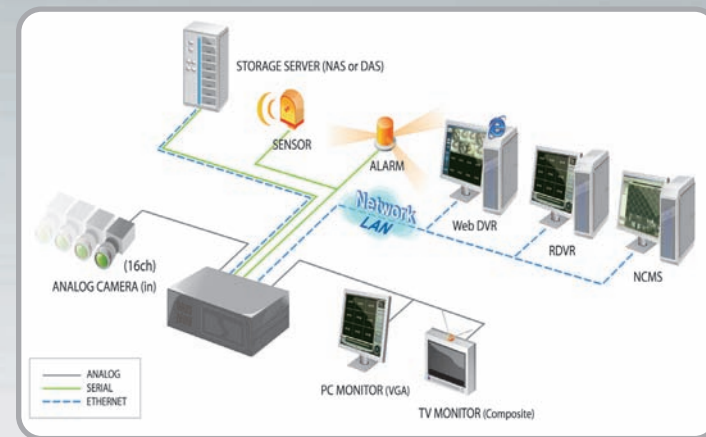


Enjoy Crystal Clear Full D1 (720X576/720X480) (PAL/NTSC) Real-Time H.W Mpeg-4 PC DVR

Major Features

- Vivid video image on Full D1 Real Time(30/25fps) Recording and Display
- Anti-distortion filtering in Live and Playback
- Hardware MPEG4 Level 5 (I, P, B frame support)
- Search 4ch Live in D1 Resolution
- Perfect Video/Audio synchronization in Live View and AVI backup
- High Performance Recording with lowest CPU Load (around 10%)
- Stable and seamless file system without any fragment (Basket type per DB 100MB)
- User friendly GUI system
- Various Remote SW
RDVR (Remote DVR), Web DVR, NCMS (Network Central Management System)
- PCI Express Support (SDH series)
1204(4ch) / 2408(8ch) / 4816(16ch)

System Configuration



System Matrix

(New Products Matrix 2008~2010)		TD Series	
General	Model	TD-4816	TD-2408
	Camera Input	16	8
	IP camera recording		N/A
	IP camera port		N/A
	IP camera compatible		N/A
	Loop-out	L-out 16 X 1 (option)	L-out 8 X 1 (option)
	Operation System	WIN XP, 2000, Vista	
	Alarm Input	16	16
	Alarm / Relay Output	4 Alarm / Relay Output	
	Audio Input	16	8
	PTZ control	RS 422/485, USB serial converter	
	Thirty-Party Dome Protocol	Yes	
	Preset & Touring	Yes	
	POS/ATM Support	N/A / N/A	
	Monitor Output	1 XGA, 4 Spot-out 4 Composite (1CH rotation)	1 XGA, 4 Spot-out (option) 1 Composite (Mux)
	Archive Device	USB (Stick, HDD, DVD), CDRW, DVDRW	
	Front Panel Control	N/A	
	Remote Control	N/A	
	Key Board Support	Yes	
	USB Mouse Support	Yes	
	Multi Language Support	Yes	
Display Option, Live	NTSC/PAL SELECTABLE	Yes	
	Camera Display	1, 4, 9, 10, 16	1, 4, 9
Display Option, Playback	Digital Zoom		N/A
	Camera Display	1, 4, 9, 16	1, 4, 9
	Digital Zoom	Yes	
Function	Maximum Record Rate CIF	120/100fps (NTSC/PAL)	
	Maximum Record Rate 2 CIF	REAL TIME (FULL D1)	
	Maximum Record Rate 4 CIF		
	Alarm, Motion, Continuous, Scheduled Recording Modes	Yes	
	Pre-Alarm	Continuous : 1fps & Event : 30fps	
	Video Motion Detection	Yes	
	Image Authentication	Yes	
	HDD Drive, Options, Internal	Yes	
	HDD Drive, Options, External	Yes	
	Raid Storage	Yes	
	Storage Optimizing	Yes	
Remote	PC remote client	Yes	
	CMS Support	Yes	
	View Live	Yes	
	Playback	Yes	
	Email on Alarm	Yes	
	PTZ control	Yes	
	Remote Administration	Yes	
	Web Browser	Live View, Search, P/T/Z	
	PDA Client	Yes	

Digital Security Leader

T.O.M. Technology

- Hybrid PC DVR
- FULL D1 Size Recording PC DVR
- JSA-2000 Series



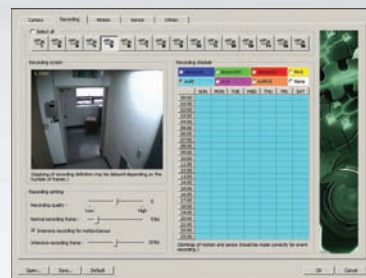
PC DVR - JSA 2000

Major Features

- Various layouts of monitoring screen
- High definition monitoring screen and high speed recording
- Smart Search function
 - Function for convenient and fast search by informing the result after extracting the motion for specific area of recorded images
- Remote monitoring, Remote search, Remote control, Remote back up function
- Multi Language support
- Multi-channel audio recording function and built in speaker
- Pan/Tilt (PTZ) related control function and Pre-set function
- E-mail transfer with alarm
- Intensive recording function on any event detection
 - Resolution, Frame rate increasing
- More powerful networking support
- Center Program available to control local DVRs on one area
 - E-map, log info record, local operation info support, 64 split image on one screen.



