



# DigiMux™

## THE DIGITAL SURVEILLANCE SOLUTION



### FEATURES

- Integrated digital video recorder, multiplexer and video server (available in 4, 9, or 16 channel versions)
- Triplex operation enables users to view live and previously recorded video simultaneously while continuing to record at the same time
- Outstanding picture quality with resolutions up to 720 x 480 (NTSC), 720 x 576 (PAL)
- Records up to 60 ips and displays live video up to 90 ips (NTSC) using the Active Window feature
- Record and playback one channel of audio
- Flexible internal storage configurations include: 80, 160 and 320 GB
- Various on-line storage options including up to 1.6 TB (TeraBytes) via FireWire using Extended Storage Modules
- Off-line storage options include USB 1.1 and 2.0 devices such as hard drives, ThumbDrives® and CD-RW
- Networkable via Ethernet (TCP/IP)
- Easy-to-use DigiClient browser-based remote viewing and configuration software enables access to live and previously recorded video
- Covert camera operation provides enhanced security and administrator control
- Motion detection with configurable sensitivity levels
- Remote alarm notification via DigiClient software, e-mail, pager or phone
- Pre-alarm video (up to five minutes)
- Upgrade software via the Internet or USB ThumbDrive (available separately)
- Easy configuration feature enables quick setup of record options using extended, standard or best quality
- Cascade (daisy-chain) up to 10 DigiMux's to create a scalable system
- DigiRemote fully functional Infrared (IR) control includes dome control
- Extend control of DigiMux via ControlCenter™ 200 or 300 keyboards (available separately)
- Export video and associated audio via USB, LAN, or FireWire
- Digital signature verifies authenticity of video
- Integrated dome control supporting a variety of domes, including the SpeedDome® series
- Per camera settings for covert camera feature, termination, gain control, alarms, motion detection, day/night/weekend scheduler

The DigiMux™ Digital Surveillance System includes a multi-channel Digital Video Recorder (DVR) with 4, 9, or 16 camera inputs, DigiClient™ remote viewing and configuration software, and one DigiRemote™ infrared remote control. This is a multifaceted product that integrates key elements into a single security CCTV solution. The DigiMux DG4000 series' triplex operation enables users to view live and previously recorded video simultaneously while continuing to record at the same time. It essentially combines the features of two time-lapse audio/video recorders, a multiplexer, and a video server into a single integrated digital platform.

DigiMux converts analog video signals into digital video images that can be stored on an array of hard disk drives. A key advantage to digital video is that it can be indexed by time or events, and recorded video can be instantly viewed. DigiMux users can access recorded video instantaneously without having to rewind videotapes. At the touch of a button, you can fast forward, rewind, and pause, while avoiding image streaking or tearing that is common with analog VCR technology.

DigiMux can be remotely controlled with DigiClient via Ethernet connection to a LAN, WAN or the Internet. The DigiRemote provides control of DigiMux with its fully functional Infrared (IR) remote control that also includes dome control. Three USB ports enable video export to external devices, and two IEEE-1394 (FireWire®) ports enables external storage expansion with Extended Storage Modules (ESM).

DigiMux offers advanced features not typically found in standard multiplexers, including motion detection, remote alarm notification, remote access, and real-time Active Window. The DigiClient remote viewing and configuration software extends the features, accessibility, and usability of the DigiMux. All around, the DigiMux is a full-featured integrated DVR, multiplexer and video server all in one unit.

# SPECIFICATIONS

## Model Numbers

NOTE: Substitute "P" for "N" for PAL version.

ADDG4004080N	.....DigiMux, 4 channel, with DigiClient software, 80GB, NTSC
ADDG4004160N	.....DigiMux, 4 channel, with DigiClient software, 160GB, NTSC
ADDG4004320N	.....DigiMux, 4 channel, with DigiClient software, 320GB, NTSC
ADDG4009080N	.....DigiMux, 9 channel, with DigiClient software, 80GB, NTSC
ADDG4009160N	.....DigiMux, 9 channel, with DigiClient software, 160GB, NTSC
ADDG4009320N	.....DigiMux, 9 channel, with DigiClient software, 320GB, NTSC
ADDG4016080N	.....DigiMux, 16 channel, with DigiClient software, 80GB, NTSC
ADDG4016160N	.....DigiMux, 16 channel, with DigiClient software, 160GB, NTSC
ADDG4016320N	.....DigiMux, 16 channel, with DigiClient software, 320GB, NTSC

