

## Fusion III DVR Series

www.honeywellvideo.com

### BRIDGING THE GAP BETWEEN ANALOG AND IP

The Fusion III DVR Series is the next step in digital video recording. Expanding beyond the analog DVR role, Fusion III bridges the gap between DVRs and NVRs; it is a full featured hybrid digital recording system. The system is designed to record, search and transmit up to 32 channels analog or IP video sources, up to 16 channels of audio and a single channel of data.

Benefits of the system include significantly expanded support for digital video sources; including IP cameras, network encoders and megapixel cameras. Fusion III can support up to 4 additional digital video sources without any additional hardware enhancements, expanding a 16 channel model to 20 channels (network video licenses are required). Expansion to 16 additional digital video sources requires the optional dual-core Pentium D processor upgrade (HF3HWUPGCPU) with a maximum limit of 32 channels.

The Fusion III hardware enhancements include the latest generation of Intel® motherboard and a faster base CPU with 512 MB of memory standard. Windows® XP Embedded operating system providing improved network security and firewall protection, while eliminating the need to format CDs before backup. A redesigned front panel provides easier access to the standard CD-RW drive, dual USB 2.0 ports and the 4 field replaceable hard drives. Support for 500 GB SATA hard drives expands internal storage capacity up to 2 TB.

### Market Opportunities

Enhancements to IP based digital video sources have made that technology a desirable alternative to the traditional analog camera. Many real world video surveillance applications now require both types of video sources to create comprehensive cost effective system. Applications include educational, municipal and corporate campus environments, large retail with IDM integration and hotels or resorts. When the need is for a hybrid digital recording solution the answer is the Fusion III DVR.

### Features:

#### Hardware

- Analog and IP recording up to 32 channels
- Global recording rates from 120/100 to 480/400 at CIF resolution (NTSC/PAL)
- Recording resolutions up to 720 x 480 (4CIF)
- Local live viewing on the real-time display models
- Available with 8, 16 & 32 looping video inputs
- Internal storage capacity from 250 GB - 2 TB
- External storage options from 1 TB to 40 TB
- 16 Sensor inputs and 16 Control outputs
- Optional multiplexed or switched Spot Outputs
- 16 channels of audio standard on select models
- 10/100 Network standard with 1 GB option
- Keyboard control of camera selection and PTZ control
- Windows XP® Embedded operating system

#### Software

- 100% compatible with all previous Fusion series
- User software included with each DVR
  - Fusion III Server Software** - Local User Interface
  - HFRVS Remote Software** - Connect to a single DVR
  - HFVMS Remote Management Software** - Connect to multiple DVRs
- Complete local and remote configuration
- New search-in-live mode feature
- Smart, preview and index searches
- Remote notification of alarm event and health check
- Integrated POS/ATM with Honeywell's IDM software
- Access Control integration to Honeywell's Pro-Watch® and WIN-PAK®
- Powerful API available for 3rd party software integration



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### FEATURES

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

- Server Unit; 8, 16 or 32 channel models with global recording rates of 120/100 through 480/400 and the powerful Fusion III Server Software
- HFRVS, Fusion Remote View Software; allows remote connections to a single Fusion DVR
- HFVMS, Fusion Video Management Software; allows remote operation, configuration and management of multiple Fusion DVRs

The powerful combination of Fusion III Server, the feature rich HFRVS and HFVMS user software suites creates a hybrid digital video recording solution that distinguishes Fusion III DVR Series from the competition.

#### **Fusion Server Software**

(Included with every DVR)

- Complete local configuration and administration
- High resolution rates - Fusion is able to record up to 720 x 480 and has an image capture rate of up to 480 ips.
- Instant access to information through advanced index searching capabilities and motion-based object search functionalities
- 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 III Server Software gives users the option of POS integration.
- Remote notification of alarm events
- Multiple types of searching capabilities, including not only Preview Search, but also Smart Search and Index Search
- Supports 5 simultaneous remote connections via HFVMS and HFRVS

#### **HFRVS Remote View Software**

(Included with every DVR)

- Looks and functions in the same manner as the Fusion Server Software
- Remotely connect to a single Fusion DVR
- Remotely search and export video from the Fusion DVR
- Control PTZ cameras that are connected to the Fusion DVR
- Microsoft Windows® 2000 and XP® compatible
- Remotely setup cameras, schedules, sensors, audio and network functions via the HFRVS Remote Software

#### **HFVMS Video Management Software**

(Single workstation license now included with every DVR)

