Honeywell

MAXPRO® NVR SE Series Quick Install Guide

Overview

This document covers how to:

- Connect essential hardware to a MAXPRO NVR SE (PAL) unit.
- Configure network settings, set up IP addresses, and discover connected devices.
- Configure the unit to record video.

Note **More detailed MAXPRO NVR SE documentation** is available on the **Documentation DVD** included with your unit.

1 Before You Begin

The following items come with your MAXPRO NVR SE chassis and may be needed for installation and setup:

- Power cord
- Keyboard (PS/2)
- Mouse (PS/2)
- DVI and VGA cable adapters

- This *Quick Install Guide*
- Recovery DVD
- Rail hardware kit with instructions for rack mount installations

- Optional, additional hard drive(s)
- 8 or more screws for hard drive installation
- MAXPRO NVR SE Software and Documentation DVD

Note Other peripheral hardware (owner supplied) will also be needed for your installation (such as cameras, network equipment and an optional keyboard controller). See *2 Installing Unit*, for more information.

Minimum Hardware Requirements

Make sure your workstations meet the following minimum hardware requirements:

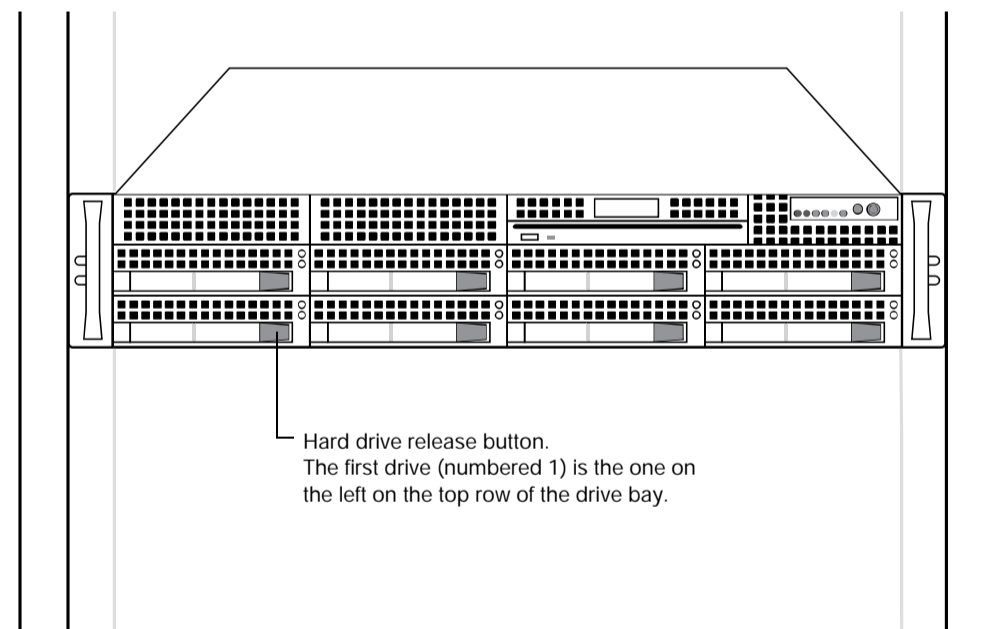| Specification	MAXPRO NVR Workstation
Processor	Intel® Core™ 2 Duo Processor E6750 2.66 GHz or Quad Core Intel® Xeon® E5405 2.0 GHz (faster speeds are optional)
Operating System	Microsoft® Windows® 7 Professional
System Memory (RAM)	4 GB of RAM minimum
DVD Drive	DVD-RW drive. An RW (Read Write) drive is required if the workstation is used for exporting recordings.
Disk	Single Disk or RAID 0 or 0+1 10K SATA 80 GB or 10K to 15K SAS 73 GB with Windows Operating System
Multiple Monitor Card – Display Adapter	1 x 256 MB PCIe x 16 NVIDIA Quadro NVS 285, Dual DVI or Dual VGA or DVI+VGA. This is for a two monitor setup with each monitor requiring 128 MB.
Network Connection	1 Gigabit/sec Network Interface Card (NIC) or greater
Video Resolution	1280 x 1024 pixels (resolution), 65K colors non-interlaced (color quality). Please refer to the *MAXPRO® NVR SE Commissioning and Installation Guide* for more information on configuring monitor properties.

