Honeywell

Fusion IV Rev B 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 cameras and 16 channels of audio. Multiple NVRs can be combined to support a large-scale system deployment for 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).

In addition to new system roll-out to realise the benefits of operating a state-of-the-art IP surveillance network, Fusion IV is ideal for upgrading the head-end recording solution of existing systems. 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 live view, playback, PTZ control, recording and interface to custom application software using the Fusion API/SDK. 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 lead 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 large retail, educational, telecommunications sites, and many other applications.

Features

Hardware

- IP recording up to 32 channels
- Megapixel camera support
- HDMI and DVI-I/VGA ports for local video viewing
- Internal storage capacity from 1TB to 18 TB
- External storage options from 4 TB to 24 TB
- Up to 16 audio channels (with supported IP cameras)
- PTZ control (with supported IP cameras)
- DVD-RW and 7 USB 2.0 ports and 2 USB 3.0 ports
- 10/100/1000 gigabit network standard
- Keyboard control of camera selection and PTZ control
- Windows® 7 embedded operating system

Software

- ONVIF standard v1.01. and v1.02 support
- HRDP-Fusion mobile App for iPhone/iPod and HRDP-Fusion HD mobile App for iPad are available
- 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 Fusion NVRs/DVRs and HRDP DVRs
- Dynamic DNS support
- Microsoft® Active Directory integration
- Smart Motion, Preview and Index Searches
- Integrated camera discovery protocol
- Integrated access control with WIN-PAK®
- Powerful API available for third party software integration

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FEATURES

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

– **Server Unit**: 8 or 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 to integrate with Honeywell WIN-PAK® access control software.
- Remote notification of alarm events and health check.
- Supports up to 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 7, Vista or XP compatible.
- Remotely set up cameras, schedules, sensors, audio, and network functions video the HFRVS Remote Software.

HFVMS Video Management Software

(single workstation licence 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.
- Connect to multiple Fusion NVRs all at one time.
- Microsoft® Windows 7, Vista or XP 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) [2]
- 1 GB system memory
- DirectX 9 or higher
- 256 MB+ Nvidia or ATI video card [3]
- 256k network connection
- TCP/IP installed
- Microsoft® Windows 7, Vista or XP [5]
- 1280 x 1024 optimal display resolution

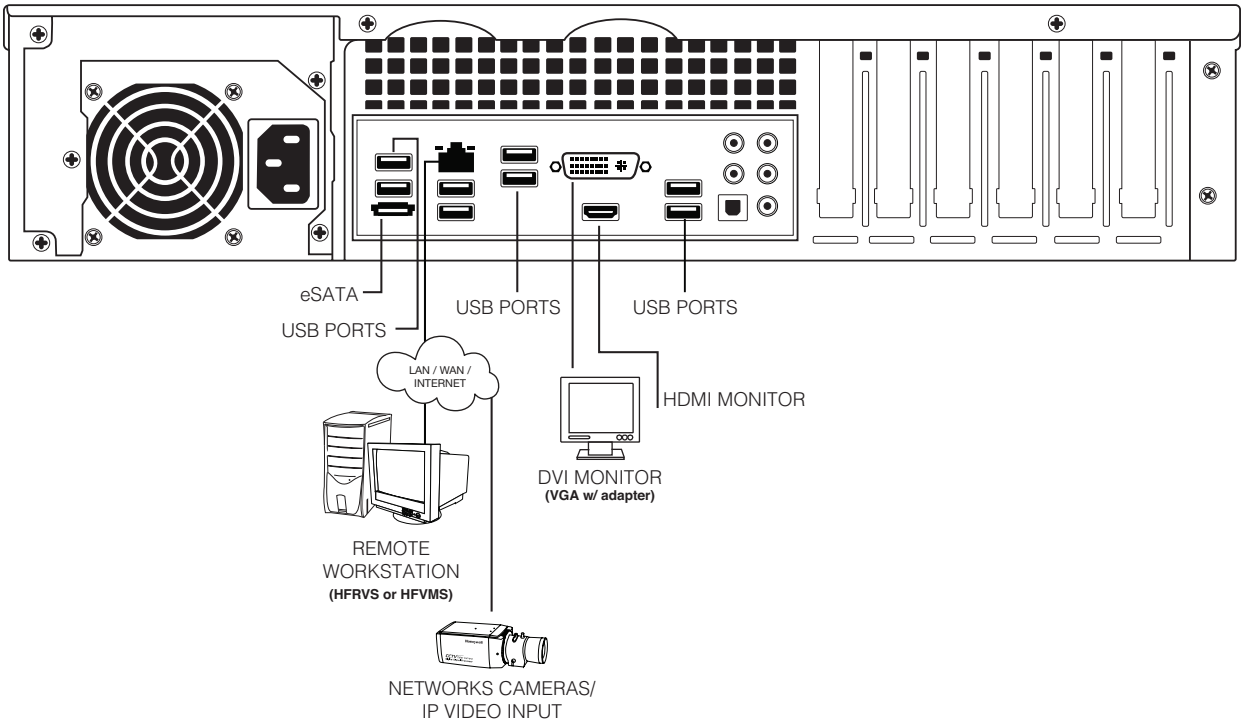
Recommended[1]:

