

Fusion IV NVR Series

The Fusion IV NVR Series is ideal for video surveillance systems requiring a scalable recording and video management platform for an end-to-end digital system. A single Fusion IV NVR supports simultaneous recording, searching and system management for up to 32 IP and megapixel cameras, 16 channels of audio and a POS text data interface. Multiple NVRs can be combined to support a large-scale system deployment or systems requiring recording and management of hundreds of cameras. Central control of Fusion NVR systems and systems operating a mix of NVRs and DVRs is provided by multi-site Fusion Video Management Software (FVMS).

The Fusion IV NVR is ideal for upgrading the head-end recording solution of existing systems or equally ideal when installing a new state-of-the-art IP surveillance network. This is because Fusion IV supports multiple compression formats, including MJPEG, MPEG4, and H.264, as well as a wide variety of IP camera drivers.

The Fusion IV hardware utilises powerful processor and memory technology allowing support of multiple simultaneous operations such as point-of-sale text recording and video analytics. With standard dual video ports, end users can view live multiplex video and search at the same time. System expansion of recording and management resources has never been easier—by connecting additional Fusion IV NVRs to the local area network. The front panel provides easy access to the DVD-RW drive, one USB v2.0 port, and six field-replaceable hard drives. This provides system engineers a fast, convenient method to expand NVR storage capacity in the field.



Market Opportunities

The continual growth of IP networks across the globe has led to convergence of many organisation's building security system needs and their IT system security facilities. This has resulted in a strong demand for all-IP end-to-end security system deployment. Fusion IV NVR provides the scalability and operational power to address the needs of a wide variety of applications including government security, port security initiatives, telecommunications sites, and many other applications. When the need is for a network digital recording and management security solution, the solution is the Fusion IV NVR.

Features

Hardware

- IP recording up to 32 channels
- Megapixel camera support
- VGA and DVI-D ports for local video viewing
- Internal storage capacity from 500 GB to 12 TB
- External storage options from 5 TB to 32 TB
- Up to 16 audio channels (with supported IP cameras)
- PTZ control (with supported IP cameras)
- DVD-RW and 7 USB 2.0 ports
- 10/100/1000 gigabit network standard
- Keyboard control of camera selection and PTZ control
- Windows® XP embedded operating system

Software

- User software included with each NVR:
 - Fusion Server Software** - Local user interface
 - HFRVS Remote Software** - Connect to a single NVR
 - HFVMS Remote Management Software** - Connect to multiple NVRs
- Dynamic DNS support
- Microsoft® Active Directory integration
- Smart Motion, Preview and Index Searches
- Integrated camera discovery protocol
- Integrated POS/ATM/access control with Pro-Watch®, WIN-PAK® and IDM
- Powerful API available for third party software integration
- Analytics support, up to 4 video channels

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FEATURES

The Fusion IV system consists of three major components which are included with each unit:

- **Server Unit:** 8, 16 or 32 channel models with megapixel recording and the powerful Fusion Server Software
- **HFRVS, Fusion Remote View Software:** allows remote connections to a single Fusion NVR
- **HFVMS, Fusion Video Management Software:** allows remote operation, configuration and management of multiple Fusion NVRs

The powerful combination of Fusion Server and the feature-rich HFRVS and HFVMS user software suites create an end-to-end digital recording and management solution that make Fusion IV NVR the market leader in new systems technology.

Fusion Server Software

(included with every NVR)

- Complete local configuration and administration.
- High resolution rates - Fusion is able to record resolutions as high as 5 megapixel.
- Multiple types of searching capabilities including Preview Search, Smart Motion Search and Index Search.
- The Preview Search function gives users a quick overview of a 24-hour period. The search can be narrowed down from ten-minute increments to one-minute increments.
- The Fusion Server Software gives users the option of POS integration.
- Remote notification of alarm events and health check.
- Supports five simultaneous connections via HFVMS and HFRVS.

HFRVS Remote View Software

(included with every NVR)

- Looks and functions in the same manner as the Fusion Server Software.
- Remotely connect to a single Fusion NVR.
- Remotely search and export video from the Fusion NVR.
- Control PTZ cameras connected to the Fusion NVR.
- Microsoft Windows XP® and Vista® compatible.
- Remotely set up cameras, schedules, sensors, audio, and network functions via the HFRVS Remote Software.

