Full-Featured Digital Video Recorder

ADEMCO Video's AVDR is a high capacity, full-featured digital video recording system designed to replace existing analog recording systems. With its advanced digital technology, powerful feature set, and user-friendly graphical user interface, the AVDR meets the many different needs of security and surveillance applications around the world.

The AVDR utilizes ADEMCO Video's advanced XtraStor Technology (XST), which allows you to record high-resolution video for days, weeks and even months at a time to the units internal, high capacity hard drives. Images can be retrieved instantaneously using the AVDRs range of powerful video search and image optimization tools, such as video motion search and digital zoom.

With XtraStor Technology!

The AVDR is a multi-tasking system that makes it possible to process alarms, view live video, play back recorded video, archive video to a network drive, and monitor live/recorded images from a remote location, while simultaneously recording images to its internal hard disk drives. All of these functions are protected by hardware and software watchdog circuitry, which ensures the reliability of your system.

All AVDR units, whether you choose from the e-Series, which offers exceptional value features and performance for every day use, or from the Systems Series, for additional features and increased flexibility, will allow you to customize your system to meet the needs of any application.

AVDR Series

The AVDR Series with XtraStor...setting new standards for digital recording technology.

FEATURES:

Both e-Series and Systems Series units feature:

- Long term digital video storage using **XtraStor** Technology (XST)
- XST video compression algorithm (ML-JPEG) provides small file sizes with minimal picture degradation
- Exceptional picture quality with four user-selectable display/recording resolutions (up to 640 x 480)
- PentaPlex operation
- Built-in image quality optimization tools
- Flexible video searching tools (including motion search)
- Intuitive graphical user interface
- Flexible user defined scheduling, including modes for recording time-lapse, event or both time-lapse and event, as well as viewing only
- Remote viewing, playback and control via LAN/WAN, PSTN and ISDN networks
- Programmable Video Motion Detection
- Capture rates up to 120IPS

- Pre and Post event recording
- Versatile display formats – full screen, 2x2, 3x3, 4x4, 3x4, and 2x8
- Enhanced video encryption technology (chained-fingerprinting)
- Save/Print still images (.bmp or .jpg) or save/play video clips (.avi)
- 16 video inputs, 1 SVGA monitor output (Main monitor) and 1 NTSC spot monitor output
- Control of ADEMCO Video and other manufacturers PTZ domes
- 16 alarm inputs and 1 Form C relay output
- Remote access software supplied with every unit

Systems Series units also include:

- WebGuard interface, internal CD-RW or DVD RAM, single-channel of audio recording, and Ultra-Wide SCSI interface connection

ADEMCO VIDEO SYSTEMS
A Honeywell Company

AVDR

Easy Installation and Operation
Although a highly complex, sophisticated system, the AVDR is simple to use and installs quickly and easily. Its intuitive graphical user interface (GUI) combines the video and its controls on one user-friendly display screen. And, its simple point and click operation will have even the most inexperienced operators up and running in a flash!

Exceptional Picture Quality w/ XtraStor
The AVDR delivers crystal clear resolution up to 640 x 480. With its multiple user-definable resolution and image quality settings, the AVDR is flexible enough to meet the needs of the vast majority of applications. XtraStor enables high quality video while using minimal hard drive space.

PentaPlex Operation
The AVDR is a flexible multi-tasking system that allows multiple operations simultaneously. View live images, playback recorded images, archive to network drive, and access system remotely, all while the AVDR continues to record ensuring critical information is not missed.

XtraStor Technology
XtraStor is ADEMCO Video's proprietary ML-JPEG compression technology that enables the AVDR to create high quality image files in a small size format. With XtraStor, the AVDR will use less hard drive space while providing you with longer record durations.

Multiple Mode Recording
Maximize the AVDRs storage capacity by recording events only. Use the AVDRs alarm inputs and/or built in programmable video motion detection that allows pre/post alarm recording, increase video capture rate, and activate external devices (e.g. lights, gates, sirens) via the systems alarm output.

Instant access to stored video
No more searching through hours of videotapes! Whether searching by time and date or using our advanced video motion search tool (search for activity or missing objects in the scene), operators can locate critical information in seconds.
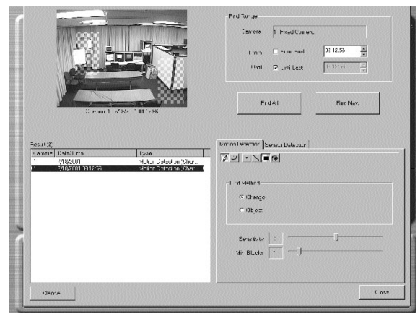
Powerful video optimization tools
Use the AVDRs video optimization tools to digitally zoom, interpolate, brighten, and sharpen recorded images in seconds. Images can be printed locally or remotely,

Outstanding Remote Accessibility
Provide for timely and informed decisions from virtually anywhere! For users who would rather not load software, all premium systems are configured with a built-in HTTP server allowing users to view live video through a standard web browser.

