

DIVAR IP all-in-one 6000

DIP-6440IG-00N | DIP-6444IG-4HD | DIP-6448IG-4HD |
DIP-644IIG-4HD

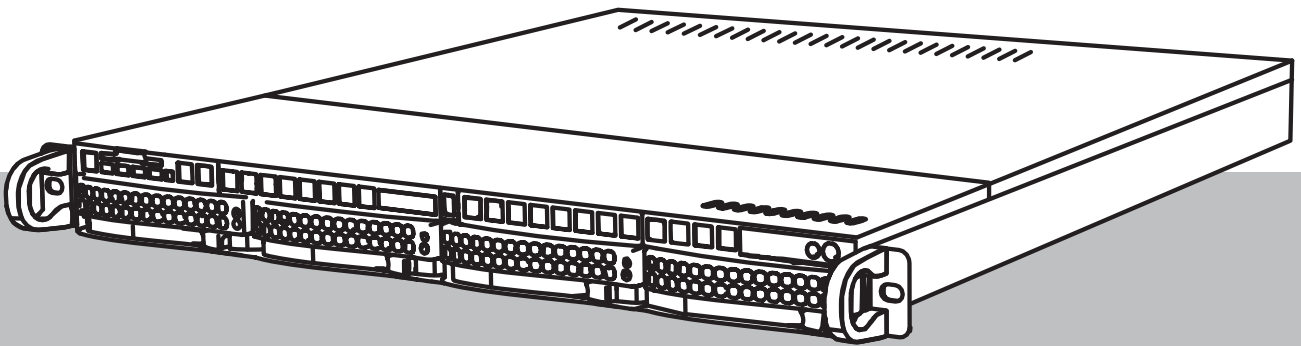


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1 Safety

Observe the safety precautions in this chapter.

1.1 Operating precautions

**Notice!**

Intended use

This product is for professional use only. It is not intended to be installed in a public area that is accessible to the general population.

**Notice!**

Do not use this product in any humid or wet location.

**Notice!**

Take precautions to protect the device from power and lightning surges.

**Notice!**

Keep the area around the device clean and free of clutter.

**Notice!**

Enclosure openings

Do not block or cover the openings. Any openings in the enclosure are provided for ventilation purposes. These openings will prevent overheating and ensure a reliable operation.

**Notice!**

Do not open or remove the device cover. Opening or removing the cover may cause damage to the system and will void the warranty.

**Notice!**

Do not spill any liquid on the device.

**Warning!**

Use caution when servicing and working around the backplane. Hazardous voltage or energy is present on the backplane when the system is operating. Do not touch the backplane with any metal objects and make sure no ribbon cables touch the backplane.

**Notice!**

Disconnect the power before moving the product. Move the product with care. Excessive force or shock may damage the product and the hard disk drives.

**Warning!**

Handling of lead solder materials used in this product may expose you to lead, a chemical known to the State of California to cause birth defects and other reproductive harm.

**Notice!**

Video loss is inherent to digital video recording; therefore, Bosch Security Systems cannot be held liable for any damage that results from missing video information.

To minimize the risk of losing information, we recommend multiple, redundant recording systems, and a procedure to back up all analog and digital information.

1.2

Cybersecurity precautions

For cybersecurity reasons, observe the following:

- Make sure that the physical access to the system is restricted to authorized personnel only. Place the system in an access control protected area, in order to avoid physical manipulation.
- The operating system includes the latest Windows security patches available at the time the software image was created. Use the Windows online update functionality or the corresponding monthly roll-up patches for offline installation to regularly install OS security updates.
- Do not switch off Windows Defender and Windows firewall, and always keep it up to date.
- Do not install additional anti-virus software.
- Do not provide system information and sensitive data to persons you do not know unless you are certain of a person's authority.
- Do not send sensitive information over the internet before checking a website's security.
- Limit local network access to trusted devices only. Details are described in the following documents which are available in the online product catalog:
 - *Network Authentication 802.1X*
 - *Cybersecurity guidebook for Bosch IP video products*
- For access through public networks use only the secure (encrypted) communication channels.
- The administrator account provides full administrative privileges and unrestricted access to the system. Administrative rights enable users to install, update, or remove software, and to change configuration settings. Furthermore, administrative rights enable users to directly access and change registry keys and with this to bypass central management and security settings. Users signed in to the administrator account can traverse firewalls and remove anti-virus software, which will expose the system to viruses and cyber-attacks. This can pose a serious risk to the system and data security.

