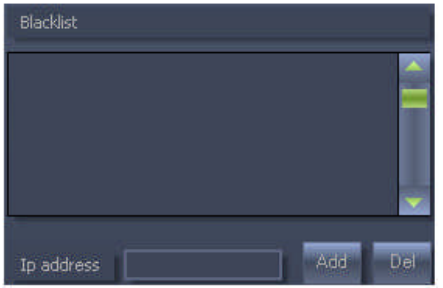


WARNING! the video security system is preset to IP address 10.0.0.10 with submask 255.255.255.0

launch application

	On the desktop, double click the HydraApp shortcurt
	Click to add a V3100 video system
	Enter a description. Enter the IP address of the V3100 Set RTSP and CTRL ports (if no defaults are used) Select TCP or UDP (TCP may be required if the connection goes through routers that block UDP packets) Enter the user number and password of an existing user
	Save the added device.
	Select a V3100 video system from the displayed list and click this button to connect to it.

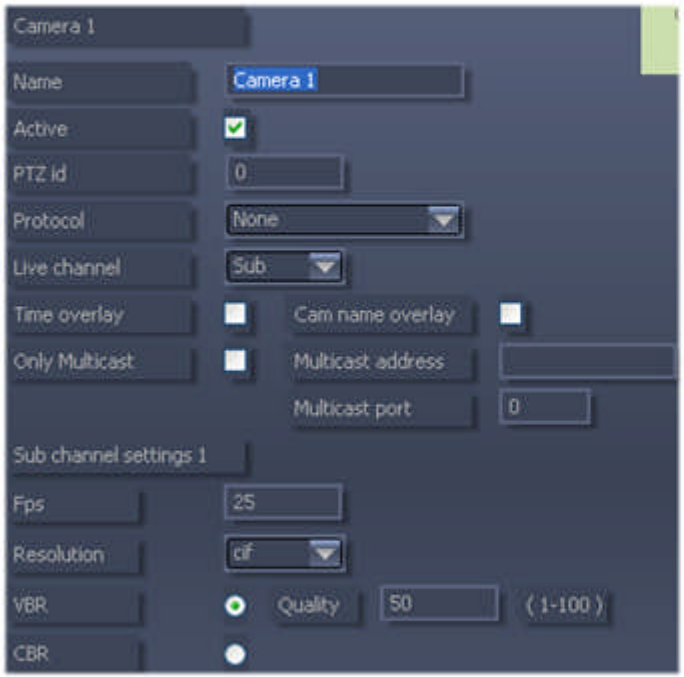
set ip address

	Open the Ethernet configuration menu.
	Set the IP address, subnet mask and gateway of the video system. Remark: factory settings are: IP address 10.0.0.10 Subnet mask 255.255.255.0
	Set IP ports of: Telnet Real time streaming protocol Control port: the IP port that is used to exchange information between the V3100 system and the workstation. Video IC protocol (Interconnection with FOXnetPLUS® security panels)
	Enter whitelist (list of IP addresses that are allowed to connect to the video system).
	Enter blacklist (list of IP addresses that are not allowed to connect to the video system). Remark: if the same IP address appears in both the Whitelist and the Blacklist, the computer will **not** be allowed to connect to the video system. The Blacklist has priority! If both lists are empty, all computers are allowed to connect to the video system.
	Click Apply

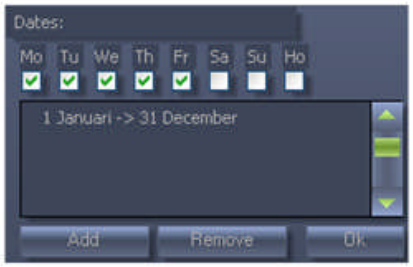
users

Settings ▶ Users	Open the Users menu
Add	User 0, 1 and 15 are already defined. User 15 is reserved for the technician. A technician can only log on after authorisation from another user. Click Add to add a new user
	Enter the user name. Type the password (6 digits) and retype it to exclude typing errors. Select the level ▪ Administrator (has all rights) ▪ Technician (adjustable) ▪ User (adjustable)
Apply	Click Apply. ⚠ Save your configuration (see page 33)

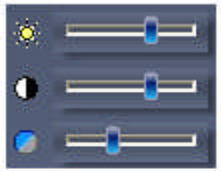
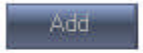
add a camera

