

## Fusion IV DVR Series

### BRIDGING THE GAP BETWEEN ANALOG AND IP

The Fusion IV hybrid DVR Series sets a new standard for recording. Expanding beyond the analog DVR role, Fusion IV 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 of analog or IP video sources, up to 16 channels of audio, and POS/ATM text data.

Benefits of the system include significantly expanded support for digital video sources; including IP cameras, network encoders and megapixel cameras. Fusion IV offers up to 32 channels of hybrid (analog and/or IP) camera support. H.264 implementation provides superior video quality with small file sizes for improved performance across a network. Furthermore, H.264 is now a standard compression option for all cameras recorded on the DVR.

The Fusion IV hardware enhancements ensure efficient multi-tasking of simultaneous operations including network cameras, megapixel cameras, point-of-sale, video analytics and more. Dual video ports have also been added. Relying on the Windows® XP embedded operating system, the Fusion IV provides network security and firewall protection, while eliminating the need to format DVDs before backup. The front panel provides easy access to the standard DVD-RW drive, dual USB 2.0 ports and the four field-replaceable hard drives.

### Market Opportunities

Global market adoption of IP and megapixel camera technologies drive the need for new surveillance capabilities offered by the Fusion IV DVR. Supporting both analog and IP cameras, Fusion IV is ideal for systems requiring transition to IP to maximize the cost-savings benefits associated with IP networking. Additional benefits are realized for systems adding new capabilities such as unparalleled image clarity using megapixel cameras. Applications include educational, municipal and corporate campus environments, large retail with IDM (Integrated Data Manager) point-of-sale integration, and hotels or resorts. When the need is for a hybrid digital recording solution, the answer is the Fusion IV DVR.



### Features:

#### Hardware

- Analog and IP recording up to 32 channels
- Global recording rates for 120/100 to 480/400 at CIF resolution (NTSC/PAL)
- Recording resolutions up to 720 × 480 (D1)
- VGA and DVI-D ports for local video viewing
- Available with 8, 16 and 32 looping video inputs
- Internal storage capacity from 500 GB to 8 TB
- External storage options from 5 TB to 32 TB
- 16 sensor inputs and 16 control outputs
- Optional multiplexed or switched spot outputs
- 16 channels of audio standard on select models
- 10/100/1000 gigabit network standard
- Keyboard control of camera selection and PTZ control
- Windows® XP embedded operating system

#### Software

- Hybrid operation for analog/IP camera mix based on DVR model - 8/16/32 channel video input
- User software included with each DVR:
  - **Fusion Server Software** - Local user interface
  - **HFRVS Remote Software** - Connect to a single DVR
  - **HFVMS Remote Management Software** - Connect to multiple DVRs
- Dynamic DNS support
- Microsoft® Active Directory integration
- Smart Motion, Preview and Index Searches
- Integrated camera discovery protocol
- Integrated POS/ATM/access control with WIN-PAK® and IDM
- Powerful API available for third party software integration
- Analytics support, up to 4 video channels

## Fusion IV DVR Series

### FEATURES

Fusion IV consists of three major components 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 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 Server, the feature rich HFRVS and HFVMS user software suites creates a hybrid digital recording solution that differentiates the Fusion IV 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 Server Software gives users the option of POS integration.
- Remote notification of alarm events and health check.
- Multiple types of searching capabilities including Preview Search, Smart Motion Search and Index Search.
- Supports five simultaneous 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.
- Live audio.
- Remotely search and export video from the Fusion DVR.
- Control PTZ cameras connected to the Fusion DVR.
- Microsoft Windows XP® and Vista® compatible.
- Remotely set up cameras, schedules, sensors, audio, and network functions video the HFRVS Remote Software.

#### HFVMS Video

#### Management Software

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

- Complete local 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 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.

