

Integrated Access Control & Digital Video Recording



NexWatch introduces Access DVPRO™, a powerful digital video recording and transmission system fully integrated with the industry's leading access control software - Pro-Watch™ software suite Release 5. Access DVPRO is an extremely secure and flexible digital storage management tool that combines Video, Audio, and Data capability. The system is designed to record, search and transmit your Video, Audio and Data requirements, providing users with both live and post event assessment capabilities. Access DVPRO can be seamlessly integrated with existing video equipment and incorporated into any TCP/IP network — making it one of the most cost effective solutions for both new and existing video and access control security systems.

The Access DVPRO system consists of:

Remote Unit

The Remote Unit (RU) is the heart of the Access DVPRO system and features a sleek, modular design, which is equally suited for desktop or rack-mount installations. Its removable front panel with key lock conceals 4 hard drive bays, a CD/RW drive and power button. A detachable Rear BNC Panel allows for servicing the unit without the removal or disruption of your coaxial cable leads. The RU is equipped with two audio channels and can also connect to ATM and POS devices. All physical connections are made directly to the unit and include 16 cameras, 16 alarm input devices, 8 auxiliary control outputs and 2 serial ports for control of most industry standard PTZ domes.

The RU also includes LocalView, which provides basic system and camera configuration and also allows for viewing of live and recorded video directly at the RU site. Using only a VGA monitor (not supplied) and a PS2 mouse (supplied) the user can configure system settings operate video management capabilities, review and play back recorded video and create & store video clips to the RU's hard drive or directly to a CD.

FEATURES

- Integration with Pro-Watch™ Access Control Software

Integration Features:

- Live matrix viewing of cameras from within both the main application as well as the alarm monitor
- Control of PTZ domes from within access control software
- Automatic camera call-up
- Auto card lookup
- Simultaneous viewing of live and recorded video
- Event linking between access control system and connected cameras



ACCESS DVPRO™ DIGITAL VIDEO SYSTEM



ADVPADMIN Software

ADVPADMIN Software is Access DVPRO's system administration tool capable of Site, User, Tour and Alarm Station management. This Windows® based administration software provides a user friendly GUI for creating Access DVPRO's database. The database can be as small as a single computer using Microsoft® Access or a hosted network server using Access, SQL or MSDE. ADVPADMIN makes controlling and administering a multi-site, multi-user, system fast, easy and secure.

ADVPVIEW Software

ADVPVIEW Software is a feature rich Windows® based operator program that provides a user friendly GUI for complete operation and configuration of one or many different RU's simultaneously. View and monitor live or recorded Video, Audio and Data from any RU listed in your Site Tab. Connect to multiple sites simultaneously from the same workstation or connect multiple workstations to the same RU site. Network connections are TCP/IP protocol and can be LAN or WAN. Dial-up connections can be made using PSTN, DSL or ISDN with appropriate hardware. Control multiple PTZ cameras, monitor two independent 2-way audio channels, monitor up to 4 streams of POS or ATM generated data, configure 16 alarm input devices, and control 8 auxiliary outputs all from within a single session of ADVPVIEW.

System Features:

- Available in 14 different configurations: Select the right RU for every application
- RU operates on VxWorks® a secure, stable & multi-tasking real-time operating system
- Integrates easily with existing and new CCTV equipment
- Long-term digital storage for recorded Video, Audio and Data information — RU rated at 12 to 75 Recording Days for typical installation — Actual Recording Days achieved is application dependent and will vary with each installation
- Authenticated proprietary file format (REM) for integrity of evidence
- Extremely flexible communication options include LAN, WAN, Internet and PSTN — Standard equipment on all RUs include a NIC 10/100 BaseT: RJ45, Ethernet connection and a TELCO internal 56K modem: RJ11 PSTN connection (ISDN and DSL connections using additional hardware)
- ADVPADMIN and ADVPVIEW provide user friendly GUI — Windows® 98/NT/ME/2000/XP compatible
- Live monitoring and surveillance of multiple remote locations simultaneously via LAN/WAN or Dial-up connections
- Multiple users can simultaneously access the same site for Live and/or Recorded information via LAN/WAN or Dial-up connections
- RapidSearch™ of events by Motion, Time/Date makes the locating and playback of recorded Video, Audio and Data quick and easy
- User definable reporting of events and alarms automatically to multiple remote locations via LAN/WAN or Dial-up connections
- Administrator definable and assignable by user — Automated remote site touring
- Administrator definable User Names and privileges featuring encrypted password protection
- User configuration and control of 8-auxiliary TTL outputs
- Serial port control of most industry standard PTZ domes
- Serial port connection to ATM & POS devices

