

PRELIMINARY

DVS Digital Video Server

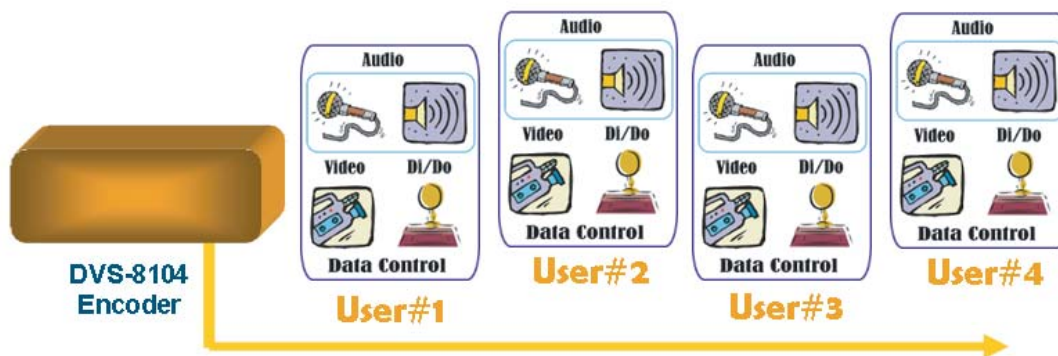
The "DVS-81XX", Digital Video Server is connected to a computer network like a LAN. **DVS-81XX** digitizes analog video sources and distribute digital video over an IP network. It is the device to convert the analog video signal and compress to digital signal via a coded mechanism in MPEG4 format standard and transmit to video monitoring center via IP network.

Design Overview

DVS-81XX is designed to be a 4-ch/16-ch video-in standard-alone video server. With 4-ch/16-ch video input with resolution configurable from QCIF in 4-ch/16-ch up to single D1 in one-ch and DSP algorithms, **DVS-81XX** can be a most cost-effective solution for the cutting edge video server satisfying for versatile application. Besides, it also provides sync 4-ch/16-ch audio in and 1-ch audio out accompanying with video, 4 sets of DI/DO, console port for local configuration, SNMP management function. Due to the characteristic of video server working on LAN, **DVS-81XX** is fully compatible with TCP/IP standard with necessary protocol implemented like, UDP, HTTP, ARP, DHCP (client), SMTP, RTSP, RTP, RTCP, DNS, DDNS, SNMP, PPPoE, IGMP v2, NTP.

Features

- MPEG-4 compliant compression format.
- QCIF up to D1 resolution.
- Transmit live video up to 30 frames/second (D1 quality) with low bit rate (nominal 1.5Mbps).
- High-density with 4 or 16 ch video-in ports per unit.
- Motion detect function user configurable.
- Four/sixteen audio-in and one/ four audio out for each unit.
- Up to 4 sensor contact ports (DI/DO) per unit.
- NTSC, PAL user configurable.
- Provide one data port RS-485/422/232 for PTZ used.
- Support Pan/Tilt/Zoom configuration.
- Provide API for further video management platform interface.
- Remote video control supported (via a client software).
- Provide IE Web server management.
- Versatile management function with VT-100, telnet, and SNMP.
- Support IGMP v2 multicast function.
- Provide PPPoE for compatible with ADSL modem.
- Auto e-mail warning system via a set IP address.
- Provide authority management function.
- 2 ports USB2.0 for WiFi and storage.



Server Interface

- BNC connectors for the connection of analog video of Audio.
- 9 pin RS-232 / RS-485 serial data port for connection of one data control such as PTZ camera control.
- HDB-26 for the connection of 4 channels of Digital input / output (I/O) for sensors, detectors and alarm relays.