## General

Access Protection	.....Yes
Alarm Event Display	.....Yes
Motion Alarm Generation	.....Yes
Alarm Notification	.....Yes, via DigiClient software, pager or phone (requires Caller ID function)
Pre-Alarm Images	.....Yes, up to 5 minutes per camera
Camera Auto Detect	.....Yes
Search Options	.....Yes (event, camera, time and date)
Network Connectivity	.....10/100 Mbps Ethernet (TCP/IP) or external PSTN modem
Dome Control Protocols	.....AD422, Pelco P and Pelco D
Domes Supported	.....American Dynamics SpeedDome Series and others
Dome Control	.....Yes, built-in control via front panel controls, DigiClient software, DigiRemote or ControlCenter 200 and 300 keyboards
Keyboard Interface	.....Compatible with ControlCenter 200 and 300 keyboards (available separately)
IR Sensor/Remote Control	.....Includes a DigiRemote control and works with universal infrared TV/VCR remote controls
Network Transmission Speed	.....Maximum 25 to 30 ips/Ethernet
Export Picture or Video Clip	.....Yes, via USB devices such as CD-RW or ThumbDrive
Processor	.....Multimedia digital signal processor
Operating System	.....Embedded
Languages	.....English, French, German, Italian and Spanish

## Video

Signal Format	.....NTSC or PAL (internal switch)
Video Inputs	.....4, 9 or 16 looping composite inputs (1 Vp-p, 75 Ohms with individual software termination)
Monitor Outputs	.....Two composite outputs (1 Vp-p, 75 Ohms), One S-video output
Video Display Resolution	.....720 x 480 (NTSC), 720 x 576 (PAL)
Playback/Record Speed	.....Up to 60 ips (NTSC), 50 ips (PAL)
Live Video Refresh	.....Live video displayed up to 90 ips (NTSC), 75 ips (PAL) including Active Window
Active Window	.....User-selectable window (or cameo) that displays real time video of one camera input up to 30 ips (NTSC), 25 ips (PAL)
Display Options	.....Full, 2x2, 3x3, 4x4, PIP, sequence
Video Encryption	.....Digital signature on video export

## Alarm

Alarm Input	.....4, 9, 16 TTL compatible, (via I/O connector board, included)
Alarm Output	.....Three dry contacts (via I/O connector board, included)
Alarm Reset Input	.....One TTL compatible (via I/O connector board, included)

## Audio

Audio Input	.....One line in, unbalanced high impedance
Audio Output	.....One line out, unbalanced high impedance

## Front Panel Controls

Camera Buttons	.....DG4004 Model: 1 to 4 DG4009 Model: 1 to 9 DG4016 Model: 1 to 16
Dome Control Buttons	.....Pan, tilt, zoom in, zoom out, focus in, focus out, set presets, go presets
Video Viewing Buttons	.....Fast rewind, rewind, play, pause, forward, fast forward, sequence, mode
Directional Buttons	.....Up, down, left and right arrows
Control Buttons	.....Enter, escape, lock

## Front Panel Indicators

Camera and Control Buttons	.....Active buttons indicated via back light
Power On	.....Indicates power is "on" (green light)
Record	.....Indicates data is being recorded (green light)
Alarm	.....Indicates an alarm has been triggered and not cleared (flashing red light)
Network	.....Indicates network access (steady green light, flashing green light indicates network traffic)

## Front Connectors

USB Port	.....One USB connector port
----------	-----------------------------

## Rear Indicators

Network	.....Standard network "on" indicator beside Ethernet port
---------	---

## Rear Connectors

Video Input	4, 9 or 16 BNC (composite)
Video Output Loop	4, 9 or 16 BNC (composite)
Main Monitor Output	One BNC (composite), one S-video
Call Monitor Output	One BNC (composite)
Audio In	RCA connector
Audio Out	RCA connector
Alarm	Alarm input per channel with appropriate grounds and outputs
I/O Connector Board	Quick connect 44-pin I/O connector board for easy alarm and dome control connections (included)
Ethernet Port	One RJ-45 LAN port
USB Port	Two USB connector ports
IEEE-1394 (FireWire)	Two IEEE-1394 (FireWire) ports (for additional external storage)
Power Input	DC Jack, 2.5 mm