HFVMS Video Management Software

(single workstation license included with every NVR - can also be ordered separately.)

- Complete local configuration and administration.
- Remotely monitor video, audio and alarms.
- Access and export recorded video.
- Create infinite customised user accounts.
- Create remote back-up schedules.
- Create custom live camera views.
- Configure Fusion NVRs remotely.
- Perform remote NVR software upgrades.
- Connect to multiple Fusion NVRs all at one time.
- Microsoft Windows XP® and Vista® compatible.
- Maps feature allows importing of .dxf, .jpg, .wmf and other formats.
- Control cameras with advanced PTZ features.
- Point-of-sale search capabilities.
- Live audio.
- TCP based.

HFRVS and HFVMS Software

(Workstation Requirements)

Minimum:

- Intel Core 2 Duo 2.8 GHz (or equivalent)
- 1 GB system memory
- DirectX 9 or higher
- 256 MB+ Nvidia or ATI video card
- 256k network connection
- TCP/IP installed
- Microsoft Windows XP® or Vista
- 1280 x 1024 optimal display resolution
- 32-bit colour depth

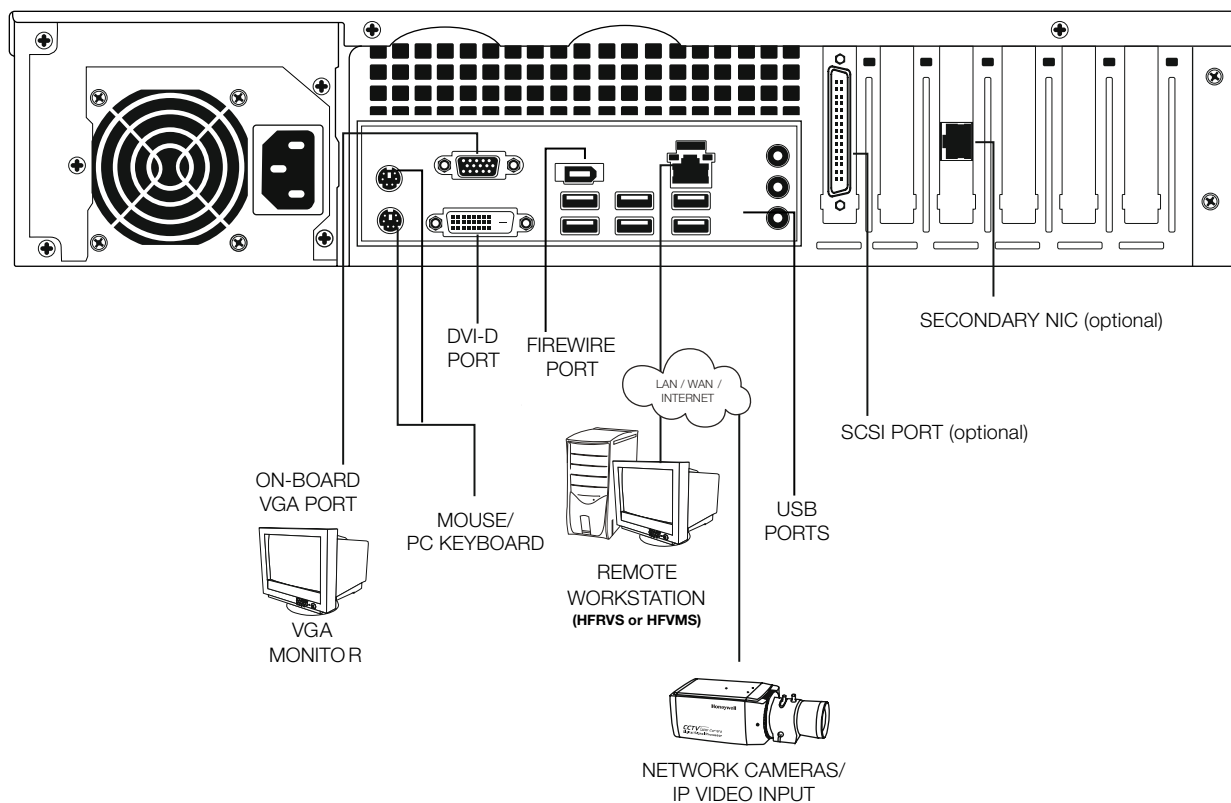
Recommended*:

- Intel Core 2 Quad – Q8200 (or equivalent)
- 2 GB system memory
- DirectX 9 or higher
- Nvidia 8600 video card (or equivalent)
- 256k network connection
- TCP/IP installed
- Microsoft Windows XP® or Vista
- 1280 x 1024 optimal display resolution
- 32-bit colour depth

*Minimum requirements for H.264 solutions and highly recommended for megapixel image rendering.