2 Installing Unit

Components of a MAXPRO NVR SE System

Your system may include some or all of the following components:

- Optional hard drives for additional storage (included if ordered)
- One or many video cameras and/or PTZ domes (owner supplied)
- A VGA monitor (owner supplied)
- A keyboard controller (owner supplied)
- A computer keyboard (included)
- A computer mouse (included)
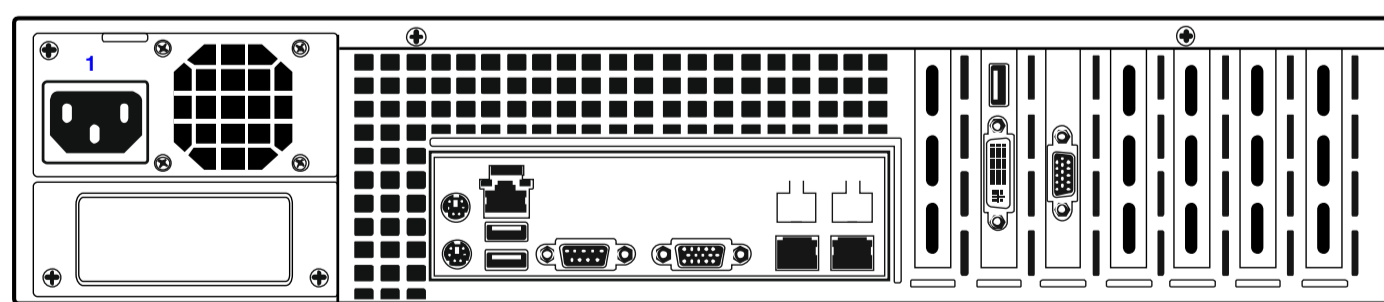- One Rail hardware kit for rack mount installations (included)

Mounting the MAXPRO NVR Unit in a Rack

The MAXPRO NVR SE unit should be mounted with the supplied Rail hardware kit. The rail kit allows you to slide the MAXPRO NVR SE unit in and out of the rack it is mounted into and provides rear support for the chassis. Refer to the instructions included with the Rail hardware kit when installing the unit with the Rail kit.


Hard drive release button.
The first drive (numbered 1) is the one on the left on the top row of the drive bay.

3 Connecting Hardware

Rear Panel Connections

#	Connector	Connects to...
1	Power	Electrical outlet
2	DMS-59 Pin	PC video card
3	DB-9 Pin Serial port	Various devices
4	DIN-8 Connector	PC PS/2 Mouse
5	DIN-8 Connector	PC PS/2 Keyboard
6	DB-15 VGA Connector	Monitor
7	HDMI	Monitor
8	USB Ports	Various devices
9	Gigabit LAN 1	Network

Camera(s)

