

DIVAR hybrid 3000 recorder













- ► Hybrid recording of up to 16 IP and 16 analog channels
- ► Compact, sturdy and stylish design
- ▶ 12 MP IP camera support for view and playback
- ► Separate internet and IP camera networks

The DIVAR hybrid recorders can simultaneously record and view video from traditional analog cameras as well as the latest IP cameras. The recorder can be connected to the following camera configurations:

- a maximum 32 IP cameras recording at resolutions up to 12MP
- a maximum 16 analog cameras recording at resolutions up to 960H
- a combination of maximum 16 analog cameras and maximum 16 IP cameras

These advanced technologies, coupled with efficient network data transmission, deliver the high security and reliability required for modern surveillance systems. Simultaneous remote or local monitoring, recording, archive and playback functions are guided by simple menu selections and operator commands. The recorders can be installed with a maximum of 2 internal HDDs for video storage. Another option is a single HDD for storage, plus a DVD burner for video export.

Functions

Latest video compression technology

The DIVAR supports H.264 and H.265 video compression technology. This technology dramatically reduces bandwidth and storage requirements while still delivering superb image and audio quality. Equipped with this newest video technology, DIVAR gives you the full benefits of the latest high-resolution cameras. The proof is in the pixels.

Camera IP support

The recorder supports native camera integration with Bosch IP cameras which provides easy installation, configuration and maintenance options. This allows plug-and-play connectivity as the installer can connect and configure the cameras to the recorder without having to open every camera individually on a web client. For further configuration 3rd party cameras are supported through the ONVIF Profile S protocol.

Simultaneous record and view

The DIVAR 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.

Simple operation

The DIVAR is very easy to install and use. Simply connect the cameras, apply power, and follow the simple Install Wizard steps for initial setup. The unit can then record automatically with no further intervention required.

Alarms

All models have extensive alarm handling functions and telemetry control. Alarm functions include local inputs and relay outputs, plus motion detection in user-defined areas. If an alarm is detected, the DIVAR can:

- send an e-mail notification and/or FTP push
- sound a buzzer and/or display a warning
- · activate local alarm output

Local control

The unit can be easily operated and programmed via the on-screen display menu system using:

- the supplied mouse
- · the front panel control keys
- the supplied remote control

· push notification

Inputs and outputs

Video inputs, audio inputs/output, and alarm inputs/outputs are located on the rear panel.
Two video connectors (VGA/HDMI) provide simultaneous output for monitor A for live display (with zoom) and playback (display can be frozen and zoomed). The displays allow full-screen, multi-screen, and sequenced viewing.

Network control

Use the PC software or built-in web application via a network for live viewing, playback, and configuration.

Watermark

The DIVAR includes an authenticity check for both local and remote archives, ensuring recording integrity. An Archive Player is provided for playback of secure video files and to check if video is authentic.

Smartphone App

A DIVAR Mobile Viewer app from Bosch for iOS and Android devices is available for:

- · live and playback viewing
- · recorder configuration
- PTZ control

This means you can watch live video from cameras connected to the DVR from anywhere in the world. You can also control focus, pan, tilt and zoom on PTZ-enabled cameras.

Furthermore, the Android smartphone App supports remote push notifications (no available on iOS). In this way you are automatically notified if an alarm occurs on the device and can take immediate action, even if you are not actively monitoring the system at that moment.

DDNS

Bosch offers its customers free Dynamic Domain Name Services (DDNS) for access to networkconnected devices via a "friendly" hostname without the need for costly static IP addresses. This makes it easier for uninterrupted access to important video from devices regardless of their location.

Dome control

The DIVAR can control IP pan/tilt/zoom (PTZ) equipment using commands sent via IP connection. It also supports Focus, Iris and Aux commands for Bosch cameras. RS-485 / RS-232 ports are available for serial communication to analog PTZ devices.

Panoramic cameras

The DIVAR supports dewarping of Bosch panoramic cameras. The following modes are supported: pan/tilt/zoom (PTZ), panoramic, corridor and quad. Dewarping in the camera can also be selected if the connected IP panoramic camera supports this.

Supported protocols

The DIVAR supports Bosch protocol and Pelco P and D protocol.