System ▸ Video	Open the Video menu
Edit	Select a camera and click Edit. ⚠ If you don't see cameras, check if your licence has been correctly loaded (see page 50).
	Enter camera settings: Camera name PTZ ID number (for PTZ cameras) PTZ protocol Live channel (Main or Sub) Time overlay (to obtain a time stamp on the image) Camera name overlay (to display the camera name) For subchannels, select: frames per second resolution of the picture VBR quality or CBR bitrate Remark: for constant quality, apply VBR. Remark: select subchannel if a separate video codec is needed for live streaming and for recording (recommended value). In this case, live video streaming parameters can be set in the Subchannel settings section, with respect to the available bandwidth, independent of video recorder settings. If you select Main, live video images will have the same quality as the recordings.
Ok	Click OK.

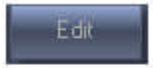
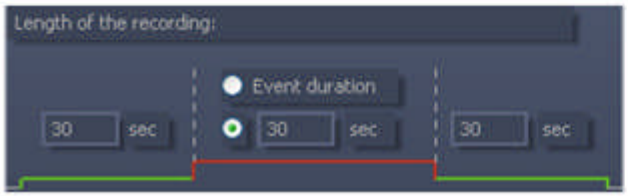
create a continuous recording

	
	add a new recording
	select the new recorder and click edit
	select camera(s)
	click on Quality on alarm
	set quality parameters and click OK fps 1 .. 25 images / second resolution: QCIF (176x144), CIF (352x288), 2CIF (704x288), 4CIF (704x576), DCIF (528x320) VBR quality 1 - 100 or CBR bitrate 1 - 2048 kbps Choose VBR for a constant quality!
	Drag the mouse pointer over the Continu time scale to mark the time zone during which the recording should be active. To correct for errors, right-click the drawn time zone and retry. Up to 8 time zones can be defined.
	To apply this recording only on specific days, click Data and select the desired days (monday > sunday, holidays). The recording is by default active during the full year, to apply only for limited periods, delete the listed period and add a customised period.
	Click OK.

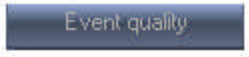
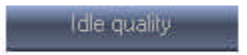
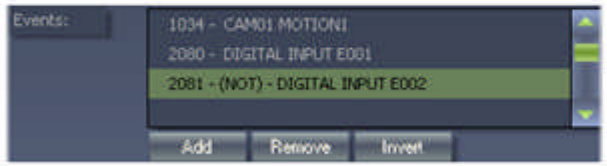
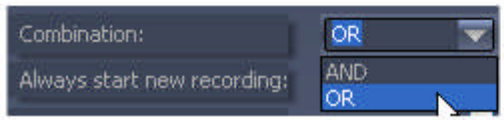
record on motion (1)

	Click to open the motion detection configurator
	Select a camera
	Correct brightness, contrast and hue if needed
	Add a motion zone Up to 4 zones can be defined per camera.
	Position and resize the detection zone
	Adjust sensitivity and threshold. when motion is detected, the area corners turn green. Sensitivity sets the change in luminance required to detect an object Threshold sets the number of pixels that should change in order to detect motion. this parameter sets the size of the objects that should be detected, and allows to suppress false events such as small animals passing by.

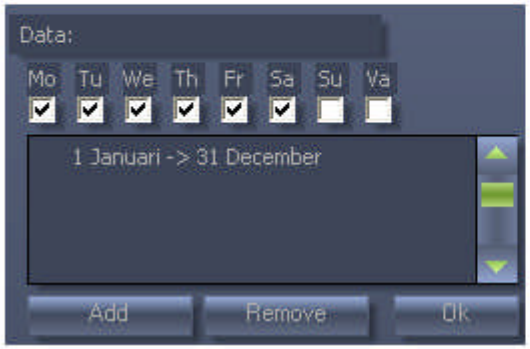
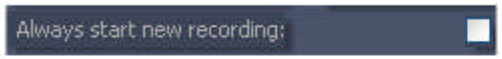
record on motion (2)

	
	Add a new recording
	Select the new recorder and click edit
	Select camera(s)
	Click on a camera number to enter specific settings for this camera, such as: - activation of an output - jump to a preset position when recording starts (PTZ) - return to a preset position after recording (PTZ)
	Set duration of pre-alarm, alarm, and post-alarm recording

record on motion (3)