Connect a network switch to the Gigabit LAN 1 connector at the rear of the MAXPRO NVR SE unit. Connect your cameras either to the network switcher or to other Ethernet network connections in your system with CAT5 Ethernet cables.
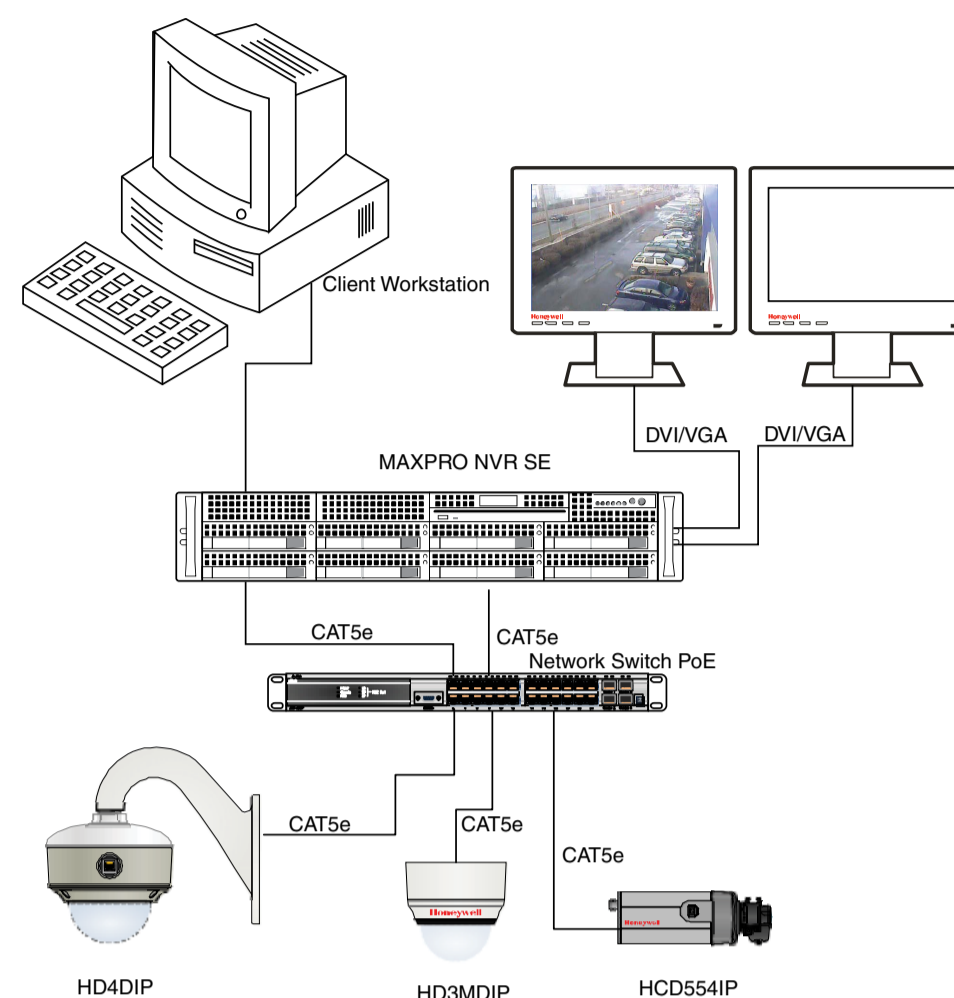
Monitor(s)

The MAXPRO NVR SE comes with a dual graphics card, so two monitors can be connected. A DVI monitor is best-suited for viewing live video. Connect the monitor to the supplied DMS-59 to dual DVI adapter cable, then connect the cable to the DMS-59 connector (2) on the rear panel of the unit. Do not use the HDMI (7) or VGA (6) graphics ports as these are disabled. The recommended settings for your monitor are: 1280 x 1024 pixels (resolution), and 65K colors non-interlaced (color quality). Refer to the *MAXPRO® NVR Commissioning and Installation Guide* for more information on configuring the monitor display properties.

Keyboard and Mouse

Before powering up the MAXPRO NVR SE, connect the supplied PS/2 keyboard and mouse to the DIN-8 connectors at the rear of the unit.

Keyboard Controller

Follow the documentation that was included with your Keyboard Controller to connect it to the MAXPRO NVR SE unit.
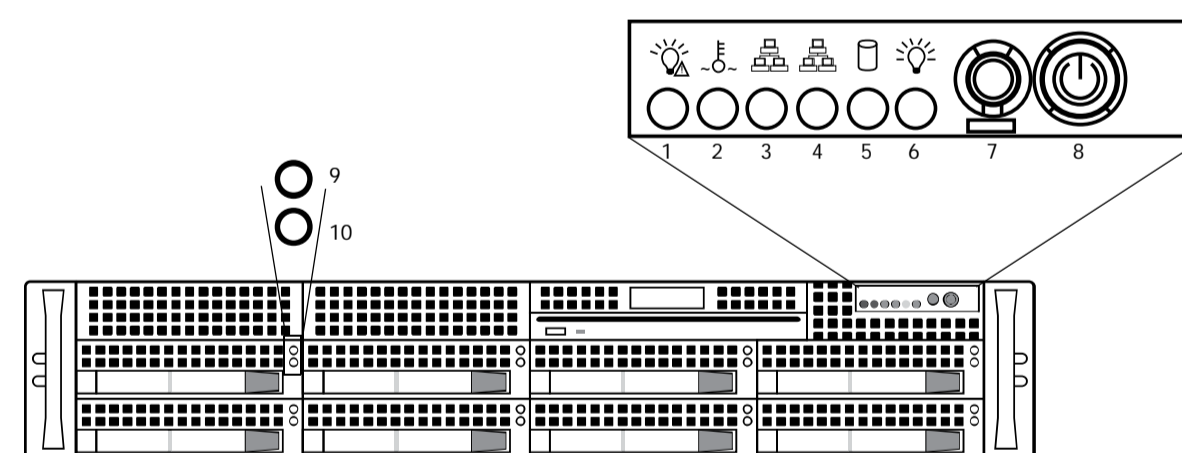
4 Powering Up the Unit

Note Honeywell recommends using an uninterruptible power supply (UPS) for the MAXPRO NVR SE unit and the cameras. Powering the cameras and unit from a UPS ensures that the MAXPRO NVR SE unit can continue to record video during a power outage. If you need to monitor video during a power outage, consider a UPS for the monitor as well.

