



# DHE-CIF

H.264/SVC Next Generation Embedded Standard DVR

Aventura's standalone DVRs utilize the most advanced H.264 technology in video/audio encoding/decoding, recording and TCP/IP transmission. It has both the features of a Digital Video/Audio Recorder (DVR) and Digital Video/Audio Server (DVS) . It can work as a standalone or be used to build a powerful surveillance network. All Aventura standalone DVR's feature TCP/IP networking for remote access, expanded hard disk recording capacity, PTZ control, alarm and sensor input and much more.

### Physical description

- Max 16 video in ( NTSC/PAL)
- Max 16 audio in (linear in)
- 1 video out (NTSC/PAL)
- 1 audio out
- 1 line in (for voice talk)
- 1 10/100M ethernet
- 4 SATA, support max 4 hard disks of max 400GB each
- 8 or 16 alarm in
- 4 alarm out
- 1 RS-485 for keyboard, 1 RS-485 for PTZ control
- 1 RS-232
- 1 USB
- 1 VGA
- Built-in DVD writer, USB support
- 19" 2U case with rackmount option

### Functions :

- Aventura's Embedded Digital Video Recorder adopts a high performance embedded real-time multi-tasking operating system (RTOS) and an embedded CPU, to perfectly implement all the functions needed to build a surveillance system. Running all the software from embedded hardware makes the system more steady and reliable.

### Compression function:

- Support maximum 16 channels video in. Each channel can be compressed independently at 30FPS (NTSC) or 25FPS (PAL) , using H.264 algorithm.
- Both variable bitrate and variable frame rate are supported.
- Support max 16 channels audio in. Each channel can be compressed independently, using an 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) 7FPS, DCIF(528x320) 9FPS, CIF(352x240) 30FPS  
PAL: 4CIF (704x576) 6FPS, DCIF(528x384) 8FPS, CIF(352x288) 25FPS
- Supports multi-zone motion detection.
- Supports position configurable OSD & LOGO.
- Supports watermarking.

### Network Functions:

- Supports TCP/IP (ARP, RARP, IP, ODP, TCP, PPP, PPPoE, DHCP, SNMP, etc).
- Supports broad-band transmission (ADSL, etc).
- Supports narrow-band transmission (PSTN, etc).
- Streaming of one or more channels, Net DVR's running state and alarm state can be accessed through the network.
- Net 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 the Net DVR can be downloaded to or remotely played in a remote host PC.
- Supports Net DVR remote upgrading.
- PC hosts can gain direct control of Net DVR's RS-232 or RS-485 port.
- Supports voice talk between host in surveillance center (back-end) and Net DVR (front-end).
- Supports embedded web server. Internet Explorer Browser can be used to access Net DVR.

### Storage Functions:

- Supports 6 kinds of record trigger mode: Schedule mode, alarm mode, motion detection, motion detection & alarm, motion detection | alarm.

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- Real-time display & record
- Up to 16 channels of audio & video
- Supports up to 4 hard drives
- 4CIF(7 FPS), DCIF(9 FPS), CIF(30 FPS)
- Dual stream
- Supports: PTZ, remote access

### AVAILABLE MODELS

Part number	Description
DHE-04-CIF	H.264/SVC Embedded DVR with 4 video and 4 audio channels with 500 GB HDD, DVD Burner
DHE-08-CIF	H.264/SVC Embedded DVR with 8 video and 8 audio channels with 750 GB HDD, DVD Burner
DHE-16-CIF	H.264/SVC Embedded DVR with 16 video and 16 audio channels with 1 TB HDD, DVD Burner

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- Won't lose frames when switching to playback
- Can install 4 HDD and each HDD supports 750GBytes
- Supports hard disk sleep mode.
- Supports FAT32 file system.
- Supports HDD smart
- Supports cyclic and non-cyclic record mode.
- Supports network access storage (NAS).
- Supports USB flash disk, USB hard disk, USB CDRW for backup.

**Preview & Playback Functions:**

- Supports BNC Monitors.
- Supports VGA Monitors.
- Switch quickly in preview mode.
- Supports partial zone sheltering.
- Supports local file playback and time playback, support fast forward, slow motion, pause, play frame by frame, etc.
- Supports OSD, LOG.

**PTZ control:**

- Supports Pan-Tilt-Zoom control and Preset through front, keyboard and network.
- Supports most popular PTZ protocol.
- Ability to customize new PTZ protocol.

**Alarm Functions**

- Supports motion detection alarm, switch alarm, signal lost alarm, exception alarm, etc.
- Supports setup of alarm links with PTZ presets.