	Click on Event Quality
	Set quality parameters and click OK Fps 1 .. 25 images / second Picture resolution: QCIF (176x144), CIF (352x288), 2CIF (704x288), 4CIF (704x576), DCIF (528x320) VBR quality 1 - 100 or CBR bitrate 1 - 2048 kbps Choose VBR for a constant quality!
	Click on Idle Quality and set quality settings for pre- and postalarm recordings
 	In the section Events, click Add and select a trigger for the recording. Ex. CAM01 MOTION1 is triggered when motion is detected in zone 1 on camera 1. Several conditions may be ANDed or ORed.

record on motion (4)

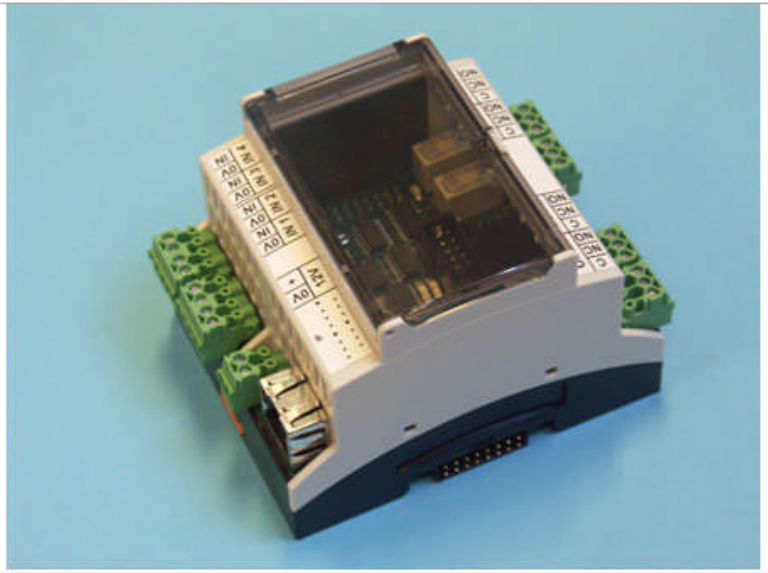
	Drag the mouse pointer over the Alarm time scale to mark the time zone during which the recording should be active. To correct for errors, right-click the drawn time zone and retry. Up to 8 time zones can be defined.
	To use this recording condition only on specific days, click Data and select the desired days (monday > sunday, holidays). The recording is by default active during the full year, to apply only for limited periods, delete the listed period and add a customised period.
	If a new event occurs before ending the current recording, the system will proceed as follows: If this option has been checked, the current recording will be stopped and a new recording will be started If this option has been unchecked, the recording will continu.
	Check the Lock option if the recording should only be deleted on demand. WARNING: locked recordings may cause the hard disk to fill up until it is full. At this state, an alarm will be generated. (15 HARD DISK FULL).
	Save the recorder.

ethernet IO (features)

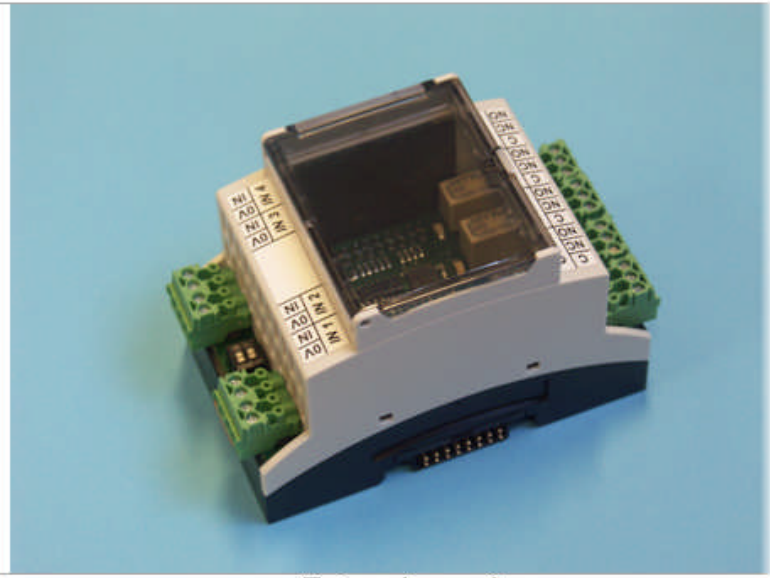
Features

Unit, with LED indicators, contact inputs and relay outputs, controlled by the V3100 video recorder.
The unit is controlled by the host system through the Ethernet network.
The base unit offers:

