


BOSCH

Invented for life

DiBos 19 inch Digital Video Recorders - Version 8 (EMEA/APR)



- ▶ Hybrid analog/IP MPEG4 digital video recorder
- ▶ Models for 6, 12, 18, 24 and 30 analog cameras and up to 32 additional network cameras/video encoders
- ▶ View/record video at CIF/2CIF/4CIF resolution
- ▶ Web-browser remote access and viewing
- ▶ Camera tamper detection
- ▶ Control cameras and AutoDomes with Biphase or Bilinx
- ▶ DVD writer for exporting video clips
- ▶ Interfacing to Bosch alarm panels
- ▶ Remote Receiver Software included

DiBos uses Bosch's proven state of the art digital recording and communications technology and takes video surveillance to a new level. It is an integral part of overall security solutions for a wide range of applications – including banks, large retailers, railway stations, airports, city centers, industrial facilities, and office buildings.

Customers can retrieve vital images and share information faster than ever before. They can better assess critical situations and take action immediately. Whether they're on site or at a remote network location, authorized personnel have quick, convenient access to information so they can operate more effectively and efficiently.

DiBos supports live viewing and recording at resolutions up to 4CIF. Users can store images at up to 450/375 ips (NTSC/PAL) on 30 composite video inputs. As many as 10 audio data streams can also be recorded on 30 video channels units.

Users can connect up to 32 additional IP video sources. This includes support for Bosch IP cameras (Dinion IP and AutoDome IP), Bosch MPEG4 network video encoders (VideoJet and VIP X Series), as well as JPEG images from numerous network camera manufacturers. DiBos can store up to 30/25 ips per attached network video device.

The system offers advanced features for viewing and very high flexibility in recording and image access. The real power of DiBos is fast, convenient accessibility to images and information. If required, accessibility to images and information is possible round the clock and everywhere all over the world. Communication and access to DiBos is possible via private or public networks. For these purposes the system can be connected to a variety of peripheral devices and systems.

The unique, scalable GUI allows live and recorded images from multiple remote systems to be viewed from a single PC or another DiBos. With this powerful tool, security managers can monitor and supervise various locations simultaneously.

Cameras and viewing modes can be programmed or selected manually. Each camera offers in-window pan/tilt/zoom functionality from local or remote facilities. Images are displayed with date/time, location, camera name and status of connected devices such as detectors and sensors.

DiBos can be programmed to respond to specific situations and events automatically. Minimal human intervention is necessary.

In response to alarms, the system can be programmed to transmit images or messages to security personnel or security control center.

Playback is easy thanks to familiar search and navigation functions in a tree structure. Images can be accessed locally or remotely via a company network or the Internet. The customer can select multiple different views from up to 30 cameras.

Fast, powerful image search functions eliminate time-consuming manual searches. Functions include search for image changes, search for criteria such as camera number, recording date/time, and optional ATM transaction data, e. g. credit card number, bank code, account number, and/or amount withdrawn.

To ensure high security, all access is controlled by user authorization. Profiles are assigned by the system administrator. Events, such as login, logoff, status changes, image transmission, and system shutdown are stored in a database. Video authentication is built in to ensure that DiBos images are not altered in any way.

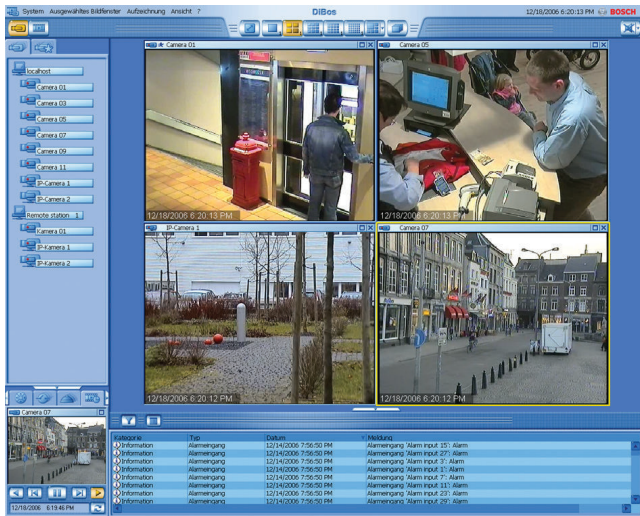
Various storage devices – such as external disk arrays, RAID and NAS devices, and external disk drives – may be used for export and backup of images.

