



## DHC Series

H.264/SVC Next Generation PC Based Commercial Hybrid DVR/NVR

The DHC series PC-based digital video recorder is the latest from the Aventura laboratories, utilizing the most advanced technology in video/audio encoding/decoding, hard disk record and TCP/IP.

### Physical description

- Max 64 video in (NTSC/PAL)
- Max 64 audio in (linear in)
- 2 Channel matrix output
- IP camera support (up to 32)
- 1 line in (for voice talk)
- 2 10/100/1000 ethernet
- 6 HDD max 1.5 TB each (9 TB total)
- 8 or 16 sensor in (optional internal/external)
- 8 alarm out (optional internal/external)
- 1 RS-485 port for keyboard, 1 RS-485 port for PTZ control
- 1 RS-232 port
- 6 USB ports
- 2 DVI
- 4U 19" rackmount case

### Function:

Aventura's PC-based digital video recorder adopts a high performance Windows XP Professional real-time multi-tasking operating system with hyperthreading CPU, to perfectly implement all the functions needed to build a surveillance system.

### Compression Function:

- Support maximum 64 channels video in. Each channel can be compressed independently in 30FPS (NTSC) / 25FPS (PAL) using H.264 algorithm. Both variable bit-rate and variable frame rate are supported
- Support max 64 channels audio in. Each channel can be compressed independently, using OggVorbis audio standard. The output bit-rate is 16 kbps
- The output video and audio streams are integrated to generate the synchronized H.264 stream. Video and audio coincide with each other from beginning to end when the stream is played back
- Supports following resolution:  
NTSC: 4CIF (704x480), DCIF(528x320), CIF(352x240)  
PAL: 4CIF (704x576), DCIF(528x384), CIF(352x288)
- Supports multi-zone motion detection
- Supports position configurable OSD and Logo. Supports watermark

### Network Functions:

- Supports TCP/IP (ARP, RARP, IP, ODP, TCP, PPP, PPPoE, DHCP, SNMP, etc)
- Supports broadband transmission (ADSL, etc)
- Supports narrow-band transmission (PSTN, etc)
- Remote viewing of one or more channels
- DVR's parameters can be set through the network
- Supports remote control of PTZ
- Streams can be recorded in a remote host PC
- Files in DVR can be downloaded to or remotely played in a remote host PC
- Supports DVR remote upgrading
- PC hosts can gain direct control of DVR's RS-232 or RS-485 port
- Supports voice talk between host in surveillance center (back end) and Net DVR (front end)



- Real-time display & record
- Up to 64 channels of audio & video
- 2 Channel matrix output
- Supports up to 6 hard drives
- Resolution: 4CIF, DCIF, CIF
- IP camera support (up to 32)

### MODELS

Part Number	Description
DHC-04	H.264/SVC hybrid DVR/NVR, 4 analog video, 4 audio, 4 IP with 750 GB HDD, DVD Burner
DHC-08	H.264/SVC hybrid DVR/NVR, 8 analog video, 8 audio, 8 IP with 1 TB HDD, DVD Burner
DHC-12	H.264/SVC hybrid DVR/NVR, 12 analog video, 12 audio, 12 IP with 1.5 TB HDD, DVD Burner
DHC-16	H.264/SVC hybrid DVR/NVR, 16 analog video, 16 audio, 16 IP with 2 TB HDD, DVD Burner
DHC-20	H.264/SVC hybrid DVR/NVR, 20 analog video, 20 audio, 20 IP with 2.25 TB HDD, DVD Burner
DHC-24	H.264/SVC hybrid DVR/NVR, 24 analog video, 24 audio, 24 IP with 2.5 TB HDD, DVD Burner
DHC-32	H.264/SVC hybrid DVR/NVR, 32 analog video, 32 audio, 32 IP with 3 TB HDD, DVD Burner
DHC-40	H.264/SVC hybrid DVR/NVR, 40 analog video, 40 audio, 32 IP with 3 TB HDD, DVD Burner
DHC-48	H.264/SVC hybrid DVR/NVR, 48 analog video, 48 audio, 32 IP with 3 TB HDD, DVD Burner
DHC-56	H.264/SVC hybrid DVR/NVR, 56 analog video, 56 audio, 32 IP with 3 TB HDD, DVD Burner
DHC-64	H.264/SVC hybrid DVR/NVR, 64 analog video, 64 audio, 32 IP with 3 TB HDD, DVD Burner



- Supports embedded web server. Browser can be used to access Net DVR

**Storage Functions:**

- Supports 6 kinds of record trigger mode: Schedule mode, motion detection
- Continuous recording during playback
- Can install 6 HDDs and standard system and can be configured with external HDD boxes and RAID array
- Supports cyclic and non-cyclic record mode
- Supports network access storage (NAS)
- Supports USB flash disk, USB hard disk, USB DVDRW/CDRW for backup