\*additional licenses can also be ordered separately

- Complete remote configuration and administration
- Remotely monitor video, audio and alarms
- Access and export recorded video
- Create infinite customized user accounts
- Create remote backup schedules
- Create custom live camera views
- Configure Fusion DVRs remotely
- Perform remote DVR software upgrades
- Connect to multiple Fusion DVRs all at one time.
- Microsoft Windows® 2000 and XP® compatible
- Maps feature allows importing of .dxf, .jpg, .wmf and other formats
- Control cameras with advanced PTZ features
- POS Search Capabilities
- Live audio
- TCP/IP based

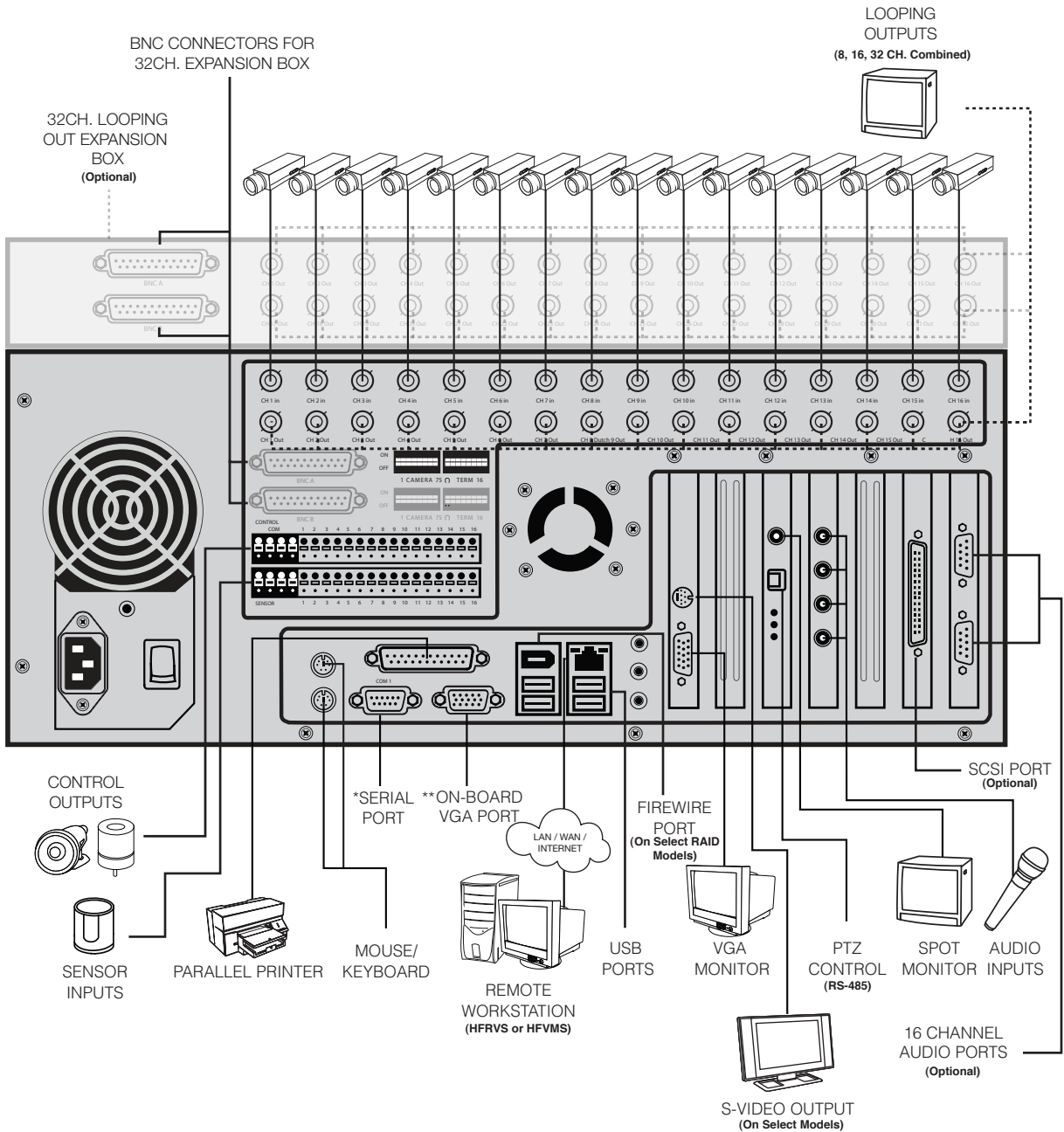
#### **HFRVS and HFVMS Central Station Software** (Minimum Workstation Requirements)