#### 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 color depth

##### Recommended\*:

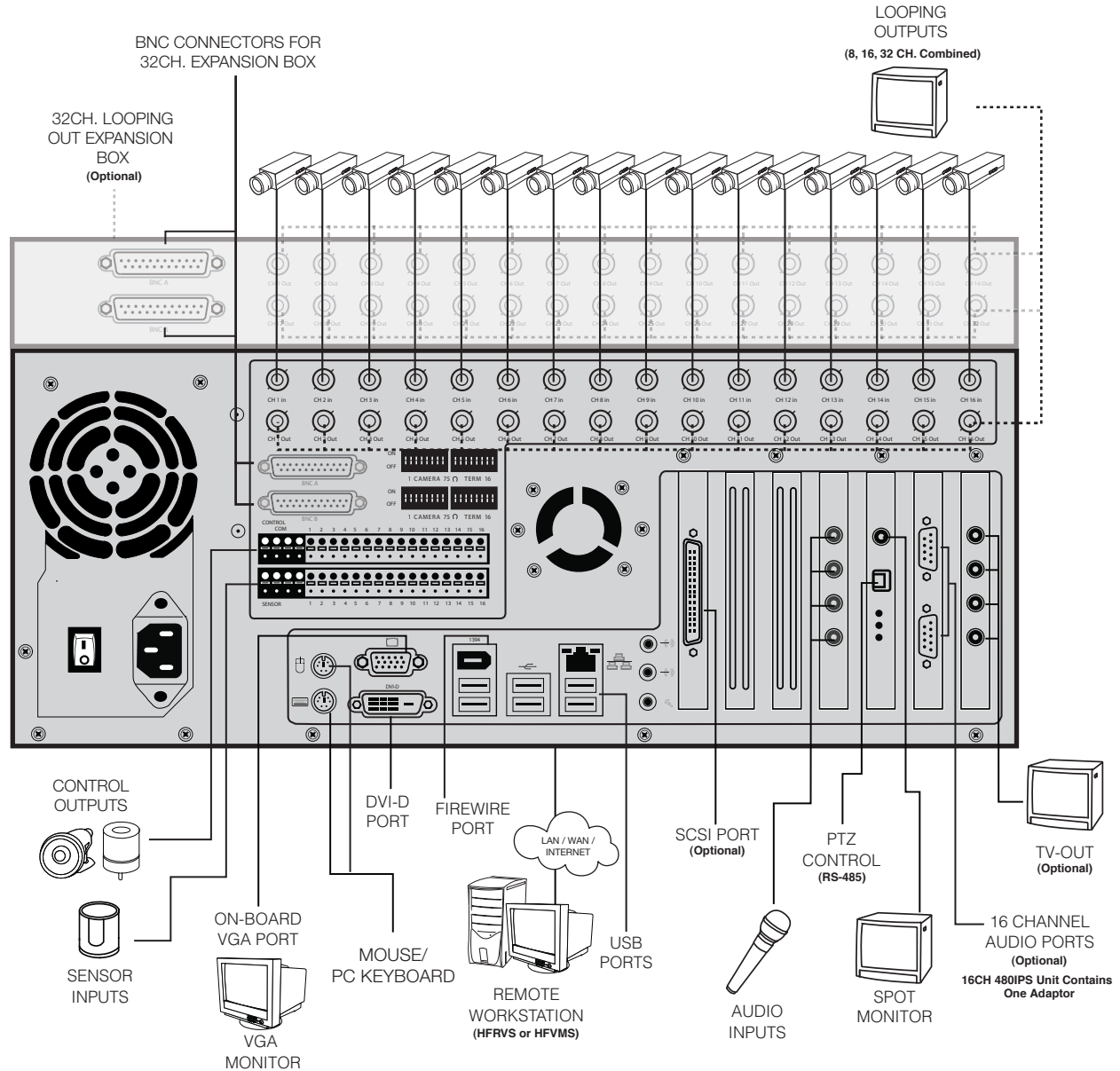
- Intel Core 2 Quad – Q8200 (or equivalent)
- 2 GB system memory
- DirectX 9 or higher
- Nvidia 8600 video card (or equivalent)
- 256k network connection
- TCP/IP installed
- Microsoft Windows XP® or Vista
- 1280 x 1024 optimal display resolution
- 32-bit color depth

