

DVR 670 Series

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The Bosch Video Recorder 670 Series is an 8/16 channel digital recorder that uses the latest H.264 compression technology. With the supplied PC software and built-in web server, the 670 Series is a fully integrated, stand-alone video management solution that's ready to go, straight out of the box. Available with a variety of storage capacities, the 670 Series features a highly reliable embedded design that minimizes maintenance and reduces operational costs. The recorder is also available with a built-in DVD writer.

System overview

The 670 Series takes advantage of H.264 video compression technology to dramatically reduce the amount of storage and bandwidth needed while still producing a better image quality. The 670 Series records multiple video and audio signals while simultaneously providing live multi-screen viewing and playback. Comprehensive search and playback functions provide quick recall and viewing of recorded video.

Hybrid

Hybrid camera viewing and recording is possible for integrated IP cameras (SD stream) on a local DVR and monitor. The maximum 16 channels can be optimally divided for up to 4 IP cameras and the balance as

- ▶ 8/16 Channel 4CIF real-time digital recording
- ▶ Flexible high-resolution HDMI and VGA monitor outputs
- ▶ Hybrid camera viewing and recording
- ▶ Remote viewing, playback, control, and configuration
- ▶ Mobile Device support for viewing

analog cameras. The IP cameras are configured via the camera web client. The following functions are not supported:

- Event triggered recording (motion and/or input)
- Viewing on local Mon.B
- Audio

Recording

Ease of use is a key feature of the 670 Series design. Simply connect the cameras, apply power, and the unit begins recording automatically. All recording takes place in the background with no operator intervention required.

The use of H.264 compression reduces the file size of recordings by as much as 30% compared to standard MPEG-4, without sacrificing image quality. The 670 Series can record at up to 25 (PAL) / 30 (NTSC) images per second, per channel at 4CIF resolution. If required, alarm recordings (input and motion) and continuous recordings can be split over two partitions. An overwrite mode can then be selected separately for each partition.

Dome Control

The 670 Series can control pan/tilt/zoom (PTZ) equipment via RS-485/ RS-232 serial communications. PTZ devices, including the Bosch AutoDome and a number of third party domes, are supported.

Alarms

All models have extensive alarm handling functions and telemetry control. Alarm functions include local inputs and relay outputs as well as motion detection in user-defined areas. In addition, the 670 Series can send an e-mail notification with a short video clip on alarm.

Local control and operation

The unit can be easily operated and programmed via the on-screen display menu system using the front panel control keys, the mouse, an IntuiKey Series keyboard or the supplied remote control. Two monitor outputs provide full-screen, quad, multi-screen and sequenced viewing.

Looping auto-terminating video inputs and outputs, audio inputs and output, and alarm inputs and outputs are located on the rear panel.

Two video connectors provide an output for monitor A (main monitor default set to VGA) and monitor B (spot monitor default set to HDMI). Monitor A displays live and playback in full-screen, quad or multi-screen pictures that can be frozen and zoomed. Monitor B displays live full-screen, quad or multi-screen pictures.

Remote control and operation

Use the PC software or built-in web application via a network for live viewing, playback, and configuration. The PC application software can also be used with other Bosch products including the 400 Series and the 700 Series. Four users can control the 670 Series simultaneously.

The 670 Series includes an authenticity check for both local and remote playback, ensuring recording integrity. The 670 Series Archive Player is provided for playback of secure video files.

Mobile Devices

Bosch DVR viewer Apps for Apple iOS and Android devices are available for live viewing and PTZ control. These Apps let you watch live video from cameras connected to the DVR from anywhere in the world. If a PTZ camera is connected, you can control focus, pan, tilt and zoom.

Additionally, Real Time Streaming Protocol (RTSP) is supported in the 670 Series. This means that live video streamed from the unit over the internet can be displayed by suitably configured mobile devices.

Functions

The 670 Series has the following features:

- 8 or 16 looped-through, auto-terminating camera inputs
- 4 audio inputs and 2 audio outputs
- Simultaneous live viewing, recording, playback, and remote streaming
- 10/100Base-T Ethernet port for local or wide area network connection
- RS-485/ RS-232 serial port for serial communication to control movable cameras
- IntuiKey Series keyboard support for Bosch dome control including loop-through to a maximum of 16 other 600 Series or 700 Series recorders
- VGA monitor outputs for main and spot monitors
- 16:9, 16:10 and 4:3 aspect ratio displays for main and spot monitor
- Full-screen, quad and multi-screen display capabilities in live and playback modes for main monitor
- Spot monitor output with sequencing and full-screen, quad and multi-screen views
- Alarm picture pop-up on full-screen or sequence by multiple alarms simultaneously
- E-mail notification with 10-second video clip on alarm
- Playback one or more channels while showing live pictures of the other channels
- Motion detection
- Multiple search modes including smart search (search for motion within recorded images)
- 8 or 16 switching (alarm) inputs and 4 alarm outputs
- Video loss detection
- Audible alarm
- Bosch DVR viewer App for live and PTZ control on iPhone, iPad and Android devices
- Live display support on mobile devices via RTSP
- Pan/tilt/zoom camera control via RS485
- Supports Bosch and Pelco protocols
- Local archiving via USB
- Local archiving via built-in DVD burner (specific models)

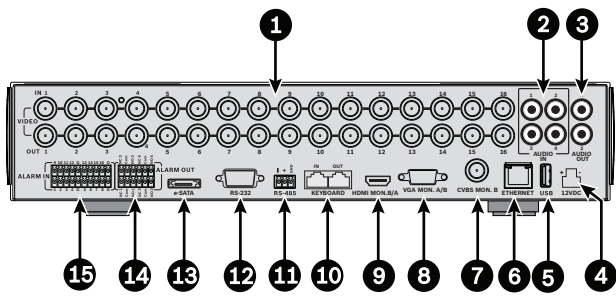
Certifications and approvals

Standards

	FCC Part 15, Class B
	EMC Directive 2004/108/EC
	Immunity: EN50130-4
	Emission: EN55022 Class B
	Harmonics: EN61000-3-2
	Voltage fluctuations: EN61000-3-3
	UL60950-1
	LV Directive 2006/95/EC, EN60950-1
	CAN/CSA-C22.2 no. 60950-1
	C-Tick

Region	Certification
Europe	CE
USA	UL
	FCC
Canada	CSA

Installation/configuration notes



- | | |
|-----------------------------|--|
| 1 Camera inputs and outputs | 9 Monitor B(A) HDMI output |
| 2 Audio inputs | 10 RJ11 connectors for IntuiKey keyboard |
| 3 Audio outputs | 11 RS485 connector for Dome control |
| 4 Power connector | 12 RS232 connector for Dome control |
| 5 USB connector | 13 eSata Hard Disk connector |
| 6 RJ45 network connector | 14 Alarm outputs |
| 7 CVBS output - Monitor B | 15 Alarm inputs |
| 8 Monitor A(B) VGA output | |

Connections on back of DVR 670 (16-channel version)

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

Technical specifications

Electrical

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; 5 A
DVR Power input	12 VDC; 3.5 A; 145 BTU/h

Video Inputs

Inputs	Composite video 1 Vpp, 75 ohm, automatic termination; PAL / NTSC auto-detect
AGC	Automatic gain adjustment for each video input

Video outputs

Outputs	Monitor A: VGA (Default) or HDMI Monitor B: HDMI (Default) or CVBS (Default monitor output types are user selectable)
Live Resolution (Mon.A & B)	800x600 (4:3), 1024x768 (4:3) 1280x1024 (5:4) 1920x1080 (16:9)
Digital Zoom	2 times
Streaming video	H.264 compression

Audio

Inputs	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	8 or 16 inputs configurable NO/NC, max. input voltage 15 VDC
Outputs	4 Relay outputs, configurable NO/NC, max. rated 30 VAC, 40 VDC 0.5 A continuous or 10 VA

Control

RS485	Output signals according to RS485, max. signal voltage -8 to +12 V
RS232	Output signals according to EIA/TIA-232-F, max input voltage ± 25 V
Supported Protocols	Pelco P and D (over RS-485) Bosch OSRD (over RS-485 or RS-232 with the optional LTC 8786 Series Biphas Converter)

Connectors

Video Inputs	8 or 16 looping BNC, auto termination
Monitor	1 VGA D-SUB 1 HDMI 1 CVBS
Alarm connectors	Screw terminal inputs, cable diameter AWG26-16 (0.13-1.5 mm)
Audio Inputs	4 RCA (CINCH)

Audio Output	2 RCA (CINCH)
Ethernet	RJ45, 10/100 BaseT according to IEEE802.3
RS485	Screw terminal output, cable diameter AWG28-16 (0.08-1.5 mm)
RS232	DB9 male, 9-pin D-connector
USB 2.0	One front and one rear USB connector for mouse or USB memory device
External storage	eSATA connector

Maximum Storage Capacity

Internal	Supports up to 2 SATA hard drives, max. 2TB each (Third party hard disks are supported from firmware version 2.0.6 onwards. A list of tested disks is available in the instruction manual.)*
External	4 JBOD hard drives, max. 2TB each via eSATA connection

*Bosch cannot be held liable for any loss or damages or system malfunction resulting from the use of non-Bosch drives in DVR recorders.

