PDR-2160

High Performance Standalone 16-ch DVR

PDR-2160

The new PDR-2160 is a high performance standalone 16 Channel Digital Video Recorder (DVR) designed to perform multiple features such as recording, playback and remote surveillance simultaneously. Offering unbeatable costs per channel, the network ready PDR-2160 is compact and simple to use. It can be operated through the on-screen menu, front panel, keyboard controller, and fully operational IR remote control. The unique portable USB drive and the built-in CD-RW further enhances the DVR, enabling the user download recorded images and upgrade firmware.

Featuring real time display at 480/400 frames per second, the PDR-2160 delivers incredible performance and functionality. There is the option to have two internal SATA II Hard Drives, one of which is hot swappable, allowing it to be easily changed to increase storage without stopping live monitoring or recording. There are also two external SATA II ports, which are capable of being used in conjunction with SATA II RAID, providing a maximum storage capacity of 4TB.

Providing network connectivity via Internet Explorer or the supplied propriety software, management and security staff can view all live and recorded images from a remote location. Also, the additional benefit of the jog and shuttle feature provides a quick and intuitive way to search the recordings.

Designed to meet the latest security requirements, features such as the extra watchdog timer protection, two level user authentication and spot camera switching display provides piece of mind for the user.

With individual camera setup, users can define features, such as zoneable motion detection, scheduled recording, external alarm control and user authentication. Complete with advanced image compression technology ensuring high quality resolution, the new standalone digital video recorder provides a versatile solution.

- Built-in CD/RW for backup
- ISO-9660 compatible CD, with plug and play
- HTTP web-based interface including remote PTZ, playback, and live monitoring
- 16-channel video inputs up to 480(NTSC) / 400(PAL) frames per second
- Up to 120 CIF playback speed
- 7 days, 24hours grid scheduling for alarm / motion, continuous, and stop recording.
- 4 matrix spot outputs (PDR-2160A) with OSD support
- 2 main outputs with built-in multiple features for split monitoring
- 1-channel audio input and output for recording
- Simultaneous recording, playback, CD/RW backup, network, and live monitoring
- Hot swappable SATA II HDD and one internal SATA II HDD
- 2 external SATA II ports for external SATA II RAID up to 4TB recording capability
- 16x12 motion detection grids
- Portable USB 2.0 flash disk and external USB 2.0 CD/RW backup
- Easy-to-use jog, shuttle, and 3D joystick controlling setup and playback menus
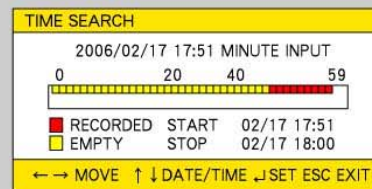

USB 2.0 Port

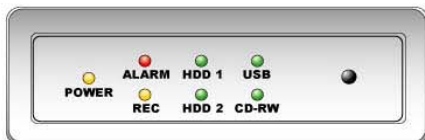

CD-RW

SATA II Port x 2

Hot Swappable
SATA II HDD

Time Search


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TIME SEARCH

      2006/02/17 17:51 MINUTE INPUT
 0          20        40        59

■ RECORDED  START   02/17 17:51
□ EMPTY     STOP    02/17 18:00
← → MOVE  ↑↓ DATE/TIME ↵SET ESC EXIT
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System LED Status Panel

System LEDs are meaningful while operating PDR-2160.
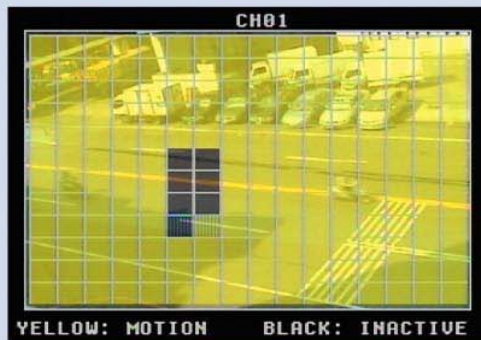The status of each LED is described as in the following table:

LED	Description	Color
REC	Recording indicator	Yellow
HDD 1	Master HDD recording indicator	Green (blinking)
HDD 2	Slave HDD recording indicator	Green (blinking)
ALARM	External alarm switches indicators when motioned or alarmed	Red
USB	USB portable disk connected indicator	Green (blinking)
CDRW	CD writing indicator	Green (blinking)
POWER	PDR-2160 power on/off indicator	Yellow