AVDR SOFTWARE

AVDR Motion Search
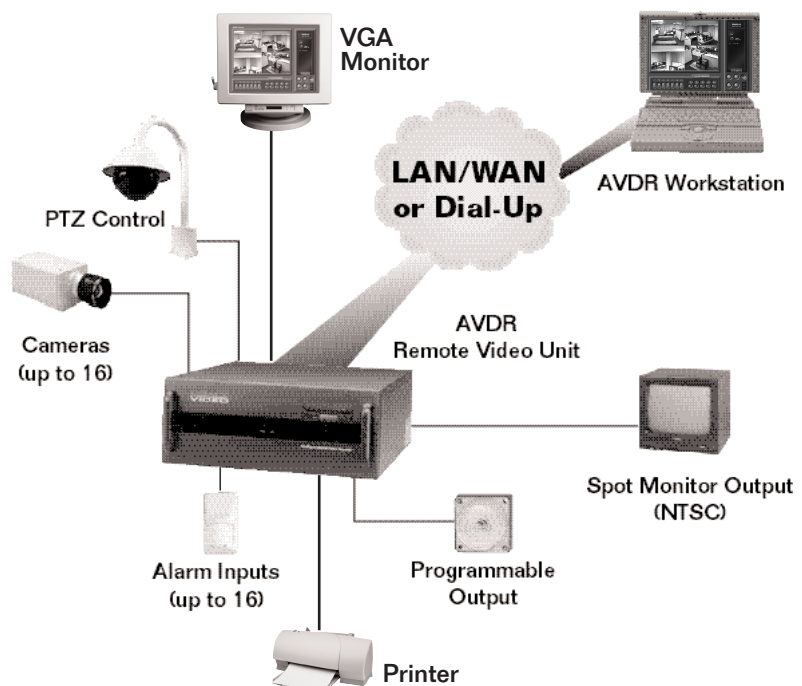

AVDR Main Screen

BASIC SYSTEM DIAGRAM

VGA Monitor

LAN/WAN or Dial-Up

AVDR Workstation

PTZ Control

Cameras (up to 16)

AVDR Remote Video Unit

Spot Monitor Output (NTSC)

Alarm Inputs (up to 16)

Programmable Output

Printer

Typical (1ips/camera) Recording Duration Charts

1. Calculations are for average situations and are approximated values. Recording capacity will vary with the environment. For example, motion in scene, PTZ operation, recording resolution and noise will greatly reduce the storage time.

2. Calculations are for Continuous Recording. NOTE: Event-driven recording mode may record much longer than the charts shown.

3. Calculations are based on the noted Recording Image Resolution (medium-quality) and a Recording Speed of 1 image per second per camera.

AVDR Recording Time (based on 40GB)

Image Rec		Recording Picture Quality Mode (320 x 240)							
Compression Rate		LOW 2 KB		STANDARD 3 KB		HIGH 5 KB		V-HIGH 6 KB	
(sec/imag)	(img/sec)	Hours	Days	Hours	Days	Hours	Days	Hours	Days
0.03	30	185	7.7	123	5.1	74	3.1	62	2.6
0.05	20	278	11.6	185	7.7	111	4.6	93	3.9
0.07	15	370	15.4	247	10.3	148	6.2	123	5.1
0.10	10	556	23.1	370	15.4	222	9.3	185	7.7
1	1	5,556	231.5	3,704	154.3	2,222	92.6	1,852	77.2

AVDR Recording Time (based on 80GB)

Image Rec		Recording Picture Quality Mode (320 x 240)							
Compression Rate		LOW 2 KB		STANDARD 3 KB		HIGH 5 KB		V-HIGH 6 KB	
(sec/imag)	(img/sec)	Hours	Days	Hours	Days	Hours	Days	Hours	Days
0.01	120	93	3.9	62	2.6	37	1.5	31	1.3
0.01	80	139	5.8	93	3.9	56	2.3	46	1.9
0.02	60	185	7.7	123	5.1	74	3.1	62	2.6
0.03	40	287	11.6	185	7.7	111	4.6	93	3.9
0.03	30	307	15.4	247	10.3	148	6.2	123	5.1
0.05	20	556	23.1	370	15.4	222	9.3	185	7.7
0.07	15	741	30.9	494	20.6	296	12.3	247	10.3
0.10	10	1,111	46.3	741	30.9	444	18.5	370	15.4
1	1	11,111	463.0	7,407	308.6	4,444	185.2	3,704	154.3

AVDR Recording Time (based on 100GB)

