Videoswitch

Vi-M2
MPEG4 Digital Recorder

Features

- 200 pictures per second
- 8 camera inputs
- MPEG4 compression
- CIF, 2CIF and 4CIF (D1) image quality options
- 250 Gbytes to 4Tbytes (upgradeable)
- Removable hard drive (SATA) with key lock
- Built-in DVD writer for backup
- USB ports for backup
- VGA and BNC monitor outputs
- CIF, 2CIF and 4CIF (D1) image quality options
- Simultaneous record and play
- Alarms and activity detection
- Covert cameras (hidden)
- Dual channel audio
- Up-the-coax and RS485 dome control built in
- Video loss and cloak detection
- Digital authentication
- Ethernet for remote IP viewing on a PC
- Password protected menu
- Supports remote keyboard with BNC monitor output via CAT5
- Watchdog timer protection
- Double fan-cooled for high reliability
- Not PC or Windows based
- Manufactured in the UK

Order Codes

Vi-M28G250	Digital Recorder, 8 Cameras, 200pps, 250G
Vi-M28G500	Digital Recorder, 8 Cameras, 200pps, 500G
Vi-M18T1	Digital Recorder, 8 Cameras, 200pps, 1T
Vi-M18T2	Digital Recorder, 8 Cameras, 200pps, 2T
Vi-M18T4	Digital Recorder, 8 Cameras, 200pps, 4T

Accessories

Vi-K1	Remote Keyboard
Vi-K2	Joystick Keyboard
Vi-K3	Enhanced Joystick Keyboard
Vi-E2	8-way Star Expander for domes
Vi-Viewer	IP viewer (included)
Vi-ViewerPro	Advanced IP viewer with maps

Overview

The Vi-M series Digital Video Recorders (DVR) use the latest MPEG recording technology to compress the maximum amount of video at the highest quality and the highest frame rates onto the hard drives. At the same time the latest SATA hard drives are used, providing reliability and a wide choice of capacity to suit the needs of the installation and the budget. Hard drives in all Videoswitch DVRs are removable to allow easy replacement and upgrade. Automatic monitoring of drives is featured and the user is alerted if replacement is due.

Videoswitch Digital Video Recorders (DVR) are designed and manufactured in the UK to the highest quality standards by Videoswitch, the leading UK digital recorder manufacturer. Users have the reassurance of a premium brand name and a stable and reliable UK built product, backed up by both pre-sales and post-sales technical assistance and long term product support.

Videoswitch maintains stability in the product range so users can therefore commit to roll-outs that may extend over many months in the knowledge that models will not become unavailable during the process. When new products are designed, we aim to maintain familiarity of operation in the keys and menus so users can readily switch to newer models.

Videoswitch provides hardware and software upgrades so installed products benefit from subsequent improvements and additions of features in the future. This includes upgrading of hard drive capacity, increasing the number of camera inputs and the addition of new software features. Most upgrades can be performed in-situ without having to remove the product.

Vsd550E

Technical Data

Storage
Hard drives (x2)	SATA, dual hard drives, 250G to 4Tbytes (upgradeable)
DVD/CD writer	Quick and easy backup to DVD or CD using just a few key presses. DVD/CDs play back on both DVR and PC (without software installation)
USB	External USB storage devices (e.g. memory sticks) may also be used for backup

Digital recording/Replay
Camera inputs	8
Maximum record rate	200 pictures per second (CIF), 100 (2CIF/4CIF)
Image retention	1 to 999 days, image rate calculated automatically or set via menu
Colour/Monochrome	Auto sense
Video gain	Auto (AGC)
Record resolution	704 x 576 (4CIF), 704 x 288 (2CIF), 352 x 288 (CIF)
Display resolution	720 x 576 pixels x 16.8 million colours
Average image size	3k to 20k bytes
Compression method	MPEG4
Hardware/Software	Embedded processor, proprietary Videoswitch software
Simultaneous processing	Record, Live, Play, Remote and CD/DVD backup
Image authentication	Every image is tagged with time, date, image number and other information and is protected with a digital security signature for authentication
Video inputs	0.5 to 1V pk-pk, 75 Ohms (switchable via menu), composite PAL (BNC)

Display
Main monitor output	VGA and 1V pk-pk composite PAL (BNC), full screen, quad, 8-way split, programmable titles
Spot monitor output	Full screen output, 1V pk-pk composite PAL (BNC)
Auto sequencing	1-99 seconds, full and quad, main and spot monitors
Covert (hidden)	Any cameras may be hidden from view on the monitors

Control and Interface
Keypad	35 keys
Remote keyboard ports (x2)	Each with built-in balun for twisted pair video connection to remote keyboards with attached monitors
Passwords	4 passwords with fully programmable rights
Search modes	Date/time search, event log
Timers	Record, alarm and activity (weekday and weekend)
Alarm inputs	16 inputs, normally open or normally closed volt-free contacts
Motion detection	16 x 12 zones, programmable sensitivity
Relays	2 relays, 24Vdc, 200mA max normally open or closed
Alarm/activity response	Pull-up full screen display, programmable record rate
Event log	Alarm, activity and system events
Incident list	Up to 10 incidents may be saved onto one CD/DVD
Dome control	Up-the-coax (BBV) and RS485 (Videoswitch VXP4, PelcoD)
Watchdog timer	In the event of any unexpected condition, the system will automatically recover

Remote Viewing
Ethernet	100baseT, TCP/IP, for LAN, WAN, broadband. View on PC using ViViewer, VIViewerPro, Internet Explorer

Power, Physical & Environmental
Power input	90-265 Vac input, 47-63Hz, 100W
Temperature	5 to 35deg C (operating), -10 to 40deg C (storage)
Humidity	10 to 90% non-condensing
Dimensions/Weight (Unit)	180mm x 210mm x 330mm (WxHxD), 2kg
Dimensions/Weight (Boxed)	380mm x 310mm x 430mm (WxHxD), 4kg

Accessories Included
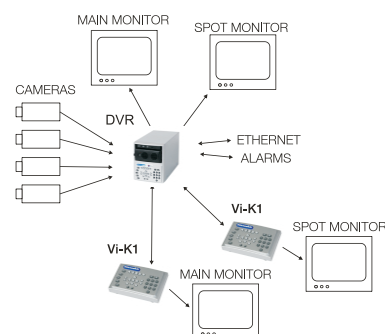|	
Cables	Mains (IEC/13A), Ethernet (CAT5)
Other accessories	Vi-X17 Alarm/Relay break-out module, drive keys, blank CDs, user manual
PC Software	"Vi-Viewer" remote access IP Viewer

Upgrades
Firmware upgrades	Available on CD and the Internet (free of charge)
Hard Drive upgrades	Replacement and upgrade hard drives available
Camera input upgrades	The number of camera inputs can be upgraded up to 8

Technical Data

The table below show examples of the relation between record image rates, hard drive capacity and number of days data retention. Divide by number of cameras to get the rate per camera. These examples are based on 6k image size.

Capacity	50pps	100pps	200pps
250 Gbytes	9.6 days	4.8 days	2.4 days
500 Gbytes	19 days	9.6 days	4.8 days
1 Tbytes	38 days	19 days	9.6 days
2 Tbytes	76 days	38 days	19 days
4 Tbytes	152 days	76 days	38 days

Example Configuration

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