

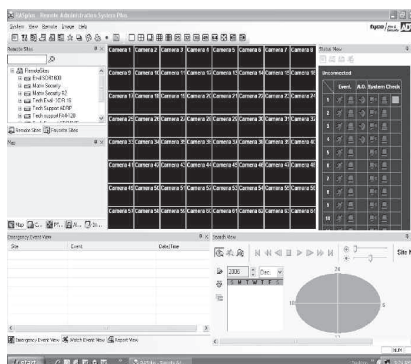
120-ips Multi-Channel Triplex Digital Video Recorders w/ CD-RW A-ADT800E, A-ADT1600E



Product Summary

ADT offers a performance leap in affordable multiple-channel Digital Video Recorders with the improved ADT Series recorders. The ADT Series recorders are highly stable 8- and 16-channel digital video recorders based on an embedded Linux operating system with improved MPEG-4 ASP compression. The units are designed for real-time 120-ips Full Duplex display and recording capabilities for eight and sixteen channel video and two audio inputs. The units record up to 120 images per second and offer selectable CIF and 2CIF record resolution (horizontal 672- or 336-pixels), high image quality, and simple file archive using the internal CD-RW, USB port for flash drive (thumb-drives), external USB hard disk drive or CD-RW drive. The recorders are the most cost effective solution for providing quality video security recording and storage.

The recorders provide exceptional picture quality in live and playback modes and offer remote monitoring, remote search and remote configuration using the supplied Remote Administration System Plus software (RAS+), on a customer supplied computer. RAS+ is offered as an advanced, yet simple Windows format with drop down menus allowing full customization of the viewing screen. All features and functions of the DVR are available on a single screen using a single connection to the DVR. The RAS+ features the capability of a 64 segment display for individual cameras up to 16 DVR connections. RAS+ offers live view, remote search and system status from multiple recorders.



One of the most powerful features of RAS+ is the ability to customize the screen layout and only have the most used features on screen while less used features are only a tab away. Each function is identified with a tab and can be placed on the side or bottom of the screen so when the cursor is placed on the tab the function window appears. The user will be able to customize and save up to four different screen configurations.

This is useful if more than one person uses the same computer or if a user has different operational characteristics for different remote locations. For example, the pan-tilt-zoom control can be on screen only if there are pan-tilt-zoom cameras at the location.

The ADT Series supports broadband static IP, ADSL, DHCP, dynamic IP using DVRNS – an enhanced DDNS system for IP addressable networking capabilities, or standard telephone line when used with an optional external modem. The system allows up to 10 simultaneous connections for live view and two each for administration and search. Remote video connections may be bandwidth controlled (max 60-ips) and remote file export is accomplished using Clip-Player, AVI, JPEG or BMP files.

The Digital Recorders offer an advanced archiving system using a compressed file format with executable “player” software saved with each image file. This allows for the transfer of Chain Finger Encryption (CFE) with each image file. With the addition of an external USB device the unit can archive video fast and efficiently. The Clip-Copy feature allows a video segment to be recorded for archiving and portability while connected remotely or locally during a search operation.

A User-friendly Graphical User Interface (GUI) and an intuitive menu system allow quick and easy operation using the familiar front panel controls or a USB mouse. For playback the DVRs support two search modes: calendar and event. The calendar search mode enables specific date and time search with a visual recording status table. Event search provides a query to pinpoint specific periods of time and types of events for quick retrieval of recorded images such as external alarm-in, motion detection, video obscuration, text-in and video loss events. Pre-event may be programmed to capture video up to 30 minutes before the event occurrence. Each camera can be individually programmed for pre-event with quality and ips settings.

The core technologies used in the ADT recorders result in a powerful operating system and increased efficiency in hard-drive capacity. The advanced MPEG4-ASP compression engine allows for smaller file data sizes without significant picture quality distortion and makes it possible to store recorded images for longer periods of time.

The optional CONKIT9C or CONKIT16C camera interface provides complete (power, audio-in, video-in, alarm) connectivity for the ADT branded observation cameras.

Features

- 8- and 16-channel looping BNC inputs
- 2-channel audio recording / 1-channel audio playback
- 120-ips (images per second) triplex operation
- Selectable (336x224) or (672x224) record resolution
- Internal CD-RW
- Two USB 2.0 I/O ports
- Concurrent BNC / VGA video outputs
- 1-spot monitor output: full-screen single camera or programmed sequencing
- USB mouse operation supported
- Full screen, 2x2, 3x3, 4x4, PIP
- Powerful search modes by calendar, time-date, event, motion, museum, text-in
- 2X Digital Zoom, 1-Touch / 2-Touch Clip/Copy archiving (compressed video image files)
- Archived video played back using executable “player” software program
- Temperature Check, SMART Diagnosis, Auto Recovery, Auto Deletion
- Network Time Sync
- Key-Lock Security / 256 individual users
- Programmable Video Motion Detection (VMD) and Video Obscuration Detection (VOD) per channel
- Intuitive Graphical User Interface (GUI) menu system
- Multiple recording modes -Time-Lapse, Alarm, Pre-event, Panic and Continuous
- Programmable record options -Schedule, Record Rate, Image Quality for each input
- Up to 30 minute pre-event / 15 minute post event recording
- Remote Access System (RAS+) software supports Static-IP, ADSL, DHCP, Dynamic-IP DVRNS (Enhanced DDNS)
- RAS+ features Monitoring, Playback, Recording, Setup, PTZ, Upgrade, Status with full Triplex operation, (User defined 64-channel view), Map integration, Multi-Site System Health Monitoring with user defined customizable panel design
- PTZ camera control
- 9 language menu including English, French, and Spanish