- Intel Quad Core i7 processer (or equivalent) [2]
- 2 GB system memory
- DirectX 9 or higher
- ATI 5750 video card (or equivalent) [3]
- 512k network connection [4]
- TCP/IP installed
- Microsoft® Windows 7, Vista or XP [5]
- 1280 x 1024 optimal display resolution

[1]Minimum requirements for H.264 solutions and highly recommended for megapixel image rendering. [2]No support for Xeon processors. [3]FireMV, NVS and CAD cards are not supported. Dual video cards required for four monitor output. SLI/Crossfire not supported. [4]Gigabit network highly recommended for LAN environments and configurations running multiple megapixel cameras. [5]No support for server operating systems.

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SYSTEM DIAGRAM



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Fusion IV Rev B NVR Series

SPECIFICATIONS

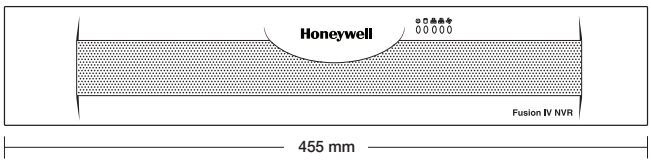
Remote Software and FVMS	
Sessions Maximum per Fusion Recorder	5 simultaneous connections
Administration; Configuration	1 session
Users Viewing Live Video and Retrieving Video	4 sessions
Above with PTZ Control	1 at a time controlling PTZ
Compatibility	Microsoft Windows® 7, Vista, or XP
Recorder Unit	
Video Standard	IP network video
Video Display Format	Up to 120/100IPS @ 720p resolution
Colour Control	Brightness, hue and contrast
Recording and Transmission Compression Algorithm	H.264, MPEG-4, MJPEG (depends on camera)
Record Mode	(FIFO) Continuous buffer
Recording Capacity	Hard Drive capacities up to 12TB, see ordering section for details
Recording Rate @ D1 resolution – B units (Global)	8 ch up to 200 ips 16 ch up to 400 ips 32 ch up to 400 ips
Recording Rate @ D1 resolution – P units (Global)	8 ch up to 200 ips 16 ch up to 400 ips 32 ch up to 800 ips
IP Devices and Resolution See document 800-07870 for a list of IP devices supported by Fusion	Various settings up to and including 5-megapixel; based on supported camera resolution options
Megapixel	• Supports up to 5 MP per channel • Use local Fusion interface & FVMS (multi-site software) to digitally zoom into playback images
Video Motion Detection	Server-side motion detection for IP cameras. IP camera motion detection for specific cameras – see doc 800-07870 for details
IP device I/O	Support for select devices only, see document 800-07870 for details
Removable Media	Built-in DVD-RW option and 9 – USB ports
Still Image	JPEG file format
NTP Client	NTP Time synchronisation available
DHCP Enabled	DHCP or Manual IP entry
Port number set-up	Five individual entries for ports
PTZ Protocols Support	Support for select devices only, see document 800-07870 for details
Language Support	English, French, German, Italian, Spanish (EU), Spanish (Americas), Portuguese, Russian, Czech, Polish