To minimize cybersecurity risks, observe the following:

 - Make sure that the administrator account is protected with a complex password according to the password policy.
 - Make sure that only limited number of trusted users has access to the administrator account.
- Due to operation requirements, the system drive must not be encrypted. Without encryption, the data stored on this drive can be easily accessed and removed. To avoid data theft or accidental loss of data, make sure that only authorized persons have access to the system and to the administrator account.

- For installation and update of software as well as for system recovery, it might be necessary to use USB devices. Therefore, the USB ports of your system must not be disabled. However, connecting USB devices to the system poses a risk of malware infection. To avoid malware attacks, make sure that no infected USB devices are connected to the system.

1.3 Software precautions

1.3.1 Use latest software

Before operating the device for the first time, make sure that you install the latest applicable release of your software version. For consistent functionality, compatibility, performance, and security, regularly update the software throughout the operational life of the device. Follow the instructions in the product documentation regarding software updates.

The following links provide more information:

- General information: <https://www.boschsecurity.com/xc/en/support/product-security/>
- Security advisories, that is a list of identified vulnerabilities and proposed solutions: <https://www.boschsecurity.com/xc/en/support/product-security/security-advisories.html>

Bosch assumes no liability whatsoever for any damage caused by operating its products with outdated software components.

You can find the latest software and available upgrade packages in the Bosch Security and Safety Systems download store under:

<https://downloadstore.boschsecurity.com/>

1.3.2 OSS information

Bosch uses Open Source Software in the DIVAR IP all-in-one products.

You can find the licenses of the used Open Source Software components on the system drive under:

```
C:\license txt\
```

The licenses of Open Source Software components used in any further software installed on your system, are stored in the installation folder of the respective software, for example under:

```
C:\Program Files\Bosch\SysMgmService\apps\sysmgm-commander\[version]\License
```

or under:

```
C:\Program Files\Bosch\SysMgmService\apps\sysmgm-executor\[version]\License
```

2 Introduction

DIVAR IP all-in-one 6000 is an affordable and easy to use all-in-one recording, viewing, and management solution for network surveillance systems of up to 64 channels (with 8 channels pre-licensed).

DIVAR IP all-in-one 6000 is a 1U rack mount unit that combines advanced Bosch Video Management System capabilities and state-of-the-art recording management into a single cost-effective, convenient to install and operate recording device for IT-minded customers.

DIVAR IP all-in-one 6000 utilizes embedded design and core components, and is based on the operating system Microsoft Windows Server IoT 2022 for Storage Workgroup. DIVAR IP all-in-one 6000 features “enterprise-rated” hot-swappable SATA hard drives, providing up to 72 TB of gross storage capacity.

3 System overview

Operating system

The Microsoft Windows Server IoT 2022 for Storage Workgroup operating system provides a user interface for initial server configuration, unified storage appliance management, simplified setup and storage management, and support for Microsoft iSCSI Software Target. It is specially tuned to provide optimal performance for network-attached storage. The Microsoft Windows Server IoT 2022 for Storage Workgroup operating system provides significant enhancements in storage management scenarios, as well as integration of storage appliance management components and functionality.

DIVAR IP System Manager

The DIVAR IP System Manager application is the central user interface that offers an easy system setup, configuration and software upgrade.

Operation modes

DIVAR IP all-in-one 6000 systems can operate in three different modes:

- Full video recording and management system, utilizing the BVMS and Video Recording Manager core components and services.
This mode provides an advanced IP video security solution that delivers seamless management of digital video, audio and data across an IP network. It seamlessly combines IP cameras and encoders, provides system-wide event and alarm management, system health monitoring, user and priority management. This mode provides the best video management system to go with Bosch video surveillance devices, leveraging the unique capabilities of Bosch cameras and recording solutions. It includes Video Streaming Gateway components to integrate third-party cameras.
- Pure video recording system, utilizing the Video Recording Manager core components and services, leveraging the unique capabilities of Bosch cameras and recording solutions.
- iSCSI storage expansion for a BVMS or Video Recording Manager system, which runs on a different hardware. Up to four of these iSCSI storage expansions can be added to a BVMS or Video Recording Manager system running on a DIVAR IP all-in-one 6000.