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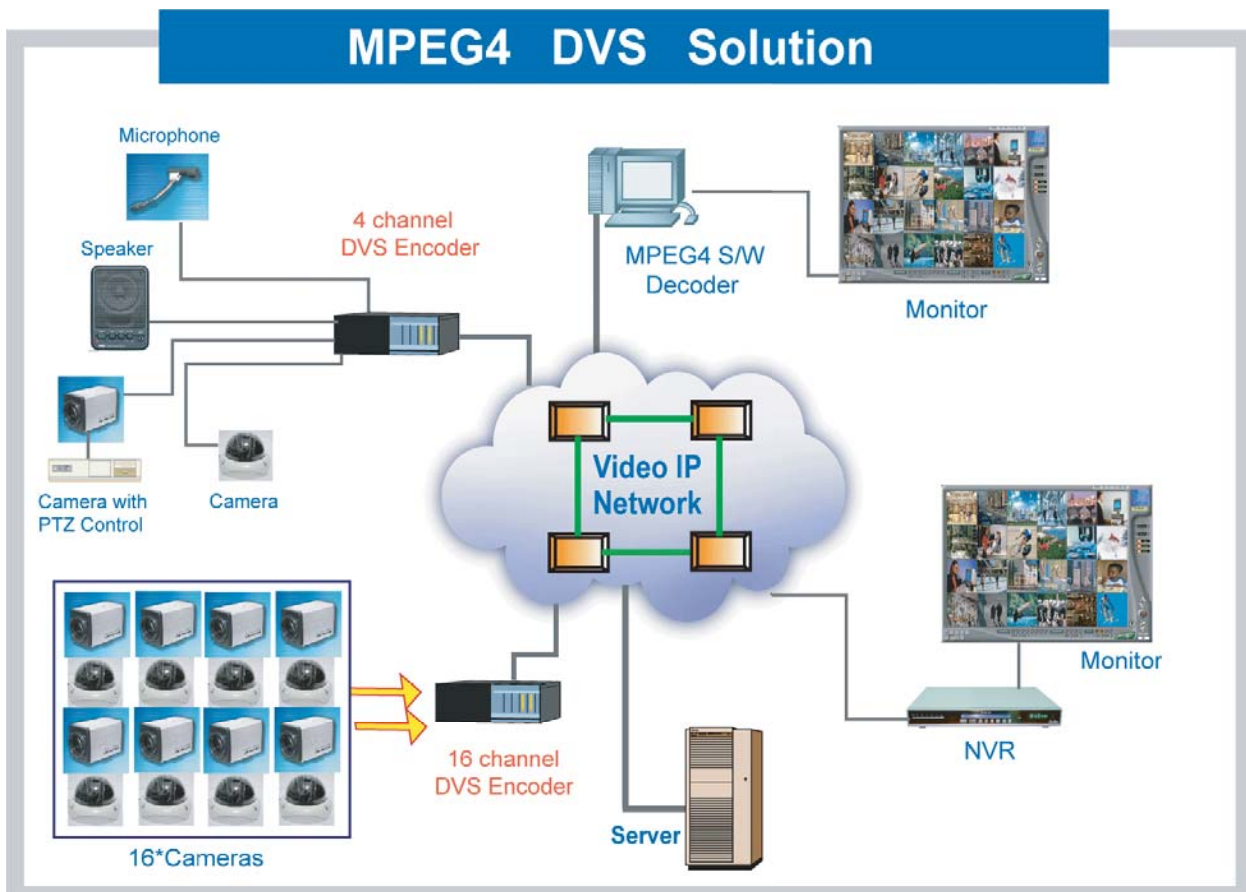
Client Video Management S/W

Features

- 4-channel D1 or 16-channel CIF PC viewing software (Live and playback).
- 16-channel recording
- Emulated PTZ support
- Bi-directional audio over IP
- Alarm contact over IP
- Embedded pre-event recording facilities
- Configuring, monitoring and control of CTC DVS equipment
- Still picture(Pause)
- Forward playback at: 1x, 2x, 4x, 10x, 20x, 40x, 100x
- Slow forward playback at: Frame by frame, 1/8x, 1/4x, 1/2x, 1x

Ordering Information

- DVS-8104-XXXX
4 x Video / 4 x Audio / 1 x DiDo / 1 x Data Encoder
- DVS-8116-XXXX
16 x Video / 16 x Audio / 4 x DiDo / 1 x Data Encoder
- Reverse playback at: -10x, -20x, -40x, -100x
- Alarm history list and management
- SNMP trap list
- Upgrade firmware of multiple units sequentially or in parallel
- Use standard internet protocols
- RS232 PTZ controller pass through to Ethernet



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Specification for DVS-8104 (4-Channels Compression)

