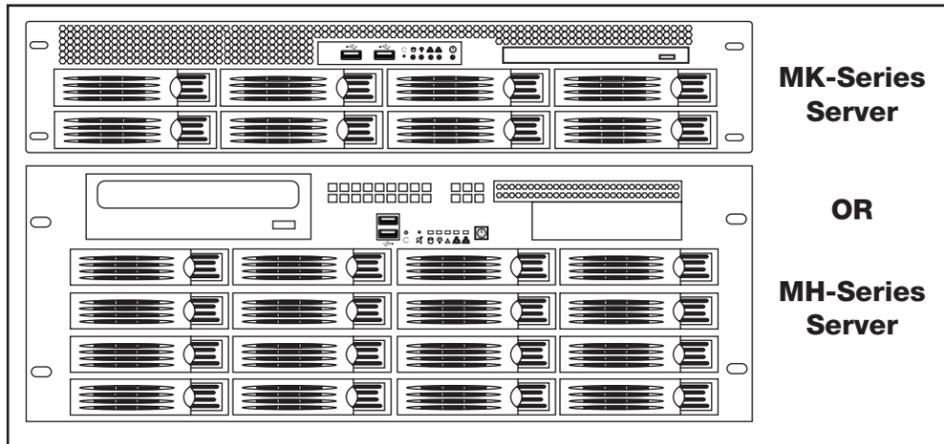


Quick Installation Guide

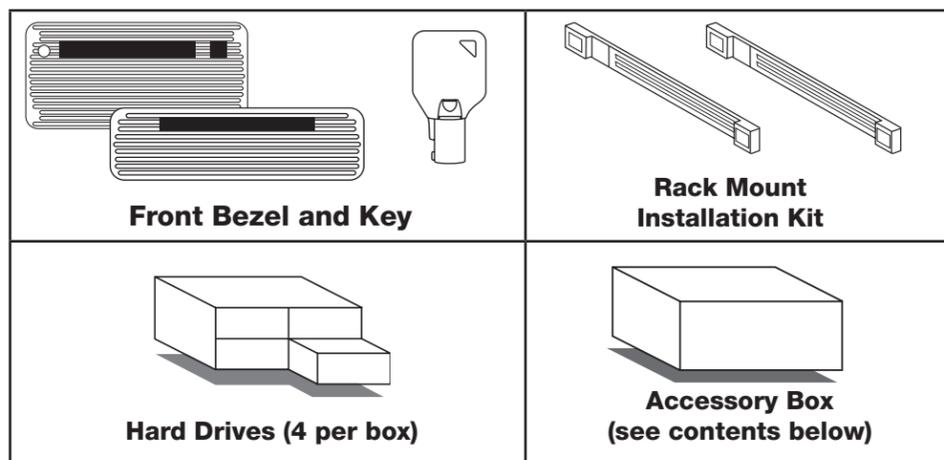
MK / MH-Series Cloud Managed Appliance

This guide is a quick reference for users to install the MK / MH-Series Server, including initial setup, and only provides basic information. For further details please refer to the User Manual.