Regulatory information

| Standards | |
|----------------------|---|
| Alarm | EN 50130-5:2011, Alarm systems - Part 5: Environmental test methods, Class I, Fixed equipment |
| Lightning protection | To ALL long input / output - and supply-wiring. Alarm inputs and relay output, Video inputs and Outputs, dome-control outputs, power-cable, Audio In/Out. ± 0.5, 1kV line to line, ± 0.5, 1 and 2kV line to earth |

| EMC + Safety - Europe | | |
|------------------------|---|--|
| EU Directives | 2014/35/EU (LVD), 2014/30/EU (EMC), 2011/65/ EU (RoHS) | |
| EMC Emission | EN 55032:2012/AC2013, class B | |
| EMC Immunity | EN 50130-4:2011/A1:2014 | |
| EMC mains Harmonics | EN 61000-3-2:2014 | |
| EMC Mains fluctuations | EN 61000-3-3:2013 | |
| LVD Safety | CB scheme + IEC/EN/UL 62368-1:2014/AC:2015 | |
| RoHS | EN 50581:2012 | |

| EMC + Safety - USA and Canada | |
|-------------------------------|------------------------------------|
| EMC USA | 47CFR part 15 (FCC), Class B |
| Safety USA (UL, cUL) | UL 62368-1, Edition 2, Dec 1, 2014 |
| Safety Canada | CAN/CSA-C22.2 No. 62368-1 |

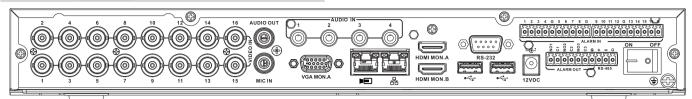
| India | |
|--|--|
| BIS (<u>Bureau of</u> <u>Indian</u> <u>Standards)</u> | BIS registration for external Power adapter (comes / packed with the main product) |

| Australia | |
|-----------|---------------------------|
| ACMA EMC | RCM logo on product label |

| Region | Regulatory | compliance/quality marks |
|-----------|------------|-----------------------------|
| Australia | RCM | DOC SAL hybrid 3000 |
| | RCM | DOC SAL Variant hybrid 3000 |
| Europe | CE | AR18-20-B004 |
| USA | UL | FCC & UL |

Region Regulatory compliance/quality marks FCC ST-VS 2016-E-088

Installation/configuration notes



VIDEO IN

16 BNC for connecting max. 16 analog cameras



Max. 16 IP cameras connected via external switch (if no analog cameras are connected, an extra 16 IP cameras can be connected)



RJ45 Ethernet connection (10/100/1000Base-T according to IEEE802.3)

VGA MON.A

1 D-SUB (Monitor output)

HDMI MON.A

1 HDMI (Monitor output)

HDMI MON.B

1 HDMI (output for spot monitor that supports live multiscreen); resolution 1080p (1920x1080)

ALARM IN

16 screw terminal inputs, cable diameter AWG26-16 (0.4-1.29 mm)

ALARM OUT

3 screw terminal outputs, cable diameter AWG26-16 (0.4-1.29 mm

AUDIO IN

4 RCA (Audio inputs)

AUDIO OUT

1 RCA (Audio output)

MIC IN

1 RCA (Audio input)

RS-485

Screw terminal output (Dome control)

RS-232

DB9 male, 9-pin D-type (Dome control)

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One front (2.0) and two rear (3.0) USB connectors for mouse or USB memory device

Power input with On/Off switch

12 VDC (5 A)

AC input adapter: 100~240 VAC, 50-60 Hz, 1.5 A



Ground connection

Technical specifications

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|--|--|
| Mechanical | |
| Dimensions (WxDxH) | 375 x 323 x 53 mm (14.8 x 12.7 x 2.1 in) |
| Weight (excluding HDD(s) and DVD) | 4.13 kg (9.1 lb) approx. |
| Power | |
| External power adapter AC input | 100-240 VAC; 50-60 Hz; 1.5 A |
| Power adapter DC output | 12 VDC; 5 A |
| RTC battery on main PCB | Lithium CR2032, 3 VDC |
| Maximum power consumption (no HDD) | 20 W |
| Environmental | |
| Operating temperature (incl. HDD(s) and DVD) | +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 |

Video storage Internal storage options Max. 2 SATA HDD or 1 SATA HDD + 1 DVD (R/RW) Max. capacity per HDD: 6 TB

Max. supported speed per HDD: 6 Gb/s

| Alarms and detections | | |
|--------------------------------|---|--|
| Motion detection set by camera | Essential or Intelligent Video Analytics (IVA), Motion + | |
| Alarm activations | Video loss, motion detection, input alarm, system alarm | |

