

Digital Video Recorders Quick Guide



BOSCH

Invented for life



Bosch Digital Video Recorders		DVR 400	DVR 600 (Divar MR)	DHR 700 Hybrid Recorder (XF)	DNR 700 Network Recorder (XF)	DHR 900 Rackmount (DiBos)
System	Operating System	Embedded	Embedded	Embedded	Embedded	Windows XP Embedded
	Rack Mountable	No	Yes	Yes	Yes	Yes
	SDK Available	No	No	Yes	Yes	Yes
	Warranty	3 Years	3 Years	3 Years	3 Years	3 Years
Video	Input Channels	4	8, 16	Analog: 8, 16 IP: 8 (H.264)	IP: 8 Channel (upgradeable to 16) or, 16 Channel (upgradeable to 32)	Analog: 6, 12, 18, 24, 30 IP: 16, 32 (MPEG-4)
	Output Looping Video	Yes	Yes	Yes	N/A	Yes
	Output Composite Outs	1	2	2	1	2
	Output VGA	Yes	1	2	1	1 (plus optional 2nd)
	Output Spot Monitor	1	1	1	0	2
Audio	Input Channels	1 or 4	4, 8	8, 16	0	2, 4, 6, 8, 10 (plus up to 32 from IP cameras)
	Output Channels	1	1	2	N/A	1
	Compression Type	ADPCM	ADPCM2	MPEG-2 Layer II	MPEG-2 Layer II	G.726
	Sample Rate	16 KHz	8 KHz	48 KHz	48 KHz	32 KHz
	Synchronous Audio	Yes	Yes	Yes	N/A	No
Alarms	Associate Multiple Cameras to 1 Audio	Yes	Yes	No	N/A	Yes
	Inputs	4	8, 16	8, 16 (plus 1 input per IP camera)	8, 16 (plus 1 input per IP camera)	32
	Relay Outputs	1 or 4	4, 8	5	5	16
	Call Up Pre-position on Dome Cameras	Yes	Yes	Yes	Yes	Yes
	Increase Frame Rate on Alarm	Yes	Yes	Yes	Yes	Yes
	Simultaneous normal and event recording	Yes	Yes	Yes	Yes	Yes
	Multiple Camera Linking on Alarm Event	Yes	No	Yes	Yes	Yes
	Notification via e-mail	Yes	Yes	No	No	Yes
	Notification to Remote PC	Yes	Yes	Yes	Yes	Yes
	Pre-alarm	Yes	Up to 60 Seconds	Up to 120 Seconds	Up to 120 Seconds	Yes
	Alarm Time	Up to 10 Minutes	Up to 10 Minutes	Up to 120 Seconds	Up to 120 Seconds	Yes
	Motion Detection	Yes	Yes	Yes	Yes	Yes
Recording	Compression Video	H.264	MPEG-4	H.264	H.264	MPEG-4, JPEG
	Software or Hardware	Hardware	Hardware	Hardware	Hardware	Video Hardware, Audio Software
	Frame Rate (IPS) PAL	100 IPS @ CIF	400 IPS @ CIF	600/720IPS @ 4CIF	600/720 IPS @ 4CIF	75/150/225/300/375 @ CIF
	NTSC	120 IPS @ CIF	480 IPS @ CIF	800/960IPS @ 4CIF	800/960 IPS @ 4CIF	90/180/270/360/450 @ CIF
	IPS per Camera PAL	25 IPS @ CIF	25 IPS @ CIF	25 IPS @ 4CIF	25 IPS @ 4CIF	25 Per Camera Max 375 on a 30 Channel Unit @ CIF
	NTSC	30 IPS @ CIF	30 IPS @ CIF	30 IPS @ 4CIF	30 IPS @ 4CIF	30 Per Camera Max 450 on a 30 Channel Unit @ CIF
	Recorded Video Resolution PAL	352 x 288/704 x 288/704 x 576	352 x 288/704 x 288/704 x 576	352 x 288/704 x 288/704 x 576	352 x 288/704 x 288/704 x 576	CIF/2CIF/4CIF Analog and IP Cameras
