The following table describes the ports for both the ELP-Series Hybrid and the ELP IP server.

Table 1: ELP-Series Hybrid and IP System back panel connections and ports

	Name	No. of Ports	Description
A	Video out	4	DisplayPort (A1), HDMI, (A2), VGA (A3), DVI-D (A4) You can use a maximum of two video outputs simultaneously
B	10/100/1000 Ethernet	2	Dual on-board NICs
C	USB 2.0/3.0	4	USB keyboard, mouse, memory device, or DVD burner; USB 2.0 (C1) and USB 3.0 (C2)
D	Audio in/out	3	Line in (blue); line out (green); microphone (pink)
*E	Auxiliary Connections		For more information, see Figure 4
*F	Analog Video In	8-16	Analog video inputs 8-16
G	Power		100-240VAC 50/60Hz. Power port (G1) and power switch (G2)

*Applies to ELP-Series Hybrid only.

Auxiliary Connections

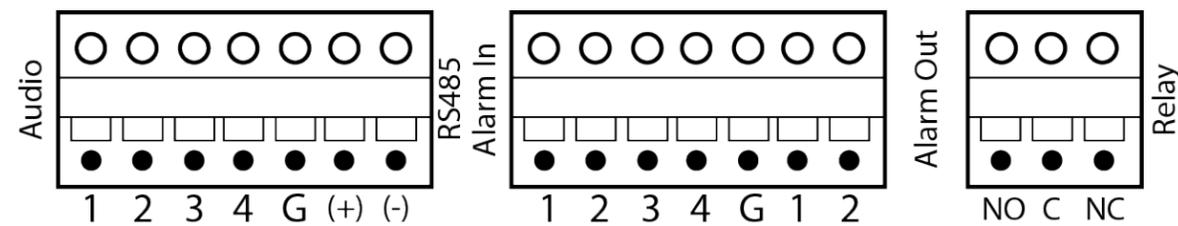The following figure show the auxiliary connections for the ELP-Series Hybrid server:

Figure 4: ELP-Series Hybrid System auxiliary connections

Audio and RS-485 Block Connections	
1-4	Line level audio in 1-4
RS-485 Block Connections	
G	Common for all inputs
Tx+	PTZ control
Tx-	PTZ control

Alarm In and Out Block Connections	
1-4	Alarm input TTL (0-5 V)
G	Ground for all inputs
1-2	Alarm output TTL (0-5 V)

Relay Block Connections	
NO	Normally open relay output #1 (24V/1A max)
C	Relay common
NC	Normally closed relay output #2 (24V/1A max)

Table 2: ELP-Series Hybrid auxiliary connections

Introduction

The exacqVision ELP-Series is part of exacqVision's series of network video recorders (NVR). The exacqVision ELP-Series Hybrid and IP servers are a complete video management solution that minimizes the installation time and risk.

Installation

Before turning on the exacqVision ELP-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 less than 70°F (21°C), and the humidity level is less than 40% non-condensing.

    Caution: 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 system was shipped with only one drive, insert drive into left hand slot.

- If you use an outdoor camera, 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**.

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 keyboard, monitor, and mouse to the server.

- Connect the exacqVision server network interface cards (NIC) to the appropriate network switch ports.

- It is recommend to use cables with ferrite core for connecting to monitors. If the cable does not have a ferrite core, the unit still performs as expected but may not meet **CE** safety regulation standards.

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.

- This VLAN configuration reduces the chances of network traffic conflicts and unauthorized access to the cameras.

Initial startup

When you start the exacqVision ELP-Series Una 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.
4. 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.

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. Refer to the *exacqVision User Manual* , and https://www.exacq.com/kb for a solution if the problem persists.

        Repeat steps one to four for all other camera connections.

Connections

For information about the ELP-Series Hybrid server back panel, see Figure 2, or for information about the ELP-Series IP server back panel, see Figure 3. Table 1: ELP-Series Hybrid and IP System back panel connections and ports describes the connections for both servers.
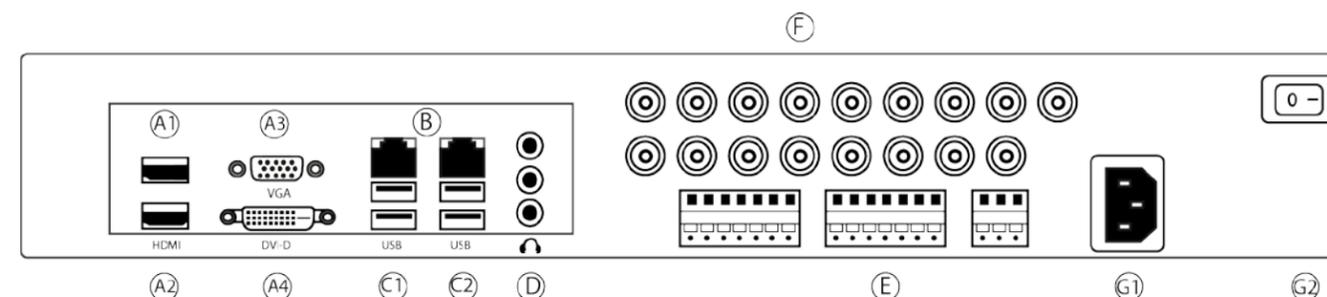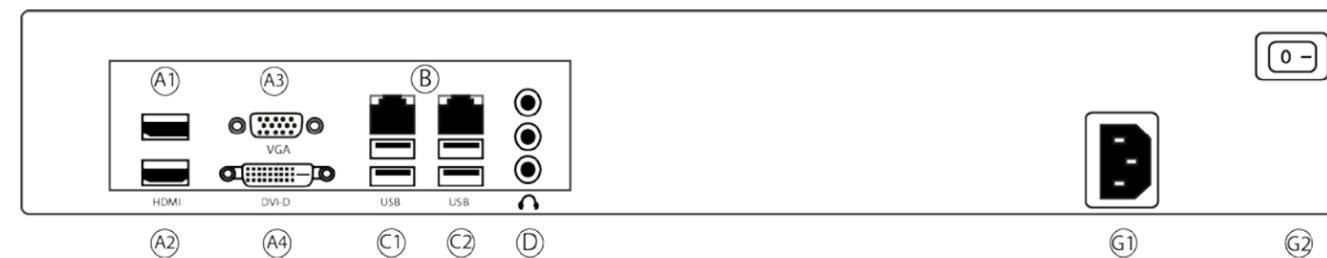

Figure 2: ELP-Series Hybrid back panel

Figure 3: ELP-Series IP back panel

Configuring the server

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

1. Open the exacqVision client.
2. From the navigation tree, select **System Setup**, and select the **Network** tab.
3. 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.

4. Click **Apply**.

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

Setting up remote access to the servers

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

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. Confirm the connectivity with the server using the ping command and the server's IP address. If the client PC cannot 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, refer to 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

To configure the exacqVision client, complete the following steps:

1. Start the exacqVision client application.
2. When the local client is launched for the first time, enter the exacqVision user name and password created during initial startup.
3. 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

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

1. Connect the analog cameras, PTZ serial cables, or alarm I/O. For more information, see **Connections**.
    Note: Connections vary by model.
2. 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 passwords until after you establish connectivity with the exacqVision server.

    For additional information, refer to 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.
3. To determine the compatibility of a particular camera model and firmware combination with exacqVision servers, review the camera integration details at: http://www.exacq.com/support/ipcams.php