Surveillance Mode - Screen Layout

1. Date
2. Day of the week
3. Time
4. HDD recording p persontage(%) and master(M) / slave(S) HDD indicator
5. Recording symbol - circle in red
6. Alarm activation indicator - bell in yellow
7. Yellow camera ID - controllable PTZ device
8. Motion detection indicator - little man in yellow
9. Remote Controller Status

Motion Decetion

YELLOW: MOTION   BLACK: INACTIVE

Internet Browser
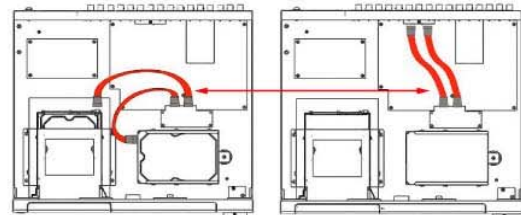

Daisy Connection of multiple PDR-2160 and Keyboard

To connect PIH-931 keyboard and multiple PDR-2160 DVRs, connect RJ-45 from PIH-931 keyboard to PDR-2160's RJ-45 keyboard input. PDR-2160 DVRs are connected in daisy chain from RJ-45's keyboard output to the next PDR-2160's input. There are up to 255 PDR-2160 can be connected and addressed.
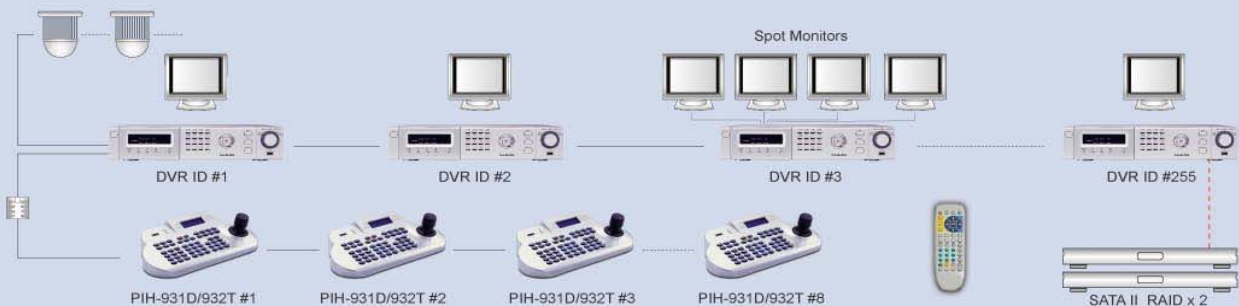

PIH-931D/932T Multi-function keyboard controller

1. LCD Display (20 characteristic x 4 lines)
2. Capable to control PTZ, DVR, Matrix and monitor
3. 3D Joystick (Pan/Tilt/Zoom) / 2D Joystick (Pan/Tilt)
4. Data Communication: RS-485 Standard
5. Easy install and setup by RJ-45 connector
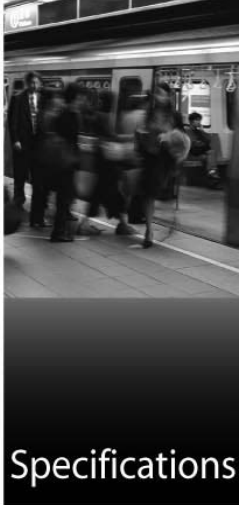6. Expandable up to 8 keyboard controllers

Connect to External SATA RAID

System Architecture

Spot Monitors

DVR ID #1   DVR ID #2   DVR ID #3   DVR ID #255

PIH-931D/932T #1   PIH-931D/932T #2   PIH-931D/932T #3   PIH-931D/932T #8   SATA II RAID x 2

120 GB HARD DISK RECORDING TABLE

Resolution	FPS	Recording Quality			
		PAL			
		Very high	High	Normal	Low
720 x288	50	17 hrs	21 hrs	41 hrs	64 hrs
	25	35 hrs	41 hrs	82 hrs	127 hrs
	12	73 hrs	86 hrs	171 hrs	265 hrs
	10	87 hrs	103 hrs	206 hrs	318 hrs
	5	175 hrs	206 hrs	411 hrs	636 hrs
	3	291 hrs	343 hrs	685 hrs	1059 hrs
	2	437 hrs	514 hrs	1028 hrs	1589 hrs
	1	874 hrs	1028 hrs	2056 hrs	3178 hrs