VIDEO Features:

- 16-BNC Composite Video looping inputs with auto termination
- RU available with capture rates of 20, 40 or 60 ips, shared between recording and live transmission
- Individual camera configuration including name, camera type, manual or AGC control of video image, Recording Rate in ips and Image Quality
- Advanced video motion detection and user definable exclusion zones per camera — Motion sensitivity user selectable with slide bar control and graphically represented by color change from green to blue to red, with red representing motion
- Automatic changeover of camera type from color to monochrome in low light situations (when using color/monochrome changeover cameras)
- User configurable composite monitor sequential switching output
- LocalView: The local user interface provides on-site live monitoring, review of recorded video, local clip generation and record clip to a CD-R on RU equipped with CD-RW drive

AUDIO Features:

- Two independent channels synchronized with the video and data streams
- Bi-directional Audio: Talk and/or Listen on each channel independently
- Monitor, Record & Record to Clip with associated video and data streams

DATA Features:

- Monitor and record critical business data from ATM & POS devices
- Review and search recorded data using our data search engine
- Support for up to 4 separate data sources with each data stream displayed as an individual window within the ADVPVIEW environment (additional hardware required)

Integrated access control and digital video capabilities provide a powerful solution

Access DVPRO provides multiple levels of integration with Pro-Watch software so that your digital video system can be controlled from the access control application, making this a convenient and powerful solution.

Video capabilities available in Pro-Watch include:



Alarm Playback Viewer - Used when an event has video associated to it. The alarm playback is available in either the Alarm Monitor, or in the Event Log Viewer.



Live View - This is available from the main hardware viewer by right-clicking on a defined camera and selecting 'Go Live' - additionally when you are viewing a playback event a 'Go Live' button is also available allowing the user to revert to live video.



Matrix View - This is available from the main viewer in Pro-Watch. This allows the user to select which cameras he wants to view as well as in what position. The options are viewing full screen, 2x2, 3x3, or 4x4 configuration. Additionally the user has full control of PTZ cameras from this screen if the camera used offers PTZ support. The blue ball represents a 'joystick' which allows the user to control the camera view.



Verification Secure Mode Viewer - Allows the user to match up the image of the individual attempting to open a door (badgeholder image is held in Pro-Watch Badge database) with that of a live view from the door. This secure mode verification allows the user to either allow or deny access to a specific area based on an image match.

TECHNICAL SPECIFICATIONS:

Remote Unit Hardware Capacity

Connections	Max. # per Remote Video Unit
Cameras	16
Inputs (e.g., alarms)	16
Outputs (TTL)	8



ADVPVIEW Software Capacity

Connections	Max. # per Remote Video Unit
Live video connections (all users)	32
Video retrieval connections (all users)	32
Users viewing live video (and activating outputs)	10
Users retrieving video	10
Users accessing alarms	10
Users accessing events	10
Users accessing maintenance (control panel)	1

ADVPVIEW and ADVPADMIN PC Requirements

(Minimum recommendations)

- X86 compatible PC
- Microsoft Windows 98, NT, ME, 2000 or XP
- Pentium II or Pentium III class CPU (min. 600MHz recommended)
- 128MB RAM
- 200MB of free hard disk space, plus adequate storage for video clips
- CD-ROM (for software installation and upgrades)
- Video card and monitor that supports SVGA mode (800x600 pixels) or better
- Mouse or other Windows compatible pointing device
- For Dial-Up Connections⁽¹⁾: Northern approved V.90 / V.92 modem or ISDN modem
- For LAN Connections: Windows compatible 10/100 Fast Ethernet Network Interface Card (NIC) configured for TCP/IP protocol