Video recording

Record rate (NTSC)	Max. 30 IPS per channel, configurable: 30, 15, 7.5, 5, 3, 1
Record rate (PAL)	Max. 25 IPS per channel, configurable: 25, 12.5, 6.25, 5, 2.5, 1
Recording Quality	Best, High, Normal, Low, Lowest

Display Modes

Monitor A	Full, quad, multi-screen (live and playback), full sequence, alarm call-up (live)
Monitor B	Full, quad, multi-screen, full sequence, alarm call-up (live)

Recording Modes

Normal partition	Continuous recording (with or without overwriting)
Event partition	Input and motion recording (with or without overwriting)

Maximum recording rates per channel (analog)

Local 16 channels	
4CIF	PAL: 25 IPS, NTSC: 30 IPS
Remote (network) 16 channels	
CIF	PAL: 25 IPS, NTSC: 30 IPS
Remote (network) 8 channels	
CIF	PAL: 25 IPS, NTSC: 30 IPS

Maximum recording rates per channel (IP)

Max 4 channels

4CIF SD D1	PAL: Max. 25 IPS; supported resolution: Max. 702x480 NTSC: Max. 30 IPS; supported resolution: Max. 702x576
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Mechanical

Dimensions (WxDxH)	355 x 362 x 78 mm (13.9 x 14.2 x 3.1 in) excluding cabling
Weight	4.3 kg (9.46 lb) approx.

Environmental

Temperature

- Operating	+0°C to +40°C (+32°F to +104°F)
- Storage	-40°C to +70°C (-40°F to +158°F)

Humidity

- Operating	<93% non-condensing
- Storage	<95% non-condensing

Ordering information

DVR-670 8ch. base unit

670 Series DVR, 8-channel, base unit
Order number **DVR-670-08A000**

DVR-670 16ch. base unit

670 Series DVR, 16-channel, base unit
Order number **DVR-670-16A000**

DVR-670 8ch. base unit + DVD

670 Series DVR, 8-channel, base unit with DVD
Order number **DVR-670-08A001**

DVR-670 16ch. base unit + DVD

670 Series DVR, 16-channel, base unit with DVD
Order number **DVR-670-16A001**

DVR-670 8ch. 500 GB

Order number **DVR-670-08A050**

DVR-670 16ch. 500 GB

Order number **DVR-670-16A050**

DVR-670 8ch. 500 GB + DVD

Order number **DVR-670-08A051**

DVR-670 16ch. 500 GB + DVD

Order number **DVR-670-16A051**

DVR-670 8ch. 1 TB

Order number **DVR-670-08A100**

DVR-670 16ch. 1 TB

Order number **DVR-670-16A100**

DVR-670 8ch. 1 TB + DVDOrder number **DVR-670-08A101****DVR-670 16ch. 1 TB + DVD**Order number **DVR-670-16A101****DVR-670 8ch. 2 TB**Order number **DVR-670-08A200****DVR-670 16ch. 2 TB**Order number **DVR-670-16A200****DVR-670 8ch. 2 TB + DVD**Order number **DVR-670-08A201****DVR-670 16ch. 2 TB + DVD**Order number **DVR-670-16A201****Accessories****DVR-XS050-A Storage Expansion Kit**

DVR 600 Series storage expansion 500 GB

Order number **DVR-XS050-A****DVR-XS100-A Storage Expansion Kit**

DVR 600 Series storage expansion 1 TB

Order number **DVR-XS100-A****DVR-XS200-A Storage Expansion Kit**

DVR 600 Series storage expansion 2 TB

Order number **DVR-XS200-A****KBD-Digital Keyboard**

IntuiKey Digital Keyboard for use with Divar Digital Video Recorders, System4 Multiplexers, Bosch VMS, and VIDOS

Order number **KBD-DIGITAL****LTC 8786/50 RS-232 to Biphase Converter**

with 16 Biphase outputs, 220-240 VAC, 50/60 Hz, 195.5-253 VAC

Order number **LTC 8786/50****LTC 8786/60 RS-232 to Biphase Converter**

with 16 Biphase outputs, 120 VAC, 50/60 Hz, 105-132 VAC

Order number **LTC 8786/60****Represented by:****Americas:**

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