Ordering Guide

SCN#	Item
A-ADT800E-250	8-Channel DVR w/ CD-RW, 250 GB
A-ADT800E-500	8-Channel DVR w/ CD-RW, 500 GB
A-ADT1600E-250	16-Channel DVR w/ CD-RW, 250 GB
A-ADT1600E-500	16-Channel DVR w/ CD-RW, 500 GB
A-ADT1600E-1TB	16-Channel DVR w/ CD-RW, 1 TB



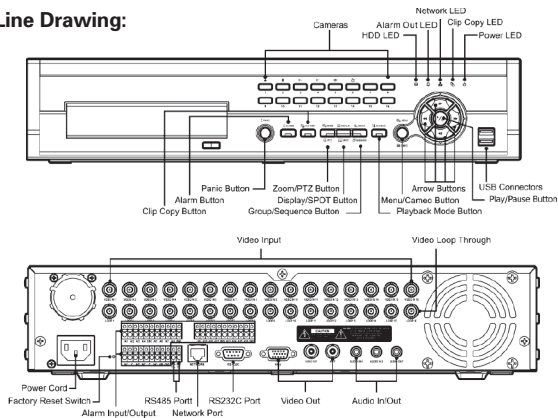
ADT Always There®

Specifications

Video Input	8-, 16-BNC looping inputs, auto terminating
Main Monitor Output	BNC Composite: 1 output VGA: 1 output
Spot Monitor	BNC Composite: 1 output
Display Mode (main)	1, 4, 8, 16, Sequence, PIP, and Digital 2X Zoom
Display Mode (spot)	Full-screen, Sequence
Display Resolution	720 x 480 NTSC
Record Resolution	CIF: 336 x 224, 2CIF: 672 x 224
Playback/Record Rate	120/120 images/second (CIF) 60/60 images/second (2CIF) Guaranteed Full-Duplex – no record rate reduction
Compression	MPEG-4 ASP (Advanced Simple Profile)
Operating System (OS)	Embedded Linux
Storage	Max 4 HDD without CD-RW, Max 3 HDD with CD-RW
Data Export Medium	Internal CD-RW, USB (HDD, CD-RW, Flash-Drive), IDE (CD-RW, DVD-RW)
Alarm Inputs	8/16 TTL, NC or NO, push terminal
Alarm Outputs	2 Relay Out, terminal block
Alarm Reset	1 TTL w/ground, terminal block
Network Interface	RJ-45 Network Interface card 10/100 Base T Ethernet RS232C Serial Port I/O Control (Optional External Modem)
Network Protocols	Static IP, ADSL, DHCP, DVRNS (Enhanced DDNS)
Remote Connections	Admin: 2 / Watch 10 / Search: 2
Remote Software	Basic: Monitoring, Playback, Recording, Setup, PTZ, Upgrade, DVR Status Advanced: Triplex operation, (User defined 64-channel view), Map integration, Multi-Site System Health Monitoring
Remote Data Export	Clip-Player, AVI, JPEG, BMP
Remote Transmission Rate	Maximum 60-ips, with Bandwidth Control
PTZ Control	1 – RS485 Serial connection (two wire half duplex)
Audio Inputs/Outputs	2/1 – line level (RCA connectors)
USB Port	2 – type 2 Version 2.0 (2 on front)
Dimensions (W x H x D)	16.9" x 3.5" x 15.7" (430mm x 88mm x 400mm), 2U, Rack mount
Weight	16.1 lbs (7.3kg)
Operating Temp	41°F ~ 104°F (5°C ~ 40°C)
Operating Humidity	0% - 90% (non condensing)
Power Requirements	100 – 240 VAC, 4-2A, 60/50 Hz, 100W

Specifications subject to change without notice.