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SYSTEM DIAGRAM



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SPECIFICATIONS

Fusion IV Unit	
Remote Sessions	Maximum of 5 simultaneous
Web Sessions	Maximum of 50
Video Standard	Variable, based on camera
Image Compression	User selectable per camera (H.264, MPEG, MJPEG)
Internal Storage Media	500 GB to 12 TB
Video Inputs	
IP	MPEG-4/MJPEG/H.264
Video Outputs	
SVGA	15 pin D-type port for a PC monitor connection (standard and wide screen monitor support)
DVI-D	24 pin port for a digital video display
Electrical	
Input Voltage	115 - 230 VAC, 50 - 60 Hz 10/7A
Operating Voltage	1115V/230V Auto Sensing
Power Consumption	Up to 480 W
Mechanical	
Dimensions (l x w x h)	686 mm x 483 mm x 89 mm
Weight	20.8kg to 23.1kg
Construction	Housing: Steel Chassis
Finish	Housing: Black Matt Paint

Environmental	
Temperature	Operating: 5°C to 40°C
	Storage: -10°C to 65°C
Relative Humidity	Operating: 0% to 90% non-condensing
Regulatory	
Emissions	EN 55022: 2006 Class B EN 61000-3-2:2006 EN 61000-3-3:1995+A1:2001+A2:2005
Immunity	EN 55024: 1998+A1:2001+A2:2003 (Class B)
Safety U.S. and Canada International	UL, cUL listed; EN 60950-1:2001 IEC 60950-1:2005
Backup Archive	
On Board Device	DVD-RW, USB
Network	LAN, WAN
Base System	
Includes	HFRVS & HFVMS Software, Keyboard, Mouse, Rack Mounts, DVD-RW, Network Connectivity, Web Access, USB Port, Keyboard and Mouse PS2 Ports

Honeywell IP Cameras	
HCS554IPX	HCX5DW2
HCD554IPX	HCX13MW
HD3MDIPX	ACUIX™ IP
HD4DIPX	HNVE1 (Network Encoder)
HCX3W	

		32 Ch.	16 Ch.	8 Ch.
Specifications				
Cameras		32	16	8
Frame Set-up - Individual (I) or Global (G)		1	1	1
Resolution - Individual (I) or Global (G)		1	1	1
Resolution		Variable based on camera		
IPS (up to) @ D1 Resolution	Base Model	400	400	200
IPS (up to) @ D1 Resolution	Plus Model	800	400	200
Audio (from supported cameras)		16	16	8
Intensive Record		Supported on HCX network cameras		
USB 2.0 Ports		7	7	7

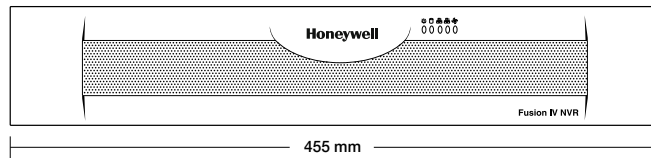
Other supported IP cameras

Go to the Fusion product web page for a comprehensive list of the wide range of IP cameras supported by Fusion IV.