DiBos supports Bilinx for pan/tilt/zoom and camera configuration via the video coax cable.

The configuration wizard makes installation quick and easy.

DiBos serial ports can be connected to Bosch alarm panels, ATM, Allegiant matrices and foyer card readers.

Live mode



Playback mode

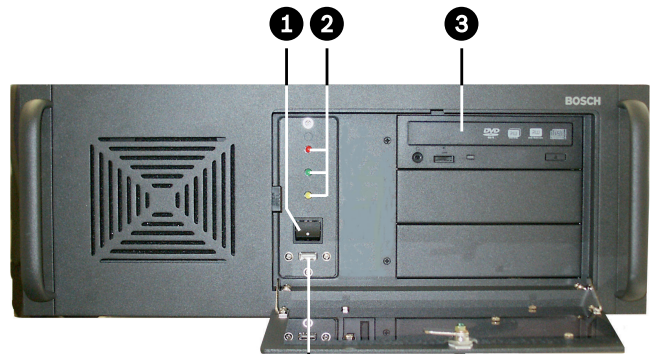


Certifications and Approvals

Region	Certification	-List
Europe	CE	-List
USA	FCC	-List

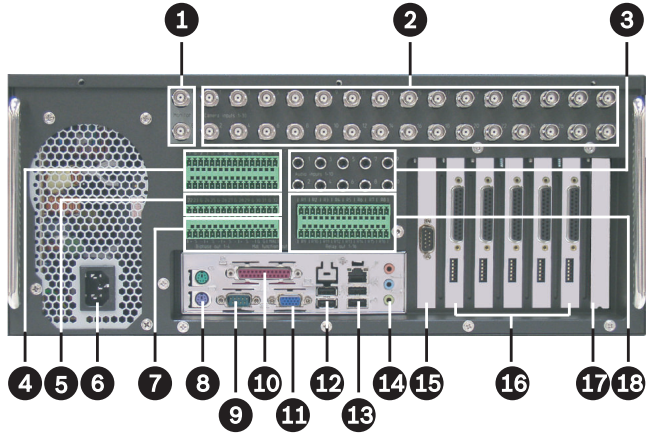
Installation/Configuration Notes

Front view:



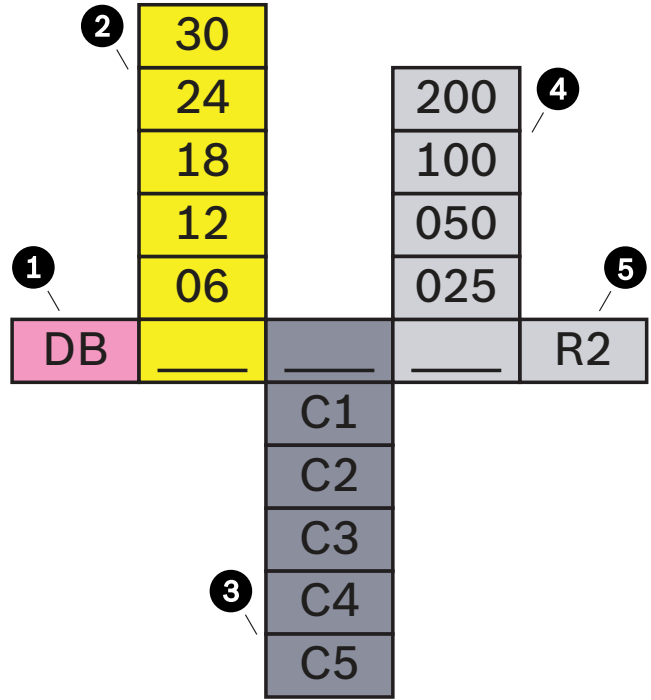
- 1 On/Off switch
- 2 Control LEDs:
Red = hard disk access
Green = system is switched on
Yellow = unused
- 3 DVD-RW
- 4 USB 2.0

Rear view:



- | | |
|--|--|
| 1 Video monitor A/Video monitor B | 10 Parallel interface. |
| 2 Video inputs 1 - 30 | 11 VGA monitor |
| 3 Audio inputs 1 - 10 | 12 2x USB 2.0 (e.g. for mouse and key-board with USB connection) |
| 4 Alarm inputs 1 - 21 | 13 1x Ethernet (RJ45) 2x USB 2.0 |
| 5 Alarm inputs 22 - 32 | 14 Line in (blue) Speaker out (green) Microphone in (red), mono |
| 6 Mains connection 100/240 VAC, 50/60 Hz (automatic switchover) | 15 Second serial interface (COM2) |
| 7 Biphasic 1 - 4, malfunction outputs 1 | 16 Grabbers 1 - 5 |
| 8 Mouse (green) - Keyboard (purple). These connections should be used if the mouse and keyboard are not connected via USB. | 17 Free for optional PCI plug-in cards |
| 9 Serial interface COM1 | 18 Relay outputs 1 - 16 |

Ordering information:



- 1 Type DiBos
 - 2 Number of analog camera inputs
 - 3 C1 version with max. 6 camera inputs
C2 version with max. 12 camera inputs
C3 version with max. 18 camera inputs
C4 version with max. 24 camera inputs
C5 version with max. 30 camera inputs
 - 4 Disk size (x10 GB)
 - 5 Version
R: Rack mount
- E. g. : **DB 30 C5 200 R2**
30 channel DiBos with 2 TB storage

Technical Specifications

Electrical

Compression Method	MPEG4			
Camera Inputs (analog)	6 BNC connectors (DB 06 C1) 12 BNC connectors (DB 12 C2) 18 BNC connectors (DB 18 C3) 24 BNC connectors (DB 24 C4) 30 BNC connectors (DB 30 C5)			
Camera Inputs (IP)	16 video/audio MPEG4 data streams from Bosch/VCS network or JPEG devices (DB 06 C1, DB 12 C2, DB 18 C3) 32 video/audio MPEG4 data streams from Bosch/VCS network or JPEG devices (DB 24 C4, DB 30 C5)			
Composite video signal	1 Vpp +/-3 dB (min. 0.7 Vpp, max. 1.4 Vpp), 75 Ohm			
Video outputs (loop through)	Via breakout cable			
Recording resolution (analog inputs)	PAL: 704 x 576 (4CIF), 704 x 288 Pixel (2CIF), 352 x 288 Pixel (CIF) NTSC: 704 x 480 (4CIF), 704 x 240 Pixel (2CIF), 352 x 240 Pixel (CIF)			
Recording resolution (IP inputs - Bosch IP devices)	PAL: 704 x 576 (4CIF/D1), 704 x 288 (2CIF), 464 x 576 (2/3 D1), 352 x 576 (1/2 D1), 352 x 288 (CIF), 176 x144 (QCIF) NTSC: 704 x 480 (4CIF/D1), 704 x 240 (2CIF), 464 x 480 (2/3 D1), 352 x 480 (1/2 D1), 352 x 240 (CIF), 176 x120 (QCIF)			
Recording rates (analog) for DiBos models	IPS CIF (PAL)	IPS CIF (NTSC)	IPS 2CIF (PAL)	IPS 2CIF (NTSC)
DB 06 C1 xxx R2	75	90	50	60
DB 12 C2 xxx R2	150	180	100	120
DB 18 C3 xxx R2	225	270	150	180
DB 24 C4 xxx (S) R2	300	360	200	240
DB 30 C5 xxx (S) R2	375	450	250	300
Recording rates (analog) for DiBos models	IPS 4CIF (PAL)	IPS 4CIF (NTSC)		
DB 06 C1 xxx R2	25	30		
DB 12 C2 xxx R2	50	60		
DB 18 C3 xxx R2	75	90		
DB 24 C4 xxx (S) R2	100	120		
DB 30 C5 xxx (S) R2	125	150		
Recording rates per channel (video inputs analog)	PAL: 0,5; 1; 2; 3; 4; 5; 6; 8; 12,5; 25 ips NTSC: 0,5; 1; 2; 3; 5; 6; 7,5; 10; 15; 30 ips			
Image size (video inputs analog)	Configurable from approx. 1.5 kB to 30 kB			