When setting up the system, in the DIVAR IP System Manager application, you must choose the desired operation mode to configure your system.

With the DIVAR IP System Manager application you can also upgrade the installed software. You can find the latest software and available upgrade packages in the Bosch Security and Safety Systems download store under:

<https://downloadstore.boschsecurity.com/>



Notice!

Recorded video streams need to be configured in a way that the maximum bandwidth of the system (BVMS/VRM base system plus iSCSI storage expansions) is not exceeded.

4 System setup

4.1 Default settings

All DIVAR IP systems are preconfigured with a default IP address and with default iSCSI settings:

- IP Address: automatically assigned by DHCP (fallback IP address: 192.168.0.200).
- Subnet mask: automatically assigned by DHCP (fallback subnet mask: 255.255.255.0).

Default user settings for administrator account

- User name: **BVRAdmin**
- Password: to be set at first sign-in.

Password requirements:

- Minimum 14 characters.
- At least one upper case letter.
- At least one lower case letter.
- At least one digit.

4.2 Prerequisites

Observe the following:

- DIVAR IP needs to have an active network link during installation. Make sure that the network switch you are connecting to is powered on.
- The default IP address must not be occupied by any other device in the network. Make sure that the default IP addresses of existing DIVAR IP systems in the network are changed before adding another DIVAR IP.

4.3 First sign-in and initial system setup



Notice!

Do not change any operating system settings. Changing operating system settings can result in malfunctioning of the system.



Notice!

To perform administrative tasks, you must sign in to the administrator account.




Notice!


In case of password loss a system recovery must be performed as described in the installation manual. The configuration must be done from scratch or must be imported.

To setup the system:

1. Connect the DIVAR IP all-in-one unit and the cameras to the network.
2. Turn on the unit.
Setup routines for Microsoft Windows Server IoT 2022 for Storage Workgroup are performed. This process can take several minutes. Do not turn off the system.
After the process is completed, the Windows language selection screen is displayed.
3. Select your country/region, the desired operating system language and the keyboard layout from the list, then click **Next**.
The Microsoft software license terms are displayed.

4. Click **Accept** to accept the license terms and wait until Windows restarts. This can take several minutes. Do not turn off the system.
After restart, the Windows sign-in page is displayed.
5. Set a new password for the administrator account **BVRAdmin** and confirm it.
Password requirements:
 - Minimum 14 characters.
 - At least one upper case letter.
 - At least one lower case letter.
 - At least one digit.
 Then press Enter.
The **Software Selection** page is displayed.
6. The system automatically scans the local drive and any connected external storage media for the DIVAR IP System Manager installation file **SystemManager_x64_[software version].exe**, which is located in a folder with the following structure: *Drive root\BoschAppliance*.
The scan might take some time. Wait for it to complete.
7. Once the system has detected the installation file, it is displayed on the **Software Selection** page. Click the bar that displays the installation file to start the installation.
8. If the installation file is not found during the scan process, proceed as follows:
 - Go to <https://downloadstore.boschsecurity.com/>.
 - Under the **Software** tab, select **BVMS Appliances** from the list, then click **Select**.
A list of all available software packages is displayed.
 - Locate the ZIP file **SystemManager_[software version].zip** and save it to a storage medium such as a USB stick.
 - Unzip the file on the storage medium by making sure that the folder **BoschAppliance** is placed in the root of the storage medium.
 - Connect the storage medium to your DIVAR IP all-in-one system.
The system will automatically scan the storage medium for the installation file.
The scan might take some time. Wait for it to complete.
 - Once the installation file is detected, it will be displayed on the **Software Selection** page. Click the bar that displays the installation file to start the installation.
Note: To be automatically detected, the installation file must be located in a folder with the following structure: *Drive root\BoschAppliance* (for example *F:\BoschAppliance*).
 If the installation file is located at another location that does not match the pre-



 defined folder structure, click  to navigate to the respective location. Then click the installation file to start the installation.
9. Before the installation starts, the **End User License Agreement (EULA)** dialog box is displayed. Read the license terms, then click **Accept** to continue. The installation starts.
10. After the installation is complete, the system restarts and you are directed to the Windows sign-in page. Sign in to the administrator account.
11. The Microsoft Edge browser opens and the **DIVAR IP - System setup** page is displayed. The page shows the device type and the device serial number, as well as the three operation modes and the available software versions for each operation mode. You must choose the desired operation mode and the desired software version to configure your DIVAR IP all-in-one system.
Note: If the desired software version for the respective operation mode is not available on a local drive, proceed as follows:

- Go to <https://downloadstore.boschsecurity.com/>.
- Under the **Software** tab, select **BVMS Appliances** from the list, then click **Select**. A list of all available software packages is displayed.
- Locate the ZIP files of the desired software packages, for example **BVMS_[BVMS version]_SystemManager_package_[package version].zip**, and save them to a storage medium such as a USB stick.
- Unzip the files on the storage medium. Do not change the folder structure of the unzipped files.
- Connect the storage medium to your DIVAR IP all-in-one system.

**Notice!**

Changing the operation mode after installation requires a full factory reset.

4.3.1**Choosing operation mode BVMS**

To operate the DIVAR IP all-in-one system as a full video recording and management system:

1. On the **DIVAR IP - System setup** page, select the operation mode **BVMS** and the desired BVMS version that you want to install, then click **Next**.
The BVMS license agreement is displayed.
2. Read and accept the license agreement, then click **Install** to continue.
The installation starts and the installation dialog box shows the installation progress. Do not turn off the system and do not remove the storage media during the installation process.
3. After all software packages have been installed successfully, the system restarts. After restart, you are directed to the BVMS desktop.
4. On the BVMS desktop, click the desired application to configure your system.

**Notice!**

For further details, refer to the respective DIVAR IP all-in-one web-based training and to the BVMS documentation.

You can find the training under: www.boschsecurity.com/xc/en/support/training/

4.3.2**Choosing operation mode VRM**

To operate the DIVAR IP all-in-one system as a pure video recording system:

1. On the **DIVAR IP - System setup** page, select the operation mode **VRM** and the desired VRM version that you want to install, then click **Next**.
The VRM license agreement is displayed.
2. Read and accept the license agreement, then click **Install** to continue.
The installation starts and the installation dialog box shows the installation progress. Do not turn off the system and do not remove the storage media during the installation process.
3. After all software packages have been installed successfully, the system restarts. After restart, you are directed to the Windows sign-in screen.

**Notice!**

For further details, refer to the VRM documentation.

4.3.3**Choosing operation mode iSCSI storage**

To operate the DIVAR IP all-in-one system as an iSCSI storage expansion:

1. On the **DIVAR IP - System setup** page, select the operation mode **iSCSI storage** and the desired iSCSI storage version that you want to install, then click **Next**.
The installation dialog box is displayed.
2. In the installation dialog box, click **Install** to continue.
The installation starts and the installation dialog box shows the installation progress. Do not turn off the system and do not remove the storage media during the installation process.
3. After all software packages have been installed successfully, the system restarts. After restart, you are directed to the Windows sign-in screen.
4. Add the system as an iSCSI storage expansion to an external BVMS or VRM server using BVMS Configuration Client or Configuration Manager.

**Notice!**

For further details, refer to the BVMS or Configuration Manager documentation.

5 Upgrading software

With the DIVAR IP System Manager application you can upgrade the installed software on your system.

You can find the latest software and available upgrade packages in the Bosch Security and Safety Systems download store under:


<https://downloadstore.boschsecurity.com/>





Notice!

Downgrade of the installed software to an earlier version is not supported.

To upgrade the installed software:

1. Go to <https://downloadstore.boschsecurity.com/>.
2. Under the **Software** tab, select **BVMS Appliances** from the list, then click **Select**. A list of all available software packages is displayed.
3. Locate the ZIP files of the desired software packages, for example **BVMS_[BVMS version]_SystemManager_package_[package version].zip**, and save them to a storage medium such as a USB stick.
4. Unzip the files on the storage medium. Do not change the folder structure of the unzipped files.
5. Start the DIVAR IP System Manager application:
 - If you are signed in to Windows with the BVRAdmin administrator account, double-click the DIVAR IP System Manager icon on the Windows desktop. The DIVAR IP System Manager application starts.
 - If your system is running in BVMS operation mode, click the DIVAR IP System Manager icon on the BVMS desktop and sign in to the BVRAdmin administrator account. The DIVAR IP System Manager application opens in a full screen dialog box (You can exit the dialog box by pressing ALT + F4).
6. The **Software packages** page is displayed, showing the device type and the device serial number on the top of the page.
 - In the column **Name**, you see all DIVAR IP System Manager software applications that are already installed on your system as well as all further DIVAR IP System Manager software applications that were detected by the system on the **Images** drive or on a storage medium.
 - In the column **Installed version**, you see the software application version that is currently installed on your system.
 - In the column **Status**, you see the status of the respective software application:
 - The  icon indicates that no later versions of the installed software application were detected by the system on the **Images** drive or on a storage medium.