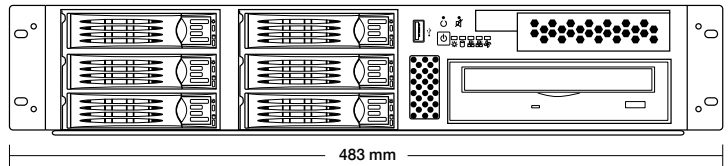
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SYSTEM DIMENSIONS

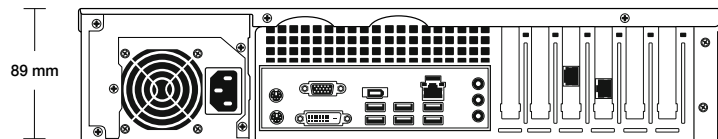
Front Bezel



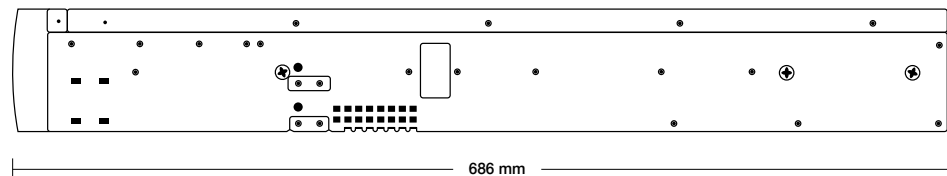
Front View



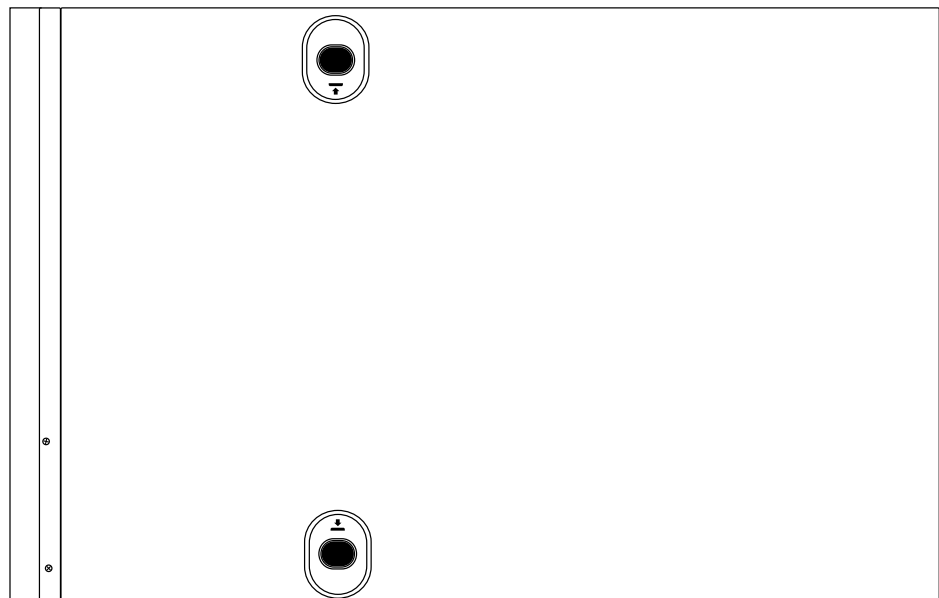
Back View



Side View



Top View



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ACCESSORIES

Factory Installed Accessories	
HF4HWUPGCPU	Fusion IV Hardware Performance Package (Includes Quad Core CPU & 1GB Memory Upgrade)
HF4R5	Fusion IV Internal RAID5 Configuration (Must have 3 drives)
HF4GBNIC	Gigabit Network Interface – adds 2nd Ethernet Port to Fusion IV
HAABF ^{1 2}	Video Analytics Active Alert® Base Package
HAASF ^{1 2}	Video Analytics Active Alert® Standard Package
HAAPF ^{1 2}	Video Analytics Active Alert® Premium Package
HASIF ^{1 2}	Video Analytics Smart Impressions
HAACF ^{1 2}	Video Analytics People Counter
HFANPRAPP1 ^{1 2}	1 CH of Fusion ANPR Engine and Application Software (ANPR Review and Database)
HFANPRAPP2 ^{1 2}	2 CH of Fusion ANPR Engine and Application Software (ANPR Review and Database)
HFANPRAPP3 ^{1 2}	3 CH of Fusion ANPR Engine and Application Software (ANPR Review and Database)
External Storage Accessories	
HE520RA4	4 BAY Raid 5 - 1RU SCSI U320 Rackmount 500GB SATA II Hard Drives. 2.0 TB Total Capacity
HE530RA4	4 BAY Raid 5 - 1RU SCSI U320 Rackmount 750GB SATA II Hard Drives. 3.0 TB Total Capacity
HE540RA4	4 BAY Raid 5 - 1RU SCSI U320 Rackmount 1TB SATA II Hard Drives. 4.0 TB Total Capacity
HE560RA8	8 BAY Raid 5 - 2RU SCSI U320 Rackmount 750GB SATA II Hard Drives. 6.0 TB Total Capacity
HE580RA8	8 BAY Raid 5 - 2RU SCSI U320 Rackmount 1TB SATA II Hard Drives. 8.0 TB Total Capacity
HE590RA12	12 BAY Raid 5 - 2RU SCSI U320 Rackmount 750GB SATA II Hard Drives. 9.0 TB Total Capacity