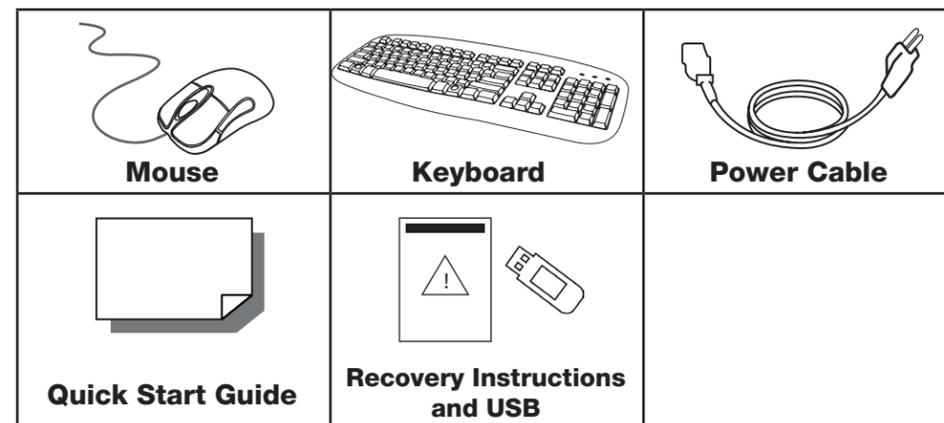
BOX 1 CONTENTS



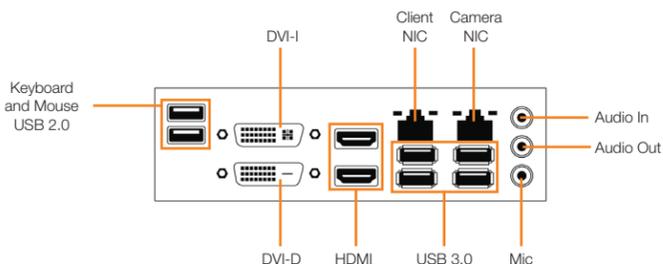
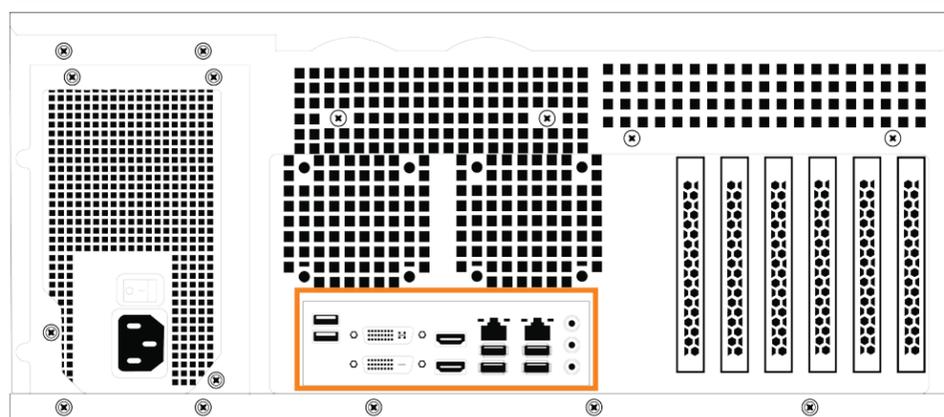
BOX 2 CONTENTS



ACCESSORY BOX CONTENTS



CONNECTIONS



Network Settings

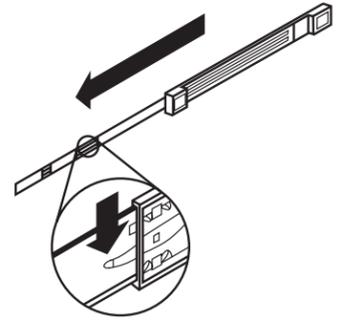
Remote Communication Port	80 (8888 used if 80 is blocked)
Client NIC IP Address	DHCP
Camera NIC (External Switch)	192.168.51.1 / 255.255.255.0 (Gateway and DNS blank)
Camera PoE	192.168.50.1, 192.168.50.2 (reserved for internal communication), 192.168.50.11-26 (Reserved for Onboard PoE Camera Ports)

RACKMOUNT ASSEMBLY INSTRUCTIONS

The box your MK / MH-Series Server was shipped in should include one rail assembly and two mounting brackets that you will need to install the system into the rack. There are a variety of rack units available on the market, which may mean the assembly procedure will differ slightly. Refer to the installation instructions for your model of rack unit. Please read this section in its entirety before you begin the installation procedure.

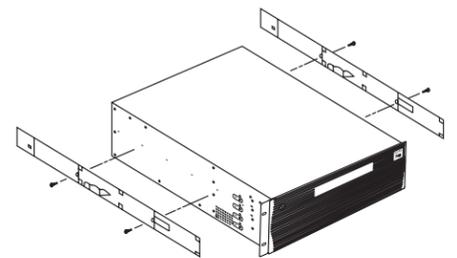
Separating the Sections of Rack Rails

1. Extend the rail assembly by pulling it outward.
2. Press the quick-release tab.
3. Separate the inner rail extension from the outer rail assembly.
4. Repeat these steps for the second rail assembly.