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

## Fusion IV DVR Series

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### SYSTEM DIAGRAM



## Fusion IV DVR Series

### SPECIFICATIONS

Fusion IV Unit		
Remote Sessions	Maximum of 5 simultaneous	
Web Sessions	Maximum of 50	
Video Standard	NTSC: 720 × 480 max; PAL: 720 × 576 max	
Image Compression	User selectable per camera (H.264, MPEG, MJPEG)	
3~4 Kbytes Per Frame (analog)	360 × 240	
Record/Viewing	(analog)	Up to 480 ips
	(network video)	Dependent on camera
Internal Storage Media	500 GB to 8 TB	
Video Inputs		
Composite	Analog Input: BNC 1.0 - Vp-p @75 Ohms	
IP	MPEG-4 / MJPEG / H.264 stream from network	
Video Outputs		
Composite	RCA connector 1.0 - Vp-p @ 75 Ohms	
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	

	480 - 32 Ch.	480 - 16 Ch.	
Fusion Specifications (480 ips)			
Cameras	32	16	
Looping Outputs	32	16	
Sensors	16	16	
Control Outputs	16	16	
IP Cameras (max)	8	8	
	Performance Package	32	16
	Performance Package & NVR Upgrade	32	32
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 × 480 (720) or 640 × 480 (640)	720	720	
Resolution - 720 × 240 (720) or 640 × 240 (640)	720	720	
Resolution - 360 × 240 (360) or 320 × 240 (320)	360	360	
Audio - Line In	8	16	
Spot Monitor - Multi-Screen Controllable/Switched	M	M	
Intensive Record - Selectable (S) or Max (M)	S	S	
USB 2.0 Ports	8	8	

	240 - 32 Ch.	240 - 16 Ch.	240 - 8 Ch.
Fusion Specifications (240 ips)			
Cameras	32	16	8
Looping Outputs	32	16	8
Sensors	16	16	8
Control Outputs	16	16	8
IP Cameras (max)	8	8	8
	Performance Package	16	16
	Performance Package & NVR Upgrade	32	32
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 × 480 (720) or 640 × 480 (640)	720	720	720
Resolution - 720 × 240 (720) or 640 × 240 (640)	720	720	720
Resolution - 360 × 240 (360) or 320 × 240 (320)	360	360	360
Audio - Line In	8	4	4
Spot Monitor - Multi-Screen Controllable/Switched	M	M	M
Intensive Record - Selectable (S) or Max (M)	S	S	S
USB 2.0 Ports	8	8	8

Fusion Specifications (120 ips)		120 - 16 Ch.
Cameras		16
Looping Outputs		16
Sensors		16
Control Outputs		16
IP Cameras (max)		8
	Performance Package	16
	Performance Package & NVR Upgrade	32
Display - Live (L) or Recorded (R)		L
Frame Setup - Individual (I) or Global (G)		I
Resolution - Individual (I) or Global (G)		I
Resolution - 720 × 480 (720) or 640 × 480 (640)		720
Resolution - 720 × 240 (720) or 640 × 240 (640)		720
Resolution - 360 × 240 (360) or 320 × 240 (320)		360
Audio - Line In		4
Spot Monitor - Multi-Screen Controllable/Switched		M
Intensive Record - Selectable (S) or Max (M)		S
USB 2.0 Ports		8

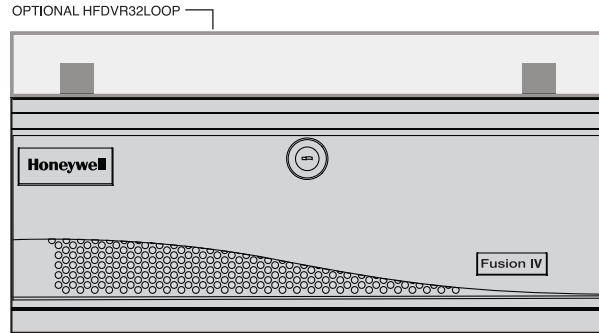
**Note** Frame Rate ÷ number of inputs = max frame rate per camera

Electrical	
Input Voltage	115 - 230 VAC, 50 - 60 Hz 10/7A
Operating Voltage	115V/230V Auto Sensing
Power Consumption	Up to 465 W
Mechanical	
Dimensions	7" × 17.3" × 21.75" 180 mm × 440 mm × 552 mm
Weight	Unit: 64 lbs (29 kg) Shipping: 64 lbs (29 kg) to 84 lbs (38 kg)
Construction	Housing: Steel Chassis
Finish	Housing: Black Matte Paint
Environmental	
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% to 90% non-condensing
Regulatory	
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
Recording Archive	
On Board Device	DVD-RW, USB
Network	LAN, WAN
Base System	
Includes	HFRVS & HFVMS Software, Keyboard, Mouse, Rack Mounts, DVD-RW, Audio In, Network Connectivity, Web Access, USB Port, Keyboard and Mouse PS2 Ports, and RS-485/232 Ports.

