

240-ips Multi-Channel Triplex Digital Video Recorders A-XDP16E



Product Summary

The next step in the evolution of embedded digital video recorders is the ADT XDP series recorder. The XDP series recorder is a highly stable 16-channel digital video recorder, based on an embedded RTOS (Real-Time OS) operating system with an internal watchdog timer and auto restart upon power loss. The unit is designed for real-time Full Duplex CIF 240 ips display and recording capabilities for sixteen channel video and four audio inputs, with powerful alarm handling and one-to-one action for each event. The units feature selectable record resolution, high image quality and multiple archiving options using the internal DVD-RW drive, an external USB hard disk drive, CD-RW, DVD RW drive or flash drive. The recorder is a cost effective solution for providing quality video security recording and storage.

The recorder provides exceptional picture quality in live and playback modes and offers remote monitoring, remote search and remote configuration using the supplied Remote Administration System Plus software (RAS+), on a customer supplied computer.

The Digital Recorder comes with 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 HDD or SCSI drive 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 by using the built in DVD-RW 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, infrared remote control

or USB mouse. For playback the DVR supports two basic search modes: calendar and event. The calendar search mode creates a specific date and time search with a visual status table. Event search provides a query to pinpoint specific types of events and times for quick retrieval of recorded images such as external alarm-in, motion detection, text in and video loss events. Pre-event may be programmed to capture video from 5 seconds to 30 minutes before the event occurrence. Each camera can be individually programmed for pre-event with quality and ips settings different from normal settings.

The core technologies used in the ADT recorders result in a powerful operating system and increased efficiency in the hard-drive capacity. The advanced 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.

Built-in IP addressable networking capabilities enable remote system management via a broadband connection or standard telephone line when used with an optional external modem.

Remote broadband connection is available with either static-IP, dynamic-IP using an enhanced DDNS system, or web-browser access using Internet Explorer.

Features

- 4-Channel audio recording and 1-channel audio playback
- 240-ips (Images per Second) triplex operation @CIF
- Built-in Web Server allows Remote Connection through a Web Browser e.g. Internet Explorer
- Live and Recorded Audio via Broadband Remote Connection
- 2X ~ 4X Digital Zoom
- Selectable 352x240 CIF, 704x240 2CIF or 704x480 4CIF recording resolutions
- Built-in DVD-RW, three USB 2.0 I/O ports and Ultra-Wide SCSI interface
- Concurrent BNC / S-VHS / VGA video monitor outputs for high quality images
- 4- spot monitor outputs with selectable camera inputs and sequencing dwell time
- Hand-Held IR Remote control and USB mouse included
- Powerful search modes by calendar, time-date, event, motion, museum, text
- Programmable Video Motion Detection (VMD) per channel (<1sec response)
- Intuitive Graphical User Interface (GUI) menu system
- Multiple recording modes (Time-Lapse, Alarm, Pre-event, Panic and Continuous)
- Menu driven back-up features allow for archiving and mirroring images to an external SCSI or USB port.
- Clip-Copy archiving using compressed video image files allows for fast and efficient image transfer and portability
- Archived video is easily played back using executable "player" software program - recorded with each clip-copy file
- Remote access via static-IP, dynamic-IP using an enhanced DDNS system, or web-browser access using Internet Explorer
- PTZ control via RS485, selectable protocols for all major brands
- Multiple display formats (full screen, 2x2, 3x3, 4x4, PIP)
- Programmable record options (schedule, record rate, image quality) for each video input

Ordering Guide

SCN#	Item
A-XDP16E-500	16-Channel Digital Video Recorder, DVD-RW, 500GB
A-XDP16E-15TB	16-Channel Digital Video Recorder, DVD-RW, 1.5TB
A-XDP16E-3TB	16-Channel Digital Video Recorder, DVD-RW, 3.0TB



Specifications

Video Input

16-BNC looping inputs, auto terminating

Main Monitor Output

BNC Composite: 1 output

VGA: 1 output

Spot Monitor

BNC Composite: 4-programmable outputs

Display Resolution

720 x 480 NTSC

Playback/Record

240/240 (CIF), 120/120 (2CIF), 60/60 (4CIF)
guaranteed full-duplex

Alarm Inputs

16 TTL, programmable as
NC or NO (push terminal)

Alarm Outputs

2 Relay Out, terminal block

Alarm Reset

1 TTL w/ground, terminal block

RS-485

1-RS485 Serial connection for PTZ control
(two wire half duplex, push terminal)

RS232C

1-RS232C Serial Port I/O Control or
Text input, DB-9 connector

Audio Inputs/Outputs

4/1 – line level (RCA connectors)

USB Port

3 – type 2 Version 2.0 (2 on front &
1 on back)