Maximum recording rate (analog and IP)	50 Mbit per second
Recording rates per channel (video inputs IP)	PAL: 0,5; 1; 2; 3; 4; 5; 6; 8; 12,5; 25 ips NTSC: 0,5; 1; 2; 3; 5; 6; 7,5; 10; 15; 30 ips
Image size (video inputs IP)	Configurable bit streams up to 3 Mbit per camera
Supported single channel encoders Bosch VideoJet Series and Bosch VIP Series	VideoJet 10S, VideoJet 1000 VideoJet X10 VIP X1, VIP 10
Supported multi channel encoders Bosch VideoJet Series and Bosch VIP Series	VideoJet 8004, VideoJet 8004A VideoJet 8008, VideoJet 8008A VideoJet X20, VideoJet X40 VIP X2, VIP X2A, VIP X1600
Supported Bosch IP cameras	Dinion IP, AutoDome IP, FlexiDome IP, Megapixel IP
JPEG protocol	JPEG image request via HTTP
Supported JPEG cameras from other manufacturers	IP cameras from Axis, Sony and Mobotix. For further information please contact Bosch Security Systems
Audio Inputs	2, 4, 6, 8, 10, cinch connector, line in signal, 16 KHz sampling rate
Audio Outputs	1, line out signal, 1/8" mini-plug (3,5 mm)
Alarm Inputs (NO / NC)	32 Switching voltage (high): >2 VDC Switching voltage (low): <0,5 VDC Input voltage: max. 40 VDC Impedance: 22 kOhm pull up (+5 V)
Malfunction relay output	1 Voltage range: 30 VAC - 40 VDC Switching current: max. 500 mA AC or DC Switching power: max. 10 VA
Relay Outputs (NO / NC)	16 Voltage range: 30 VAC - 40 VDC Switching current: max. 500 mA AC or DC Switching power: max. 10 VA
Spot monitor output	2 CVBS outputs for full screen or sequences from connected analog cameras
Bilinx control	For AutoDome control and Dinion camera configuration via coax
PTZ control	Bilinx: Via coax cable, up to 30 AutoDome units. Biphase: Up to 16 AutoDome units. RS 232: Via Console Port of any Allegiant matrix.
Storage capacity (internal hard disk)	250 GB, 500 GB, 1 TB, 2 TB (8 GB are needed for the operating system and video system software)
Video output	1x VGA
Ethernet	10/100/1000Base-T, bandwidth-limited
CPU	Intel P4 (min. 3 GHz)
RAM	1024 MB
RS 232	2 (to connect Bosch alarm panels and Allegiant matrices)

USB 2.0	5
DVD writer	Included; supported medias: CD-R, CD-RW, DVD-R
Power supply	100 / 240 VAC, 50 / 60 Hz (auto switch)
Typical power consumption	approx. 150 W
Power consumption	max. 210 W
Operating system	Microsoft Windows XP Embedded
Web Browser	Microsoft Internet Explorer 6 or higher, on Windows 2000 or Windows XP
Export of video/audio data	DiBos-format or ASF-format on DVD-R/DVD+R, USB-device or network drive
Image Printer	via USB (with Windows XP drivers)
External storage capacity	max. 16 TB

Supported protocols

	Panasonic, Pelco (D protocol), JVC, SAE	Bosch (Bilix, Biphas, Allegiant)	Geutebrueck Lederer
Pan / tilt / zoom	Yes	Yes	Yes
Focus / Iris	Yes	Yes	Yes
Prepositions	Yes	Yes	Yes
AUX commands	No	Yes	No
Extended commands, e.g. wiper on	No	No	Yes

Mechanical facilities

Dimensions (H x W x D)	17,5 x 48,0 x 54,5 cm (7 x 19 x 21.5 inch)
Weight	16 - 20.4 kg (25 - 55 lb), dependent on model

Environmental conditions

Operating temperature	+5 °C to +40 °C (41 ° to 104 °F)
Storage temperature	-10 °C to +60 °C (-14 °F to 140 °F)
Relative humidity in operation	15% to 80%, no condensation
Relative humidity when stored	8% to 80%, no condensation

Electromagnetic Compatibility (EMC)