Connections	
IP Input for video	10/100/1000 NIC Onboard
Video Output	MAIN-OUT (DVI-I cw VGA adapter or HDMI)
Audio Input/Output	● Audio Input – via cameras (Fusion NVR support for specific cameras only, see document 800-07870 for details) - 8 ch NVR – up to 8 audio input - 16 ch NVR – up to 16 audio input - 32 ch NVR – up to 16 audio input ● Audio Output : - 1 x 3.5 mm TRS jack
Sensor Inputs General Purpose	● Via cameras (Fusion NVR support for specific cameras only, see document 800-07870 for details) - 8 ch NVR – up to 8 sensor inputs - 16 ch NVR – up to 16 sensor inputs - 32 ch NVR – up to 16 sensor inputs
Control Outputs	Via cameras (Fusion NVR support for specific cameras only, see Doc 800-07870 for details) - 8 ch NVR – up to 8 sensor outputs - 16 ch NVR – up to 16 sensor outputs - 32 ch NVR – up to 16 sensor outputs
Serial Ports	7 x USB 2.0, 2 x USB 3.0
Internal Storage	SATA HDD, up to six
Networking	10/100/1000 NIC Onboard (Optional 2nd 10/100/1000 NIC)
Electrical	
Input Voltage	110-240V ~ 50/60Hz 7A
Power Consumption	Up to 480 W
Mechanical	
Dimensions (L x W x H)	686 mm x 483 mm x 89 mm
Weight	Unit: 12.7kg to 15.9kg Shipping: 20.8kg to 23.1kg
Construction	Housing: Steel chassis Finish: Black matt paint
Environmental	
Temperature	Operating: 5°C to 40°C Storage: -10°C to 65°C
Relative Humidity	0% - 90%, non-condensing
Regulatory	
Safety	ANSI / UL 60950-1
Emissions	FCC Part 15, Subpart B, Class B EN 55022:2006 +A1:2007 (Class B) EN 61000-3-2:2006 + A2:2009 EN 61000-3-3:2008
Immunity	EN 50130-4:1995 + A1:1998 + A2:2003

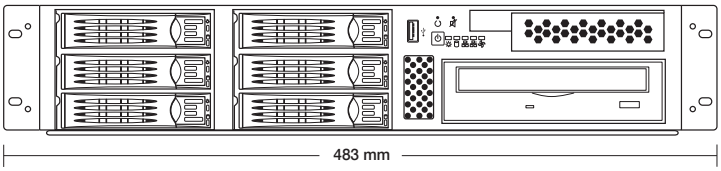
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SYSTEM DIMENSIONS