- Pentium IV 2.0 GHz+ (or Equivalent)
- 256 MB System Memory
- DirectX 8 or Higher
- AGP 128 MB Video Card
- Internet or LAN Connection
- TCP/IP Installed
- Microsoft Windows® 2000 or XP® Compatible System
- 1280 x 1024 Optimal Display Resolution
- 16 Bit Color Depth

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### SYSTEM DIAGRAM



#### SYSTEM DIAGRAM NOTES

\*Serial Port 1:

DB9 (M) RS-232 only; used for data input, Point of Sale or PTZ control with an additional code conversion device

\*\*On-Board VGA Port:

Used only with 16 Channel 120/100 PPS & 16 Channel 120/100 PPS Real Time (No VGA Card Used with listed models)

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### SPECIFICATIONS

<b>Fusion Specifications (480 ips)</b>	480 - 32 Ch.	480 - 16 Ch.
Cameras	32	16
Looping Outputs	32	16
Sensors	16	16
Control Outputs	16	16
Display - Live(L) or Recorded(R)	L	L
Frame Setup - Individual(I) or Global(G)	I	I
Resolution - Individual(I) or Global(G)	I	I
Resolution - 720 x 480 (720) or 640 x 480 (640)	720	720
Resolution - 720 x 240 (720) or 640 x 240 (640)	720	720
Resolution - 360 x 240 (360) or 320 x 240 (320)	360	360
Audio - Line In	8	16
Spot Monitor - Multi-Screen Controllable(M)/Switched(S)	M	M
Intensive Record - Selectable(S) or Max(M)	S	S
USB 2.0 Ports	6	6

<b>Fusion Specifications (240 ips)</b>	240 - 32 Ch.	240 - 16 Ch.	240 - 8 Ch.
Cameras	32	16	8
Looping Outputs	32	16	8
Sensors	16	16	8
Control Outputs	16	16	8
Display - Live(L) or Recorded(R)	L	L	L
Frame Setup - Individual(I) or Global(G)	I	I	I
Resolution - Individual(I) or Global(G)	I	I	I
Resolution - 720 x 480 (720) or 640 x 480 (640)	720	720	720
Resolution - 720 x 240 (720) or 640 x 240 (640)	720	720	720
Resolution - 360 x 240 (360) or 320 x 240 (320)	360	360	360
Audio - Line In	8	4	4
Spot Monitor - Multi-Screen Controllable(M)/Switched(S)	M	M	M
Intensive Record - Selectable(S) or Max(M)	S	S	S
USB 2.0 Ports	6	6	6

<b>Fusion Specifications (120 ips)</b>	120 - 16 Ch.	120R - 16 Ch.
Cameras	16	16
Looping Outputs	16	16
Sensors	16	16
Control Outputs	4	16
Display - Live(L) or Recorded(R)	R	L
Frame Setup - Individual(I) or Global(G)	G	I
Resolution - Individual(I) or Global(G)	G	G
Resolution - 720 x 480 (720) or 640 x 480 (640)	640	720
Resolution - 720 x 240 (720) or 640 x 240 (640)	640	720
Resolution - 360 x 240 (360) or 320 x 240 (320)	320	360
Audio - Line In	2	4
Spot Monitor - Multi-Screen Controllable(M)/Switched(S)	S	M
Intensive Record - Selectable(S) or Max(M)	M	M
USB 2.0 Ports	6	6