- USA: FCC Part 15, Class A
- EU: EMC Directive 89/336/EEC
Interference immunity: Conformance with EN 50130-4 requires an external UPS. The product is tested according to EN 50130-4, with the exception of voltage interruption to EN 50130-4:1995 Chapter 3/8/04. To comply with EN 50130-4, an external UPS is required. The UPS (Pulsar ellipse 500) is not contained in the product and must be ordered separately. The UPS should be dimensioned for at least 480 VA.
Interference emission: EN 55022, Class B
Mains power fluctuations: EN 61000-3-2
Voltage fluctuations: EN 61000-3-3

Safety

- USA: UL60950 Third edition (2000)
CAN/CSA 22.2 No.60950-00, Third edition (2000)
 - EU: EN 60950: 2000
- Warranty: 3 years
- Approved anti virus software: Norton Anti Virus, McAfee Virus Scan, Trend Micro

Minimum requirements for computer with DiBos Receiver Software/IP Recorder Software (in brackets recommended requirements)

Operating system	Windows XP Professional, 32-bit versions; Windows Vista, 32-bit versions
CPU	Pentium 4, 3 GHz with Hyper Threading, (Core 2 Duo CPU)
RAM	1024 MB (2048 MB)
VGA card	32-Bit color depth (DirectX 9 Hardware Support, no shared memory)
Recording partition	Dedicated partition for recording
Network adapter	1000 Base-T, Gbit

Windows 2000, Windows XP and Windows Vista are registered trademarks of Microsoft Corporation.

Intel Pentium and Celeron are registered trademarks of Intel Corporation.

Ordering Information

DB 06 C1 050 R2 DiBos Digital Video Recorder 6 channel DiBos with 500 GB HDD, DVD-RW, 8 IP devices.	DB06C1050R2
DB 06 C1 100 R2 DiBos Digital Video Recorder 6 channel DiBos with 1 TB HDD, DVD-RW, 16 IP devices.	DB06C1100R2
DB 12 C2 050 R2 DiBos Digital Video Recorder 12 channel DiBos with 500 GB HDD, DVD-RW, 8 IP devices.	DB12C2050R2
DB 12 C2 100 R2 DiBos Digital Video Recorder 12 channel DiBos with 1 TB HDD, DVD-RW, 16 IP devices.	DB12C2100R2
DB 12 C2 200 R2 DiBos Digital Video Recorder 12 channel DiBos with 2 TB HDD, DVD-RW, 16 IP devices.	DB12C2200R2
DB 18 C3 025 R2 DiBos Digital Video Recorder 18 channel DiBos with 250 GB HDD, DVD-RW, 16 IP devices.	DB18C3025R2
DB 18 C3 050 R2 DiBos Digital Video Recorder 18 channel DiBos with 500 GB HDD, DVD-RW, 16 IP devices.	DB18C3050R2
DB 18 C3 100 R2 DiBos Digital Video Recorder 18 channel DiBos with 1 TB HDD, DVD-RW, 16 IP devices.	DB18C3100R2
DB 18 C3 200 R2 DiBos Digital Video Recorder 18 channel DiBos with 2 TB HDD, DVD-RW, 16 IP devices.	DB18C3200R2
DB 24 C4 025 R2 DiBos Digital Video Recorder 24 channel DiBos with 250 GB HDD, DVD-RW, 32 IP devices.	DB24C4025R2
DB 24 C4 050 R2 DiBos Digital Video Recorder 24 channel DiBos with 500 GB HDD, DVD-RW, 32 IP devices.	DB24C4050R2
DB 24 C4 100 R2 DiBos Digital Video Recorder 24 channel DiBos with 1 TB HDD, DVD-RW, 32 IP devices.	DB24C4100R2
DB 24 C4 200 R2 DiBos Digital Video Recorder 24 channel DiBos with 2 TB HDD, DVD-RW, 32 IP devices.	DB24C4200R2