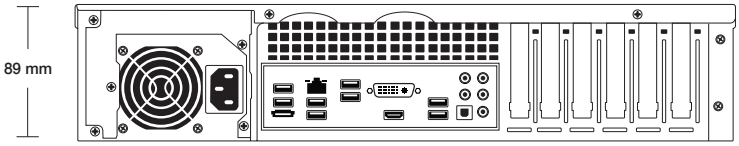
Front Bezel



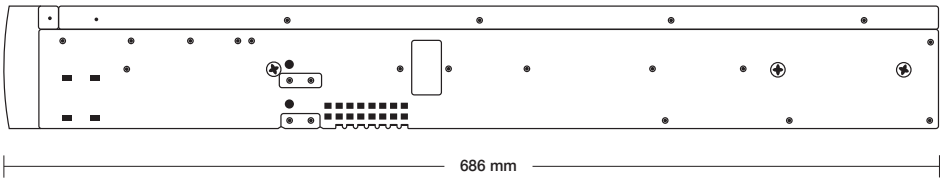
Front View



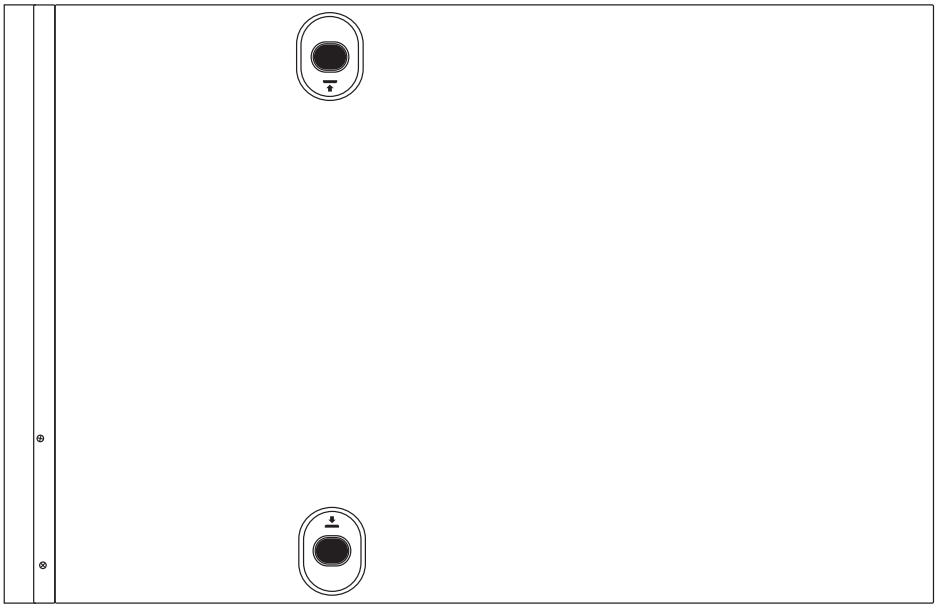
Back View



Side View



Top View



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ACCESSORIES

Factory Installed Accessories	
HF4NVRUPGCPUF	Fusion IV NVR Hardware Performance Package (I7 2600 CPU & 1 GB Memory Upgrade)
HF4R5	Fusion IV Internal RAID 5 Configuration (Must have 3 drives)
HFDVRGBNIC	Gigabit Network Interface – adds 2nd Ethernet Port to Fusion IV
External Storage Accessories	
HE540RA4	4 BAY RAID 5 - 1RU SCSI U320 Rackmount 1 TB SATA II Hard Drives. 3.0 TB Total Capacity (2.7 TB Usable Storage)
HF4HD3T0	Fusion IV Rev.B 3TB Upgrade Kit (Includes Fusion IV Drive Tray)
HE580RA8	8 BAY RAID 5 - 2RU SCSI U320 Rackmount 1 TB SATA II Hard Drives. 7.0 TB Total Capacity (6.5 TB Usable Storage)
HE5120RA12	12 BAY RAID 5 - 2RU SCSI U320 Rackmount 1 TB SATA II Hard Drives. 11.0 TB Total Capacity (10.2 TB Usable Storage)
HE5240RA24	24 BAY RAID 5 - 4RU SCSI U320 Rackmount 1 TB SATA II Hard Drives. 23.0 TB Total Capacity (21.4 TB Usable Storage)
ACS29320ALP-R	SCSI adapter card for controlling RAID 5 U320 systems. To be used with Fusion IV units. Field upgrade needs to be supported by Honeywell sales/technical support
Field Installed Accessories	
HF4RMKT	Rack Mounting Rails for Fusion IV NVR models
HF4HD1TB	Fusion IV 1 TB Upgrade Kit (HF4NVRTRAY item needs to be ordered)
HF4HD2TB	Fusion IV 2 TB Upgrade Kit (HF4NVRTRAY item needs to be ordered)
HF4HD3TB	Fusion IV Rev.B 3TB Upgrade Kit (HF4NVRTRAY item needs to be ordered)
HF4HD2T0R	Fusion IV 2 TB Upgrade Kit for RAID Field Installation (HF4NVRTRAY item needs to be ordered)
HF4HD1T0R	Fusion IV 1 TB Upgrade Kit for RAID Field Installation (HF4NVRTRAY item needs to be ordered)
HF4USB232	Fusion IV USB to RS232 Convert for HJC4000 keyboard connection
HF4NVRTRAY	Hard Drive Tray for Fusion IV NVR models - (available on request)
HF4NVRUPGCPUF	Fusion IV NVR Performance Package (I7 2600 CPU & 1 GB Memory Upgrade). (Must be supported by Honeywell sales/ technical support)
Software Part Numbers	
HFRVS	Fusion Remote View Software
HFVMS	Fusion Video Management Software
IP and POS Data Software Licences	
HFLICNVR1	1 CH Fusion IP/Network Video Licence (Add up to 4 CH of Network Video to Fusion IV Systems)
HFLICNVR4	4 CH Fusion IP/Network Video Licence (Add 4 CH of Network Video to Fusion IV Systems)
HFLICNVR8 [1]	8 CH Fusion IP/Network Video Licence (Add 8 CH of Network Video to Fusion IV Systems)
HFLICNVR16 [1]	16 CH Fusion IP/Network Video Licence (Add 16 CH of Network Video to Fusion IV Systems)
HFLICDATA	1 CH Fusion 4 Alarm Panel for POS Data Licence
Other Recommended Accessories	
HJC4000	PTZ camera and DVR controller