**Preview & Playback Functions:**

- Supports 2 DVI Monitors
- Supports PDA live viewing (Windows Mobile 5/6, iPhone, BlackBerry)
- Switches quickly to preview mode
- Supports partial zone masking
- Supports local file playback and time/date playback, supports fast forward, rewind, slow motion, pause, play frame by frame, etc.
- Supports OSD, Logo

**PTZ control:**

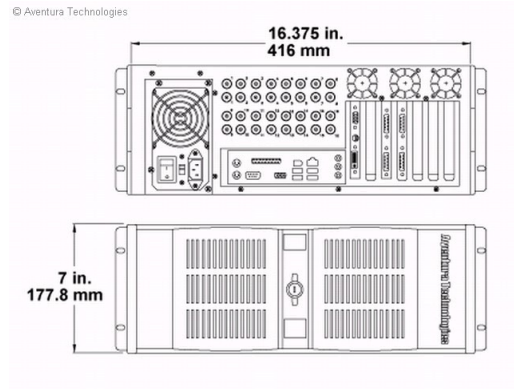
- Supports Pan-Tilt-Zoom control and preset through software/firmware
- Supports most popular PTZ protocols
- Ability to customize new PTZ protocols

**Alarm Functions:**

- Supports Motion detection alarm, sensor alarm, video loss alarm, exception alarm, etc.
- Supports setup of alarm related with PTZ preset

**Others:**

- Support RS-485 interface keyboard
- User-friendly interface
- Multi-level user priority
- Hybrid IP Support
- SDK and DEMO software source code can be provided to reduce application development time.



## SPECIFICATIONS

### System

Motherboard & Chipset	Intel Q35 chipset
CPU	Intel Core 2 Duo 3.0 GHz E8400 Socket 775 (6 MB Cache)
RAM	2 GB DDR2 800
Storage	Up to 9 TB SATA (expandable) RAID configuration optional
Hot Swappable	Optional
Video Display	ATI Radeon HD3650 (512 MB PCI Express 2.0 x16)
OS	Windows XP Professional
Video Compression	H.264 Advanced Video Compression (SVC)
Audio Compression	OggVorbis 16 Kbps
Chassis Type	4U Rackmount (Optional 6U)
Storage Media	DVD-RW (20x)
Mouse	Optical USB
Keyboard	106-Key USB
LAN	Redundant 10/100/1000 Base T Ethernet
Backup Storage	(Optional) DAT- Supports IDE, SCSI, NAS, DDS3/4, RAID
Encoder	PCI Hardware
Decoder	PCI Hardware
Video Inputs	1~64 BNC (1.0Vp-p 75 $\Omega$ ) Resistance 75 $\Omega$ (NTSC/PAL)
Video Outputs	2 BNC (1.0Vp-p 75 $\Omega$ ) Resistance 75 $\Omega$ (NTSC/PAL) (Optional up to 16)
Audio Inputs	1~64 BNC (1.0Vp-p 75 $\Omega$ ) Linear Level 600 $\Omega$

### Hardware

Size	4U Chassis: 17" x 18" (20" w/ handle) x 7"
Weight	50 lb
Power Supply	500 W, 90-264 V(47 Hz-65 Hz)
Power	110/220 VAC, 60/50 Hz (non condensing) at 40°C
Operating Temperature	25°F ~ 110°F
Power Management	Programmable Auto-Reboot in Case of Power Loss
UPS	External UPS (Optional)

### Monitoring

Interface	Web Graphical User Interface
Display Rate	Real-Time All Channels Simultaneous (30 FPS/NTSC 25 FPS/PAL)
Display Resolution	4CIF (704 x 480)
Disconnection Detection	Watchdog Function
POS Terminal Display	Video Text Inserter (Optional)
PTZ Control	PTZ GUI Interface (RS-232/422 Interface)

### Recording

Time Stamp	Image Embedded With Date/Time Information
Recording Resolution	NTSC: 4CIF (704x480), DCIF(528x320), CIF(352x240) PAL: 4CIF (704x576), DCIF(528x384), CIF(352x288)
Record Rate	30 FPS/NTSC 25 FPS/PAL (All Channels Simultaneous)
Mode	Watch, Normal, Motion Detection, Sensor, Pre-Post Alarm/Scheduled Multi-Channel

### Playback

Search Mode	By Channel, Date and Time, Motion Detection, Sensor Events
Playback Mode	Play, Pause, Frame by Frame, 1 - 2048 Times Fast Forward/Rewind, Scrub Bar
Image Adjustment	Brightness, Contrast, Saturation, Hue, Zooming

### Alarm

Alarm Output	Email with Screen Shot
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### Authentication

Encrypted Watermark	AES/MD5 (Court Admissible)
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### Remote

Monitoring	Full Remote Control PSTN, ISDN, ADSL, LAN and TCP/IP
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### Standard

Safety Standards	EN60950, UL1459
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### Approvals

EMC Standards	EN55022 Class-B, EN50082-1
FCC	Part 15 Class-B, VCCI Class-2

### WARRANTY

4 Years	
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