Uniden®

ProSeries NVR
INSTALLATION GUIDE

Pro12800N0-4K
Pro6400N0-4K
Pro3600N4-4K
Pro1600N3-5MP
Pro800N2-5MP
Pro800N2-5MP
Pro1600N2-4K/PRO800N2-4K

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Thank you for purchasing this Uniden NVR high-quality video security system. This manual refers to the following models:

- Pro12800N0-4K
- Pro6400N0-4K
- Pro3600N4-4K
- Pro1600N3-5MP
- Pro800N2-5MP
- Pro800N2-5MP
- Pro1600N2-4K/PRO800N2-4K

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Uniden constantly works on improving our products. This includes updating our documentation with the latest firmware changes. Go to www.uniden.com to find the latest version of all documentation.

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UNIDEN PROSERIES NVR INSTALLATION GUIDE

OVERVIEW

This Installation Guide helps the installer to install and initially configure Uniden's ProSeries series NVR surveillance systems. It provides basic instructions to install the NVR receiver; it does not provide detailed instructions on how to use the firmware. For detailed firmware operation, refer to the online ProSeries NVR User's Manual at www.uniden.com. A series of informational articles can also be found at support.uniden.com/Pro-series.

This Installation Guide uses ProSeries NVR models (version 2.0) with an operating interface of NVR 64 channels as a generic example for intallation procedures. Details vary according to the specific model being installed.

PROSERIES NVR INSTALLATION GUIDE ATTRIBUTES

This Guide provides a decription of the various Uniden ProSeries NVR models' hardware. It also provides a basic installation checklist with accompanying procedures for each step.

The Installation Guide text confirms to the following nomenclature:

- *Italic* text indicates a screen name, menu selection, etc. It is usually prefaced with "Select."
- **BOLD** text indicates an action, such as Save, Copy to, etc. It is usually prefaced with "Click."

REQUIREMENTS

- Access to standard AC outlet (AC100~240V, 50Hz~60Hz)
- Phillips-head screwdriver may be required
- HDMI 1080p monitor (for initial boot up)
- External PoE network switch to add more than 8 cameras (ProSeries series 16 ~ 128 channel NVRs)
- Camera network cables if devices purchased separately (only included in Pro Series kits)
- Optional 12VDC power supply (if PoE not used)
- HDMI or VGA cable (HDMI cable included in Pro Series kits)
- Western Digital Purple or Seagate SkyHawk surveillance hard drives (for systems containing more than 8 cameras)

FIRMWARE AND DOCUMENTATION UPDATES

Because Uniden strives to provide the latest technology and quality in all of its products, firmware updates may be available with no prior notice. Check for updates at support.uniden.com/pro-support. Update the firmware manually either locally or remotely through a web browser.

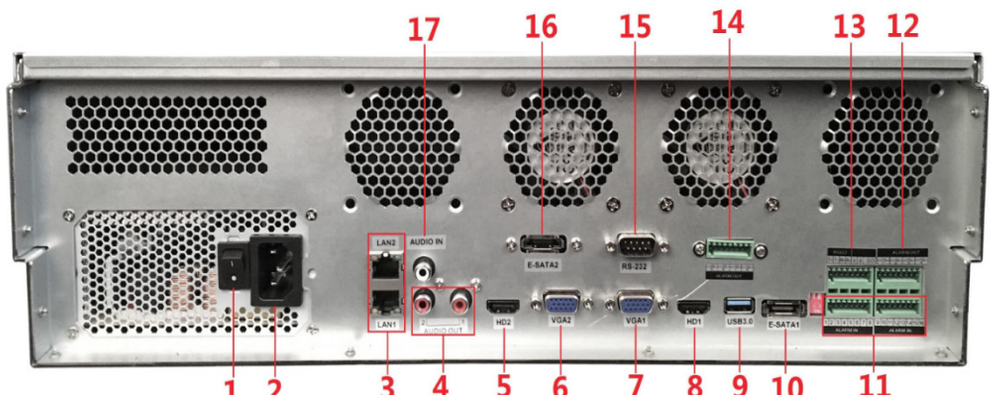
DEFAULTS

- Administrator user name: admin.
- Administrator password: No password; leave blank.
- LAN1 IPv4 address: DHCP auto enabled
- LAN2 IPV4 address: 192.168.2.189 (if equipped with second network port)
- Default video resolution: 1080p
- Factory-installed hard drives are formatted and ready to record.
- Daylight savings time enabled; however, the start and stop dates must be set.
- Unpopulated hard drive connections will trigger an "unpopulated hard drive" alarm. See page 25 for instructions on how to turn it off.