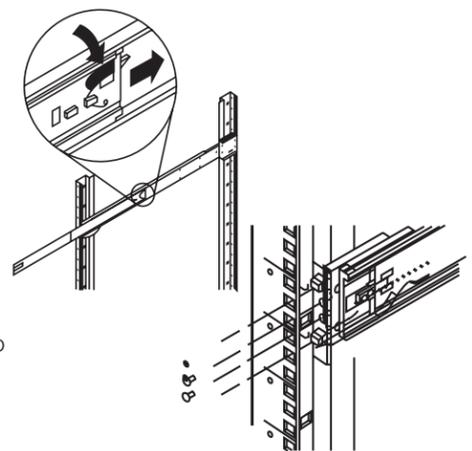
Installing the Inner Rail Extensions

1. Place the inner rail extensions on the side of the chassis, aligning the hooks of the chassis with the rail extension holes. Make sure the extension faces outward, just like the pre-attached inner rail.
2. Slide the extension toward the front of the chassis.
3. Recommended: Secure the rail extension to the chassis with 4 screws (included).
4. Repeat these steps for the other side of the chassis.



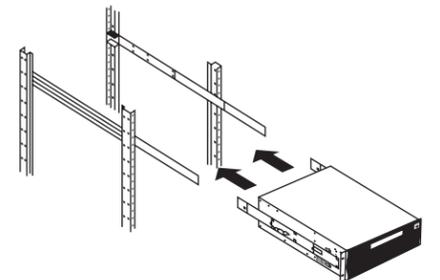
Installing the Outer Rack Rails

1. Secure the back end of the outer rail to the rack using the leaf springs and screws provided.
2. Press the button where the two outer rails are joined to retract the smaller outer rail.
3. Hang the hooks of the rails onto the rack holes and, if desired, use screws to secure the front of the outer rail onto the rack.
4. Repeat these steps for the other outer rail extension.



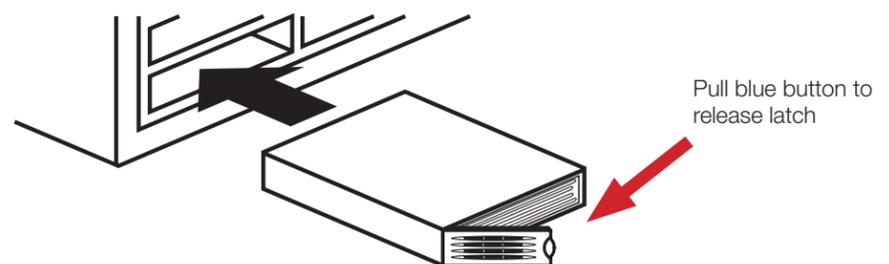
Installing the Recorder into a Rack

1. Extend the outer rails.
2. Align the inner rails with the outer rails on the rack.
3. Slide the inner rails into the outer rails, keeping pressure even on both sides. When pushed all the way into the rack, the rails will click into a locked position (preventing removal without pressing the quick-release tabs).

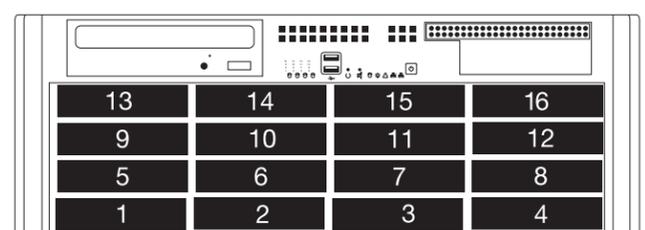


HARD DRIVE INSTALLATION (MH-SERIES ONLY)

Your MH-Series server will be shipped with the drives in a separate box. To insert the drives, pull the blue latch release on the front of the drive, insert the drive into the proper port, and close the latch.



Your hard drives should be inserted in order, 1-16, depending on how many hard drives you have purchased. Each hard drive is marked with the number of its port. See the diagram below for the order of hard drive ports.