MAXPRO NVR SE Power Up Sequence

1. Turn on camera(s) and other hardware connected to the MAXPRO NVR SE unit.

Note Honeywell recommends that cameras be powered on before the MAXPRO NVR SE unit starts up. It can take up to two minutes for IP cameras to boot up. Online cameras can be easily discovered by the unit after starting up. It is also recommended to turn on other associated network components such as a network switch or router before the MAXPRO NVR SE starts up.

2. Press and hold the power button on the front of the MAXPRO NVR SE unit (the power button is labelled **9** in the image below). The power button turns blue after the unit is powered up.

3. After powering up, you are prompted to log on. The Default user is user name: **Administrator**, password: **Password1**. The user name and password are case sensitive.

Front Panel LEDs

No.	LEDs, Buttons	Behavior
1	Power Failure LED	Flashing = Indicates a power failure in the power supply.
2	Overheat/Fan Failure LED	Flashing = Indicates a fan failure.
		Continuously on = Indicates the temperature has exceeded the threshold. This may be caused by cables obstructing the airflow in the system or the ambient room temperature being too warm. Check the cable routing and make sure all fans are present and operating normally. You should also check that the chassis covers are installed. Finally, verify that the heatsinks are installed properly. The LED will continue to flash or be on as long as the overheat condition exists.
3	NIC2 LED	Flashing = There is network activity on GLAN2.
4	NIC1 LED	Flashing = There is network activity on GLAN1.
5	HDD LED	Flashing = Indicates IDE channel activity in the SAS/SATA drive, SCSI drive and/or DVD-ROM drive.
6	Power LED	On = Indicates power is being supplied to the system's power supply units. This LED should normally be illuminated when the system is operating.
7	Reset Button	Press to reboot the system.
8	Power Button	The main power switch is used to apply or remove power from the power supply to the server system. Turning off system power with this button removes the main power but keeps standby power supplied to the system. **Therefore, you must unplug the system before servicing.**
9, 10	HDD Activity/Failure LEDs	Green = Indicates drive activity.
		Red = Indicates a drive failure. If a drive fails you should be notified by your system management software.

5 Logging On

MAXPRO NVR SE has one default Windows user configured: **Administrator** (user name **Administrator**, password **Password1**) with full operation and configuration privileges and one default non-Windows **user** (user name **admin**, password **trinity**). Both user names and passwords are case-sensitive.

Logging On and Off

1. Double-click 🔲 on the desktop. At the prompt, log on.
2. Select **Display Video on Alarm** to display the viewer as an alarm monitor.
3. Click ➡. The Viewer screen appears by default.

   Note If the NVR name has been changed, please click **Cancel** and then click **Server settings**. You will be able to change the Server IP/Name you are connecting to in this window. Save this as your default profile.

6 Camera and MAXPRO NVR SE IP Addresses

Use the IP Utility to set the IP Address for **each** connected camera in your network before you add them (see *8 Setting Up the Cameras*). Click 🔲 on the desktop. After logging on, the IP Utility automatically discovers connected cameras. Select a camera in the list on the left pane. Confirm that the camera is using a static IP address (not DHCP).

Your MAXPRO NVR SE unit comes with a default IP Address (**192.168.1.101**) and computer name (**MaxPRO-NVR**). If you are going to have more than one MAXPRO NVR SE on the network then you should change the computer name and IP address. Each MAXPRO NVR SE unit should have its own unique computer name and IP address.