Line Drawing:



Cameras

Part No.	Description
A-C4CPS	Camera, Color, 1/4", plastic, 4&8mm lens, speaker
A-CC540TDN	Camera, Color, 540 TVL, OSD, 3.3-8mm VF, BNC / 12VDC / 24VAC / RJ11
A-CF540	Camera, Color, 540 TVL, fixed dome, 4-9mm VF, DC AI, BNC / 12VDC / 24VAC / RJ11
A-CV540	Camera, Color, 540 TVL, vandal, 4-9mm VF, DC AI, BNC / 12VDC / 24VAC / RJ11
A-S35CNV	Camera, Color, outdoor bullet, 6mm, 380TVL, 6 LEDs, 37mm dia
A-S35CPS	Camera, Color, outdoor bullet, 6mm, 380TVL, 6 LEDs, 37mm dia, 12VDC ps.
A-S35CPS36	Camera, Color, outdoor bullet, 3.6mm, 380TVL, 6 LEDs, 37mm dia, 12VDC ps
A-S230CWX	Camera, Color, bullet, 3.6mm, 380TVL, 23mm dia
S230CWPS	Camera, Color, bullet, 3.6mm, 380TVL, 23mm dia, 12VDC ps
SDN650	Camera, Color, outdoor bullet, 3.8-9.5mm VF AI, 520TVL, 18 LEDs, 60mm dia
SDN650PS	Camera, Color, outdoor bullet, 3.8-9.5mm VF AI, 520TVL, 18 LEDs, 60mm dia, 12VDC ps
A-CK540HB	Camera, Color, Outdoor Hsg, 5-60mm VF AI lens, mt, H/B, pwr sup, cable
A-DC4C	Camera, Color video door, 1/3", call button, 4mm
A-DS1C	Camera, Color dome, motorized, 360 deg pan
A-CC42S1	Camera, Color, Covert, Wall Clock, 4mm
A-CC42PIR	Camera, Color, Covert, non-working PIR Housing, 4mm
CC48HS	Camera, Color, Covert, Height-Strip Housing, 480 TVL, 3.7mm, RJ-11
FS100H	Camera, Color, Covert, Height-Strip Housing, 480 TVL, 3.7mm, 12VDC ps inc
FD375VA	Camera, Color, 4-9mm VF, DC AI, High Res 24 VAC 12 VDC
A-C3BPS	Camera, B/W, 1/3", plastic, 4&8mm lens, speaker
A-S190SWX	Camera, B/W, bullet, 3.6mm fixed, 420TVL, 19mm dia
A-DS1B	Camera, B/W Dome, 1/3" motorized, 360 deg pan
A-CB38PIR	Camera, B/W, Covert, non-working PIR Housing, 4mm

Accessories

Part No.	Description
CONKIT4C	Interface Box, 4-channel Video/Audio/Alarm, RJ11, BNC, RCA, 15VDC (includes video connection cables)
CONKIT9C	Interface Box, 9-channel Video/Audio/Alarm, RJ11, BNC, RCA, 15VDC (includes video connection cables)
CONKIT16C	Interface Box, 16-channel Video/Audio/Alarm, RJ11, BNC, RCA, 15VDC (includes video connection cables)
A-A2POS	3' Cash Register to camera interface adapter
A-MB1412E	14" B/W Monitor, CRT, 800L, no audio
A-MC1574FN	15" Color Monitor, flat-CRT, 500L, 2-ch A/V, SHVS
A-MC2174FN	21" Color Monitor, flat-CRT, 500L, 2-ch A/V, SHVS
M170CP2	17" LCD Color Monitor 1280x1024, narrow bezel, plastic, cctv/pc, desk stand inc
M190CP2	19" LCD Color Monitor 1280x1024, narrow bezel, plastic, cctv/pc, desk stand inc
A-XDLBW2	Lockbox, DVR
A-AB50C	Cable, 50', BNC to BNC, spot monitor
BB-6	Cable, 6' BNC to BNC, RG59
BB-3	Cable, 3' BNC to BNC, RG59
ACB-6	Cable, 6' RCA to RCA, audio

Storage Duration

The following tables illustrate typical recording duration for the 336 x 224 (CIF) record resolution with a single video input with continuous video recording and no audio for the recorder with a 500-GB hard disk drive. The actual storage duration will vary depending on the number of cameras recorded, the image quality selected, the recording speed, recording schedule, motion content of the images and the number of stored events.

Recording Time (based on 500GB)

Image Rec Compression Rate	Record Resolution & Quality Mode (1 CIF) 336 x 224								
	LOW 2 KB		STANDARD 4 KB		HIGH 8 KB		V-HIGH 12 KB		
(sec/img) (img/sec)	Hours	Days	Hours	Days	Hours	Days	Hours	Days	
0.01	120	579	24.1	289	12.1	145	6.0	96	4.0
0.02	60	1,157	48.2	579	24.1	289	12.1	193	8.0
0.03	30	2,315	96.5	1,157	48.2	579	24.1	386	16.1
0.07	15	4,630	192.9	2,315	96.5	1,157	48.2	772	32.2
0.13	7.5	9,259	385.8	4,630	192.9	2,315	96.5	1,543	64.3
0.20	5	13,889	578.7	6,944	289.4	3,472	144.7	2,315	96.5
1	1	69,444	2,893.5	34,722	1,446.8	17,361	723.4	11,574	482.3

* Storage is for one input, divide by number of cameras used