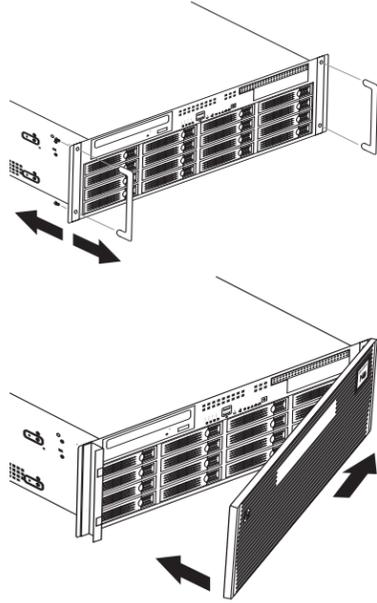
FOR UNITS WITH RAID CONFIGURATION ONLY:

Use only identical models to replace the hard drives. Do not re-insert failed drives.

INSTALLING THE FRONT BEZEL

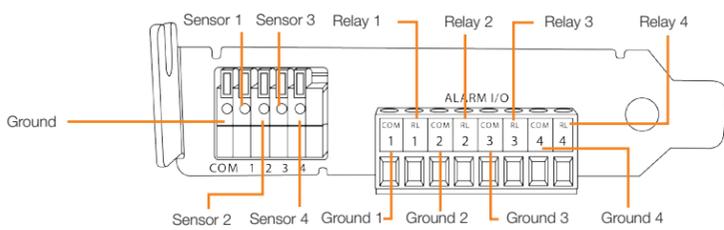
If you choose to mount the front bezel onto your recorder, you will need to remove the attached handles and attach the bezel before attaching the rackmount rails.

1. Remove the **two screws** from each handle.
2. Install the included **bezel clips** and fasten with **screws**.
3. Align and slide the right side of the bezel into the right clip.
4. Slide the left side of the bezel into the left clip.
5. Lock the bezel by turning the **key** counter-clockwise.



SENSOR / RELAY CARD (OPTIONAL ADD-ON CARD)

The Sensor/Relay Card is an optional add-on card that can be installed on the OE-MK or OE-MH in an available card slot. Apex Server version 1.2 or higher is required for use of the Sensor/Relay Card. See page 36 of the Apex Server Software Manual for instructions on setting up the Sensor/Relay Card on the software.



NOTE Do not remove the Alarm I/O adapter. It is permanently attached to ensure full integrity of the connections. A small fine-tip screwdriver might be needed to access the lock screws on the adapter.

SETTING UP YOUR SERVER FOR THE FIRST TIME

1. Plug the supplied **power cord** into the recorder. Do NOT connect the plug to a power source at this time.
2. Connect the network cable intended for remote connections to the **Client NIC**.

NOTE The Camera NIC is intended for use with a dedicated camera network.

NOTE The MK / MH-Series Servers do not have Power over Ethernet ports. For IP camera setup, use the Camera NIC to connect a camera network or external PoE switch instead.

3. Connect the supplied **keyboard** and **mouse** using the USB ports.
4. Connect a monitor using the **HDMI** or **DVI** ports.
5. Connect the cameras to the **external camera network**.
6. Connect the power cord to a power source, and then turn the recorder **On**.

SOFTWARE SETUP

1. After powering on your Apex appliance, you will be prompted to log in with the default local Username and Password, or your pre-existing OWS credentials.

Default Admin Username: NVRAdmin

Default User Username: NVRUser

Default Admin Password: dvr4321

Default User Password: (none)

2. After logging in for the first time, the **Welcome Apex Wizard** will launch and assist you with changing the default local password (recommended), changing IP settings (if your unit is a Linux system), and enabling Cloud Health Monitoring.
3. If the unit is unlicensed, a pop-up bar will be displayed at the bottom of the live interface. Click **Go to Licensing** in the bottom banner bar.
4. Once the Apex licensing page has loaded, enter the **System ID** located on this page, along with the **System Serial Number** located on the side of the appliance.
5. Navigate to activate.openeye.net/nvr and enter the **System ID** and **Serial Number** recorded in Step 4.
6. Record the **Licensing Key**, and then click **Add New License** in the Licensing tab.
7. Click **Next**.