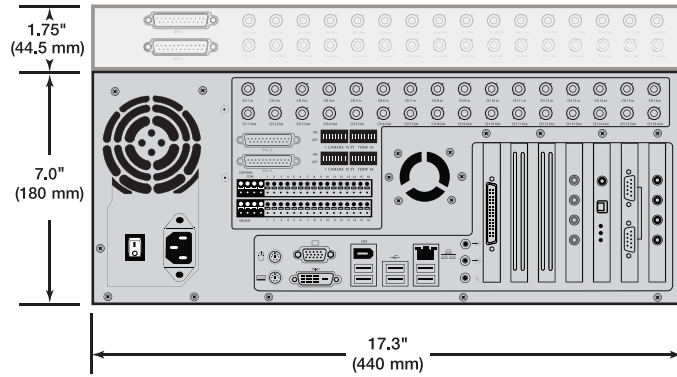
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### SYSTEM DIMENSIONS

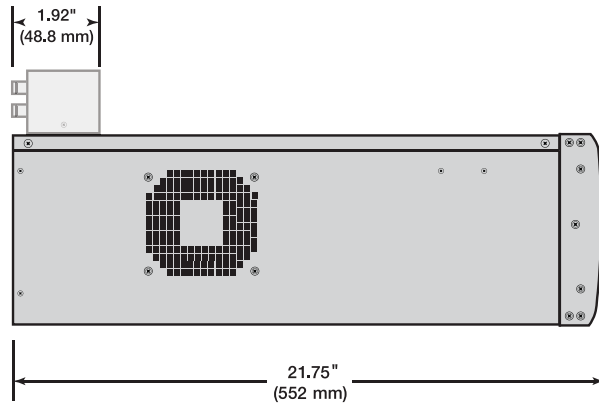
Front View



Back View

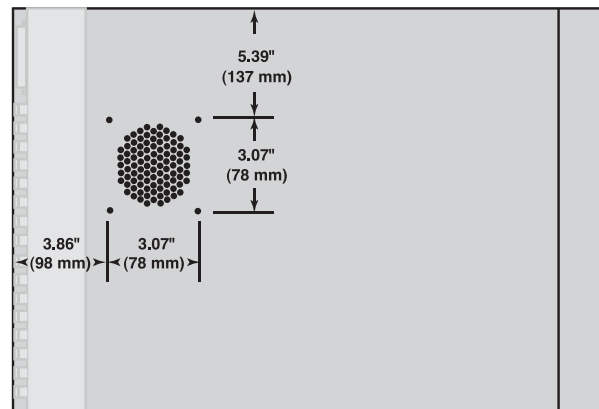


Side View



Top View

Keep Clear  
(CPU EXHAUST FAN)