	NTSC	352 x 240/704 x 240/704 x 480	352 x 240/704 x 240/704 x 480	352 x 240/704 x 240/704 x 480	352 x 240/704 x 240/704 x 480	CIF/2CIF/4CIF Analog and IP Cameras
	Individual Camera Adjustment (IPS, Quality)	Yes	Yes	Yes	Yes	Yes
	Schedule Recording Modes	Day/Week/Specific Day 32 Exception Days	Day/Week/Specific Day	Weekday/Weeknight/Weekend Day/Weekend Night/32 Exception Days	Weekday/Weeknight/Weekend Day/Weekend Night/32 Exception Days	Day/Night/Weekend/Holiday/ Specific Day
	HDD Overwrite Warning	Yes	Yes	No	No	Yes
	Recording Times	Best Quality/Highest Resolution, 3 IPS Continuous, 50% Motion, Very Busy Scene (Outdoor), No Audio	4 Ch.: 27 Days (500 GB) @ 4CIF	8 Ch.: 9 Days (500 GB) @ 4CIF 8 Ch.: 18 Days (1000 GB) @ 4CIF 16 Ch.: 9 Days (1000 GB) @ 4CIF 16 Ch.: 18 Days (2000 GB) @ 4CIF	8 Ch.: 12 Days (500 GB) @ 4CIF 8 Ch.: 36 Days (1500 GB) @ 4CIF 16 Ch.: 6 Days (500 GB) @ 4CIF 16 Ch.: 18 Days (1500 GB) @ 4CIF 16 Ch.: 48 Days (3000 GB) @ 4CIF	8 Ch.: 12 Days (500GB) @ 4CIF 8 Ch.: 36 Days (1500GB) @ 4CIF 16 Ch.: 6 Days (500GB) @ 4CIF 16 Ch.: 18 Days (1500GB) @ 4CIF 16 Ch.: 48 Days (4000GB) @ 4CIF
Normal Quality/Standard Resolution, 3 IPS Continuous, 50% Motion, Very Busy Scene (Outdoor), No Audio		4 Ch.: 125 Days (500 GB) @ CIF	8 Ch.: 36 Days (500 GB) @ CIF 8 Ch.: 72 Days (1000 GB) @ CIF 16 Ch.: 36 Days (1000 GB) @ CIF 16 Ch.: 72 Days (2000 GB) @ CIF	8 Ch.: 120 Days (500 GB) @ CIF 8 Ch.: 363 Days (1500 GB) @ CIF 16 Ch.: 60 Days (500 GB) @ CIF 16 Ch.: 181 Days (1500 GB) @ CIF 16 Ch.: 484 Days (3000 GB) @ CIF	8 Ch.: 120 Days (500GB) @ CIF 8 Ch.: 363 Days (1500GB) @ CIF 16 Ch.: 60 Days (500GB) @ CIF 16 Ch.: 181 Days (1500GB) @ CIF 16 Ch.: 484 Days (4000GB) @ CIF	6 Ch.: 86 Days (750 GB) @ CIF 12 Ch.: 43 Days (750 GB) @ CIF 18 Ch.: 38 Days (1000 GB) @ CIF 24 Ch.: 58 Days (1600 GB) @ CIF 30 Ch.: 46 Days (1600 GB) @ CIF



Bosch Digital Video Recorders		DVR 400	DVR 600 (Divar MR)	DHR 700 Hybrid Recorder (XF)	DNR 700 Network Recorder (XF)	DHR 900 Rackmount (DiBos)			
Storage	Internal HDD	500 GB	500 - 1000 - 2000 GB	0 - 500 - 2000 - 4000 - 8000 GB	0 - 500 - 2000 - 4000 - 8000 GB	250 - 500 - 750 - 1000 - 2000 GB			
	Export	Supported Devices	USB 1.1 and USB 2.0	Internal CD/DVD Writer, USB 2.0	Internal CD/DVD Writer, USB 2.0	Internal CD/DVD Writer, USB 2.0	CD-RW, DVD, USB 2.0, Network Drive, SCSI		
		Data Format	Native File Format	Native File Format	Native File Format	Native File Format	Bosch, ASF		
