

A-Series NVR Quick Start Guide

Introduction

The A-Series is part of the Built By Exacq (BBE) line of network video recorders (NVR). The server is pre-installed with exacqVision video management software, and can connect to both IP and analog cameras depending on configuration. You can connect the A-Series 2A and 2A Hybrid models to up to 64 IP streams and 16 analog cameras, and you can connect the A-Series FA and FAR models to up to 150 IP streams.

Installation requirements

Before you turn on the exacqVision A-Series server, ensure that you meet the following requirements:

Mounting, grounding, and operating environment requirements

- Mount the A-Series in a dust-free and climate-controlled location where the temperature is between 40°F and 95°F (4.5°C to 35°C), and the humidity level is less than 80% non-condensing.
- Do not replace NVR batteries. If you replace the NVR battery with an incorrect battery, there is a risk of an explosion.
- Do not use this NVR in locations where children are likely to be present.
- For maximum reliability, connect the NVR to an inline UPS. An inline UPS filters power surges and dips that can damage the server.
- Connect a mouse, keyboard, and monitor to the server.
- Connect the exacqVision server network interface cards (NIC) to the appropriate switch ports.
- Ensure that only a qualified technician installs the socket outlet protective earthing connection. Use a minimum 18 AWG green and yellow wire to make the connection.

Note: Dust can cause components of the server to overheat, and elevated temperatures can contribute to premature hard drive failures.

Figure 1: Socket-outlet protective earthing connection



Network connection requirements

- If the video surveillance system does not have a physically isolated network, connect all IP cameras and one server network interface card (NIC) to a dedicated camera VLAN or dedicated physical camera network. For information on suggested configurations, see <https://support.exacq.com/#/knowledge-base/article/868>
- Install the camera manufacturer's software on a PC in the same subnet or configure the router to connect a client computer in the camera subnet. For information on how to configure the network, see [Configuring the server](#).

Note: A configuration that isolates the camera traffic reduces the chances of conflicts with other network traffic and unauthorized access to cameras.

Installing storage drives

The A-Series ships with video storage hard drives securely packaged outside of the chassis. Before start up, add these drives to the system.

Before you begin:

Note: Insert the first drive in the lower left slot and continue in sequential order from left to right and from bottom to top.

1. Remove the electrostatic protection packaging from the drive.

2. To release the drive caddy latch, push the left side button.
3. Insert the drive.
4. Ensure that the latching mechanism engages with the opening, then push the drive caddy latch until it clicks into place.

Starting the server

When you start the A-Series for the first time, create an operating system user name and password, then create an exacqVision user name and password.

1. Turn on the exacqVision server.
2. To create an operating system user account, in the **Log on** dialog box, enter a user name and password.
3. Configure the operating system settings as required.
4. If prompted, log on to the operating system again with the user name and password that you just created.
5. To create an exacqVision admin user account, in the **exacqVision** dialog box, enter a user name and password.

Note: Use your exacqVision credentials to log on to the A-Series.

Configuring the client

1. Start the exacqVision client application.
2. When you launch the local client for the first time, enter your exacqVision user name and password.
3. Verify that the server appears in the **Systems** list and displays a **Connected** status.

Configuring the server

1. Open the exacqVision client.
2. From the navigation tree, click **Configure System > Network**.
3. On the **Network** tab, choose one of the following options:
 - To install the server on a network that uses static IP addressing, click **Static**, and enter the IP address.
 - To install the server on a network using dynamic host configuration protocol (DHCP), click **Dynamic**. If the information does not configure automatically, contact your network administrator.
4. Click **Apply**.
5. Repeat this procedure for any additional network ports. For more information about configuring the server, see <https://exacq.com/support/manspecs/>.

Connecting the cameras

About this task:

To determine the compatibility of a particular camera model and firmware combination with exacqVision servers, use the following link: <http://www.exacq.com/support/ipcams.php>.

1. Use the camera manufacturer's software to configure the IP addresses for each camera, and record this information for future reference. For troubleshooting information on connecting cameras to the server, see <https://support.exacq.com/#/knowledge-base/article/2075>.

Note: Do not change the user name and password until after you establish connectivity with the exacqVision server.
2. To test the connectivity between the camera and the server, complete the following steps:
 - a. Log on to the operating system as an administrator.
 - b. In the address bar of your internet browser, type the camera's IP address.
 - c. Press **Enter**

Note: If the browser does not display an introductory or logon window, the camera is not connected to the server. If the problem persists, refer to the *exacqVision User Manual*, and <https://support.exacq.com>.
3. To add a camera, in the exacqVision client, select **Configure System > Add IP Cameras > New** and enter the camera address and credentials. To bulk add cameras, you can use the **Find IP Cameras** and **Quick Add** tabs. For detailed information, see the *exacqVision User Manual*.
4. Repeat this process for all other camera connections.