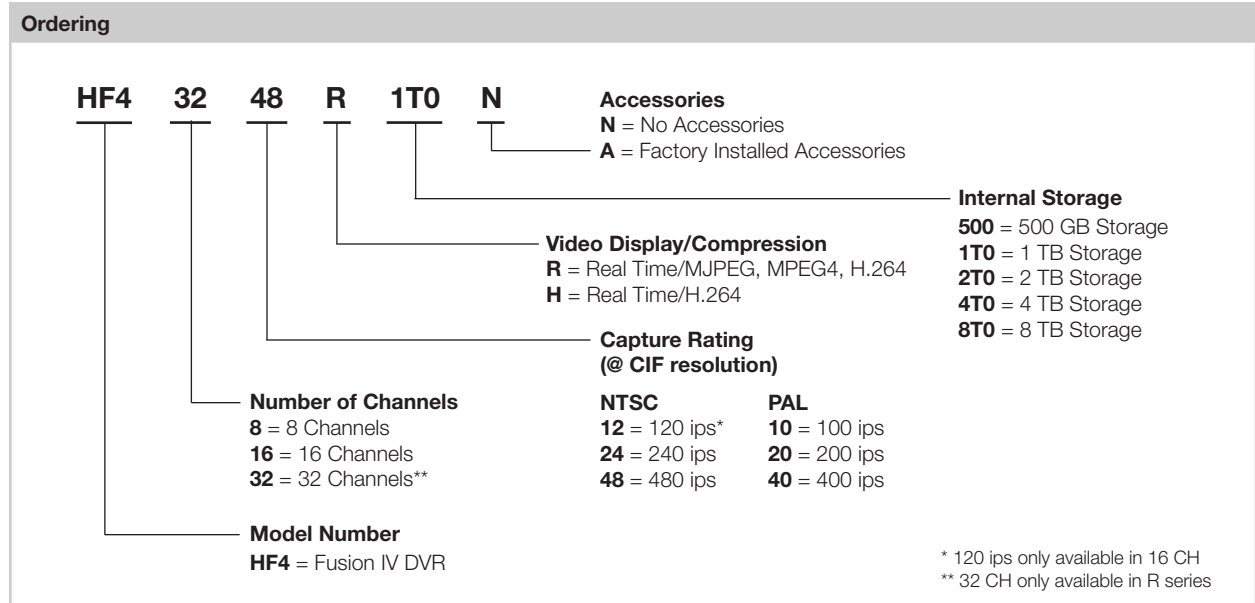


# Fusion IV DVR Series

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## ACCESSORIES AND ORDERING

Factory Installed Accessories		Field Installed Accessories	
HF4HWUPGCPU	Fusion IV Hardware Performance Package CPU & Memory Factory Upgrade	HF4HWUPGCPUF	Fusion IV Hardware Performance Package CPU & Memory Field Upgrade
HF4R5	Fusion IV Internal RAID 5 Configuration	HF4R5	Fusion IV Internal RAID 5 Configuration
HFDVRSCSI	SCSI Interface Card — for external storage	HF4R5	Fusion IV Internal RAID 5 Configuration
HFDVRGBNIC	Gigabit Network Interface — adds 2nd Ethernet Port	HF4R5	Fusion IV Internal RAID 5 Configuration
HFDVR4VOUT	4 CH Analog TV Output Card	HF4R5	Fusion IV Internal RAID 5 Configuration
HF4VOUTM	4 CH Multiplexed Analog TV Output Card	HF4R5	Fusion IV Internal RAID 5 Configuration
HFDVR16AUDIO	16 CH Audio Input Card	HF4R5	Fusion IV Internal RAID 5 Configuration
<b>External Storage Accessories</b>		<b>Software Part Numbers</b>	
HFDVREXT8T	External storage 8 TB — includes SCSI adapter	HFRVS	Fusion Remote View Software
HFDVREXR5T	External RAID 5 TB — requires separate SCSI adapter (HFDVRSCSI)	HFVMS	Fusion Video Management Software
HFDVREXR8T	External RAID 8 TB — requires separate SCSI adapter (HFDVRSCSI)	HFVMSR	Fusion to Rapid Eye Remote Software
HFDVREXR16T	External RAID 16 TB — requires separate SCSI adapter (HFDVRSCSI)	HFVMSR	Fusion to Rapid Eye Remote Software
		HFVMSR	Fusion to HRDP Remote Software
		HFLICDATA	1 CH Fusion Alarm Panel for POS Data License
		<b>NVR Software Licenses</b>	
		HFLICNVR1	Adds 1 CH of NVR to Fusion IV
		HFLICNVR4	Adds 4 CH of NVR to Fusion IV
		HFLICNVR8	Adds 8 CH of NVR to Fusion IV
		HFLICNVR16	Adds 16 CH of NVR to Fusion IV
		<b>Other Recommended Accessories</b>	
		Analog and IP cameras, ACUIX PTZ, Megapixel	See Honeywell's full line of indoor and outdoor cameras, housings, lenses and infrared illuminators
		HZJTP	PTZ camera and DVR controller



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

### Honeywell Security Group

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