

# DRH-5532-400N00 Recorder 16ch IP, 16ch AN, 1.5U, no HDD

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**BOSCH**  
Invented for life



- ▶ Hybrid recording of up to 16 IP and 16 analog channels
- ▶ Extended rack-mount unit with advanced connections
- ▶ 12 MP IP camera support for view and playback
- ▶ Separate internet and IP camera networks
- ▶ RAID 1 and 5 support

## Certifications and approvals

### 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

### EMC + Safety - Europe

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 (Bureau of Indian Standards)	BIS registration for external Power adapter (comes / packed with the main product)
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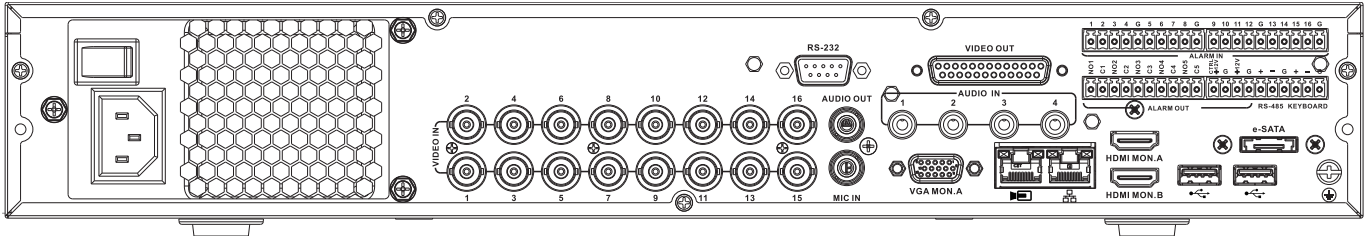
### Australia

ACMA EMC	RCM logo on product label
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Region	Regulatory compliance/quality marks	
Australia	RCM	DOC SAL hybrid 5000
	RCM	DOC SAL Variant hybrid 5000
Europe	CE	ST-VS 2016-E-087

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

### Installation/configuration notes



<b>VIDEO IN</b>	16 BNC for connecting max. 16 analog cameras
	Max. 16 IP cameras connected with 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)
<b>VGA MON.A</b>	1 D-SUB (Monitor output)
<b>HDMI MON.A</b>	1 HDMI (Monitor output)
<b>HDMI MON.B</b>	1 HDMI (output for spot monitor that supports live multiscreen)
<b>ALARM IN</b>	16 screw terminal inputs, cable diameter AWG26-16 (0.4–1.29 mm)
<b>ALARM OUT</b>	6 screw terminal outputs, cable diameter AWG26-16 (0.4–1.29 mm)
<b>AUDIO IN</b>	4 RCA (Audio inputs)
<b>AUDIO OUT</b>	1 RCA (Audio output)
<b>MIC IN</b>	1 RCA (Audio input)
<b>RS-485</b>	Screw terminal output (Dome control)
<b>KEYBOARD</b>	Screw terminal output (Keyboard)
<b>VIDEO OUT</b>	D-sub (loop through to other devices)
<b>RS-232</b>	DB9 male, 9-pin D-type (Dome control)
	Two USB (3.0) connectors for mouse or USB memory device; one USB (2.0) also on front panel
<b>eSATA</b>	For backup/memory device
Power input with On/Off switch	100~240 VAC, 50-60 Hz, 1.9 A, 75 W
	Ground connection

### Parts included

Quantity	Component
1	Recorder
1	CD-ROM containing software licenses and user documentation
2	Power supply cables (120VAC US type; 230VAC Euro type)
	Terminal connector blocks
1	Hard disk mounting kit (including SATA cables, brackets and screws)
1	Optical USB mouse
1	19" mounting set (including brackets and screws)
1	IR remote Control with 2 AA (1.5 V) batteries
1	Ground screw
1	Keyboard cable
1	Loophrough cable
	Installation guides for Recorder, HDD, plus safety instructions

### Technical specifications

Mechanical	
Dimensions (WxDxH)	440 x 408 x 76 mm (17.3 x 16.1 x 3.0 in)
Weight (excluding HDD(s) and DVD)	6.67 kg (14.7 lb) approx.
Power	
AC input	100-240 VAC; 50-60 Hz; 1.9 A
RTC battery on main PCB	Lithium CR2032, 3 VDC

Maximum power consumption (no HDD)	20 W
<b>Environmental</b>	
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
<b>Video storage</b>	
Internal (option)	Max. 4 SATA HDD or 2 SATA HDD + 1 DVD (R/RW) Max. capacity per HDD: 6 TB Max. supported speed per HDD: 6 Gb/s
External (option)	eSATA-connected storage device
<b>Alarms and detections</b>	
Motion detection set by camera	Essential or Intelligent Video Analytics (IVA), Motion +
Alarm activations	Video loss, motion detection, input alarm, system alarm
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)
<b>Exporting</b>	
DVD (optional)	Built-in DVD+R/RW writer
USB	Flash memory or external HDD (FAT32)
Network	Web Client software or Video Client
<b>Playback</b>	
Multi-channel	Simultaneous 1/4/9/16 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

<b>Playback</b>	
Protection	Protect video against overwriting
Retention time	Automatically delete recordings after 1 to 365 days
<b>Recording</b>	
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
<b>Network control</b>	
Ethernet	RJ45 port (10/100/1000 Mbps)
PC software	Video Client, Web client
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
<b>Video performance</b>	
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

Audio	
Output	1 channel (via RCA) 200 to 3000 mV, 5 kOhm
Direction	Bidirectional (audio input and output connected via device)

### Ordering information

#### **DRH-5532-400N00 Recorder 16ch IP, 16ch AN, 1.5U, no HDD**

High-resolution recorder for IP and analog surveillance systems.

Recorder 16ch IP/16ch AN 1.5U w/o HDD

Order number **DRH-5532-400N00**

#### **Services**

#### **EWE-DIP5BS-IW 12mths wrty ext DIVAR 5000 w/out HDD**

12 months warranty extension

Order number **EWE-DIP5BS-IW**

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