### **Costar CRV Series**

# V Series Digital Video Recorder with Four Channels of Bi-Directional Audio



# **Three Times** better compression than most of the competition!

The V Series Digital Video Recorder is a 4, 8 and 16 channel DVR with a reliable Linux-embedded operating system, triplex operation and advanced MPEG4 compression technology. The V Series has four channels of two-way audio, built-in CD-RW, USB port and has the capability of viewing live video without remote software (including Microsoft internet Explorer). Remote monitoring and recording over IP networks allow central control of any camera as well as multiuser viewing and monitoring.

#### **Product Features**

- Remote access via client software or web browser
- Three password protected user levels
- Bi-Directional audio on four channels
- Built-in CD-RW
- Non-PC Platform, Reliable Linux-embedded operating system
- 120 images/sec
- Triplex operation
- Up to 3 internal hard drives (2 TB)
- Ethernet (10/100 Base-T), TCP/IP
- Record time table for easy searching, storage or internet transmission
- User friendly GUI
- Multiple user network viewing and playback up to four simultaneously
- Hardware watchdog timer function
- Network remote support allows system Changes to be made remotely without a site visit
- Digital zoom in both live and playback mode
- Motion detection
- Logs up to 1,000,000 user events, menu changes and remote access connects
- Four spot monitor outputs with 16 channel, two spot outputs with 8 channel
- Pre and post event alarm recording
- Supports popular RS-485 PTZ protocol



## **CRV Series Specifications**

Power		Multi-tasking	Triplex – Record, Playback,
Power Source	100-240 VAC, 2 Amp 60/50 Hz		Monitor, Search, Back-up
		Searching	Recording table provided
General Information			(time/date), Smart search
Video In		Book Mark	Provided
CR4000V	4 Channel w/looping output	Back-Up	Manual back-up to USB,
CR8000V	8 Channel w/looping output		Ethernet, CD-RW
CR1600V	16 Channel w/looping output	On Screen Display	Cam ID, location, status, mode
Audio Input/Output	4 In, 1 Out bi-directional (RCA)		display, time, date
Monitor Out	Simultaneous XVGA, composite	Special Searching	Multi-screen playback, Smart
	or SVHS output		search
Display Speed	120 images/second		
Screen Divison	1, 4, 8, 9, 16	Mechanical	
Recording Speed	120 ips @ 352x240	Operating Temp.	41°F to 104°F (5°C to 40°C)
0 1	60 ips @ 704x240	Dimensions	429W) x 489(D) x 89(H) mm
	30 ips @ 704x480		16.9(W) x 19.25(D) x 3.5(H) in
Recording Resolution	352x240, 704x240, 704x480	Weight	28 lbs. (12.7 Kg)
Recording Quality	Very High, High, Standard, Low		<u> </u>
Compression	MPEG4	Recommended	
Data Size	3-5 KB (352x240)	Monitors	
	5-10 KB (704x240)	CMC1400N	14" high-performance multi-
Transfer Rate	LAN: Max. 30 fps		standard, color monitor with
	Throttle: Transfer speed 56K to		OSD
	819K, 8 Levels	CMC2100N	21" high-performance multi-
Storage Structure	AVI, JPG, BMP		standard, color monitor with
Security	Chaned fingerprint encryption		OSD
Recording Schedule	Scheduled by camera, date &	CMC17LCD	17" color high-performance LCD
	time		monitor, black chassis
Motion Detection	Video motion detection	CMC17LCDW	17" color high-performance LCD
Remote Function	Remote playback, remote real		monitor, white chassis
	time monitoring	CMC19LCD	19" color high-performance LCD
Alarm Input/Output	4, 8, 16 input/4, 8, 16 output		monitor, black chassis
Alarm Reset Input	1 TTL	CMC19LCDW	19" color high-performance LCD monitor, white chassis
Model	Channel	Decian and enecifications of	abject to change without notice. Conversion:
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Design and specifications subject to change without notice. Conversion: 1" = 25.4mm Measurement conversions are approximate.



#### Recording quality picture mode - based on 80 gb hard drive

4 Channel, built-in CDRW

8 Channel, built-in CDRW

\*Hard drive options: 160, 250, 400, 500 GB up to 2 TB

16 Channel, built-in CDRW

IMAGE	REC LOW		STANDA	RD (VHS)	HIGH (	S-VHS)	V-HIGH		
COMPRESSION RATE 2kb		31	kb	7 k	db	18kb			
(sec/image)	(image/sec)	Hours	Days	Hours	Days	Hours	Days	Hours	Days
0.02	60	185	7.7	124	5.1	53	2.2	21	0.9
0.03	30	370	15.4	247	10.3	106	4.4	41	1.7
0.05	20	556	23.1	370	15.4	159	6.6	62	2.6
0.10	10	1,111	46.3	741	31	317	13.2	123	5.1
1	1	11,111	463.0	7,407	309	3,175	132.3	1,235	51.4
30	0.03	370,370	15,432	246,914	10,288	105,820	4,409.2	41,152	1,715

**STORAGE CALCULATION:** To select the correct model, you need to determine the storage requirements for the application. To calculate the storage requirement use the following formula as illustrated below.

Image Size	Images Number			Number	Record Hours HDD Storage					Required		
(Kb)	X	Per Second	X	of Cameras	X	Per Day	X	in Days	X	0.0036	Storage (GB)	
3	X	1	Х	16	Χ	24	Χ	14	Χ	0.0036	= 58.06	

Storage calculation is based on VHS equivalent quality, actual file size and recording duration may vary.

Standard Quality is equivalent to VHS quality. Low Quality – 2 Kb, Standard – 3 Kb VHS, High – 7 Kb SVHS, Very High – 18 kb



CR4000V-XXXCD\*

CR8000V-XXXCD\*

CR1600V-XXXCD\*

Form CR4000V-9/06