Ikegami

PRODUCTS COVERED: Digital VDO, 4,8,12 and 16 channel digital video recorders.

Models: Series SDR-G8000

Main Features of Ikegami Digital VDO:

- Proprietary SMICT (Super Image Motion Compression Technology) with 1400:1 video compression provides for the smallest compressed file sizes for high resolution image reproduction, and thus providing the user with "all-hard disk" recording featuring the longest recording times and smallest bandwidth with best frame rates, allowing for remote connectivity over LAN and even PSTN when compared to other technologies using MPEG, JPEG, Wavelet, H.242/243 etc.

- A recorder may be used as a stand-alone system, or be connected to a network to cover the installation of hundreds of cameras, allowing up to 32 users to simultaneously view both live and previously recorded video over a LAN or WAN from either multiple software equipped operator review stations running Digital VDO software, or the recorders themselves looking down at other recorders, and in most cases without the use of a dedicated server.

- All hard disk recording that may record video for months onto reliable Ikegami Genius designed hard disk arrays. Unlike other systems, no tapes need to be managed or maintained weekly as with other systems using AIT/DAT or-DIV tape storage mediums and combination mechanically driven tape jukeboxes.

- No degradation over time of recorded data as well as immediate access to pre-recorded video without human intervention.

- Password protected, multi-level: Supervisor, Administrator, Operator, Remote User.

- Built-in Video Authentication for court admissibility purposes.

- Unparalleled zoom video enhancement capabilities .

- Easy to use "make a clip", "take a snapshot" operator review mode.

- May control PTZ devices either locally or remotely via built-in RS-232 port as well as connect up to 32, 8 Input / Output I/O modules providing a total of 256 alarm and control relay points.

- Built-in 16xRW-CD for archiving of close to a days' video from 16 cameras at 2,5fps.

- Built-in Glide-point mouse for system set-up and local system operation.

- NTSC, PAL compatible.

- Variable frame rates per 4 inputs per video card.

- Features "field upgradeable" addition of 2 extra removable hard drives for added storage capability.

- Built-in USB port for connection to IEEE standard fire wire storage devices.

- Built-in Video Motion detector for alarm marking, increasing recorded frame rate, as well as remote signal of alarm conditions.

- May send alarm messages to a cell phone or other dial up device using pre-recorded voice prompts.

- Features 1 channel of audio recording, audible hi-temp and fan fail alarm.

- Front mounted, accessible, washable air filter.

- The system may be used as a stand-alone recording device with a VGA monitor and keyboard connected to the recorder, or, be connected to either a 10 Base T or 100 Base T Network, allowing up to 32 remote operator review stations to simultaneously communicate with a recorder, offering both live view, playback as well as remote file transfer. In addition to this feature and unlike other systems, the Digital VDO recorder itself may be set up as a client, to view video from other remotely or LAN connected Digital VDO recorders without the required use of a dedicated server or dedicated review station/PC as with other competitive technologies.

- The system with all 4, 4-channel Video capture cards installed, and all 16 cameras connected to the system will record Video from these 16 cameras at between 2.5 and 3 fps at 220 Horizontal TV lines at 320 x 240 tile size format onto a single factory installed 75 GB drive for between 30 and 60 days, more if there is less activity within the field of view of the cameras. Traditionally, other systems using other standard compression technologies would record Video from the same number of cameras at a lesser frame refresh rate as well as lower resolution for only about 48 hours instead of one month as with Digital VDO.

- File sizes are dynamically changing based on background and foreground high frequency algorithmic calculations, providing a changing Video bandwidth that also makes PSTN telephone line transmission a reality without sacrificing either on resolution or frame refresh rates. Typically using a PSTN connection with a 56KB modem, 4 cameras may be viewed at 2 fps each in a quad mode down a traditional phone line with a 56KB modem at each end with 56 KB data transfer rate available.

- The system may be accessed once started by entering a valid password. Once entered, system parameters may be adjusted to account for lesser number of cameras connected to each Video capture card and thus increasing frame refresh rates on a per card basis, changes to resolution and Video sensitivity, assignment of passwords, camera and system descriptions, PTZ control, alarm functions, setting up 4 Video motion detection zones per camera for alarm transmission/alarm marking/frame rate increase, etc.

- Once the Video threshold of the defaulted 500 MB of spare overhead space in the standard 75 GB hard drive is achieved, the system will rewrite the oldest stored Video with the latest current hour. To satisfy needs in other countries whereby a maximum of 31 days Video archival is allowed by local regulation, the user may change this Video recording threshold accordingly.

- It is suggested that all the Video be stored onto the recorders hard drive, or additional hard drives, for the period that is required by the client, example, 2 month, 4 months etc.,. and that files are transferred for scenes of interest or alarm onto the recorder's RW-CD.

