# Digital Video Recorder 440/480 Series

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Advantage Line

The Bosch Video Recorder 440/480 Series is a 4/8 channel digital recorder that uses the latest H.264 compression technology. With the supplied Control Center software and built-in web server, the 440/480 Series is a fully integrated, stand-alone video solution that's ready to go, straight out of the box.

Available in 4-channel and 8-channel versions, the 440/480 Series features a highly reliable embedded design that minimizes maintenance and operational costs.

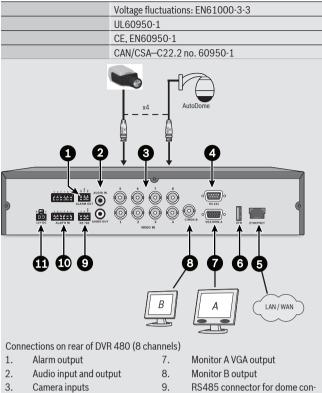
# **Features**

- ▶ 4/8-Channel real-time recording
- ► Flexible viewing with two monitor outputs
- ► Remote viewing, playback, control, and configuration
- ► Easy Pan/Tilt/Zoom camera control
- ▶ DVR viewer iPhone App

# **Technical specifications**

Floatrical		
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Rated Voltage and Power		
External power adapter AC input	110-240 VAC; 50/60 Hz; 1.8 A	
External power adapter DC output	12 VDC; 3 A	
DVR Power input	12 VDC; 3 A	
Video		
Video Standard	SVGA	
	PAL / NTSC auto-detect	
Live Resolution	SVGA: 800x600, 1024x768 or 1280x1024	
	PAL: 720x576, NTSC: 720x484	
Digital Zoom	2 times	
AGC	Automatic gain adjustment for each video input	
Compression	H.264	
Inputs	Composite video 1 Vpp, 75 ohm, automatic termination	
Outputs	Monitor A: VGA RGB	
	Monitor B: 1 Vpp, 75 ohm, sync. 0.3 V ±10%	
Audio		
Input	Mono RCA, 1.0 Vpp	
Output	Mono RCA, 1.0 Vpp	
Compression	ADPCM	
Sample rate	16 kHz per channel	
Bit rate	8-bit	
Alarm Handling		
Inputs	4/8 Inputs configurable NO/NC, max input voltage 15 VDC	
Outputs	1 Relay output, configurable NO/NC, max. rated 30 VAC, 30 VDC 0.5 A continuous	
Control		
RS232	Output signals according to EIA/TIA-232-F, max. input voltage ±25 V	
RS232 Support	Bosch domes via RS232/Bi-phase converter	
RS485	Output signals according to RS485, max. signal voltage -8 to +12 V	
RS485 Support	Bosch domes, and Pelco P and D	
Connectors		
Video Inputs	4/8 BNC	
Monitor	1 VGA d-SUB, 1 BNC	
Alarm connectors	Screw terminal inputs, cable diameter AWG26-16 (0.13-1.5 mm)	
Audio Inputs	1 RCA (CINCH)	
Audio Output	1 RCA (CINCH)	
Ethernet	RJ45, 10/100 BaseT according to IEEE802.3	
RS232	DB9 Male	
RS485	Screw terminal output, cable diameter AWG28-16 (0.08-1.5 mm)	
USB	Type A Connector	
	USB 2.0 on front and rear for mouse or USB memory device	
Storage		
Hard Disk	Supports 1 SATA hard drive up to 1TB.	
	(Third party hard disks are supported from firmware version 2.0.6 onwards. A list of tested disks is available in the instruction manual.)*	
*Bosch cannot be held liable for any loss or	ble in the instruction manual.)* damages or system malfunction resulting from the use of non-Bosch drives in DVR recorders.	
Video recording		
Record Rate (IPS) NTSC	May 20 IPS per channel configurable 20, 15, 7,5	
IVIO	Max. 30 IPS per channel, configurable: 30, 15, 7.5, 5, 3, 1	