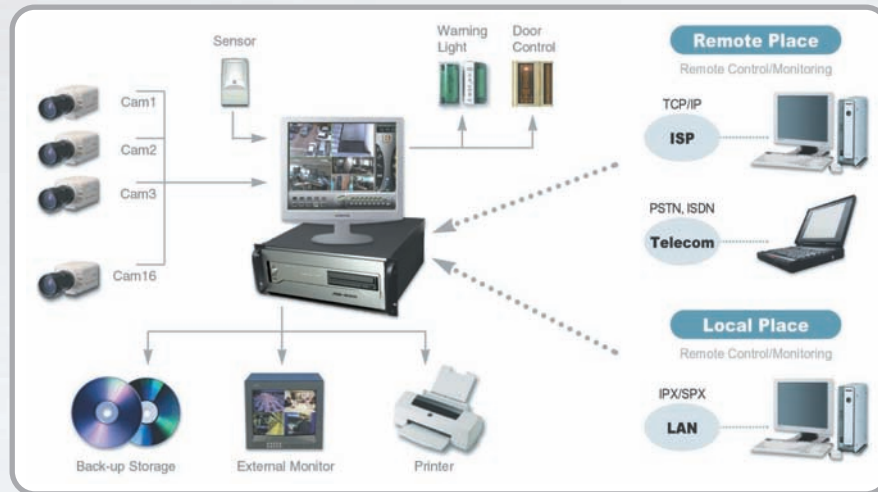
Monitoring/Recording Screen



Setup Screen



E-map Screen



Specification

		JSA-2004S	JSA-2008S	JSA-2008D	JSA-2016SO	JSA-2016DO	JSA-2016H	JSA-2032DO
Video	Input	4CH	8CH	8CH	16CH	16CH	16CH	32CH
	Output	PC Monitor						
Display	S.Split	1, 4	1, 4, 6, 7, 8	1, 4, 6, 7, 8, 9, 10, 16	1, 4, 6, 7, 8, 9, 10, 16	1, 4, 6, 7, 8, 9, 10, 16	1, 4, 6, 7, 8, 9, 10, 16	1, 4, 6, 7, 8, 10, 16, 32
	Resolution	320*240, 640*240, 640*480						
Frame	Display	120fps	120fps	240fps	480fps	480fps	480fps	960fps
	Recording	120fps	120fps	240fps	120fps	240fps	480fps	240fps
Compression	Size	0.5 - 2Kbytes						
	Algorithm	Modified MPEG 4						
Sensor	Input	8, 16 port						
	Output	8, 16 port						
Audio		1 CH Default (4, 8, 16 CH option)						
Sound Out		Option						
Remote Control		PSTN, ISND, TCP / IP						
Pre Alarm		Yes						
Video Motion Detection		Yes						
Live & Recorded Video		Yes						
PAN/TILT		Possible, Embedded, RS Converter default						
Mult View(Center S/W)		Possible (option)						
Backup		DVD, CD-RW, Network, Removable HDD						
Dimension		483(W) x 88(H) X 501.2(D)mm / 18kg						

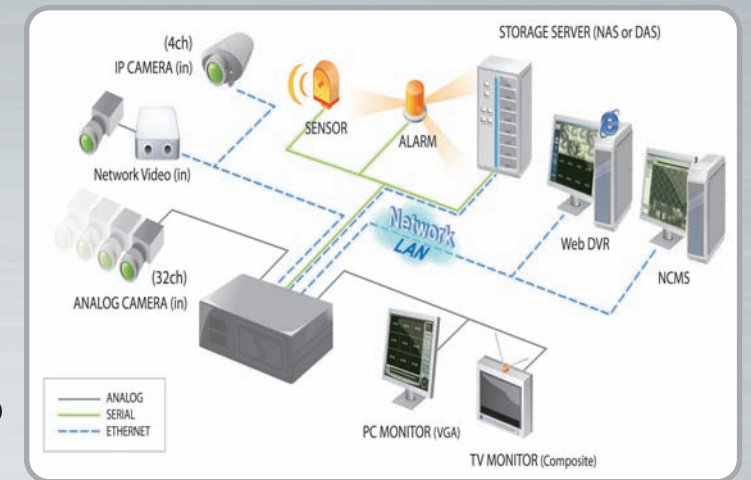
Hybrid DVR (PC DVR evolves to include IP surveillance)