Note: To make sure that you use the latest software version, double-check the available software versions in the Bosch Security and Safety Systems download store under: <https://downloadstore.boschsecurity.com/>
 - The  icon indicates that the system has detected later versions of the installed software application on the **Images** drive or on a storage medium. The icon is also displayed if the system has detected a software application that is not yet installed on your system.

- In the column **Available version**, you see the later versions of the installed software applications. These versions were detected by the system on the **Images** drive or on a storage medium.
The column also displays the available versions of the detected software applications that are not yet installed on your system.
Note: Only later versions of the installed software applications are displayed. The downgrade of a software application to an earlier version is not supported.
- 7. In the column **Name**, click the respective option button to select the software application that you want to upgrade or to install.
- 8. In the column **Available version**, select the desired version to which you want to upgrade your software application, or which you want to install, and then click **Next**.
If applicable, a license agreement dialog box is displayed.
- 9. Read and accept the license agreement, then click **Install** to continue.
The installation starts and the installation dialog box shows the installation progress. Do not turn off the system and do not remove the storage media during the installation process.
- 10. After all software packages are installed successfully, you will receive the message **Installation finished successfully** at the top of the page.
- 11. If the installation was not successful, you will receive the message **Installation failed** and the  icon will be displayed. In this case, press F5 to go back to the **Software packages** page. Download the respective software packages again and retry.
If the issue persists, contact technical support.

6 Remote connection to the system

You can make a remote connection to your DIVAR IP all-in-one system and access it from the internet.

To create a remote connection, you must do the following:

1. *Protecting the system from unauthorized access, page 15.*
2. *Setting up port forwarding, page 15.*
3. *Choosing an appropriate client, page 15.*

6.1 Protecting the system from unauthorized access

To protect the system from unauthorized access, make sure to follow strong password rules before you connect the system to the internet. The stronger your password, the more protected your system will be from unauthorized persons and malware.

6.2 Setting up port forwarding

To access a DIVAR IP all-in-one system from the internet through a NAT/PAT capable router, you must configure port forwarding on your DIVAR IP all-in-one system and on the router.

To set up port forwarding:

- ▶ Enter following port rules in the port forwarding settings of your internet router:
 - port 5322 for SSH tunnel access using BVMS Operator Client.
Note: This connection is only applicable for BVMS operation mode.
 - port 443 for HTTPS access to VRM using Video Security Client or Video Security App.
Note: This connection is only applicable for BVMS or VRM operation mode.

Your DIVAR IP all-in-one system is now accessible from the Internet.

6.3 Choosing an appropriate client

There are two options to make a remote connection to your DIVAR IP all-in-one system:

- *Remote connection with BVMS Operator Client, page 15.*
- *Remote connection with Video Security App, page 16.*



Notice!

The compatibility of the versions of BVMS Operator Client or Video Security App is determined by the versions of the BVMS or VRM software installed in DIVAR IP.

For detailed information refer to the respective software documentation and training material.

6.3.1 Remote connection with BVMS Operator Client



Notice!

This connection is only applicable for BVMS operation mode.

To make a remote connection with BVMS Operator Client:

1. Install BVMS Operator Client on the client workstation.
2. After finishing the installation successfully, start Operator Client using the desktop

shortcut .

3. Enter the following, then click **OK**.

User name: admin (or other user in case one is configured)

Password: user password

Connection: ssh://[public-IP-address-of-DIVAR-IP_all-in-one]:5322

6.3.2 Remote connection with Video Security App

**Notice!**

This connection is only applicable for BVMS or VRM operation mode.

