

Z Series 2U NVR Series Quick Start Guide

Introduction

The exacqVision Z-Series is part of exacqVision’s series of network video recorders (NVR). The exacqVision Z Series 2U NVR provides high performance hardware with an exacqVision surveillance video management software.

Installation

This is a Rack Mountable System. Before turning on the exacqVision Z-Series server, ensure that you meet the following requirements:

Mounting and operating environment requirements

- Mount the exacqVision server in a dust-free, and climate controlled location where the temperature is between 40°F to 95°F (4.5°C to 35°C), and the humidity level is less than 80% non-condensing.
- **ⓘ Note:** Dust can cause components of the server to overheat, and elevated temperatures can contribute to premature hard drive failures.
- If the hard drives dispatch separately to the system, insert each drive into the appropriate hard drive slot, if they are numbered.
- The server must connect permanently to the ground wire. Ensure that you use an 18 AWG wire or larger to make the connection, and that you label the grounding screw near the power connector with the image in Figure 1. Ensure this connection is made by a skilled individual.

Figure 1: Grounding wire



Electrical environment requirements

- For maximum reliability, connect the exacqVision server to an online UPS. An online UPS filters power surges and dips that can damage the server.
- Connect a mouse and keyboard to the server.
- Connect the exacqVision server network interface cards (NIC) to the appropriate network switch ports.
- Battery is replaceable by a skilled person.

Network connection requirements

- If the video surveillance system does not have a physically isolated network, connect all IP cameras and one server NIC to a dedicated camera VLAN.
- Install the camera manufacturer’s software on a PC in this subnet, or configure the router to connect a client computer with the camera subnet. For information on how to configure the network, see [Configuring the server](#).
- This VLAN configuration reduces the chances of network traffic conflicts and unauthorized access to the cameras.

Initial startup

When you start the exacqVision G-Series server for the first time, create a user name and password for the operating system, then create a root user name and password for the Enterprise Manager.

1. Turn on the exacqVision server.
2. Create a user name and password for the operating system when the logon dialog box appears. Configure operating system settings as required.
3. If prompted, log back on to the operating system with the user name and password you just created.

- When you log back on, an exacqVision dialog box appears on the desktop. Create the exacqVision admin user name and password.
Note: This is not the same as the credentials you created to log on to the operating system. Use these credentials to log on to the exacqVision Server.

Configuring the server

About this task:

To configure the exacqVision Z-Series server, complete the following steps:

- Open the exacqVision client.
- From the navigation tree, select **System Setup**, and select the **Network** tab.
- In the **Network** window, choose one of the following options:
 - If you install the server on a network that uses static IP addressing, select **Static** and enter the IP address.
 - If you install the server on a network using DHCP, select **Dynamic**. If the information does not automatically configure, contact your network administrator.
- Click **Apply**.

What to do next:

Repeat this procedure for any additional network ports. For more information on configuring the server, see the *exacqVision Start User Manual*.

Setting up remote access to the servers

About this task:

To configure the server through a remote exacqVision client, complete the following steps:

- Download the latest exacqVision Client software from the Exacq website at: <https://www.exacq.com/support/downloads.php>
- Install the client software on a system administrator computer.
- Confirm the connectivity with the server using the ping command and the server's IP address. If the client PC can not communicate with the server, contact your network administrator.

Remote access for administrative support

For administrative support to access to the server remotely, configure Remote Desktop (Windows) or SSH (Linux) on your computer. For more information, see the following Exacq Knowledge Base articles:

- Using remote desktop to manage Windows-based exacqVision servers: <https://www.exacq.com/kb/?kbid=61687>
- Using Secure Shell (SSH) to manage Linux-based exacqVision servers: <https://www.exacq.com/kb/?kbid=6186>

Configuring the client

About this task:

To configure the exacqVision client, complete the following steps:

- Start the exacqVision client application.
- When the local client is launched for the first time, enter the exacqVision user name and password created during initial startup.
- Verify that the server appears in the **Systems** list with a status showing **Connected**.
Note: If the server does not connect, but you can confirm the server's ability to connect, check for anti-virus software on the remote client machine that may block the communication between the server IP addresses and ports.

Camera connections

About this task:

To connect cameras to the system, complete the following steps:

- Connect the analog cameras, PTZ serial cables, or alarm I/O. For more information, see [Connections](#).
Note: Connections vary by model.
- Using the camera manufacturer's software, configure the IP address for all the cameras, and record this information for future reference.
Note: Do not change the username and password until after you establish connectivity with the exacqVision server. For additional information, see the camera manufacturer's website or the *exacqVision IP Camera Quick Start Guide* at <http://www.exacq.com/downloads/ev-ip-quickstart-0311.pdf>. You may also find the Quick Start Guide in the Quickstarts directory on the CD that Exacq dispatch with your system.
- 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>

4. Test the connectivity between the camera and the server by completing the following steps:
 - a. Log off from the operating system user account.
 - b. Type the camera's IP address into the address bar on your internet browser.
 - c. Press Enter. If the browser does not display an introductory or logon window, the camera is not establishing a connection with the server. Check the *exacqVision User Manual*, and www.exacq.com/kb for a solution if the problem persists.

What to do next:

Repeat steps one to four for all other camera connections.

Connections

For information on the Z-Series server's back panel for Hybrid and IP systems, see the below figures and tables.