		Back-up Mode	n/a	Manual or Automatic	Manual	Manual	Manual or Automatic		
	On-board RAID	No	No	Yes (up to 6TB optional)	Yes (up to 6TB optional)	No			
Support SCSI Disk Array	No	No	Yes (iSCSI)	Yes (iSCSI)	Yes, DVSA (Lite and Premium)				
Max. SCSI Array Configuration	n/a	n/a	120TB (60 LUNs @ 2TB)	120TB (60 LUNs @ 2TB)	13.8 TB**				
Search	Timeline Search Bar (Color Coded)	Yes	Yes	No	Yes	Yes			
	Search Mode	Date/time, Events, Motion, Motion Search	Date/time, Camera Number, Events, Motion, Bookmark, Smart Motion Search	Date/time, Camera, Events, Motion, Smart Motion Search and Text	Date/time, Camera, Events, Motion, Smart Motion Search and Text	Date/time, Camera Name, Events, Pre-Alarm, Motion, Smart Motion Search			
	Smart Motion Search – Motion in specific area	Yes	Yes	Yes	Yes	Yes			
Display	Live Resolution	PAL 720x576 NTSC 720x484	720 x 576 720 x 484	720 x 576 720 x 484	720 x 576 720 x 484	CIF/2CIF/4CIF Analog and IP Cameras CIF/2CIF/4CIF Analog and IP Cameras			
	Screen Division (Multi-screen)	Full, 2x2, Sequence	Full, Sequence, 2x2, 3x3, 4x4, 5+1, 7+1	Full, Sequence, 2x2, 3x3, 4x4	Full, Sequence, 2x2, 3x3, 4x4	Full, 2x2, 3x3, 4x4, 5x6			
	Digital Zoom	Yes	No	Yes	Yes	Yes			
	Camera Lock-outs by User	Yes	Yes	Yes	Yes	Yes			
Security/User Management	User Control	User Levels	3	3	8	Unlimited			
		Add/Delete	Yes	Yes	Yes	Yes			
		Set Viewing Permissions	Yes	Yes	Yes	Yes			
		Centralized User Management	No	No	No	No	Yes - LDAP		
	Event Logging by User	No	No	No	No	No			
Data Integrity Check (Watermarking, etc.)	Yes	Yes	Yes	Yes	Yes				
Remote Access	Network	Connection	10/100 Ethernet	10/100 Ethernet	10/100/1000 Ethernet	10/100/1000 Ethernet			
		Protocol	TCP/IP	TCP/IP	TCP/IP	TCP/IP	TCP/IP, UDP Tunneling		
	Web Browser Access	Yes	Yes	Yes	No	Yes			
	Simultaneous Accessible Users	4	5	5	5	20 with software; 5 with web browser			
	Remote PC Client	Resolution (live)	352x288 (PAL) / 352x240 (NTSC)	352x288 (PAL) / 352x240 (NTSC)	704x576 (PAL) / 704x480 (NTSC)	704x576 (PAL) / 704x480 (NTSC)	CIF/2CIF/4CIF Analog and IP Cameras		
Full Admin Control		Yes	Yes	Yes	Yes	Yes, Remote Desktop			
PTZ Control		Yes	Yes	Yes	Yes	Yes			
Export Options	Native File Format	Native File Format and .AVI (individual and multiple cameras)	Native File Format	Native File Format	Bosch (All Cameras) ASF (Individual and Multiple Cameras)				
Other Features	Instant Playback	Yes	Yes	Yes	Yes	Yes			
	Bilinx/Up-the-Coax Camera Control	No	No	No	No	Yes			
	Digital Zoom on Playback	Yes	No	Yes	Yes	Yes			