To make a remote connection with Video Security App:

1. In Apple's App Store search for Bosch Video Security.
2. Install the Video Security app on your iOS device.
3. Start the Video Security app.
4. Select **Add**.
5. Enter the public IP address or dynDNS name.
6. Make sure Secure Connection (SSL) is switched on.
7. Select **Add**.
8. Enter the following:
 - User name:** admin (or other user in case one is configured)
 - Password:** user password

6.4 Connecting to an Enterprise Management Server

For a central management of multiple DIVAR IP all-in-one systems in BVMS operation mode, you can use a BVMS Enterprise Management Server installed on a separate server.

For detailed information about BVMS Enterprise System configuration and operation, refer to the BVMS documentation and training material.

7 Maintenance

7.1 Signing in to the administrator account

Signing in to the administrator account in BVMS operation mode

To sign in to the administrator account in BVMS operation mode:

1. On the BVMS desktop, press CTRL+ALT+DEL.
2. Press and hold the left SHIFT key immediately after clicking **Switch User**.
3. Press CTRL+ALT+DEL again.
4. Select the **BVRAdmin** user and enter the password that was set during the system setup. Then press ENTER.

Note: To go back to the BVMS desktop, press CTRL+ALT+DEL and click **Switch user** or **Sign out**. The system will automatically go back to BVMS desktop without a system restart.

Signing in to the administrator account in VRM or iSCSI operation mode

To sign in to the administrator account in VRM or iSCSI operation mode:

- ▶ On the Windows sign-in screen, press CTRL+ALT+DEL and enter the BVRAdmin password.

7.2 Monitoring the system

7.2.1 Monitoring the system using the SuperDoctor application

The DIVAR IP all-in-one systems come with the pre-installed application **SuperDoctor**, which you can use to monitor your system.

Activating the monitoring functionality

To activate the monitoring functionality:

1. Sign in to the administrator account (refer to *Signing in to the administrator account, page 17*).
2. On the desktop, in the **Tools** folder, right-click the **startSD5Service** script, and then click **Run with PowerShell**.
3. Double-click the **SuperDoctor 5 Web** icon on the desktop.
4. Sign in to the web interface using the following default credentials:
 - User name: **admin**
 - Password: **DivaripSD5**
5. Click the **Configuration** tab, and then click **Account Setting** and change the default password.

Note: Bosch strongly recommends to change the default password immediately after the first sign-in to the **SuperDoctor** application.
6. Under the **Configuration** tab, click **Alert Configuration**.
7. Activate the **SNMP Trap** feature and specify the IP address of the receiver for SNMP traps.

Deactivating the monitoring functionality

To deactivate the monitoring functionality:

1. Sign in to the administrator account (refer to *Signing in to the administrator account, page 17*).
2. On the desktop, in the **Tools** folder, right-click the **stopSD5Service** script, and then click **Run with PowerShell**.

7.2.2 Monitoring the system using the IPMI interface

DIVAR IP all-in-one 6000 has a dedicated IPMI port on the rear side.

You can use the IPMI interface to access, monitor, diagnose, and manage your DIVAR IP all-in-one 6000 system as a remote server.

Each DIVAR IP all-in-one 6000 unit is delivered with the default user name ADMIN and with an initial password. The initial password is unique for each unit. You can find it on the label at the rear of the unit, below the IPMI port.

Bosch strongly recommends to change the initial password during the IPMI configuration, and to store the new password at a secure location.



Notice!

For security reasons, do not permanently connect the device to a public network through the IPMI port.

To configure the IPMI settings:

1. Turn on the unit and press Del to enter the BIOS setup.
2. In the BIOS setup, navigate to the tab **IPMI**.
3. Select the option **BMC Network Configuration**, then press Enter.
4. In the next dialog box, select the option **Update IPMI LAN Configuration**, then press Enter.
The **Update IPMI LAN Configuration** dialog box is displayed.
5. In the **Update IPMI LAN Configuration** dialog box, select **Yes**, then press Enter.
6. Set the desired network configuration parameters.
7. Press F4 and Enter to save and exit.

The DIVAR IP all-in-one 6000 unit restarts.

7.3

Replacing a faulty hard drive and configuring a new hard drive

If a hard drive that is installed on your DIVAR IP all-in-one 6000 system is faulty, the respective hard drive tray LED is illuminated red. In this case, you must do the following:

1. *Replacing a faulty hard drive, page 18.*
2. *Rebuilding RAID5 with the new hard drive, page 18.*



Notice!

This procedure only applies to a default RAID5 configuration and only in the case that a single hard drive in the RAID5 configuration is faulty. Only in this case it can be ensured that no data will be lost.