Image Rec		Recording Picture Quality Mode (320 x 240)							
Compression Rate		LOW 2 KB		STANDARD 3 KB		HIGH 5 KB		V-HIGH 6 KB	
(sec/imag)	(img/sec)	Hours	Days	Hours	Days	Hours	Days	Hours	Days
0.03	30	463	19.3	309	12.9	185	7.7	154	6.4
0.05	20	694	28.9	463	19.3	278	11.6	231	9.6
0.07	15	926	38.6	617	25.7	370	15.4	309	12.9
0.10	10	1,389	57.9	926	38.6	556	23.1	463	19.3
1	1	13,889	578.5	9,259	385.8	5,556	231.5	4,630	192.9

NOTE: The AVDR's unique compression algorithm is ideal for long-term storage and video transmission. By compressing only changes in the video (also known as "conditional refresh rate") the captured images file size vary. For example, in a scene with very little activity, the file sizes may only be a few hundred bytes (e.g. empty hallway scene). The above charts', indicating average file sizes, assumes continuous movement in 30-40% of the scene.

AVDR

SPECIFICATION:

AVDR BASE SOFTWARE CAPACITY (Base Software Supplied)
- Live Video Connections (all users) 16
- Retrieval Video Connections (all users) 16
- Users viewing live video (simultaneously) .10
- Users retrieving video (simultaneously).....10
- Users accessing configuration Module 5

AVDR Remote Software Requirements
- IBM™ Compatible PC
- Pentium-class processor (450 MHz or better)
- 64MB RAM
- 200MB of free hard disk space, plus adequate storage for video clips or archived images
- 3-$^1/_4$ inch Floppy Drive (for software installations)
- Video card and monitor that supports 1024 x 768 pixels or better, 24-bit (true color)
- For dial-up connections: standard 33.6 Kbps modem or better or ISDN terminal adapter
- For LAN connections: 10/100 BaseT Network Interface Card (NIC) configured for TCP/IP
- WIN98/NT/2000 or WIN98-ME

ELECTRICAL
- POWER: 115VAC, 50/60Hz, 2.5A 230VAC, 50/60Hz, 1.5A
- NOTE: NTSC units are configured for 115VAC/60Hz, 2.5A. PAL units are configured for 230VAC/50Hz, 1.5A

MECHANICAL
- Dimensions: 6.9" H x 17.4" W 19.3" D (175mm x 440mm x 490mm)
- Nominal Shipping weight: 48 lbs (22 Kg)
- Rack mountable hardware supplied

ENVIRONMENTAL
- Operating temperature: 41° to 104° F (5° to 40° C)
- Humidity: 5% to 95% RH (non-condensing)
- Storage Conditions: 32° to 140° F (-0° to 60° C)
- Maximum Operating Tilt: 10°

REGULATORY
- FCC PART15 Subpart B, Class A
- Emissions (EMI): CE: EN55022: 1998, Class A
- Immunity: CE: EN50082-1: 1997
- Safety (Europe): EN60950
- UL1950

Rear Panel Connections
- Video inputs: 16 composite 1 V p-p, non-looping, BNC
  – Alarm Inputs: 16 "push insert" type connectors
  – Block-16 pairs configured as NO (normally open) or NC (normally closed)
- Alarm inputs: 16
- General purpose control/alarm output: Form C Relay, dry voltage
- RS-232 Ports (1 and 2): Serial DB9-P
- USB Ports 1 and 2: Standard
- Printer port: Standard DB-25 P
- Keyboard: Standard PS/2 (supplied)
- Mouse: Standard PS/2 (supplied)
- Spot Monitor Output: Composite, 1Vp-p, BNC
- Audio (Systems Series only)
- SCSI (Systems Series only)

ORDERING:

Part No.	Description
E-Series	
AVDR40E	30IPS, 40GB, LAN and PSTN, 16 Channel, Spot Monitor
AVDR100E	30IPS, 100GB, LAN and PSTN, 16 Channel, Spot Monitor
AVDR200E	30IPS, 200GB, LAN and PSTN, 16 Channel, Spot Monitor
Systems Series	
AVDR5120-80	120IPS, 80GB, LAN and PSTN, 16 Channel, Spot Monitor, CD-RW, Audio, SCSI
AVDR5120-320	120IPS, 320GB, LAN and PSTN, 16 Channel, Spot Monitor, CD-RW, Audio, SCSI
AVDR40	30IPS, 40GB, LAN and PSTN, 16 Channel, Spot Monitor, DVD RAM, Audio, SCSI
AVDR100	30IPS, 100GB, LAN and PSTN, 16 Channel, Spot Monitor, DVD RAM, Audio, SCSI
AVDR200	30IPS, 200GB, LAN and PSTN, 16 Channel, Spot Monitor, DVD RAM, Audio, SCSI

For more information on the AVDR or ADEMCO Video products, please contact your sales representative or visit our Web site at www.ademcovideo.com

ADEMCO Group is committed to ongoing product improvement; we therefore reserve the right to change specifications without notice.

L/AVDRDS/D Form 4418 6/12/03

Digital Video Recording Systems

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