1. To change the computer name using Windows:
   a. Navigate to **Start ➤ Computer ➤ Properties ➤ Change settings**, then click **Change**.
   b. Type in a new computer name. Do not use the following characters: < > ; : * " * + = \ | ?. Also, the name should not contain spaces or all numbers.
   c. Launch MAXPRO NVR SE, then on the System tab (**Configurator** tab ➤ **System** tab) in the **Device Address** field, add the new computer name and reboot.
2. To change the IP address using Windows:
   a. Click the **network icon** located next to the clock (lower right of screen) ➤ **Open network and sharing center ➤ Change adapter settings**.
   b. Right click **Local area connection** and select **Properties**.
   c. Click **Internet Protocol Version 4 (TCP/IPv4)**, then click **Properties**.
   d. It is recommended that you use static IP address scheme.
   e. Click **Use the following IP address**, then in the IP address, Subnet mask, and Default gateway boxes, type the IP address settings.
   f. Specify preferred and alternate DNS server address. This step is required when clients connect through the Internet.

7 System Settings
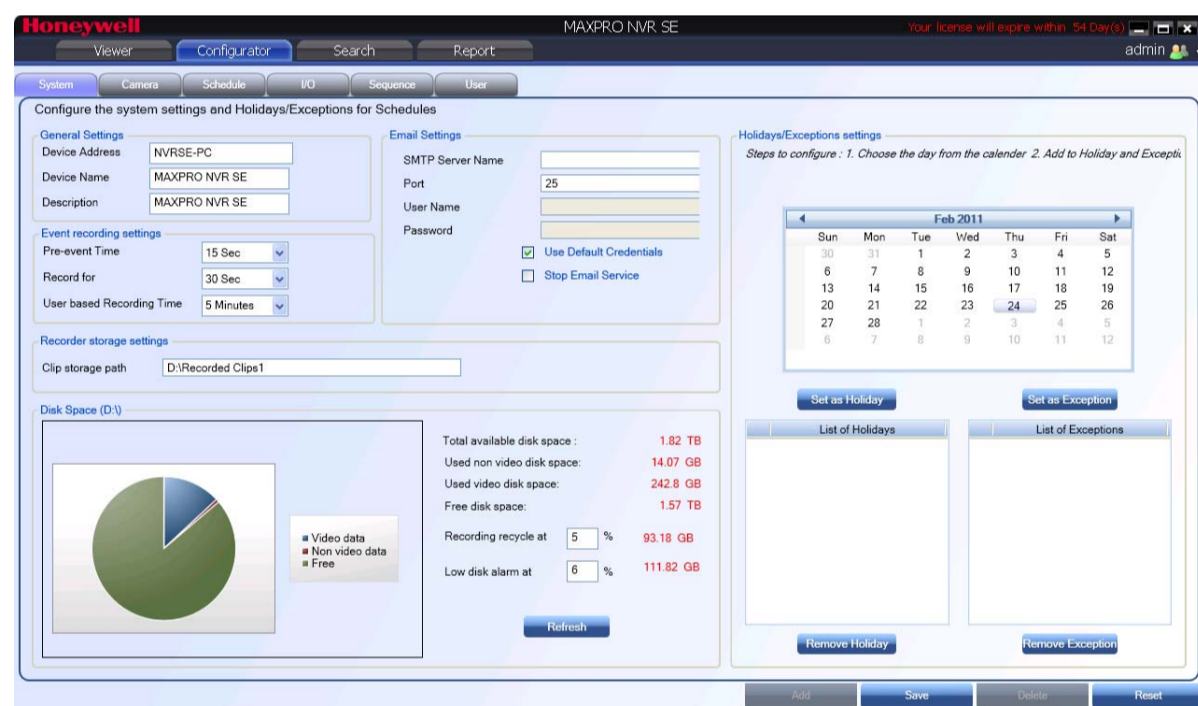
Use the following table to configure your system settings. Remember to click **Save** to save your settings.

| Area	Description
General Settings	Do not modify the Device Name unless you have changed the computer name; then it should match the Windows computer name.
Event Recording Settings	To configure times when you use video motion detection recording only, select the pre-event time and how long you wish to record. You can also set a user based recording time; that is, start and stop the recording through the user interface.
Recorder Storage Settings	The path for storing the video clips on the NVR is set to F drive **Video Storage**. Do not change this setting unless a valid video storage location is identified. By default the F drive is selected.
Disk Space	Displays the total available storage space and current usage. You can change the Recording recycle threshold (**5** to **98**) and the Low disk alarm threshold (**6** to **99**) as required. The Low disk alarm threshold must be the greater of the two.
Email Settings	Configure the SMTP server settings for e-mail communication of events.
Holidays/Exceptions Settings	Set schedule-based video recordings for holidays and exceptions. To set a recurring scheduled recording, see *9 Configuring Schedules, Sequences, User Roles*.