Remote Unit Specifications

- Video Standards: NTSC/EIA or PAL/CCIR
 - NTSC/PAL auto standard detect with manual override
 - Individual AGC profile and configuration settings for each camera
- Video Format:
 - 320 x 192 native resolution REM proprietary format
 - 24-bit color (over 16 million colors)
- Record and Transmission Format: Modified H.261 (DCT) w/ proprietary *Dual Threshold* processing yielding high quality vs. bit rate
- Record Mode: Continuous (circular buffer)
- System Record Capacity: 8, 12, 16, 25, 50 & 75 days (based on model)
- System Update Rate: (maximum):
 - 20, 40 or 60 ips (based on model), shared between recording and live transmission
 - Individual camera selectable from ¼ to 30 ips

- Video Quality Settings: 12 – 1
 - 12 = highest quality, shortest record duration
 - 1 = lowest quality, longest record duration
- Video Motion Detection and Search:
 - User configurable to sense region-of-interest, mass and motion intensity
 - User configurable post event video motion search within given region-of-interest
- POS/ATM and Event/Alarm Action Filters:
 - Initiate action and/or report upon specific serial data or event transactions
 - Post event search of a specific recorded data stream qualifier

ACCESS DVPRO™ TECHNICAL SPECIFICATIONS

Remote Unit Specifications (cont'd)

- Record and Remote Reporting of Events:
 - Session request
 - Session rejection
 - Session disconnect
 - Run-time failure
 - Self restart
 - Reboot
 - Synchronize time
 - System configuration
 - Security modification
 - System file modification
 - Clear storage
 - Input sensor activation/deactivation
 - Output sensor activation/deactivation
 - Video loss/restore
 - Video motion detection
 - POS/ATM data
- Mass Storage: 4 hard drive bays
 - All drives mounted on field serviceable carrier sleds
 - Power-Off, "Cold Swap" operation
- Removable Media: [1] CD/RW Bay
 - Supports optional CD/RW drive for event backup and archiving
 - 2nd aux. device bay reserved for future expansion
- Front Panel Control & Display Module: (secured behind lockable front door)
 - Power Switch (low voltage control)
 - System Ready LED
 - Alarm State LED
 - HD Activity LED
 - 2x16 Alphanumeric System Status LCD Readout Indicating operational status and system health monitoring

Rear Panel Connections

- Video Inputs: [16] Composite 1Vp-p
 - Looping BNC w/ 75 ohm auto-termination
 - Removable rear connector panel for convenient servicing
- Video Outputs: [2] Composite 1Vp-p
 - Monitor 1: Spot or sequential real-time switcher
 - Monitor 2: NTSC/PAL color bar test pattern
- Audio Inputs: [2] Line Level
 - Line inputs via 3.5mm stereo mini jack
 - Mic-In: Reserved for future use
- Audio Outputs: [2] Line Level
 - Line outputs via 3.5mm stereo mini jack
- Alarm / Control Inputs: [16] 5V TTL
 - Removable 5mm terminal block plugs
 - Software configured as NC, NO or 2K EOL (end-of-line) resistor sense
- General Purpose Control Outputs: [8] 5V TTL
 - Removable 5mm terminal block plugs
 - 50mA max @ 5V each output
- Serial Ports: [2] RS-232
 - COM1: DB9 (M) External Modem, PTZ Control or POS/ATM (cables provided)
 - COM2: RJ45 PTZ Control or HyperTerminal configuration (cable & adapters provided)
- Modem / Telco ⁽¹⁾: [1] V.90 Multi-Protocol Modem
 - 19.2Kbps to 33.6Kbps on typical North American dial-up connection
 - Standard RJ11 handset cable interface (cable provided)
- Networking: [1] 10/100 BaseT Fast Ethernet
 - Standard RJ45 supporting CAT5 cable plug
- Desktop Monitor: [1] VGA / SVGA
 - Supports *LocalView* UI thru standard analog desktop monitor (640x480 support req'd)
 - Supports remote analog composite monitor thru VGA – NTSC/PAL converter

- PS2 Mouse: [1] 6-pin MiniDIN
 - Supports *LocalView* UI functions (PS2 mouse provided)
- PS2 Keyboard: [1] 6pin MiniDIN
 - Additional support of *LocalView* UI functions. Not required for operation.
- Printer Port: Not required for operation.
- USB Port: Not required for operation.
- AC Power: [1] 115VAC or 230VAC 50/60Hz input
 - Modular IEC-320 connector (regional power cord provided)