| Alarms and detections | | |
|---------------------------|--|--|
| Events triggered by alarm | Recording, PTZ movement, alarm out, email, buzzer, screen message, Mon A and B activated, mobile push notification | |
| Inputs | 16 inputs configurable NO/NC, max. input voltage 12 VDC +/-10% | |
| Outputs | 5 relay outputs, 1 open collector | |
| Relay contact | Max. rated, 30 VDC, 2 A continuous or 125 VAC, 1 A (activated) | |
| Exporting | | |
| DVD (optional) | Built-in DVD+R/RW writer | |
| USB | Flash memory or external HDD (FAT32) | |
| Network | Web Client software or Video Client | |
| Playback | | |
| Multi-channel | Simultaneous 1/4/8/16 channels | |
| Mode | Forward, reverse, slow play, fast play, frame-by-frame | |
| Search | Time, channel, type, smart | |
| Network | Video Client, Web client, App | |
| Restrict | Restrict video by user rights for viewing | |
| Protection | Protect video against overwriting | |
| Retention time | Automatically delete recordings after 1 to 365 days | |
| Recording | | |
| Decoding compression | H.265/H.264/MJPEG | |
| Speed | Max. 60 IPS per channel, configurable | |
| Bit rate | 16 kbps to 24 Mbps per channel | |
| Record interval | 1~120 min (default: 60 min), Pre-record: 1~30 sec, Post-record: 10~300 sec | |
| Mode | Manual, Scheduled (regular, motion detection, alarm), Stop | |
| Network control | | |
| Ethernet | RJ45 port (10/100/1000 Mbps) | |
| PC software | Video Client, Web client | |
| | | |

| Network control | | |
|--------------------------------|---|--|
| APPs | iPhone, Android | |
| User access | Maximum 128 users. Bosch advises a maximum of 4 simultaneous connections. More connections can cause performance limitations. | |
| Protocols | HTTP, HTTPS, TCP/IP, IPv4/IPv6, UPnP, RTSP, UDP, SMTP, NTP, DHCP, DNS/DDNS, IP Filter, PPPoE, FTP | |
| Video performance | | |
| Maximum camera inputs | 16 analog + 16 IP or 32 IP | |
| Maximum incoming bandwidth | 320 Mbps | |
| Maximum recording bandwidth | 256 Mbps | |
| Maximum transmission bandwidth | 128 Mbps | |
| Resolution IP camera | 12MP, 8MP, 6MP, 5MP, 3MP, 1.3MP, 1080p, 720p | |
| Resolution analogue camera | 960H, D1, HD1, CIF, QCIF | |
| Display | | |
| Resolution IP camera | 3840×2160, 1920×1080, 1280×1024, 1280×720, 1024×768 | |
| Resolution analogue PAL | 970x576, 704x576, 352x576, 352x288, 176x144 | |
| Resolution analogue NTSC | 960x480, 704x480, 352x480, 352x240, 176x120 | |
| OSD | Camera title, Time, Video loss, Motion detection, Recording, PTZ | |
| Audio | | |
| Input | 4 channel (via RCA) 200 to 3000 mV, 10 kOhm | |
| MIC Input | 1 channel (via RCA) 200 to 3000 mV, 10 kOhm | |
| Output | 1 channel (via RCA) 200 to 3000 mV, 5 kOhm | |
| Direction | Bidirectional (audio input and output connected via device) | |

Ordering information

DDH-3532-200N00 Recorder 16ch IP, 16ch AN, no HDD

High-resolution recorder for IP and analog surveillance systems.

Recorder 16-ch IP/16-ch AN w/o HDD

Order number DDH-3532-200N00 | F.01U.321.914

DDH-3532-212N00 Recorder 16ch IP/16ch AN 1x2TB

High-resolution recorder for IP and analog surveillance systems.

Combination of up to 16 IP and 16 analog camera channels.

1 HDD (2 TB)

Order number DDH-3532-212N00 | F.01U.329.367

DDH-3532-112D00 Recorder 16ch IP/16ch AN 1x2TB DVD

High-resolution recorder for IP and analog surveillance systems.

Combination of up to 16 IP and 16 analog camera channels.

1 HDD (2 TB); 1 DVD

Order number DDH-3532-112D00 | F.01U.329.368

Accessories

DVR-XS200-A HDD expansion 2TB

Storage expansion kit. 2 TB

Order number DVR-XS200-A | F.01U.302.620

F.01U.169.674

DVR-XS300-A HDD expansion 3TB

Storage expansion kit. 3 TB

Order number DVR-XS300-A | F.01U.302.621

F.01U.285.185

DVR-XS400-A HDD expansion 4TB

Storage expansion kit. 4 TB

Order number DVR-XS400-A | F.01U.302.657

DVR-XS600-A HDD expansion 6TB

Storage expansion kit. 6 TB

Order number DVR-XS600-A | F.01U.324.396

DVR-XS-DVD-B DVD writer expansion B

DVD writer Expansion kit B

Order number DVR-XS-DVD-B | F.01U.328.077

Services

EWE-DIP3BS-IW 12 mths wrty ext DIVAR 3000 w/out HDD

12 months warranty extension

Order number EWE-DIP3BS-IW | F.01U.346.377

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