HE5120RA16	16 BAY Raid 5 - 3RU SCSI U320 Rackmount 750GB SATA II Hard Drives. 12.0 TB Total Capacity
HE5160RA16	16 BAY Raid 5 - 3RU SCSI U320 Rackmount 1TB SATA II Hard Drives. 16.0 TB Total Capacity
ASC39160	SCSI adapter card for controlling Raid 5 U320 systems. To be used with Fusion IV DVRs
Field Installed Accessories	
HF4HWUPGCPUF	Fusion IV Hardware Performance Package (Includes Quad Core CPU & 1GB Memory Upgrade)
HF4RMKT	Rack Mounting Rails for Fusion IV NVR models
HF4HD2T0	Fusion IV 2 TB Upgrade Kit (Includes Fusion IV Drive Tray)
HF4HD1T0	Fusion IV 1 TB Upgrade Kit (Includes Fusion IV Drive Tray)
HF4HD500	Fusion IV 500 GB Upgrade Kit (Includes Fusion IV Drive Tray)
Software Part Numbers	
HFRVS	Fusion Remote View Software
HFVMS	Fusion Video Management Software
HFVMSR	Fusion to Rapid Eye™ Remote Software
IP and POS Data Software Licenses	
HFLICNVR1	1 CH Fusion IP/ Network Video License (Add up to 4 CH of Network Video to Fusion IV Systems)
HFLICNVR4	4 CH Fusion IP/ Network Video License (Add 4 CH of Network Video to Fusion IV Systems)
HFLICNVR8 ²	8 CH Fusion IP/ Network Video License (Add 8 CH of Network Video to Fusion IV Systems)
HFLICNVR16 ²	16 CH Fusion IP/ Network Video License (Add 16 CH of Network Video to Fusion IV Systems)
HFLICDATA	1 CH Fusion 4 Alarm Panel for POS Data License
Other Recommended Accessories	
HJZTPX	HJZTPX PTZ camera and DVR controller
<p>1 Up to 4 channels of any combination of Video Analytic packages or up to 6 ANPR channels. Video Analytics and ANPR options are available with 200 IPS and 400 IPS real time Fusion IV configurations only.</p> <p>2 Requires HF4HWUPGCPU.</p>	

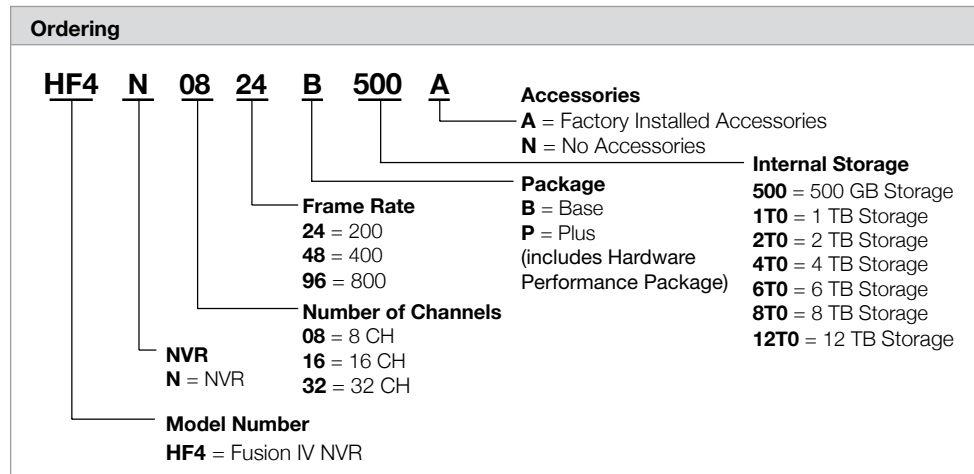
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ORDERING