Hybrid DVR means [integrated DVR (PC base analogue DVR) with future IP surveillance system] which is also the basic system where our all TOM's S/W and Systems are built in. Hybrid will set DVR users free from the burden of IP surveillance and strengthen the opportunity for future trend of converging IP, and will give the chances to easily integrate IP surveillance system with existing analog(coaxial) DVR to save cost and expand accessibility.

Major Features

- Full Features of PC DVR with IP supporting (Hybrid or NDVR features)
- Max 36ch, Analog 32ch + IP 4ch (16, 20, 36CH)
- Display and Recording fps for each Model
- Support 6 internal hard disks (IDE and SATA)
- Stable and seamless file system (Image DB basket 100MB)
- Excellent image quality and appropriate file size (Modified Mpeg-4)
- Synchronized live and recording with audio
- Live sound and 2 way audio
- Diverse PTZ device support and on-screen PTZ control
- Various backup mode :
 - Schedule, Concurrent, Manual, Direct, AVI, Jpeg
- Various search mode :
 - Smart, Time and date, spot search in live view (-30minutes)
- Universal IP support :
 - Axis, Vivotek, Sony, JVC, Canon, Panasonic
- Transaction Data Control :
 - POS, Access control, ATM

System Configuration



System Matrix

(New Products Matrix 2008~2010)		TI Series			
		TI-4832	TI-4816	TI-2416	TI-1216
General	Model	36CH (32 plus 4 IP camera)	20CH (16 plus 4 IP camera)	16CH (16 minus 4 IP camera)	16CH (16 minus 4 IP camera)
	Camera Input	Yes			
	IP camera recording	1 (LAN Port)			
	IP camera port	Axis, Vivotek, Sony, Canon, Panasonic, JVC			
	IP camera compatible	L-out 16 X 2 (option)			
	Loop-out	L-out 16 X 1 (option)			
	Operation System	WIN XP,2000,Vista			
	Alarm Input	16	4 (default), 16 (option)		
	Alarm / Relay Output	4 Alarm / Relay Output			
	Audio Input	16 (default) + 16 (option)	16 2 (default), 16 (option)		
	PTZ control	RS 422/485, USB serial converter			
	Thirty-Party Dome Protocol	Yes			
	Preset & Touring	Yes			
	POS/ATM Support	Yes / Available on demand			
	Monitor Output	1 XGA, 4 Spot-out 1 4 Composite (1CH rotation)	1 XGA, 4 Spot-out (option)	1 XGA, 1 Spot-out 1 Composite (Mux)	
	Archive Device	USB (Stick, HDD, DVD), CDRW, DVDRW			
	Front Panel Control	N/A			
	Remote Control	N/A			
	Key Board Support	Yes			
	USB Mouse Support	Yes			
	Multi Language Support	Yes			
	NTSC/PAL SELECTABLE	Yes			
Display Option, Live	Camera Display	1, 4, 6, 9, 10, 16, 21, 25, 36	1, 4, 6, 9, 10, 16, 21	1, 4, 6, 9, 10, 16	1, 4, 6, 9, 10, 16
Display Option, Playback	Digital Zoom	N/A			
	Camera Display	1, 4, 9, 16			
	Digital Zoom	Yes			
Function	Maximum Record Rate CIF	480/400fps (NTSC/PAL)		240/200fps (NTSC/PAL)	
	Maximum Record Rate 2 CIF	240fps NTSC		120fps NTSC	60fps NTSC
		200fps PAL		100fps PAL	50fps PAL
	Maximum Record Rate 4 CIF	120fps NTSC		60fps NTSC	30fps NTSC
		100fps PAL		50fps PAL	25fps PAL
	Alarm, Motion, Continuous, Scheduled Recording Modes	Yes			
	Pre-Alarm	Yes, 1-5 seconds			
	Video Motion Detection	Yes			
	Image Authentication	Yes			
	HDD Drive, Options, Internal	4EA (Max), Each 250G ~ 1TB			
	HDD Drive, Options, External	Yes			
	Raid Storage	Yes			
	Storage Optimizing	N/A			
Remote	PC remote client	Yes			
	CMS Support	Yes			
	View Live	Yes			
	Playback	Yes			
	Email on Alarm	Yes			
	PTZ control	Yes			
	Remote Administration	Yes			
	Web Browser	Live View, Search, P/T/Z			
	PDA Client	Yes			