- 3 LED indicators (red: recording / yellow: fault / green: power supply)
- 4 voltage-free contact inputs (default = NO)
- 4 relays (voltage free switchover contacts) each with status LED
- Mounted on DIN rail
- Extendible with one to four extension units. Extension units are powered from the base unit, each offers 4 additional contact inputs and 4 relay outputs
- Base unit is powered by a local adapter (12VDC; 800mA) or by a PoE switch or injector.

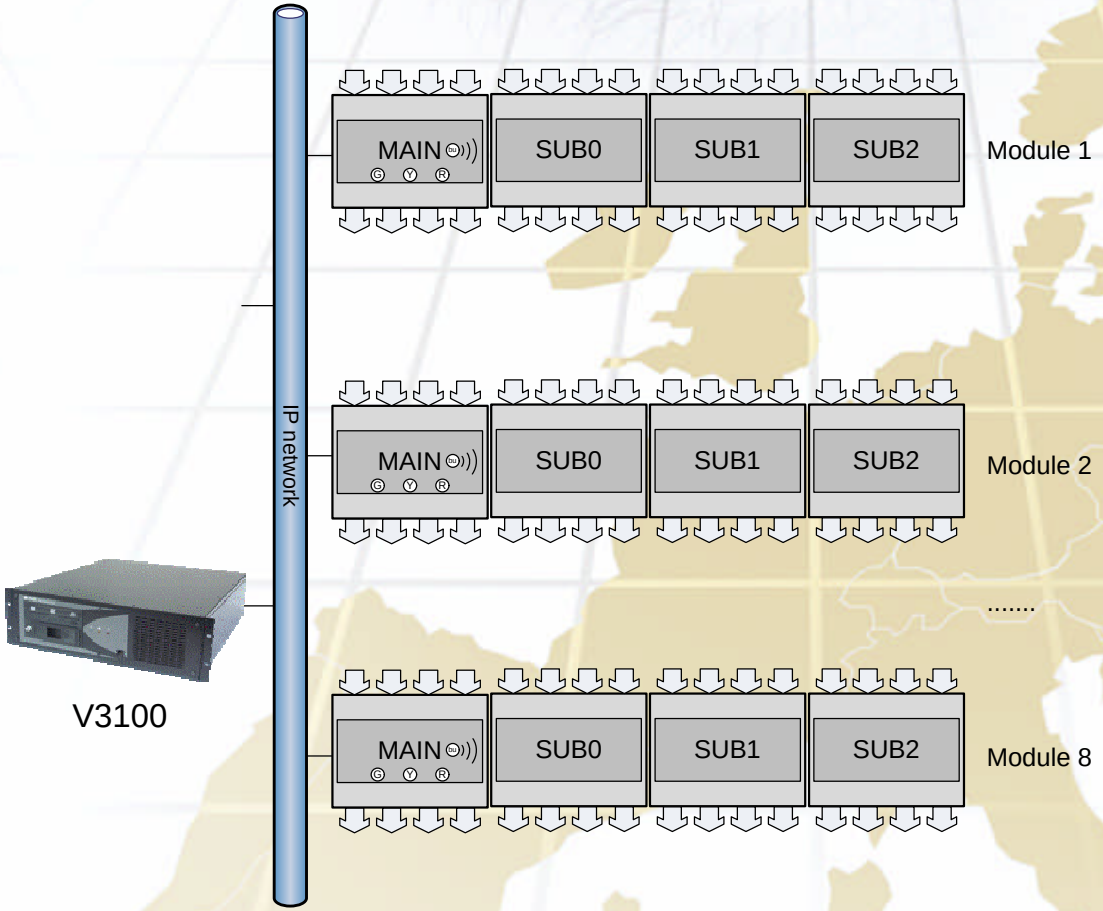


Base unit

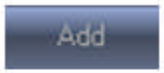
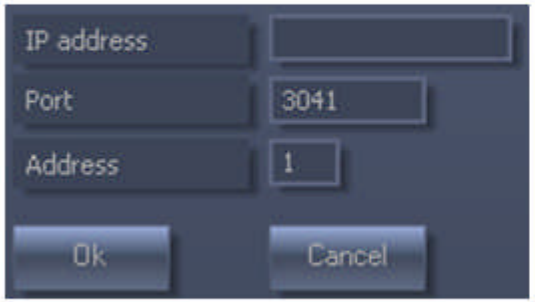