8 Setting Up the Cameras

You can add and configure Honeywell IP cameras with the MAXPRO NVR SE.

1. Click the **Camera** tab, then click 🔍 to automatically discover the cameras in the network.
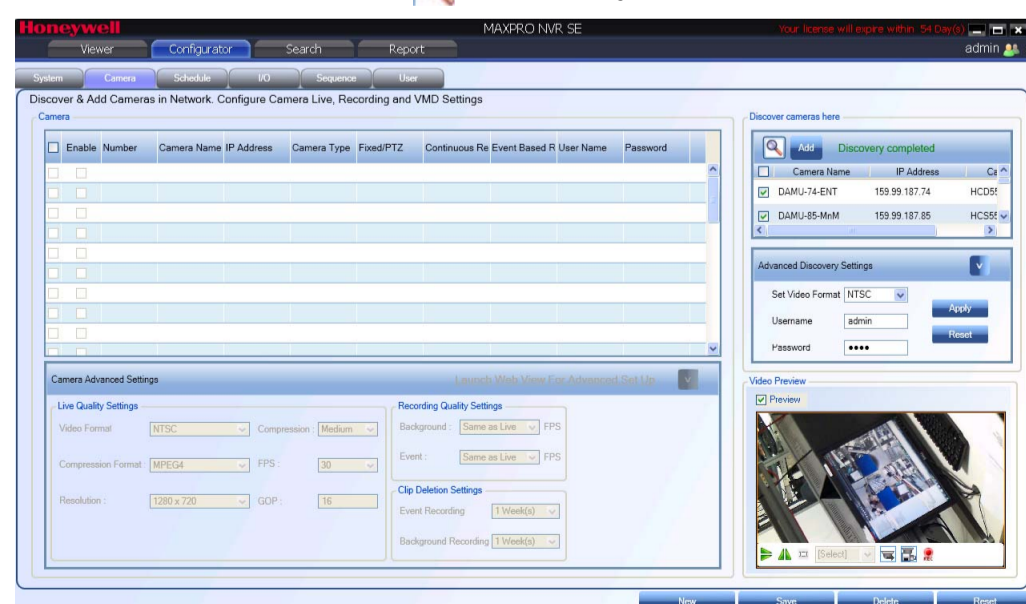
2. Click **Add** to add all the discovered cameras. To add only specific cameras, first clear the check boxes of the cameras you do not wish to add.
3. In the **Cameras** pane, select a camera to change the default parameters, following the table below.

Field	Description
Enable/Disable	Used to enable or disable a camera for recording and live view.
Number	Displays the camera number.
Camera Name	Type a new camera name (maximum 18 alphanumeric characters).
IP Address	Displays the default IP address of the camera. **Note** This is the IP address the NVR will use to connect to the camera. Changing this value does not change the actual IP address of the camera.
Camera Type	Displays the type of camera.
Fixed/PTZ	Indicates whether the camera is a PTZ or fixed camera.
Continuous Recording	The default is **24/7** recording. Select a different option from the drop-down list.
Event Based Recording	Select an event based recording from the drop-down list. The default is **None**. Choose a schedule if, for example, you are doing motion-based recording only.
User Name	Select to change the default user name (**admin**) for the camera.
Password	Select to change the default password for the camera.
Camera Advanced Settings	1. Click 🔲 to open the **Camera Advanced Settings** pane. This pane is disabled when there are no cameras available in the system. 2. Click **Launch Web View for Advanced Set Up.** Use the web client to view IP and firmware settings, bit rate statistics, camera exposure, day night and white balance settings, and set up video motion detection and other analytic events. **Note** Camera compression settings should be set from the MAXPRO NVR software as changes made in the web client will be overwritten.
Live Quality Settings	Select to change the following: **Video Format**: Select **NTSC** or **PAL** as applicable. **Compression Format**: Select to change the default format. **Resolution**: Select to change the default resolution (camera model dependent). **PTZ Sensitivity**: For PTZ cameras, select from **Low**, **Normal**, **High**, **Maximum**. **Compression**: Select to change the default **Medium** ratio. The higher the compression, the lower the bit rate, the lower the image quality and the more processor power is consumed. **FPS**: For live streaming, default frame rates are **30 FPS** (NTSC) / **25 FPS** (PAL). **GOP**: Select a new GOP from **0** to **100** (default **16**). For example:

Live settings		Record quality resulting FPS		
FPS	GOP	Every I frame	Every 2nd I frame	Every 3rd I frame
30	2	15	7.5	5
30	16	1.88	0.94	0.63
30	30	1	3.5	0.33

Field	Description
Recording Quality Settings	Select the FPS for Background and Event based recording.
Clip Deletion Settings	Select the Event Recording or Background Recording clip deletion duration.

