DÉSA XL
Digital Video Recorders

- Windows® XP Professional
- Passive Looping Video
- Average File Size 3–6 KB
- 120, 240 FPS Frame Rate
- Remote Multiserver Access
- Limited Remote Administration
- Local & Remote PTZ Control
- Local & Remote Intelligent Search Engine
- E-mail Notification
- Event Logging by User
- Web Browser Viewer
- Local Smart Motion Search
- AntiVirus Software Supported

The Bosch DÉSA[XL] is a Windows XP Professional PC-based digital recorder that produces an amazing 120-240 frames per second, with average file sizes of 3–6 KB per image. This unit has 8 or 16 video inputs with independently adjustable frame rate settings. The DÉSA[XL] features an alarm input and an auxiliary output for each video input[3].

When an alarm is triggered, e-mail or remote notification is sent to an administrator, providing remote event notification. On activation of alarms, the DÉSA[XL] may be configured to execute pre-positions from multiple AutoDome cameras. The DÉSA[XL] has pre-alarm recording capability, allowing video capture *prior* to an alarm event. There are also five configurable motion detection zones per camera.

Both live and recorded video are accessible via the remote viewing software (included). Additionally, the remote software provides PTZ control and limited system configuration, supporting up to 16 DÉSA[XL] units. Live viewing of cameras is available via a standard web browser or pocket PC software. Video is easily offloaded and distributed as proprietary or AVI files using a standard DVD/CD writer.

Local PTZ control is accomplished directly via the user interface, providing complete control over the Bosch AutoDome Series[1]. Other manufacturers' units are also supported[2].

Secure operation is achieved via fully definable users, assigned to grant or deny access to system administration functions, recorded video access, PTZ control, and live viewing of cameras. The advanced scheduling feature of DÉSA[XL] allows customization of recording parameters based on time, day of the week, motion, and alarm input. The DÉSA[XL] is easily configured to record based on your unique needs!

The LTC 8016/90 Bilinx Data Interface Unit accepts a biphase output from the DESA[XL] to allow control and configuration of Bosch Dinion and AutoDome cameras using only the video cable[1].

Single channel audio recording is available by connecting an audio source to the unit. The DÉSA[XL] also supports two way audio, for listening in and talking to the site using the remote viewing software.

NOTES: [1] Bosch LTC 8786/60-RS-232 to Biphase converter required

[2] Additional hardware may be required

[3] Only refers to 16-channel

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Specifications

Model	DR2xxxxxx
Composite Output	Full Screen/Sequencing
Display (Max) FPS	120 or 240
Video Input-Cameras	1 to 8 or 1 to 16
Digital Audio Recording	1-channel
External Alarm	4/4 or 16/16 (Input/Auxiliary Output)
SVGA Display	1024 x 768
Standard HDD	250, 500, 750, 1000 GB
Memory	1 GB
Recording Resolution	320 x 240 / 120 FPS or 240 FPS
	640 x 480 / 120 FPS (maximum)

Average Record Days Disk format (GB) / Recording Speed (FPS)

DR2161xx	Total FPS	Continuous Recording	15% Motion Recording
250 GB	16	60 days	290 days
250 GB	112	8 days	41 days
1000 GB	16	250 days	1200 days
1000 GB	112	35 days	171 days

NOTE: The above record calculations are examples based on continuous or motion at 15% recording, with 320 x 240 resolution, and an average of 3 KB file size at normal quality setting.

4U Rack-mount Chassis

Dimensions	W x D x H: 17 1/4 in. x 21 in. x 7 in.
Weight	25-55 lb based on model

Hard Drive Capacity

8-channel	250-500 GB
16-channel	250-1000 GB
Camera Inputs	8 or 16 BNC Type 1 Vp-p 75 Ω
Camera Looping Outputs[1]	8 or 16-34-pin AMP Connector 1 Vp-p 75 Ω
	manually switched termination
[1]With LTC 8508/01 Cable	1x supplied
Composite Output	Full Screen/Sequencing 1 V p-p 75 Ω
One (1) SVGA Monitor Output-1024x768	
Display Rate (Max) FPS	120 or 240
Record Rate (Max) FPS	120 or 240
One (1) Audio Input	1/8 in. mini phono jack
One (1) Mic Input	1/8 in. mini phono jack
One (1) Audio Output	1/8 in. mini phono jack
One (1) RJ-45 Ethernet Port	10/100/1000 Base-T (Standard)
One (1) **SCSI-2 Port**	HD50 (Standard)
One (1) IEEE-1394 Input	
Five (5) USB 2.0 Ports- 4/Rear, 1/Front	
One (1) LPT Port	
One (1) RS-232 COM Port	
One (1) RS-422 Connector via Watchdog Card	
Removable HDD	80 GB Operating System Only (Standard)
DVD/CD writer (Standard) Formats DVD + R/RW DVD - R/RW CD-R/RW	
One (1) Keyboard Port PS/2	
One (1) Mouse Port PS/2	