Part Number	Channels	Frame Rate @ 4 CIF	Performance Processor	Storage	Image Compression
HF4N3296P12T0A	32	800	Yes	12 TB	MPEG-4, MJPEG, H.264
HF4N3296P8T0A	32	800	Yes	8 TB	MPEG-4, MJPEG, H.264
HF4N3296P6T0A	32	800	Yes	6 TB	MPEG-4, MJPEG, H.264
HF4N3296P4T0A	32	800	Yes	4 TB	MPEG-4, MJPEG, H.264
HF4N3296P2T0A	32	800	Yes	2 TB	MPEG-4, MJPEG, H.264
HF4N3296P1T0A	32	800	Yes	1 TB	MPEG-4, MJPEG, H.264
HF4N3296P500(N or A)	32	800	Yes	500 GB	MPEG-4, MJPEG, H.264
HF4N3248B12T0A	32	400		12 TB	MPEG-4, MJPEG, H.264
HF4N3248B8T0A	32	400		8 TB	MPEG-4, MJPEG, H.264
HF4N3248B6T0A	32	400		6 TB	MPEG-4, MJPEG, H.264
HF4N3248B4T0A	32	400		4 TB	MPEG-4, MJPEG, H.264
HF4N3248B2T0A	32	400		2 TB	MPEG-4, MJPEG, H.264
HF4N3248B1T0A	32	400		1 TB	MPEG-4, MJPEG, H.264
HF4N3248B500(N or A)	32	400		500 GB	MPEG-4, MJPEG, H.264
HF4N1648P12T0A	16	400	Yes	12 TB	MPEG-4, MJPEG, H.264
HF4N1648P8T0A	16	400	Yes	8 TB	MPEG-4, MJPEG, H.264
HF4N1648P6T0A	16	400	Yes	6 TB	MPEG-4, MJPEG, H.264
HF4N1648P4T0A	16	400	Yes	4 TB	MPEG-4, MJPEG, H.264
HF4N1648P2T0A	16	400	Yes	2 TB	MPEG-4, MJPEG, H.264
HF4N1648P1T0A	16	400	Yes	1 TB	MPEG-4, MJPEG, H.264
HF4N1648P500(N or A)	16	400	Yes	500 GB	MPEG-4, MJPEG, H.264
HF4N1648B12T0A	16	400		12 TB	MPEG-4, MJPEG, H.264
HF4N1648B8T0A	16	400		8 TB	MPEG-4, MJPEG, H.264
HF4N1648B6T0A	16	400		6 TB	MPEG-4, MJPEG, H.264
HF4N1648B4T0A	16	400		4 TB	MPEG-4, MJPEG, H.264
HF4N1648B2T0A	16	400		2 TB	MPEG-4, MJPEG, H.264
HF4N1648B1T0A	16	400		1 TB	MPEG-4, MJPEG, H.264
HF4N1648B500(N or A)	16	400		500 GB	MPEG-4, MJPEG, H.264
HF4N0824B12T0A	8	200		12 TB	MPEG-4, MJPEG, H.264
HF4N0824B8T0A	8	200		8 TB	MPEG-4, MJPEG, H.264
HF4N0824B6T0A	8	200		6 TB	MPEG-4, MJPEG, H.264
HF4N0824B4T0A	8	200		4 TB	MPEG-4, MJPEG, H.264
HF4N0824B2T0A	8	200		2 TB	MPEG-4, MJPEG, H.264
HF4N0824B1T0A	8	200		1 TB	MPEG-4, MJPEG, H.264
HF4N0824B500(N or A)	8	200		500 GB	MPEG-4, MJPEG, H.264

Note: The letter "N" at the end of the part number signifies no factory installed accessories. The letter "A" at the end of the part number signifies factory installed accessories. Factory installed accessories MUST be ordered at the same time as the DVR.

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Note: Honeywell reserves the right, without notification, to make changes in product design or specifications.

For additional information,
please visit www.honeywell.com/security/me

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HVS-FIVNVR-01-ME(1209)DS-C
December 2009
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Honeywell