Accessing the server from a client workstation

You can configure the server through a remote exacqVision client.

1. Download the latest exacqVision client software from the Exacq website at: <https://www.exacq.com/support/downloads.php>.
 2. Install the client software on a system administrator computer.
 3. Use the ping command and the server's IP address to confirm connectivity. If the client PC cannot communicate with the server, contact your network administrator.
- ❶ **Note:** If the server does not connect to the client, check the remote client machine for antivirus software that can block communication between the server IP addresses and ports.

Cybersecurity

Cybersecurity guidance for use in planning, deployment, and maintenance periods is available in the [exacqVision Hardening Guide](#). For additional cybersecurity information and other resources, see <https://www.johnsoncontrols.com/trust-center/cybersecurity/resources#AdditionalResources>.

Hardware components

Figure 2: A-Series 2A and A-Series 2A Hybrid front panel

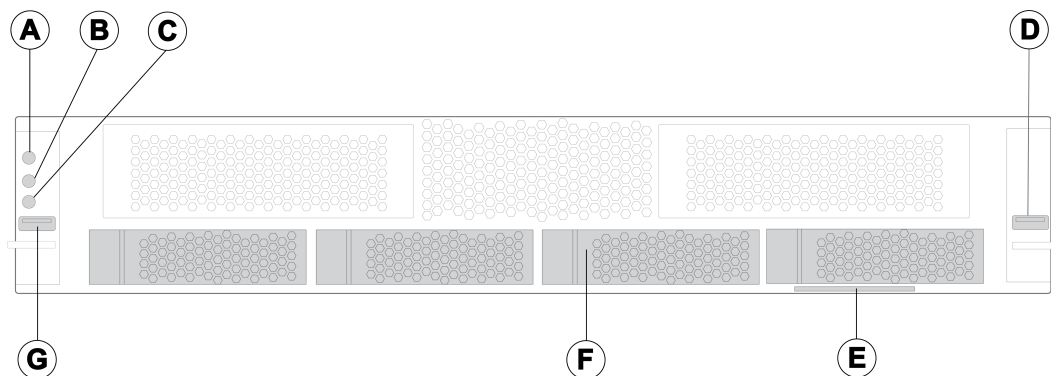
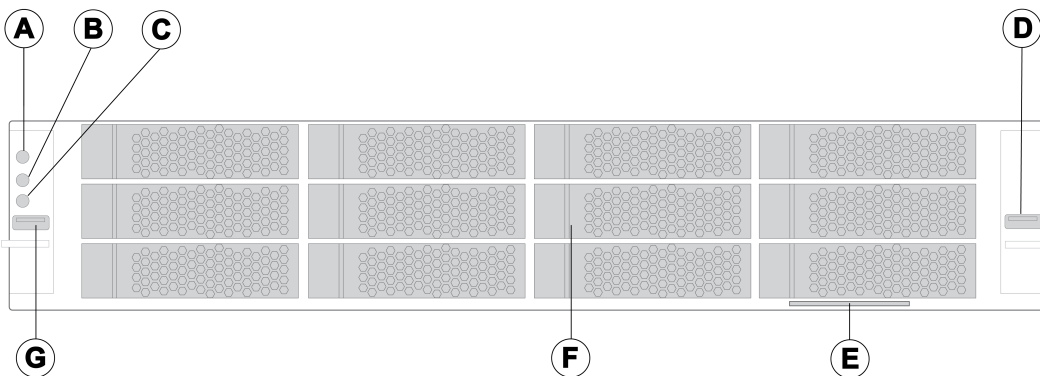


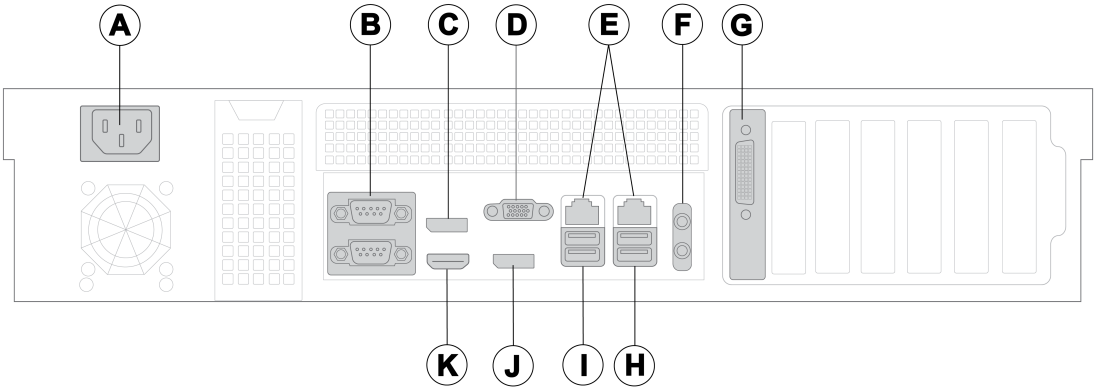
Figure 3: A-Series FA and A-Series FAR front panel