Ordering Information

DB 30 C5 025 R2 DiBos Digital Video Recorder 30 channel DiBos with 250 GB HDD, DVD-RW, 32 IP devices.	DB30C5025R2
DB 30 C5 050 R2 DiBos Digital Video Recorder 30 channel DiBos with 500 GB HDD, DVD-RW, 32 IP devices.	DB30C5050R2
DB 30 C5 100 R2 DiBos Digital Video Recorder 30 channel DiBos with 1 TB HDD, DVD-RW, 32 IP devices.	DB30C5100R2
DB 30 C5 200 R2 DiBos Digital Video Recorder 30 channel DiBos with 2 TB HDD, DVD-RW, 32 IP devices.	DB30C5200R2
Accessories	
DB EK 012 CS English Keyboard and Czech Manuals (only EMEA)	DBEK012CS
DB EK 012 DA English Keyboard and Danish Manuals (only EMEA)	DBEK012DA
DB EK 012 DE German Keyboard and German Manuals (only EMEA)	DBEK012DE
DB EK 012 EL English Keyboard and Greek Manuals (only EMEA)	DBEK012EL
DB EK 012 EN English Keyboard and English Manuals	DBEK012EN
DB EK 012 ES English Keyboard and Spanish Manuals (only EMEA)	DBEK012ES
DB EK 012 FI English Keyboard and Finnish Manuals (only EMEA)	DBEK012FI
DB EK 012 FR French Keyboard and French Manuals (only EMEA)	DBEK012FR
DB EK 012 HU English Keyboard and Hungarian Manuals (only EMEA)	DBEK012HU
DB EK 012 IT English Keyboard and Italian Manuals (only EMEA)	DBEK012IT
DB EK 012 NL English Keyboard and Dutch Manuals (only EMEA)	DBEK012NL
DB EK 012 NO English Keyboard and Norwegian Manuals (only EMEA)	DBEK012NO
DB EK 012 PL English Keyboard and Polish Manuals (only EMEA)	DBEK012PL
DB EK 012 PT English Keyboard and Portuguese Manuals (only EMEA)	DBEK012PT
DB EK 012 RU English Keyboard and Russian Manuals (only EMEA)	DBEK012RU
DB EK 012 SV Swedish Keyboard and Swedish Manuals (only EMEA)	DBEK012SV
DB EK 012 TR English Keyboard and Turkish Manuals (only EMEA)	DBEK012TR

Ordering Information

DB EK 021 SCSI Card Adapter and SCSI Cable	DBEK021
Built in the factory. Included SCSI cable. DiBos Micro: Only for DB 06, due to required PCI slot. DiBos 19 inch: Not for DB 30 C5 100 R2 and DB 30 C5 160 R2, due to required PCI slot.	
DB EK 061 SCSI Card Adapter and SCSI Cable	DBEK061
Expansion. Included SCSI cable. DiBos Micro: Only for DB 06, due to required PCI slot.	
DB SE 041 Tele Service Package for DiBos (only EMEA)	DBSE041
PC Anyware Host Version 10.5	
DB EK 831 OVS Interface Converter OVS	DBEK831OVS
RS 485/RS 232 interface converter.	
DB EK 823 9M Connection Cable 9-pole, between DTP3 and OVS	DBEK8239M
DB EK 721 RS 232 PCI Interface Expansion for RS 232 (only EMEA)	DBEK721RS232
PCI card for 2x RS 232. Requires one free PCI slot.	
DB EK 211 DCF Radio Clock Receiver DCF-77 (only EMEA)	DBEK211DCF
Requires one free RS 232 interface.	
DB EK 211 DCFC Extension Cable 50 m for DCF-77 (only EMEA)	DBEK211DCFC
DB EK 201 UPS Uninterruptable Power Supply UPS (only EMEA)	DBEK201UPS
DB EK 031 Internal Modem Card (only EMEA)	DBEK031
PCI modem card (not DB 30 C5 100 and DB 30 C5 160).	
Software Options	
DB SE 016 DiBos ATM POS Bridge License	DBSE016
Software interface via TCP/IP to Bosch ATM/POS bridge.	
DB SE 017 DiBos IP Software License	DBSE017
Software interface via TCP/IP socket connection to IP server providing POS, ATM or other data.	
DB SE 031 Software Interface to Bosch Alarm Panels	DBSE031
Connection via RS 232 to Bosch G Series, UGM 2020, UEZ 2000/1000, BZ 500, NZ/BZ 1060, NZ/BZ 1012, NZ 1008.	
DB SR 002-B DiBos 8 Receiver SW Burning License	DBSR002-B
DB SW CD-DVD	DBSWCD-DVD
SW Recovery DVD and setup CD	

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