PAL	Max. 25 IPS per channel, configurable: 25, 12.5, 6.25, 5, 2.5, 1			
Recording Quality	Best, High, Normal, Low, Lowest			
Average Recording Capacit	у			
CIF, Normal, 25/30 IPS	PAL: 550 Hours, NTSC: 685 Hours			
CIF, Normal, 6.25/7.5 IPS	PAL: 1400 Hours, NTSC: 1700 Hours			
2CIF, Normal, 12.5/15 IPS	PAL: 460 Hours, NTSC: 575 Hours			
4CIF, Normal, 6.25/7.5 IPS	PAL: 370 Hours, NTSC: 460 Hours			
Maximum recording rates				
Local Stream 8 channels				
4CIF	PAL: 6.25 IPS, NTSC: 7.5 IPS			
2CIF	PAL: 12.5 IPS, NTSC: 15 IPS			
CIF	PAL: 25 IPS, NTSC: 30 IPS			
Local Stream 4 channels				
4CIF	PAL: 12.5 IPS, NTSC: 15 IPS			
2CIF	PAL: 25 IPS, NTSC: 30 IPS			
CIF	PAL: 25 IPS, NTSC: 30 IPS			
Local Stream 2 channels				
4CIF	PAL: 25 IPS, NTSC: 30 IPS			
2CIF	PAL: 25 IPS, NTSC: 30 IPS			
CIF	PAL: 25 IPS, NTSC: 30 IPS			
Local Stream 1 channel				
4CIF	PAL: 25 IPS, NTSC: 30 IPS			
2CIF	PAL: 25 IPS, NTSC: 30 IPS			
CIF	PAL: 25 IPS, NTSC: 30 IPS			
Remote (network) Stream	4 channels			
CIF	PAL: 12.5 IPS, NTSC: 15 IPS			
Remote (network) Stream 2	2 channels			
CIF	PAL: 25 IPS, NTSC: 30 IPS			
Display Modes				
Monitor A	Full, multiscreen, sequence (live and playback),			
	alarm call-up (live)			
Monitor B	Full, multiscreen, sequence, alarm call-up (live)			
Recording Modes				
Normal	Continuous recording (with or without overwriting)			
Event	Input and motion recording (with or without overwriting)			
Mechanical				
Dimensions (WxDxH)	225 x 325 x 60 mm			
excluding cabling				
Weight (DVR440)	(8.86 x 12.8 x 2.4 in) 2.9 kg (6.39 lb) approx. (DVR440)			
Weight (DVN440)				
Fusing months	3 kg (6.61 lb) approx. (DVR480)			
Environmental				
Operating temperature	+0°C to +40°C (+32°F to +104°F)			
Storage temperature	-40°C to +70°C (-40°F to +158°F)			
Operating humidity	<93% non-condensing			
Storage humidity	<95% non-condensing			
Certifications and approvals				
Region	Certification			
Europe	CE			
Standards				
	CC Part 15, Subpart B, Class B			
	EMC Directive 2004/108/EC			
	Immunity: EN50130-4			
	Emission: EN55022 Class B			
	Harmonics: EN61000-3-2			



4. RS232 connector

5. RJ45 network connector 6. USB connector

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10. Alarm inputs

11. 12 VDC power connector

Recommended PC requirements for Web support			
Operating system	Windows XP, Windows Vista or Windows 7		
Web browser	Internet Explorer 7, 8 or 9		
Processor	Intel Core Duo 2.0 GHz or comparable		
RAM memory	2048 MB		
Free disk space	10 MB		
Graphics card	NVIDIA GeForce 8600 or better		
Video memory	256 MB		
Network interface	10/100-BaseT		

Ordering information		
440 Series DVR, 4ch, base unit	DVR-440-04A000	
480 Series DVR, 8ch, base unit	DVR-480-08A000	
440 Series DVR, 4ch, 500 GB	DVR-440-04A050	
480 Series DVR, 8ch, 500 GB	DVR-480-08A050	
480 Series DVR, 8ch, 1 TB	DVR-480-08A100	
Accessories		
DVR-XS050-A Storage Expansion Kit	DVR-XS050-A	
DVR-XS100-A Storage Expansion Kit	DVR-XS100-A	

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