Extension unit

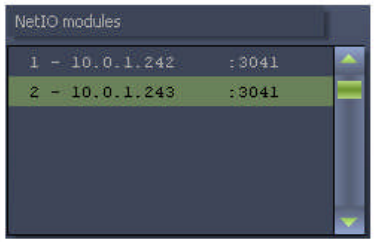
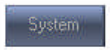
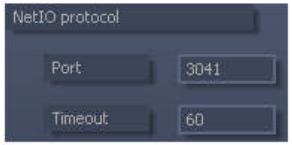
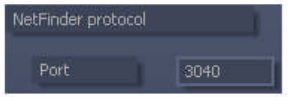
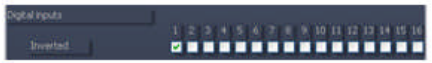
ethernet IO (connection)



ethernet IO (add)

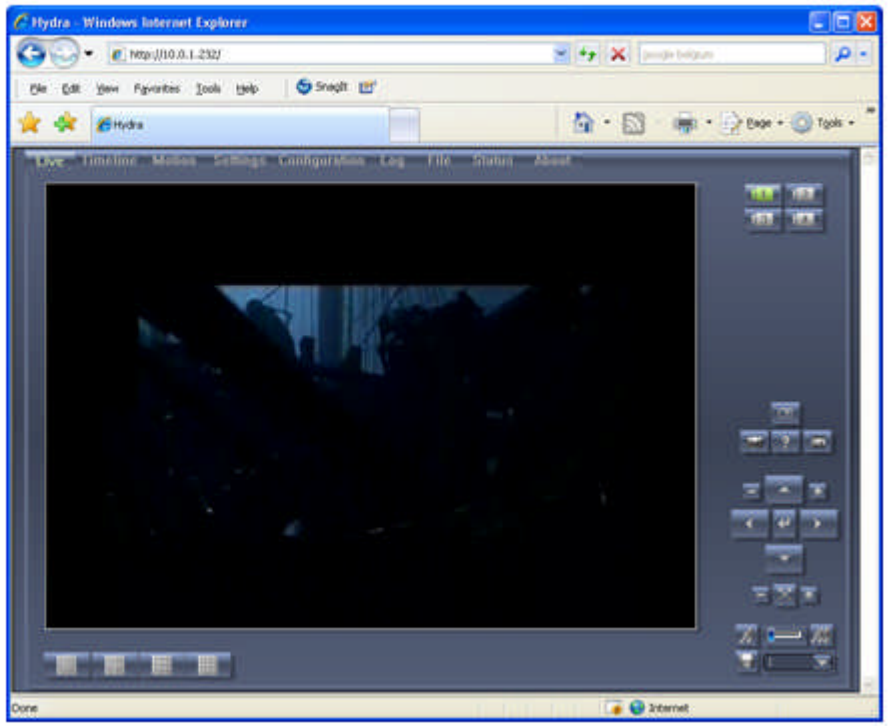
	Open the NetIO configuration menu.
	Click Add to add a NetIO interface.
	Enter IP address, port number (the port to which the NetIO module is listening) and order number of each NetIO module) Click OK.
	Click Apply.

ethernet IO (configure IO)

	Open the NetIO configuration menu.
	Select a NetIO interface from the list.
	Click System to program: inputs : NO or NC outputs: failsafe
	Modify name of NetIO module
	Modify port of NetIO module (has to be the same port as the one selected when the NetIO module was added)
	Modify port used by the Netfinder tool (an external tool used to program the IP address of the module and to update its software)
	Invert inputs (NC). If not checked, the input is NO.
	Select outputs that will be used for: failsafe operation: relay is inverted (activated when idle) watchdog outputs: activated on communication time-out (NetIO protocol time out) error outputs: activated concurrent with the yellow error LED
	Click Apply.