[1] Requires HF4NVRUPGCPUF

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ORDERING

Part Number	Channels	Frame Rate @ 4 CIF	Performance Processor	Storage	Image Compression
HF4N3296P18TA	32	800	Yes	18 TB	MPEG-4, MJPEG, H.264
HF4N3296P12T0A	32	800	Yes	12 TB	MPEG-4, MJPEG, H.264
HF4N3296P8T0A	32	800	Yes	8 TB	MPEG-4, MJPEG, H.264
HF4N3296P4T0A	32	800	Yes	4TB	MPEG-4, MJPEG, H.264
HF4N3296P2T0A	32	800	Yes	2TB	MPEG-4, MJPEG, H.264
HF4N3296P1T0A	32	800	Yes	1TB	MPEG-4, MJPEG, H.264
HF4N3248B18TA	32	400		18 TB	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
HF4N3248B4T0A	32	400		4TB	MPEG-4, MJPEG, H.264
HF4N3248B2T0A	32	400		2TB	MPEG-4, MJPEG, H.264
HF4N3248B1T0A	32	400		1TB	MPEG-4, MJPEG, H.264
HF4N1648P18TA	16	400	Yes	18 TB	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
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
HF4N1648B18TA	16	400		18TB	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
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
HF4N0824B18TA	8	200		18 TB	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
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

Fusion IV Rev B NVR Series

Ordering

HF4 N 08 24 B 1T0 A

Model Number
HF4 = Fusion IV NVR

NVR
N = NVR

Number of Channels
08 = 8 CH
16 = 16 CH
32 = 32 CH

Frame Rate
24 = 200
48 = 400
96 = 800

Package
B = Base
P = Plus*
(includes Hardware Performance Package)

Internal Storage
1T0 = 1 TB Storage
2T0 = 2 TB Storage
4T0 = 4 TB Storage
8T0 = 8 TB Storage
12T0 = 12 TB Storage
18T = 18 TB Storage

Accessories
A = Factory Installed Accessories
N = No Accessories

* Only available in 16 and 32 channel models.

Notes:
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 NVR.
During the ordering process, please specify the language that is required.
Honeywell reserves the right, without notification, to make changes in product design or specifications.

Download HRDP-Fusion Mobiles Apps

HRDP-Fusion HD
iPad version

HRDP-Fusion
iPhone/iPod touch version

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

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