Technical Specifications	
Video Interface	
Input Channel	4 channel per card
Video Format	NTSC, PAL, configurable
Signal	1V p-p
Impedance	75 ohms
Interface Connector	
Interface Connector	4 *BNC
Video Adjustment	Brightness, contrast, saturation, color tone level adjust
Motion Detect	Yes (with sensitivity turning)
Camera Control	Pan/Tilt/Zoom supported via serial port (RS-485/RS-422/RS-232 configurable)
Audio Interface	
Channel Connectors	4 mono audio-in ports & 1 mono audio-out port
Standard	Audio-in: G.726 (ADPCM) sample rate 8KHz / Audio-out: MP3 sample rate 44.1KHz
Input / Output Signal	6V p-p, +10 dBm max
Input / Output impedance	600 ohms balance or unbalance
Frequency Response	20Hz ~ 20KHz
Data Interface	
Interface Type	RS-485/RS-422/RS-232 configurable
Baud Rate	115.2Kbps max
BER	<1.0E ⁻¹⁰
Interface Connector	DB9 Female
Line(Network) Interface	
Ethernet Interface	IEEE 802.3 10Base-T, 802.3u 100Base-TX
Protocol	TCP/IP, UDP/IP, HTTP, ARP, DHCP(client), SMTP, RTP, RTCP, DNS, DDNS, SNMP, PPPoE, IGMPv2, NTP
Interface Connector	1 *RJ-45 for 10/100Base-TX (Auto-sensing)
Contact Input/Output	
Channel	4 * duplex
Output Format	Form C output 32 VDC/VAC max@100mA
Input Format	Optically isolated
Interface Connector	DB-25 female
USB Interface	
Interface Type	USB 2.0 Host, 2 ports
Baud Rate	480Mbps
Purpose	One for WiFi and the other for mass storage
Connector Type	USB A type

Image Compression	
Compression format	MPEG4(ISO/IEC-14496-2)
Resolution	Full D1:720*480(NTSC)/720*576(PAL), 4CIF:702*480(NTSC)/702*576(PAL), CIF:352*240(NTSC)/352*288(PAL), QCIF: 176*120(NTSC)/176*144(PAL)
Performance	1 Channel D1:30(NTSC)/25(PAL)FPS, 4 Channel D1:30(NTSC)/25(PAL)FPS, 4 Channel CIF:120(NTSC)/100(PAL)FPS,
Frame Rate	3/ 5/ 10/ 15/ 20/ 25/ 30 fps
Bit Rate	32K/ 64K/ 128K/ 384K/ 512K/ 768K/ 1.5M/ 2M
Alarm Cut-Off Button	Yes
Date & Time	
Mode	Synchronize with computer time / Synchronize with NTP server / Manually
Overlay	Enable or Disable
Management	
Local Interface	RS-232/DB9 for VT-100
Telnet Access	Via 10/100Mbps Ethernet port
Web Management	Via 10/100Mbps Ethernet port
SNMP Management	Via 10/100Mbps Ethernet port
Remote Management	Optional by SNMP line card
API Interface	Yes
Video Management Program (Client S/W)	Yes
Environment	
Operating Temperature	0°C to 70°C
Storage Temperature	-30°C to 85°C
Humidity	0 ~ 95% (non-condensing)
Power	
Input Power	8 to 28 VDC (nominal 12VDC)
Power Consumption	< 8 Watts
Humidity	0 ~ 95% (non-condensing)
General	
LED Indicators	Power, Video in status, LAN status
Dimension	TBA
Reliability (MTBF)	> 5 years
Certification	FCC Part 15 class A, CE, UL1950, CCC

*Performance Notice : A. Cold Start (60 sec)
B. Warm Start from standby mode (2 sec)



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Specification for DVS-8116 (16-Channels Compression)

Technical Specifications	
Video Interface	
Input Channel	16 channel per card
Video Format	NTSC, PAL, configurable
Signal	1V p-p
Impedance	75 ohms
Interface Connector	16 * BNC
Video Adjustment	Brightness, contrast, saturation, color tone level adjust
Motion Detect	Yes (with sensitivity turning)
Camera Control	Pan/Tilt/Zoom supported via serial port (RS-485/RS-422/RS-232 configurable)
Audio Interface	
Channel Connectors	16*mono audio-in ports & 4*mono audio-out port
Standard	Audio-in: G.726 (ADPCM) sample rate 8KHz Audio-out: MP3 sample rate 44.1KHz
Input / Output Signal	6Vp-p, +10 dBm max
Input / Output impedance	600 ohms balance or unbalance
Frequency Response	20Hz ~ 20KHz
Data Interface	
Interface Type	RS-485/RS-422/RS-232 configurable
Baud Rate	115.2Kbps max
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Interface Connector	DB9 Female
Line(Network) Interface	
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Contact Input/Output	
Channel	4 * duplex
Output Format	Form C output 32 VDC/VAC max@100mA
Input Format	Optically isolated
Interface Connector	DB-25 female
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Interface Type	USB 2.0 Host, 2 ports
Baud Rate	480Mbps
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Performance	4 Channel D1: 120(NTSC)/100(PAL)FPS, 16 Channel D1: 120(NTSC)/100(PAL)FPS, 16 Channel CIF: 480(NTSC)/400(PAL)FPS,
Frame Rate	3/ 5/ 10/ 15/ 20/ 25/ 30 fps
Bit Rate	64K/ 128K/ 384K/ 512K/ 768K/ 1.5M/ 2M
Alarm Cut-Off Button	Yes
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