\*Note: Frame Rate ÷ # of inputs = max frame rate per camera

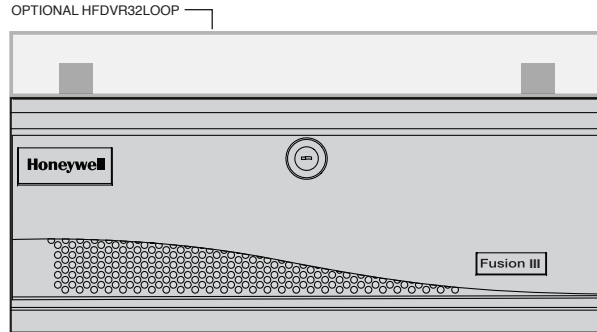
<b>Fusion III Server</b>	
Remote Sessions	Maximum of 5
Video Standard	NTSC:720 x 480 max.; PAL: 720 x 576 max.
Image Compression	Proprietary
3~4 Kbytes Per Frame	(360 x 240)
Record/Viewing	Up to 480/400 ips
Internal Storage Media	250 GB to 2 TB
<b>Video Inputs</b>	
Composite	Analog input: BNC 1.0 - Vp-p @ 75 Ohms
IP	MPEG-4/MJPEG stream from network
<b>Video Outputs</b>	
Composite	RCA connector 1.0 - Vp-p @ 75 Ohms
SVGA	15 pin D-type port for a PC monitor connection
<b>Electrical</b>	
Input Voltage	115 - 230 VAC, 50 - 60 Hz 10/7A
Operating Voltage	115V/230V Auto sensing
Power Consumption	465 W
<b>Mechanical</b>	
Dimensions	7" x 17.3" x 21.75" 180 mm x 440 mm x 552 mm
Weight	Unit: 64 lbs (29kg) Shipping: 64 (29kg) lb to 84 lb (38kg)
Construction	Housing: Steel Chassis
Finish	Housing: Black Matte Paint
<b>Environmental</b>	
Temperature	Operating: 40°F to 105°F (5°C to 40°C) Storage: 14°F to 150°F (-10°C to 65°C)
Relative Humidity	Operating: 0% - 90% non-condensing
<b>Regulatory</b>	
Emissions	FCC Part 15, Subpart B. Class A. EN55022 + A1:1995 and A2:1997 EN61000-3-3 EN61000-3-2
Immunity	EN 55024:1998 + A1:2001 and A2:2003.
Safety U.S. and Canada International	UL, cUL Listed; UL 60950-1:2003; IEC/EN 60950-1:2001 CB report and certificate
<b>Recording Archive</b>	
On Board Device	CD/RW
Optional	DVD +R/-R, dual layer compatible
<b>Base System</b>	
Includes	HFRVS and HFVMS Software, Keyboard, Mouse, Rack Mounts and CD-RW, Audio In, Network Connectivity, Printer Port, USB Ports, Keyboard and Mouse PS2 Ports, RS485/232 Ports

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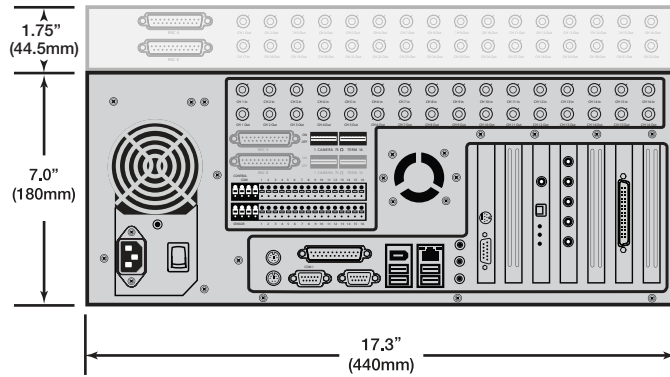
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### SYSTEM DIMENSIONS

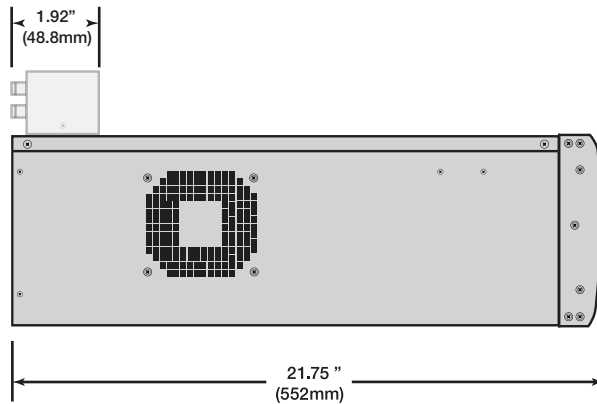
Front View



Back View

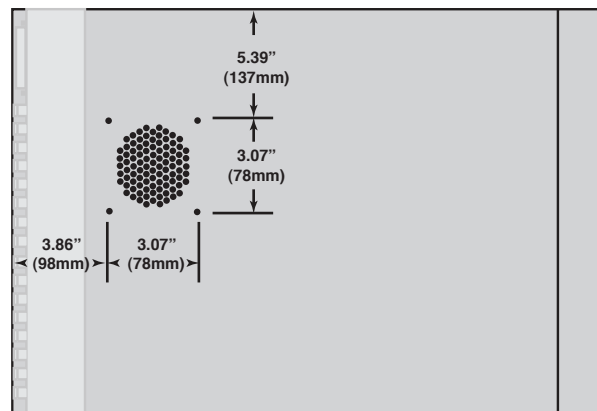


Side View



Top View

Keep Clear  
(CPU EXHAUST FAN)