4. To delete a camera, select the clear the check box next to that camera, then click **Delete** and **Yes**.
5. Click **Save**. If you have changed the Camera Advanced Settings, click **Apply** first.

9 Configuring Schedules, Sequences, User Roles

Tab	Description
Schedule	Create schedules for camera(s) to record video at recurring intervals for continuous recording or event based recording (for example, motion event). There are four default schedules: **24 x 7**, **Weekday**, **DayTime**, **NightTime**.
Sequence	Create a set of live video streamed one after the other from two or more cameras for a specified time interval. You can select cameras or presets to be included in a sequence. You can also specify the time interval (**Dwell Time (Sec)**) for which the video from each camera or preset must be displayed before advancing to the next camera.
User	The default user (**admin**), that was created when the MAXPRO NVR SE software was installed, has the role **NVRAdministrator**. The NVRAdministrator has access to all tabs. The Supervisor user has access to View, Search and Report tabs. The Operator user has access to only the View tab. Events are associated to users on the **User** tab.

Installing MAXPRO NVR SE on a Client Workstation

1. Insert the MAXPRO NVR SE DVD into the DVD drive. The setup runs automatically. If it does not run automatically, browse to the Setup folder on the DVD, then double-click **Setup.exe**.
2. At the Welcome screen, click **Next** to see the **License Agreement** dialog box.
3. After you accept the terms of the license agreement, continue to click **Next** to progress through the Setup Wizard.
4. On the **Validation of User Credentials** dialog box, select the **Domain Name/Host Name**, then type in the **User Name** and **Password** (defaults are **admin** and **Trinity** respectively).
5. On the **Installation Type** dialog box, select **Client Installation** to install Client, Trinity Framework, and Adapters. When you are prompted for the MAXPRO NVR SE Server name, if you do not know it or if the server is not accessible, type in the local host name (for example, localhost).
6. Click **Finish**, then click **OK** to reboot the computer to complete the installation.

Installing Additional Hard Drives

1. After taking proper safety measures and grounding yourself to prevent electro static discharges (ESD), unlock and remove the front panel cover. Set aside.
2. Power down the unit through Windows (**Start ➤ Shutdown…**). Allow at least 10 seconds.
3. The first drive is the one on the left on the top row of the drive bay and is numbered 1 (see *Mounting the MAXPRO NVR Unit in a Rack*). Ensure that you fill the free slots from right to left in sequence; that is, if slots 3 and 4 are empty, fill slot 3 first.
4. Remove the hard drive tray chassis. Push the button on the side of the hard drive tray down to release the locking handle and pull the hard drive tray out of the chassis.
5. Insert each new hard drive into an empty hard drive tray and fasten with four of the spare hard disk screws supplied with the chassis.
6. Slide the hard drive tray(s) back into the chassis and secure by snapping the locking handle into place.
7. Replace the front panel cover and turn the two bezel key locks to secure the cover.

Configuring a New Hard Drive

1. Power up the unit.
2. On your computer desktop, go to **My Computer ➤ Manage ➤ Computer Management ➤ Disk Management**.
3. To extend the volume:
   a. Right-click the **Disk X** box (left hand side) of the hard drive disk you want to extend (typically, drive F: Video Storage). Select **Extend Volume…**, then follow the Wizard.
   b. On the **Select Disks** dialog box, move the appropriate disk(s) to the **Selected List**.
   c. At the prompt, click **Yes** to convert the basic disk(s) to dynamic disk(s).
4. The configured disks populate on the **Computer Management** window. Each properly configured disk shows as **Dynamic**, the bar to the right turns color, and is labeled **Video Storage (F:)**.
5. Confirm the hard drive configuration on the **Configurator** tab ➤ **System** tab. Verify that the **Clip storage path** displays **F:** and the Disk Space storage limits are displayed in red.
6. Reboot the unit.
7. View the Total available disk space on the **Configurator** tab ➤ **System** tab to ensure the new drive is recognized as new storage space.

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