Notice!

Bosch is not liable for any data loss, damages, or system failures of units equipped with hard drives that are not supplied by Bosch. Bosch cannot provide support if non-Bosch-supplied hard drives are considered to be the cause of the problem. To troubleshoot potential hardware issues, Bosch will require Bosch-supplied hard drives to be installed.

7.3.1

Replacing a faulty hard drive

To replace a faulty hard drive:


- ▶ Remove the faulty hard drive from the unit and install the new hard drive.
Refer to chapter *Installing a SATA hard drive* in the Installation manual.

7.3.2

Rebuilding RAID5 with the new hard drive


Automatic RAID5 rebuild

1. On the DIVAR IP all-in-one desktop, double-click the **Launch LSA** shortcut.
The **LSI Storage Authority** application starts and the **Remote Server Discovery** page is displayed.

2. Sign in with the BVRAdmin administrator account credentials.
A dialog box is displayed, showing that there is a controller, which has a critical issue.
3. Click the **Controller ID:** bar to open the controller settings.
 - If you have not yet removed the faulty hard drive, it will be displayed under **Drives > Foreign Drives > Unconfigured Drives**.
 - Once you have removed the faulty hard drive and installed the new hard drive, the system automatically starts the RAID5 rebuild with the new hard drive and a progress bar shows the rebuild progress.
4. After the rebuild is completed successfully, the  icon is displayed.

Manual RAID5 rebuild

If the RAID5 rebuild of the new hard drive does not start automatically, proceed as follows:

1. In the controller settings dialog box, under **Drives > Foreign Drives > Unconfigured Drives**, select the hard drive with the status **Unconfigured Bad**, and then in the right pane, select **Make Unconfigured Good**.
A dialog box is displayed.
2. Select the checkbox **Confirm**, and then click **Yes, Make Unconfigured Good** to continue.
The system starts the RAID5 rebuild with the new hard drive.
3. After the rebuild is completed successfully, the  icon is displayed.

7.4 Collecting DIVAR IP System Manager log files

The DIVAR IP System Manager application includes a dedicated script that simplifies the log file collection.

To collect DIVAR IP System Manager log files:

1. Sign in to the administrator account (refer to *Signing in to the administrator account, page 17*).
2. On the Windows **Start** menu, click **Export System Manager Logs**.
The script exports the log files to the folder `Documents\Bosch` and creates a ZIP file with following name structure `SysMgrLogs-[date]_[time]`.
You can use this ZIP file to attach it to the detailed error description.

7.5 Recovering the unit

To recover the unit:

1. Turn on the unit and press F7 during the BIOS power-on-self-test to enter Windows PE.
The **System Management Utility** dialog box is displayed.
2. Select one of the following options:
 - **System factory default:** This option will format video data partitions and restore the OS partition with the factory default image.
This process might take up to 5 minutes.
 - **Full data overwrite and system factory default:** This option will format video data partitions, completely overwriting existing data, and restore the OS partition with factory default image.
Note: This process might take up to 110 hours.

- **OS system recovery only:** This option will restore the OS partition with the factory default image and import existing virtual hard drives from existing video data partitions.

This process might take up to 5 minutes.

Note:

The **OS system recovery only** option does not delete video footage that is stored on the data HDDs. However, it replaces the complete operating system partition (including the video management system settings) with a default configuration. To access existing video footage after recovery, the video management system configuration needs to be exported before the system recovery and re-imported afterwards.



Notice!

Do not turn off the unit during the process. This will damage the recovery media.

-
3. Confirm the selected option.
The system starts the formatting and image recovery process.
 4. After the recovery process is complete, confirm the system restart.
The system restarts and setup routines are performed.
 5. After the process is complete, the Windows language selection screen is displayed.
 6. Proceed with the initial system setup.

Refer to

- *First sign-in and initial system setup, page 9*

8 Additional information

8.1 Additional documentation and client software

For more information, software downloads, and documentation, visit <http://www.boschsecurity.com> and go to the respective product page in the product catalog. You can find the latest software and available upgrade packages in the Bosch Security and Safety Systems download store under: <https://downloadstore.boschsecurity.com/>

8.2 Support services and Bosch Academy



Support

Access our **support services** at www.boschsecurity.com/xc/en/support/.



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