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## ACCESSORIES AND ORDERING

Factory Installed Accessories	
HF3HWUPGCPU	Fusion III Hardware Performance Package Dual Core CPU & 512 MB Memory
HF3MEM512	512 MB Memory Upgrade
HF3R5	Fusion III Internal RAID5 Configuration
HFDVRR1	Internal RAID-1 Controller
HFDVRSCSI	SCSI Interface Card, HD 68 Ultrawide
HFDVRDVDRW	DVD Burner
HF3GBNIC	Gigabit Ethernet Upgrade MB Port
HFDVRGBNIC	Gigabit Network Interface , Adds 2nd Ethernet Port
HFDVR4VOUT	4 CH Analog TV Output Card
HF34VOUTM	4 CH Multiplexed Analog TV Output Card
HFDVR16AUDIO	16 CH Audio Input Card
External Storage Accessories	
HFDVREXT1T	External storage 1 TB – includes SCSI adapter
HFDVREXT2T	External storage 2 TB – includes SCSI adapter
HFDVREXTR4T	External Raid, 4 TB – requires separate SCSI adapter
HFDVREXTR5T	External Raid, 5 TB – requires separate SCSI adapter
HFDVREXTR8T	External Raid, 8 TB – requires separate SCSI adapter

Field Installed Accessories	
HFDVR32LOOP	32 Channel Looping Expansion Box
HF3HD250	Fusion III 250 GB Upgrade Kit
HF3HD500	Fusion III 500 GB Upgrade Kit
HFDVRUSBM	USB Powered Modem
Software Part Numbers	
HFRVS	Fusion Remote View Software
HFVMS	Fusion Video Management Software
HFVMSR	Fusion to Rapid Eye Remote Software
HF3LICDATA	1 CH Fusion Alarm Panel or POS Data License
Hybrid Software Licenses	
HF3LICHYB4	Converts 4 Analog Channels to NVR
HF3LICHYB16	Converts 16 Analog Channels to NVR
NVR Software Licenses	
HF3LICNVR1	Adds 1CH of NVR to Fusion III
HF3LICNVR4	Adds 4CH of NVR to Fusion III
HF3LICNVR8	Adds 8CH of NVR to Fusion III
HF3LICNVR16	Adds 16CH of NVR to Fusion III
Other Recommended Accessories	
HF4CHSTRM	4CH MPEG4 Fusion Streamer
HD6 SERIES	High Speed PTZ Dome Systems

Ordering											
<p><b>HOW TO ORDER</b></p> <p>HF 32 48R 250 N</p>											
<p><b>Accessories</b>  <b>N</b> = No Accessories  <b>A</b> = Signifies Factory Installed Accessories</p>	<p>Example:  <b>HF3248R250N</b> =  <b>32 Channel / 480 ips RTD</b>  <b>250 GB Storage / No Accessories</b></p>										
<p><b>Number of Channels</b>  <b>8</b> = 8 Channels  <b>16</b> = 16 Channels  <b>32</b> = 32 Channels</p>	<p><b>Internal Storage</b>  <b>250</b> = 250 GB Storage  <b>500</b> = 500 GB Storage  <b>750</b> = 750 GB Storage  <b>1T0</b> = 1 TB Storage  <b>1T5</b> = 1.5 TB Storage  <b>2T0</b> = 2 TB Storage</p>										
<p><b>Model Number</b>  <b>HF</b> = Honeywell Fusion DVR</p>	<p><b>Capture Rating</b></p> <table border="0"> <tr> <td><b>NTSC</b></td> <td><b>PAL</b></td> </tr> <tr> <td><b>120</b> = 120 ips</td> <td><b>100</b> = 100 ips</td> </tr> <tr> <td><b>12R</b> = 120 ips RTD</td> <td><b>10R</b> = 100 ips RTD</td> </tr> <tr> <td><b>24R</b> = 240 ips RTD</td> <td><b>20R</b> = 200 ips RTD</td> </tr> <tr> <td><b>48R</b> = 480 ips RTD</td> <td><b>40R</b> = 400 ips RTD</td> </tr> </table>	<b>NTSC</b>	<b>PAL</b>	<b>120</b> = 120 ips	<b>100</b> = 100 ips	<b>12R</b> = 120 ips RTD	<b>10R</b> = 100 ips RTD	<b>24R</b> = 240 ips RTD	<b>20R</b> = 200 ips RTD	<b>48R</b> = 480 ips RTD	<b>40R</b> = 400 ips RTD
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\*RTD = Realtime Display

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

### Honeywell Security

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