## Storage

Primary Internal Storage	EIDE hard disk drive
Secondary Internal Storage	EIDE hard disk drive
External Storage	IEEE-1394 (FireWire)
Export	USB 1.1 and 2.0 (on front and back of unit)

## Electrical

Power	External auto-ranging power supply, 100 to 240 VAC, 500mA 50/60 Hz, input power DC 19 V, 3.4 A
-------	--

## Mechanical

Dimensions (W x H x D)	432 x 44 x 406 mm (17 x 1.75 x 16 in) Rack-mountable, one RU
Shipping Dimensions	533 x 305 x 508 mm (21 x 12 x 20 in)
Unit Weight	5.4 kg (14 lbs)
Shipping weight	9 kg (20 lbs)
Color	Black
Case	Desktop (with removable non-marring feet)
Rack-Mount Option	Rack-mount ears included with DigiMux

## Minimum Systems Requirements for DigiClient Software

Operating System	Windows XP, Windows 2000 or Windows 98 SE
Processor	Pentium III, 600 MHz or faster
Memory	128 MB RAM
Screen Resolution	SVGA, 800 x 600 pixels, 16 bit or higher
Connectivity	10BaseT or 100BaseTX or dial-up (56 K) modem
Web-Browser	Microsoft® Internet Explorer 6.0 or higher
Peripherals	CD-ROM or CD/RW drive (optional), mouse, keyboard

## DigiRemote

Functions	Menu, enter, escape, play, pause, rewind, forward, 1 to 16 camera/channel selection, up, down, left, right directional controls, set, sequence, mode, lock and dome control
IR Distance	12 ft (4 m)
Battery Type	Two "AA" 1.5 V, included
Size	Approximately 2 x 7 x .75 in
Weight	Approximately 8 oz

## Regulatory

Emissions	FCC Part 15, Subpart B, Class A
Safety	UL and CUL 1950 CE

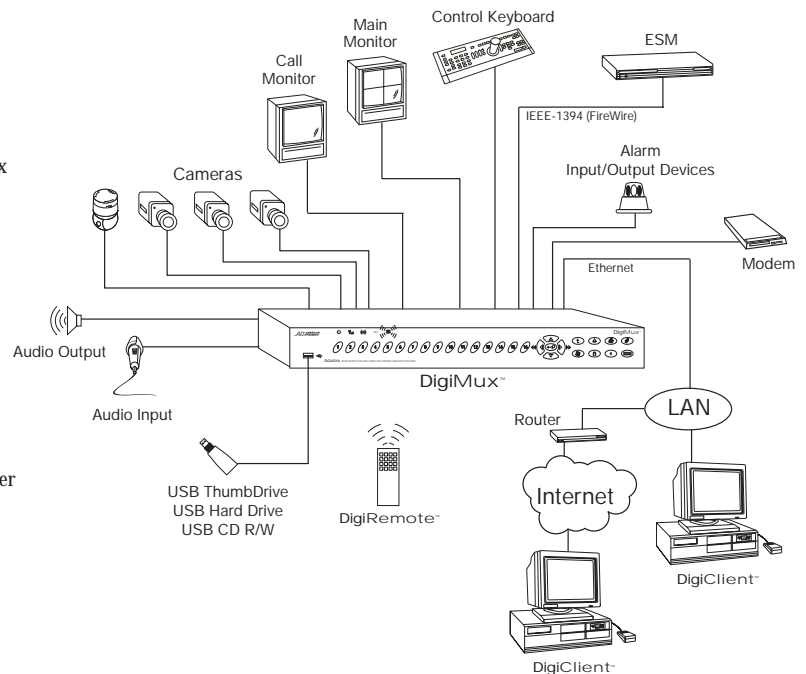
## Environmental

Operating Temperature	5° to 40° C (41° to 104° F)
Storage Temperature	-20° to 70° C (-4° to 158° F)
Humidity	0% to 90% RH (non condensing)