Figure 2: Z-Series Hybrid System back panel

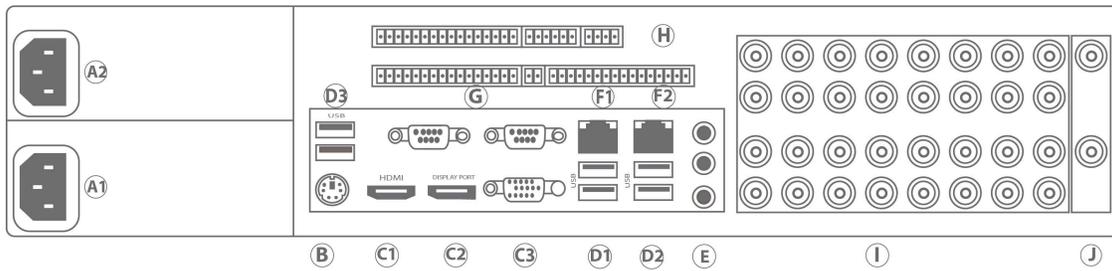


Figure 3: Z-Series IP Only System back panel

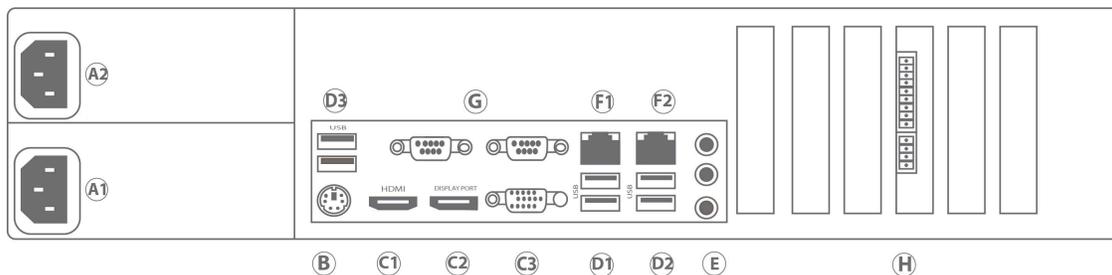


Table1: Z-Series Hybrid System back panel

	Name	No. of Ports	Description
A	Power	2	100-240VAC 50/60Hz. Connect A1 and A2 to separate power circuits.
B	PS/2 connectors	1	PS/2 port.
C	Video out	3	HDMI (C1), Display port (C2), VGA (C3). You may use a maximum of two video outputs simultaneously
D	USB	6	USB keyboard, mouse, memory device, or DVD burner. USB 2.0 (D1 and D3) and USB 3.0 (D2).
E	Audio in/out	3	Line in (blue); line out (green); microphone (pink).
F	10/100/1000 Ethernet	2	Dual on-board NICs. 2.5GB (F1) and 1GB (F2).
G	Serial port	2	Serial port.
H	Auxiliary Connections		For more information, see detail in figures Figure 4 and Figure 5.
I	Video In	32	Only for Hybrid Systems; inputs and looping outputs; or inputs 1-32
J	Video Out	2-4	Only for Hybrid Systems

Auxiliary Connections

Figure 4: Z-Series Hybrid System auxiliary connections

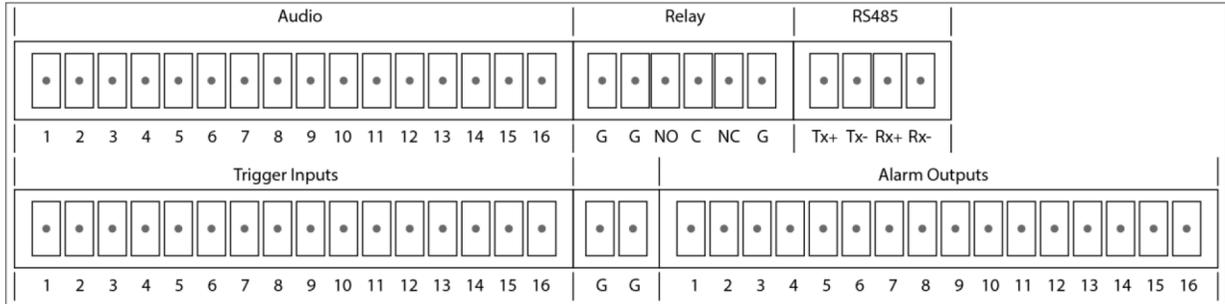


Table2: Z-Series Hybrid System auxiliary connections

Audio block connections	
1-16	Line level audio in 1-16
Relay block connections	
G	Common for all inputs
NO	Normally open relay output #1 (24V/1A max)
C	Relay common
NC	Normally closed relay output #2 (24V/1A max)
G	Common for all inputs
RS-485 block connections	
Tx+	PTZ control
Tx-	PTZ control
Rx+	PTZ control
Rx-	PTZ control
Trigger Inputs and Alarm Outputs blocks	
1-16	Trigger inputs 1-16
G	Common for all inputs
1-16	Alarm outputs 1-16

Table3: Z-Series IP Only System auxiliary connections

IP only connections	
Tx+	PTZ control
Tx-	PTZ control
IN4	Trigger input 4
IN3	Trigger input 3
IN2	Trigger input 2
IN1	Trigger input 1
G	Common for all inputs
OUT1	Alarm output 1
G	Common for all inputs
NC	Normally closed relay output #1 (24V/1A max)
C	Relay common
NO	Normally open relay output #2 (24V/1A max)

Figure 5: Z-Series IP Only System auxiliary connections