	PTZ Joystick Control	No	Yes	Yes	Yes	Yes - DiBos/Bosch VMS			
	ATM/POS Interface	No	No	Yes	Yes	Yes			
OPC Support	No	No	No	No	Yes				
Ordering Information	Part Numbers/Ordering Charts	DVR-430-04A050 (500 GB) DVR-451-04A050 (500 GB/DVD)		DVR-8K-050A (500 GB) DVR-8L-050A (500 GB/DVD) DVR-8L-100A (1000 GB/DVD) DVR-16K-050A (500 GB) DVR-16L-050A (500 GB/DVD) DVR-16L-100A (1000 GB/DVD) DVR-16L-200A (2000 GB/DVD)		DHR-730-08A000 (8CH/0GB/1 NW) DHR-730-08A050 (8CH/500GB/1 NW) DHR-730-08A200 (8CH/2TB/1P) DHR-730-08A400 (8CH/4TB/1P) DHR-730-08A800 (8CH/8TB/1 NW) DHR-751-16A000 (16CH/0GB/1 NW) DHR-751-16A050 (16CH/500GB/1 NW) DHR-751-16A200 (16CH/2TB/1 NW) DHR-751-16A400 (16CH/4TB/1 NW) DHR-751-16A800 (16CH/8TB/1 NW) DHR-732-08A000 (8CH/DVD/0GB/1 NW) DHR-732-08A050 (8CH/DVD/500GB/1 NW) DHR-732-08A200 (8CH/DVD/2TB/1 NW) DHR-732-08A400 (8CH/DVD/4TB/1 NW) DHR-732-08A800 (8CH/DVD/8TB/1 NW) DHR-753-16A000 (16CH/DVD/0GB/1 NW) DHR-753-16A050 (16CH/DVD/500GB/1 NW) DHR-753-16A200 (16CH/DVD/2TB/1 NW) DHR-753-16A400 (16CH/DVD/4TB/1 NW) DHR-753-16A800 (16CH/DVD/8TB/1 NW) DHR-754-16A000 (16CH/DVD/0GB/2 IP) DHR-754-16A050 (16CH/DVD/500GB/2 IP) DHR-754-16A200 (16CH/DVD/2TB/2 IP) DHR-754-16A400 (16CH/DVD/4TB/2 IP) DHR-754-16A800 (16CH/DVD/8TB/2 IP)		DNR-732-08A000 (8CH/DVD/0GB/1 NW) DNR-732-08A050 (8CH/DVD/500GB/1 NW) DNR-732-08A200 (8CH/DVD/2TB/1 NW) DNR-732-08A400 (8CH/DVD/4TB/1 NW) DNR-732-08A800 (8CH/DVD/8TB/1 NW) DNR-753-16A000 (16CH/DVD/0GB/1 NW) DNR-753-16A050 (16CH/DVD/500GB/1 NW) DNR-753-16A200 (16CH/DVD/2TB/1 NW) DNR-753-16A400 (16CH/DVD/4TB/1 NW) DNR-753-16A800 (16CH/DVD/8TB/1 NW) DNR-754-16A000 (16CH/DVD/0GB/2 NW) DNR-754-16A050 (16CH/DVD/500GB/2 NW) DNR-754-16A200 (16CH/DVD/2TB/2 NW) DNR-754-16A400 (16CH/DVD/4TB/2 NW) DNR-754-16A800 (16CH/DVD/8TB/2 NW)	

* Due to SCSI specifications, the daisy chaining of more than two Digital Video Storage Array subsystems (DVA-08K/DVA-16K) on a single Divar is NOT RECOMMENDED. DiBos can address up to 6 SCSI IDs (7 units without DVD writer) and a maximum of 2TB per ID (12TB with DVD writer or 14TB for units without a DVD writer). Stated capacities assume JBOD configuration 8% overhead on the HDDs.
 ** Due to SCSI specifications, the daisy chaining of more than three Digital Video Storage Array subsystems (DVA-08K/DVA-16K) on a single DiBos is NOT RECOMMENDED. The maximum configuration is (2) DVA-16Ks or (1) DVA16K and (2) DVA08Ks daisy chained. Stated capacities assume JBOD configuration and 8% overhead on the HDDs.