Ultra Wide SCSI Port

High density female 68 pin connector

Network Interface

RJ-45 Network Interface card

10/100 Base T Ethernet

Dimensions (W x H x D)

16.9" x 3.5" x 15.9"

(430mm x 89mm x 405mm)

(Includes jog/shuttle extension and
connectors on back plate)

Weight

22.5 lbs (10.2kg)

Shipping Weight

27.6 lbs (12.5kg)

Shipping Dimensions

21.3" x 11.4" x 23.2"

(540mm x 290mm x 590mm)

Operating Temp

41°F ~ 104°F (5°C ~ 40°C)

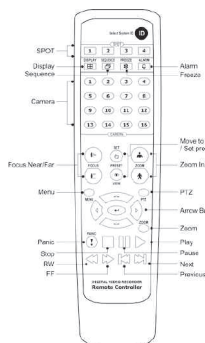
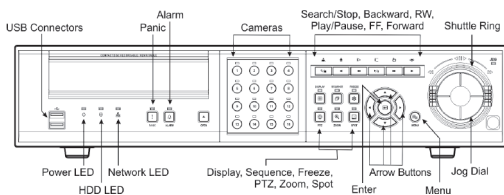
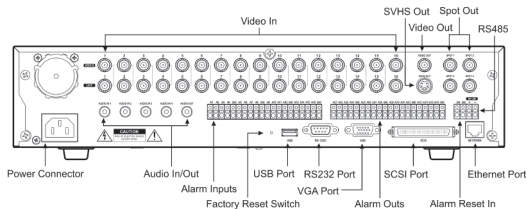
Operating Humidity

0% - 90% (non condensing)

Power Requirements

100 – 240 VAC, 3A, 60/50 Hz, 150 watts

Specifications subject to change without notice.



Cameras

Part No.	Description
A-CC540TDN	Camera, Color, 540 TVL, OSD, 3.3-8mm VF, BNC / 12VDC / 24VAC / RJ11
A-CF540	Camera, Color, 540 TVL, 4-9mm VF, fixed dome, BNC / 12VDC / 24VAC / RJ11
A-CV540	Camera, Color, 540 TVL, vandal, 4-9mm VF, DC AI, BNC / 12VDC / 24VAC / RJ11
A-CBHD60JI	Camera, Color, outdoor bullet, 6mm, 540TVL, 12 LEDs
A-CBHD60PI	Camera, Color, outdoor bullet, 6mm, 540TVL, 12 LEDs, 12VDC PS
A-CBHD36JI	Camera, Color, outdoor bullet, 3.6mm, 540TVL, 12 LEDs
A-CBHD36PI	Camera, Color, outdoor bullet, 3.6mm, 540TVL, 12 LEDs, 12VDC PS
A-CBSD36J	Camera, color, bullet, 3.6mm, 380TVL, Digital D/N
A-CBSD36P	Camera, color, bullet, 3.6mm, 380TVL, Digital D/N, 12VDC PS
A-CBHT2812JI	Camera, Color, bullet, 2.8-12mm VF AI, 540TVL, 24LEDs
A-CBHT2812PI	Camera, Color, bullet, 2.8-12mm VF AI, 540TVL, 24LEDs, 12VDC PS
A-CK540HB	Camera, Color, Outdoor Hsg, 5-60mm VF AI lens, mt, H/B, pwr sup, cable
CC48HS	Camera, Color, Covert, Height-Strip Housing, 525TVL D/N, 3.7mm, RJ-11
FS100H	Camera, Color, Covert, Height-Strip Housing, 525TVL D/N, 3.7mm, 12 VDC ps inc
FI150H	Camera, Color, Covert, Mini-Strip Housing, 525TVL D/N, 3.7mm, 12 VDC ps inc

Accessories

Part No.	Description
ML757	17" LCD VGA-only, 1280x1024, black plastic case
ML970W	19" Wide LCD VGA-only, 1440x900, black plastic case
ML2200W	22" Wide LCD VGA-only, 1680x1050, black plastic case
M170CP2	17" LCD Monitor 1280x1024, narrow bezel, plastic, cctv/pc, 300nit, desk stand inc
M190CP2	19" LCD Monitor 1280x1024, narrow bezel, plastic, cctv/pc, 300nit, desk stand inc
A-M170CP2D	same description as M170CP2
A-M190CP2D	same description as M190CP2
A-MC1574FN	15" Color Monitor, flat-CRT, 500L, 2-ch A/V, SHVS
CONKIT16C	Interface Box, 16-channel Video/Audio/Alarm, RJ11, BNC, RCA, 15VDC (includes video connection cables)
A-XDLBW2	Lockbox, DVR
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 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
0.05 20	3,472	144.7	1,736	72.3	868	36.2	579	24.1
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
30 0.03	2,314,815	96,450.6	1,157,407	48,225.3	578,704	24,112.7	385,802	16,075.1

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