OPENEYE WEB SERVICES CONNECTION

1. Click **Setup**, and then click the **Global Configurations** tab.
2. Click **Web Services Account**.
3. Type your OpenEye Web Services Account **Email** and **Password**, or the **Recorder Registration Code**.
4. Click **Connect**.

IP CAMERA SETUP

1. Click **Setup** and navigate to the Cameras page, and then click **Add Cameras**.
2. Check the box for the camera you wish to add to Apex and enter the **username** and **password** for the camera, and then click **Add Selected Cameras**.

NOTE Apex will automatically discover cameras on the network that have not yet been added to Apex, but will not show cameras already added.

NOTE Click for more information about how to use Apex with your newly added camera.

Adding Auto-Detected Cameras

Apex Server software automatically detects ONVIF Profile S compliant cameras set to DHCP. Cameras not meeting these requirements must be configured manually.

1. Click **Setup**, and then click **Cameras**.
2. Click **Add Cameras**.
3. For automatically detected cameras, select the camera(s) using the check boxes, and then type the appropriate **Username** and **Password**.
4. Click **Add**.

Adding Cameras Manually

1. Click Setup, and then click Cameras.
2. Click Add Cameras.
3. For cameras not automatically detected, click Add Cameras Manually.



4. Select the ONVIF or the RTSP protocol, and then type the appropriate Title, IP Address, Username, and Password.

NOTE When using RTSP, specify the individual URL streams for your cameras. For instructions regarding these streams, consult the camera manual.

5. Click Add Cameras.

ADVANCED CAMERA MANAGEMENT

Cameras set to static IP addresses, third party cameras, and cameras not supported by ONVIF may not be detected automatically. To configure cameras not automatically detected by Apex Server software, follow the steps below.

Configuring OpenEye Cameras with a Static IP Address (Linux models only)

1. Click **Setup**, and then click **Support Tools**.
2. Click **Launch Support Tools**.
3. Click **Network Camera Manager**.
4. Note the discovered **IP address** for the desired camera.
5. Click **Exit** to return to Apex Server software.
6. Follow the steps in the *Adding Cameras Manually* section, typing the static IP Address.

NOTE Network Camera Manager can be launched from the Windows desktop icon.

Configuring OpenEye Cameras with DHCP (Linux models only)

1. Click **Setup**, and then click **Support Tools**.
2. Click **Launch Support Tools**.
3. Click **Network Camera Manager**.
4. Select your desired **cameras**, and **DHCP**, and then click **Apply**.
5. Click **Exit** to return to Apex Server software.
6. Follow the steps in the *Adding Auto-Detected Cameras* section to add the camera.

NOTE OpenEye cameras on Windows can be configured with DHCP by launching Network Camera Manager from the Windows desktop icon.

Adding Third Party Cameras

Third party cameras may require installing a manufacturer camera discovery tool on a separate PC. Once the camera discovery tool is installed, follow the steps for adding a camera with a static IP address or using DHCP as outlined above.

Adding Cameras Not Supported by ONVIF

You must add cameras that are not ONVIF-compliant using the RTSP stream of the camera. Consult the manufacturer's camera manual for more detailed information regarding RTSP streams. When you know the URL for the RTSP stream of your camera, follow the steps in the Adding Cameras Manually section, selecting RTSP protocol.

OPENEYE WEB SERVICES

OpenEye Web Services is a cloud based management solution which allows you to administer all your users, recorders, and VMS installations from one central location. To get the most out of your new web-managed recorder, we strongly recommend connecting it to the Web Services portal.

Connecting a Recorder to OWS

In the previous OpenEye Web Services Connection section, you enabled OpenEye Web Services on your Apex Server recorder.

Now, you will need to add the recorder to the appropriate Company Account.

1. Log in to your OWS account at **ows.openeye.net** from a web browser.
2. Select the appropriate **Company Account**, and then click **Add**.

NOTE Once you have enabled an Apex recorder to connect with OWS, it will appear on your OWS account as an unassigned recorder. Assign the recorder to the appropriate Company Account.

Users associated with this Company Account will now be able to remotely access the Apex Server recorder.