Resolution	FPS	Recording Quality			
		NTSC			
		Very high	High	Normal	Low
720 x240	60	15 hrs	17 hrs	34 hrs	53 hrs
	30	29 hrs	34 hrs	69 hrs	106 hrs
	20	44 hrs	51 hrs	106 hrs	159 hrs
	12	73 hrs	86 hrs	171 hrs	265 hrs
	5	175 hrs	206 hrs	411 hrs	636 hrs
	3	291 hrs	343 hrs	685 hrs	1059 hrs
	2	434 hrs	514 hrs	1028 hrs	1589 hrs
	1	874 hrs	1028 hrs	2056 hrs	3178 hrs

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Specifications

	PDR-2160A (Advanced)	PDR-2160S (Standard)	PDR-3160
Recording	Hot swappable SATA (II) HDD x 1, Fix SATA (II) HDD x 1		Hot swappable IDE HDD x 2
External Storage	Up to 2 external SATA (II) RAID with total 8 HDDs, 4 TB space (optional)		Nil
Record Type	External DIO triggering recording / motion detection / schedule / manual		
Speed	PAL: 50 Fields/Sec / 100 CIF/Sec	NTSC: 60 Fields/Sec / 120 CIF/Sec	
Resolution	720 x 240 (Fields) / 320 x 240 (CIF)		
Scheduling	7x24 grid array adjustable for motion / record / stop recording		
Archiving	USB 2.0 Flash Disk / USB 2.0 External CD-RW		
CD/RW	Built-in: 52X(W) 32X(RW) 52X (ROM)		USB 2.0 External
CD Format	ISO-9660 compatible, plug-and-play		
Playback	Normal Record / Timer Search / Alarm / Motion Detection Triggering / HDD Playback		
Speed	FR: 2x, 4x, 8x, 16x / FF: 2x, 4x, 8x, 16x, 32x, 64x		
Compression	Modified M-JPEG		
Video Input	16-channel BNC Inputs (1Vp-p, 75Ω Terminal)		
Camera Title	Anti-flickering 8 characters OSD		
Looping	16-channel BNC (1Vp-p, 75Ω Terminal)	Nil	Nil
Live	400 FPS (PAL)/480 FPS (NTSC)		
Video Outputs	BNC 2-channel (1Vp-p, 75Ω)		BNC 1-channel
S-Video	1-channel		
VGA Output	Resolution : 800 x 600 to 1280 x 1024	Optional	Nil
Matrix Outputs	4-channel BNC-Alarmed camera switching, keyboard controllable, and sequence with OSD	Nil	Nil
Multiplexer	Sequence (programmable) / Digital Zoom 2X / Freeze		
Split display	4, 8, 9, 13, 16 split display		
Alarm	16 alarm inputs / 2alarm (NO/NC) outputs		
Motion Detection	16 x 12 motion grid, 5 sensitivity levels, each channel programmable		
Event Log	External DIO / Video Loss / Stop Rec / Power failure detection / Motion / Schedule		
Accessories	IR Remote Controller (255 DVRs addressable)		
P/T/Z Control	Built-in Merit Lilin & Pelco D protocols / Remote controller / Web controllable		
Keyboard Control	Up to 255 DVRs controllable by PIH-931 keyboard		Nil
RS-485	Two RJ-45 connectors for RS-485 with 12V output, one RS-485 for PTZ		RS-485 for PTZ
Jog & Shuttle	Setup & playback menu controllable		
Audio	4-channel RCA inputs / 1-channel output and record (2.2Vp-p, 300Hz to 3KHz)		
Network	HTTP Web-based / NetworkViewer Application / Multiple User Accessible		
Protocol	HTTP port number adjustable / SMTP Alarm Notification		
Web Features	Live monitoring / remote time and event playback / AVI archiving		
DVR status	HTML DVR statistics		
Others	Authentication : Two levels		
WDT	Extra software Watch Dog Timer protection		
Time Sync.	DVRs Timer synchronization by PIH-931 keyboard		Nil
Language OSD	Chinese, English, Spanish, Italian, Japanese, French, Germany, Polish		
CPU	32-bit RISC Processor, 208MHz		
OS	Linux Kernel 2.6		
Consumption	AC 90V~260V Max., 135W		
Operation	Temp: -10℃ ~ +60℃ / Humidity: 0%~80%		
Dimension	434 x 414 x 88 mm (2U)		
Weight	8.5Kg (HDD not included)		8Kg (HDD not included)

SGS UKAS CE