## Accessories

ADCC0200	ControlCenter Keyboard, two axis joystick, RS-485
ADCC0300	ControlCenter Keyboard, three axis joystick (twist and zoom), RS-485
ADACTD01128U	USB ThumbDrive Smart 128 MB
ADDGRC20	DigiRemote IR Remote Control
ESM480	480 GB Extended Storage Module
ESM640	640 GB Extended Storage Module

## BASIC SYSTEM DIAGRAM



**Record Duration Times (NTSC without audio)**

**80 GB**

Image Rec Recording Rate		Recording Picture Quality Mode									
		BASIC		STANDARD		MEDIUM		HIGH		SUPERIOR	
		10 KB		12 KB		15 KB		19 KB		28 KB	
(sec/imag)	(imag/sec)	Hours	Days	Hours	Days	Hours	Days	Hours	Days	Hours	Days
0.02	60	37.0	1.5	30.9	1.3	25.0	1.0	19.8	0.8	13.4	0.6
0.03	30	74.1	3.1	61.7	2.6	50.1	2.1	39.6	1.7	26.7	1.1
0.10	10	222.2	9.3	185.2	7.7	150.2	6.3	118.8	5.0	80.2	3.3
0.20	5	444.4	18.5	370.4	15.4	300.3	12.5	237.7	9.9	160.4	6.7
0.33	3	740.7	30.9	617.3	25.7	500.5	20.9	396.1	16.5	267.4	11.1
0.50	2	1,111.1	46.3	925.9	38.6	750.8	31.3	594.2	24.8	401.1	16.7
1.00	1	2,222.2	92.6	1,851.9	77.2	1,501.5	62.6	1,188.4	49.5	802.2	33.4

**160 GB**

Image Rec Recording Rate		Recording Picture Quality Mode									
		BASIC		STANDARD		MEDIUM		HIGH		SUPERIOR	
		10 KB		12 KB		15 KB		19 KB		28 KB	
(sec/imag)	(imag/sec)	Hours	Days	Hours	Days	Hours	Days	Hours	Days	Hours	Days
0.02	60	74.1	3.1	61.7	2.6	50.1	2.1	39.6	1.7	26.7	1.1
0.03	30	148.1	6.2	123.5	5.1	100.1	4.2	79.2	3.3	53.5	2.2
0.10	10	444.4	18.5	370.4	15.4	300.3	12.5	237.7	9.9	160.4	6.7
0.20	5	888.9	37.0	740.7	30.9	600.6	25.0	475.3	19.8	320.9	13.4
0.33	3	1,481.5	61.7	1,234.6	51.4	1,001.0	41.7	792.2	33.0	534.8	22.3
0.50	2	2,222.2	92.6	1,851.9	77.2	1,501.5	62.6	1,188.4	49.5	802.2	33.4
1.00	1	4,444.4	185.2	3,703.7	154.3	3,003.0	125.1	2,376.7	99.0	1,604.5	66.9

**320 GB**

Image Rec Recording Rate		Recording Picture Quality Mode									
		BASIC		STANDARD		MEDIUM		HIGH		SUPERIOR	
		10 KB		12 KB		15 KB		19 KB		28 KB	
(sec/imag)	(imag/sec)	Hours	Days	Hours	Days	Hours	Days	Hours	Days	Hours	Days
0.02	60	148.1	6.2	123.5	5.1	100.1	4.2	79.2	3.3	53.5	2.2
0.03	30	296.3	12.3	246.9	10.3	200.2	8.3	158.4	6.6	107.0	4.5
0.10	10	888.9	37.0	740.7	30.9	600.6	25.0	475.3	19.8	320.9	13.4
0.20	5	1777.8	74.1	1481.5	61.7	1201.2	50.1	950.7	39.6	641.8	26.7
0.33	3	2963.0	123.5	2469.1	102.9	2002.0	83.4	1584.5	66.0	1069.7	44.6
0.50	2	4444.4	185.2	3703.7	154.3	3003.0	125.1	2376.7	99.0	1604.5	66.9
1.00	1	8888.9	370.4	7407.4	308.6	6006.0	250.3	4753.4	198.1	3209.0	133.7

NOTE: Record duration times are based on actual tests. Performance may vary depending on specific installations and use.