**Others:**

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

**SPECIFICATIONS**

Model Name	DHE-04-CIF	DHE-08-CIF	DHE-16-CIF
<b>HARDWARE INTERFACE</b>			
Operating System	RTOS (Real Time Operating System)		
Video System	NTSC/PAL		
Compression	H.264 SVC		
Streaming Compression	H.264 SVC Dual Streaming		
Display Resolution	RealTime-704*480(NTSC), 720*576(PAL)		
Record Resolution	4CIF/DCIF/CIF 704*480/528*320/352*240/(NTSC), 704x576/528x384/352x288/(PAL)		
Display Frame Rate	Live Preview - 120 FPS (NTSC), 100 FPS (PAL)	Live Preview - 240 FPS (NTSC), 200 FPS (PAL)	Live Preview - 480 FPS (NTSC), 400 FPS (PAL)
Record Frame Rate	120 FPS Global NTSC: 4CIF (704x480) 7 FPS, DCIF(528x320) 9 FPS, CIF(352x240) 30 FPS PAL: 4 CIF (704x576) 6 FPS, DCIF (528x384) 8 FPS, CIF(352x288) 25 FPS	240 FPS Global NTSC: 4CIF (704x480) 7 FPS, DCIF(528x320) 9 FPS, CIF(352x240) 30 FPS PAL: 4 CIF (704x576) 6 FPS, DCIF (528x384) 8 FPS, CIF(352x288) 25 FPS	480 FPS Global NTSC: 4CIF (704x480) 7 FPS, DCIF(528x320) 9 FPS, CIF(352x240) 30 FPS PAL: 4 CIF (704x576) 6 FPS, DCIF (528x384) 8 FPS, CIF(352x288) 25 FPS
Video Bitrate	32 Kbps-2 Mbps- User Defined/Variable		
Video Input Channels	4x BNC (1.0Vp-p 75 Ω) Channels	8x BNC (1.0Vp-p 75 Ω) Channels	16x BNC (1.0Vp-p 75 Ω) Channels
Video Loop Output	N/A		
Video Output	1x BNC Channel (1.0Vp-p 75 Ω)		
Monitor Output Support	VGA		
Matrix Output	N/A		
Alarm Input	4	8	16
Alarm Output	2	4	4
Audio Input	4x BNC (2.0Vp-p, 1KΩ) Channels	8x BNC (2.0Vp-p, 1KΩ) Channels	16x BNC (2.0Vp-p, 1KΩ) Channels
Audio Output	1x RCA (Linear Electrical Level Resistance: 600Ω)	1x RCA (Linear Electrical Level Resistance: 600Ω)	1x RCA (Linear Electrical Level Resistance: 600Ω)
Audio Compression	Ogvorbis		
Audio Bitrate	16 Kbps		
Audio Voice Input	1 Channel, BNC (2.0Vp-p, 1KΩ)		
Hard Drive Interface	500GB SATA Hard Drive Included	750GB SATA Hard Drive Included	1TB SATA Hard Drive Included
Max Hard Drive Support	Up to 4x 1000GB (4TB) SATA Hard Disk Drive		
DVD Writer	Included		
USB	1x USB (USB Mouse, USB Flash drive, USB Hard Drive or DVD-RW)		
Communication Interface	RJ-45(Ethernet), RS232/RS485 (For PTZ/Alarm), 2x RJ-45 (Keyboard Controller Interface)		
PTZ Control	COM Port Control		
PTZ Protocol Support	Pelco D/Pelco P/Kalatel/		
Network Interface	RJ-45 10/100 Ethernet		
Network Protocol	DHCP, PPPoE, Static IP, TCP/IP		
Remote Control	Included		
Mouse	Included		
Control Interface	USB Mouse, Front Panel, Remote Control (all Included)		
Video Backup Options	USB Flash Drive, USB Hard Drive, USB DVD-RW, Internal DVD-RW, Web Browser, Client Software		
DVR Interface	Pentaplex (Live Display, Record/Playback, network simultaneously)		
Motion Detection Record	Yes (Multi area setup per each individual Camera)		
Recording Options	VBR, CBR, adjustable Frame Rate, Manual, Scheduled, Motion Detection, and Alarm		
<b>SOFTWARE</b>			
Web Client Software	Included		
Remote Client Software	Included		
Mobile Phone Software	N/A		
Language	English		
<b>ELECTRICAL &amp; ENVIRONMENTAL</b>			
Power Supply	100~240 VAC, 6.3 A, 50~60 HZ		
Surge Protection	Built in		
Power (without HDD)	20--58 W (without HDD)		
Power Consumption	37 W	41 W	44 W
Working Temperature	-10°C--55°C		
Working Humidity	10-90 RH		
<b>PHYSICAL</b>			
Weight	16.8 lb (≤7.6 Kg) -- without HDD and CD-RW		
Dimension	18.5" x 3.5" x 18.5" (441 x 90 x 470 mm)		
Regulatory Type	CE, FCC, UL		
Chassis	19" Rack Standard		
<b>Warranty (Effective Jan 1, 2009)</b>			
2 Years			