PTZ Dome Control

- ADEMCO Video *RapidDome* and *Orbiter* Domes using VCL code
- ULTRAK KD6 Series Domes using VCL or Pelco P or D code

Also compatible with other manufactures including:

- Javelin 308 Series
- Kalatel
- Pelco P or D codes
- Sensormatic RS422

Electrical

- Power Requirements:
 - 1.2A @ 115VAC (138VA), 60Hz
 - 0.6A @ 230VAC (138VA), 50Hz
 - Selectable 115V / 230V operation via guarded front accessible PS switch

Specifications (Cont'd)

Mechanical

- Desktop or Rack Mount configurable:
 - EIA 19" rack mount slide kit available as an option
 - All critical components secured behind lockable front fascia panel
- Dimensions:
 - 5.23" (3RU) H x 17.3" W x 18.8" D (133mm H x 440mm W x 478mm D)
 - 17.4" (442mm) unit depth without removable front fascia panel
- Weight: (model dependent)
 - Unit weight: 32 lbs – 42 lbs (14.5 kg – 19 kg)
 - Shipping weight: 38 lbs – 48 lbs (17.5 kg – 22 kg)

Environmental

- Operating Temperature:
 - 40° – 104° F (5° – 40° C) non-condensing

Regulatory

- Emissions
 - FCC: Part 15, Class B
 - CE: EN50081-1 (Class B)
- Immunity
 - CE: EN50130-4 (w/ use of UPS)
- Safety
 - UL-listed for U.S. and Canada:
- UL 1950, CAN/CSA-C22.2 No. 950-95
 - CE: EN60950

ORDERING & CONFIGURATION INFORMATION

Order #	Description	Max Recording Rate	Storage Capacity	Recording Days*
ADVP2080	ADVP, 20 IPS, 500 CAMDAYS, LAN/PSTN	20 IPS	80 GB	25
ADVP20160	ADVP, 20 IPS, 1000 CAMDAYS, LAN/PSTN	20 IPS	160 GB	50
ADVP4080	ADVP, 40 IPS, 500 CAMDAYS, LAN/PSTN	40 IPS	80 GB	12
ADVP40160	ADVP, 40 IPS, 1000 CAMDAYS, LAN/PSTN	40 IPS	160 GB	25
ADVP40480	ADVP, 40 IPS, 3000 CAMDAYS, LAN/PSTN	40 IPS	480 GB	75
ADVP6080	ADVP, 60 IPS, 500 CAMDAYS, LAN/PSTN	60 IPS	80 GB	8
ADVP60160	ADVP, 60 IPS, 1000 CAMDAYS, LAN/PSTN	60 IPS	160 GB	16
ADVP60480	ADVP, 60 IPS, 3000 CAMDAYS, LAN/PSTN	60 IPS	480 GB	50
ADVP4080C	ADVP, 40 IPS, CD-RW, 500 CAMDAYS, LAN/PSTN	40 IPS	80 GB + CD/RW	12
ADVP40160C	ADVP, 40 IPS, CD-RW, 1000 CAMDAYS, LAN/PSTN	40 IPS	160 GB + CD/RW	25
ADVP40480C	ADVP, 40 IPS, CD-RW, 3000 CAMDAYS, LAN/PSTN	40 IPS	480 GB + CD/RW	75
ADVP6080C	ADVP, 60 IPS, CD-RW, 500 CAMDAYS, LAN/PSTN	60 IPS	80 GB + CD/RW	8
ADVP60160C	ADVP, 60 IPS, CD-RW, 1000 CAMDAYS, LAN/PSTN	60 IPS	160 GB + CD/RW	16
ADVP60480C	ADVP, 60 IPS, CD-RW, 3000 CAMDAYS, LAN/PSTN	60 IPS	480 GB + CD/RW	50
ADVPADMIN	ADVP V5 Administrator Software			
ADVPVIEW	ADVP V5 Viewing Software			

* Recording Days based on fixed color cameras, recording quality setting of 7 and no audio recording. Use of PTZ cameras or recording of audio impacts the total recording days available. Contact your NexWatch representative for more information.

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