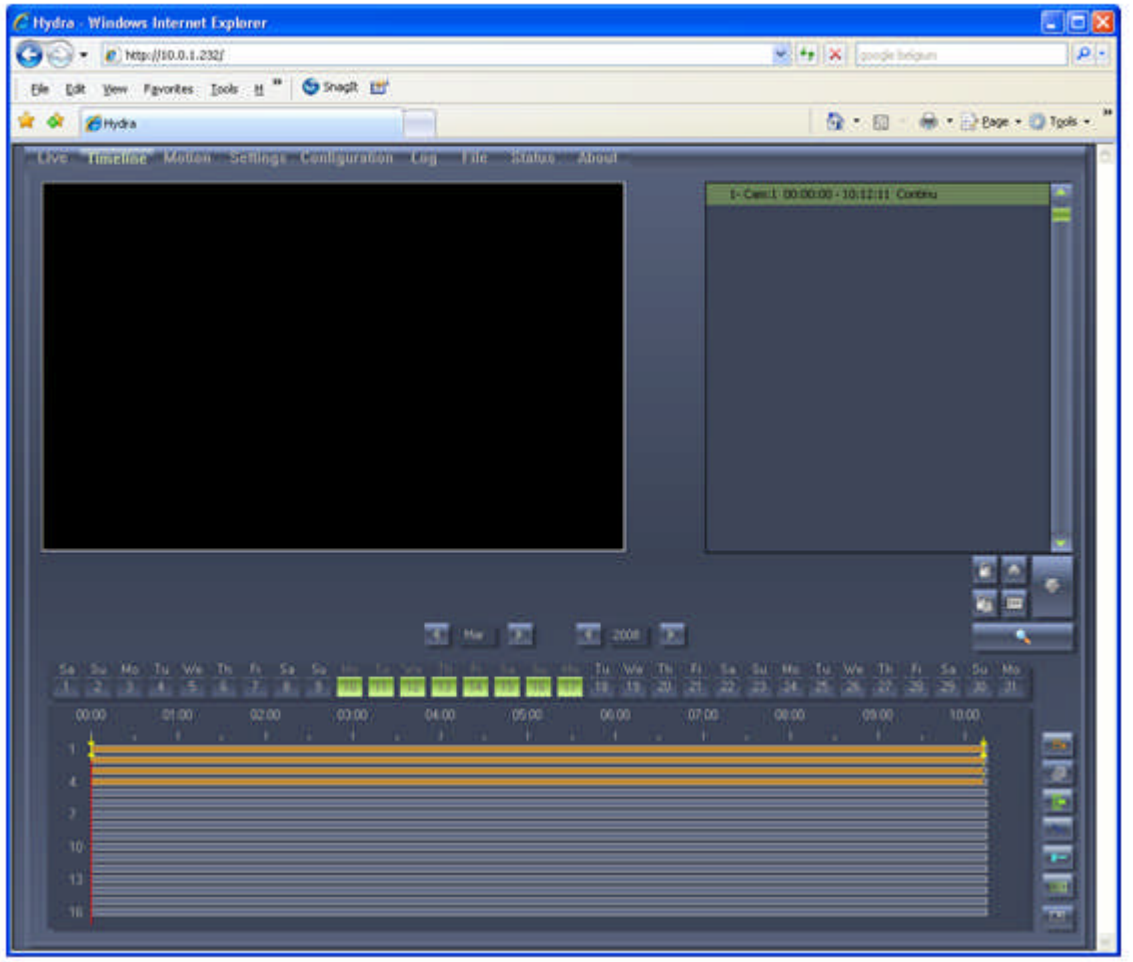
live

Click Live to watch live images from one or several cameras.

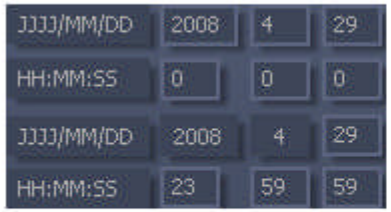


retrieve recordings (timeline)

Open Timeline to look up recordings



retrieve recordings (postmotion)

	Click to retrieve recordings
	Select a camera and connect to it
	Move and resize the area inside the picture of the selected camera.
	Select a period
	Start searching for all recordings that display some moving object inside the selected part of the picture


the end