Product Specifications for SDR-G8000

System Specifications:

Video Inputs	4 BNC Video Inputs per card, NTSC or PAL, 4 cards per recorder Maximum, total 16 cameras
Compression Type	Proprietary SMICT (Super Motion Image Compression), background/foreground compression of changes
Maximum Resolution	NTSC: 320 x 240 size, 220 HTVI-Lines, adjustable, PAL: 352 x 288, 260 H- TV Lines, adjustable
Average single frame file size	10 Bytes -2,500 Bytes (2.5KB)
Multi-Screen Display	Mix/Match, Live, Playback, Alarms, in groups of 4 cameras, mix of recorders/sites
Recording Speed	VDO-2000 30fps each camera, VDO 4000/8000/12000/16000 series, 2-15 fps (*NOTE 1)
Live Monitoring Frame Rates	1 camera 25 fps, 4-16 cameras 3-15 fps
	(NOTE 1) adjustable per card in groups of 4 cameras, ex 1 cam 15 fps, 12 cams 3.5 fps in 1 recorder
Recording Device	internal 75 GB removable hard disk drive with cooling, max 3 internal HDD's
Recording Duration	16 cameras at 2 fps, 30 ~ 90 DAYS depending on motion (*NOTE 2)
	(*NOTE 2): Longer recording times may be achieved in areas where there is < than 24 hr/day activity
System Configuration	PIII-850 MHz with 128 MB RAM, internal mouse, 300-Watt power supply, 32 MB video RAM,
	300 Watt, 90-240VAC, 5016OHz universal power supply, 32 MB video card, 3 USB ports
	16X RW-CD drive, 2 external RS-232 port, 56 K Modern RJ-11, 10 Base T LAN card RJ-45, VGA out, WIN ME
Video Authentication	Part of SMICT compression algorithm
System Start-Up	Automatic on Power Up
Recording Modes	Continuous, or by alarm, or internal motion detection area, selectable camera
	Selectable modes per camera, per 4 channel input card, with alarm marking or pre-post alarm
Recording Auto Scan for Alarms	Alarm zooms in live view without affecting recording
Sensitivity/ Image Quality Settings	16 settings per 4-camera card
Database Information/ Retrieve	Camera Name, Site Name, Site Address, Alarm description, Alarm Log, Video Log :
Alarm Inputs	8 inputs 8 outputs per VO card, up to 32 external cards may be used on single RS-232/485 loop
Alarm Logic Control	Alarms may be assigned to specific cameras, settlings like frame rate, warning sounds, and alarm transmission to Remote Agent Software equipped review station and file capture user selectable
Built-in Audio Recording	Uses 24 kbps ADPCM format w/ built-in sound card
Internal Motion Detector	4 zones per camera, alarms may be marked or transmitted to Remote operator review station

Local- or Remote Monitoring Functions:

Multi-Tasking System Operation	Recorder used as a stand-alone device views single and groups of 4 cameras: live, playback & alarms
	Stand-alone recorder using Digital VDO Network Agent software may call up any recorder
	"Quadplex" Operation, views live, recorded, and *alarms simultaneously on any number of review stations.
	Copies files over LAN/VAN/PSTN or to built-in CD-RW or any other device
Remote System Configuration	Set up at recorder level or camera changes via LAN/PSTN
Remote Alarm Video Transmission	Over PSTN with Voice Message to a designated telephone number
	Text Messaging via Pager transmitting text message
	Remote site via PSTN, or LAN/VAN using Remote Agent Software: live image play w/ alert sound
	Multiple Remote Sites over TCP/IP connection: live image play w/alert sound
PC Camera "Snapshot" feature	May capture single snapshots of live, recording and playback images, stored as ". bmp"- flies
Playback speeds	1110,118,116,114,1/2,1.2X, 4X, 6X, 8X, 10X
Video "Clip" Feature	Allows operator to make video clips of incidents of interest that may be archived/emailed
Password Protection	3 Levels: Supervisor, Local User, and Remote User
On-Screen-diagnostic messages	System status, Start time/end time, Current Time, Camera Name, Bandwidth, HDD Space
H.D.D. Operation	System overwrites first in first out; H.D.D. Full Alarm may be set
Alarm /System LED Indicators	Power, recording (X4), H-Disk operating (X4), H-Disk Power (X4), Temperature Alarm (X2)
Alarm Log Information	Recorded Files, Alarm Time, Camera Name, Site/Board Name

Video Transmission Information:

Bandwidth:	3 bps ~ 17 kbps per frame per second per camera

Hardware Specifications:

Dimensions:	Standard 19" rack, 3 U Height, 47 lbs approx. shipping weight
Power Input:	100/110/120/220/240 VAC, +/- 10%, 50-60 Hz, Voltage Auto-sensing, 300 Watts
Temperature Range:	Operating- Temperature: 0 ~ + 50 deg °C., Storage- Temperature: -20 ~ +70 °C