Electrical

Power Supply	Pentium-4 Power Supply
	Selectable Full range 115-240 VAC 60-50 Hz
	560 W (Max)
	It is highly recommended to use a UPS
	(Uninterruptable Power Supply)
Video	
Display Resolution	160 x 120, 320 x 240, 640 x 480 NTSC
Input	1 Vp-p composite video signal, 75 Ω
Composite Output	1 Vp-p composite video signal, 75 Ω
SVGA	One (1) DB 15
Audio	*1-channel (line in, mic in, line out)
	*Line level inputs only
	.78 V RMS = 0dB@600Ω
Connectors	
Video Input	BNC
Video Looping Out	AMP 34-pin header LTC 8508/01 cable
Composite Video Output	RCA
Audio	1/8 in. mini phone jack
10/100/1000 MB Ethernet	
	RJ-45
Alarms	
Alarm Inputs	4 or 16 programmable N/O, N/C dry contacts
Alarm Outputs[1]	4 or 16 programmable output relays
Image Compression	Proprietary temporal compression
	(Based on enhanced MJPEG and
	H.263 compression technology)
Image Integrity	Proprietary Codec, time/date stamp,
	watermark authentication
VGA Card	AGP 128 MB RAM
Resolution/Average File Size[2]	
	160 x 120/1.5 KB; 320 x 240/3 KB;
	640 x 480/6 KB
PTZ Control	One (1) RS-422, one (1) RS-232[3]
	output supplied

NOTES:

[1]Specifications on next page

[2]Average file size based on temporal refresh

[3]LTC 8786/60 Series Data Converter is required for RS-232 conversion to biphase

NOTE: Biphase and Pelco® protocols have been tested and verified. All other protocols have yet to be tested.

Remote PC Requirements

Processor	Pentium® III, Pentium 4, or AMD, 1 GHz minimum
Memory	256 MB minimum, 512 MB recommended for Drag and Drop feature
Video	Dedicated AGP Graphics Adaptor, 32 MB RAM minimum (64 MB recommended), 32-bit color or better

CAUTION: Recommended graphics boards are ATI Radeon™ or NVIDIA® GeForce™. The software does not support video cards based on SiS or Riva™ TnT2 chip sets, or onboard integrated graphics adaptor with shared memory.

Monitor	SVGA or XVGA set to 1024 x 768 resolution at 60 Hz refresh rate
Hard Disk	500 MB free disk space
Operating System	Windows 2000 Pro SP3, or Windows XP Pro
Browser	Internet Explorer 5.5 or greater

NOTE: When installing the Remote Client software, it is important to upgrade Windows Scripting to version 5.2 or greater. Versions below 5.2 cause installation issues.

PDA Requirements

Processor	PXA255 400 Mhz C1
RAM (Random Access Memory)	64 MB SDRAM (55 MB main memory)
Display	3.5 in. transflective color TFT, 240 x 320 pixels, 64K-color support
Communication	802.11b
OS	Pocket PC 2002 or Higher

Mechanical

Rack-mount Dimensions W x D x H: 17 1/4 in. x 21 in. x 7 in.

Rack-mount Weight 11.3 - 20.4 Kg (25 – 55 lb) based on model

Environmental

Temperature	Operating: 5° to 40°C (41° to 105°F)
Relative Humidity	0 to 90%, noncondensing

Product Regulatory Compliance

Electromagnetic Compatibility (EMC)

Complies with FCC Part 15 and ICES-003

Product Safety Complies with UL and CSA Standards
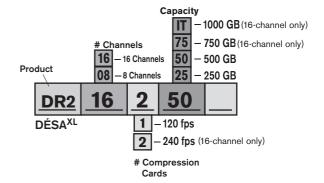
Warranty

3 years

Bosch Accessories (Optional)

LTC 8786/60 – RS-232 to biphase converter

S1363-BNC-RCA Converter

DVAS

DVAD

Approved Accessories (Third Party Manufacturers)

StarTech.com (Starview) KVMs

Any UPS (Uninterruptable Power Supply) rated at 560 W per unit

Norton AntiVirus™

McAfee VirusScan

Ordering Information

Use the chart below to create your part number, based on this example:

DR2 16 2 25:
- DÉSA^XL
- 16-channel
- 240 fps
- 250GB

DÉSA^XL Part Numbering Structure

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