Callout	Component	Callout	Component
A	Power	E	Identification tag
B	ID (unsupported)	F	HDD
C	Reset	G	• USB 2.0 port (A-Series 2A and A-Series 2A Hybrid) • USB 3.2 port (A-Series FA and A-Series FAR)
D	• USB 2.0 port (A-Series 2A and A-Series 2A Hybrid) • USB 3.2 port (A-Series FA and A-Series FAR)		

For information on the exacqVision A-Series server’s back panels, see the following figures and tables.

Figure 4: A-Series 2A and A-Series 2A Hybrid back panel



Callout	Component	Callout	Component
A	Power supply input	G	Analog input (hybrid model)
B	2 x serial ports	H	2 x USB 2.0 ports
C	DisplayPort	I	2 x USB 3.2 ports
D	VGA port	J	DisplayPort
E	2 x 2.5 Gbps Ethernet ports	K	HDMI port
F	Audio connectors - Green: Line out, provides audio signal output - Red: Mic in, use to connect to an external microphone		

Figure 5: A-Series FA back panel

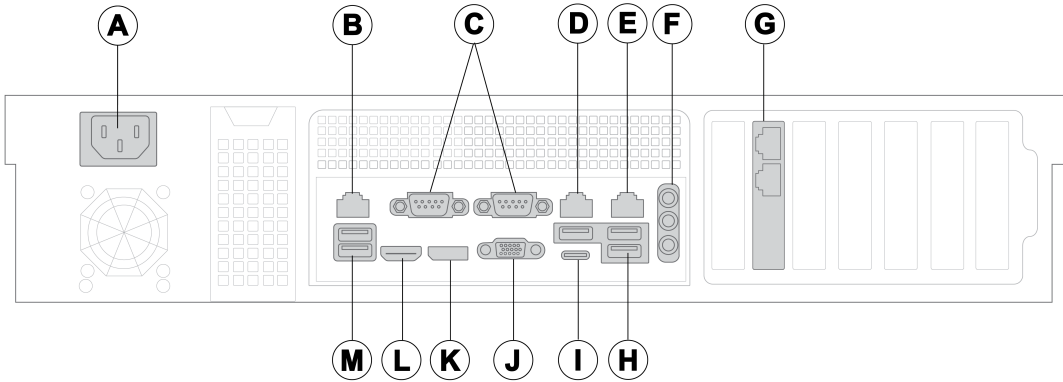
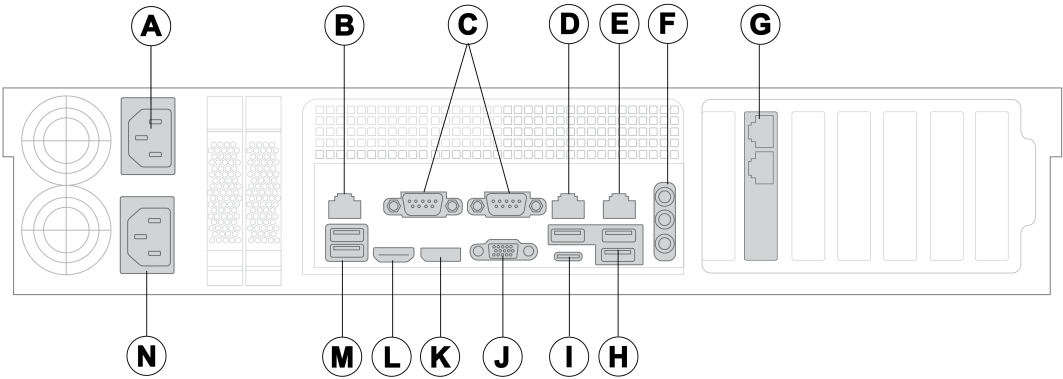


Figure 6: A-Series FAR back panel



Callout	Component	Callout	Component
A	Power supply input	H	3 x USB 3.2 ports
B	2.5 Gbps Ethernet port	I	USB-C port
C	2 x serial ports	J	VGA port
D	2.5 Gbps Ethernet port	K	DisplayPort
E	Ethernet port	L	HDMI port
F	Audio connectors • Green: Line out, provides audio signal output • Red: Mic in, use to connect to an external microphone	M	2 x USB 3.2 ports
G	2 x Ethernet ports	N	Power supply input