FRONT PANEL (PRO12800N0-4K)

REAR PANEL INTERFACES

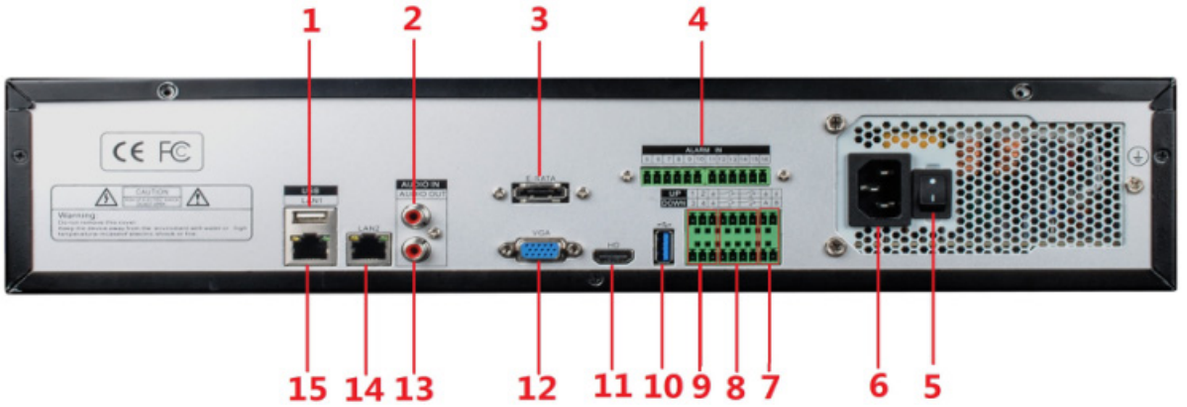
PRO12800N0-4K



1. Power Switch
2. 110-220VAC Power Supply Plug
3. LAN1/LAN2 Interface
4. Audio Output
5. HDMI Video Output 2
6. VGA Video Output 2
7. VGA Video Output 1
8. HDMI Video Output 1
9. USB 3.0
10. E-Sata Interface 1
11. Alarm Input
12. Alarm Output (1, 2, 3, 4)
13. RS422 Interface
14. Alarm Output (5, 6, 7, 8)
15. RS232
16. E-Sata Interface 2
17. Audio Input

Cameras connect to LAN1 (PoE gigabit network switch)

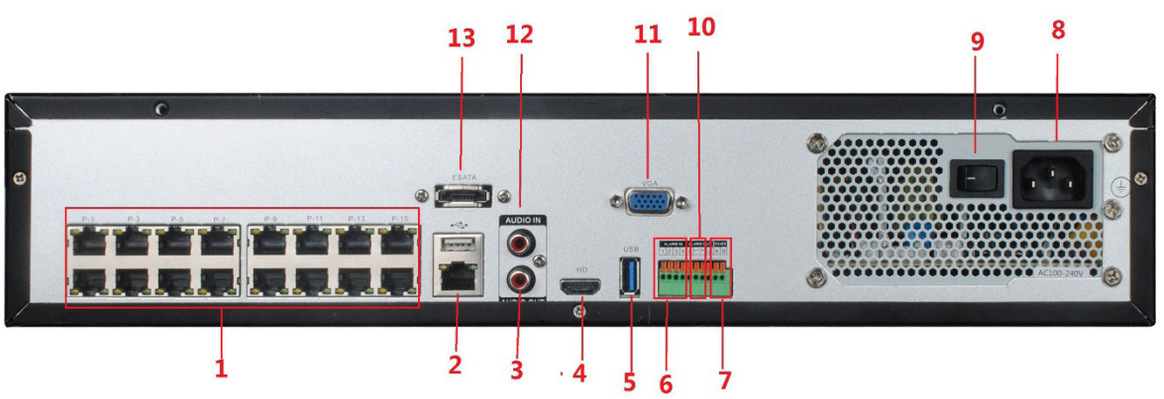
PRO6400N0-4K



1. USB 2.0
2. Audio Input
3. E-SATA
4. Alarm Input (5-16)
5. Power Switch
6. 110-220VAC Power Supply Plug
7. RS485
8. Alarm Output
9. Alarm Input (1-4)
10. USB 3.0 Alarm Output
11. HDMI Video Output
12. VGA Video Output
13. Audio Output
14. LAN 1
15. LAN 2

Cameras connect to LAN1 (PoE gigabit network switch)

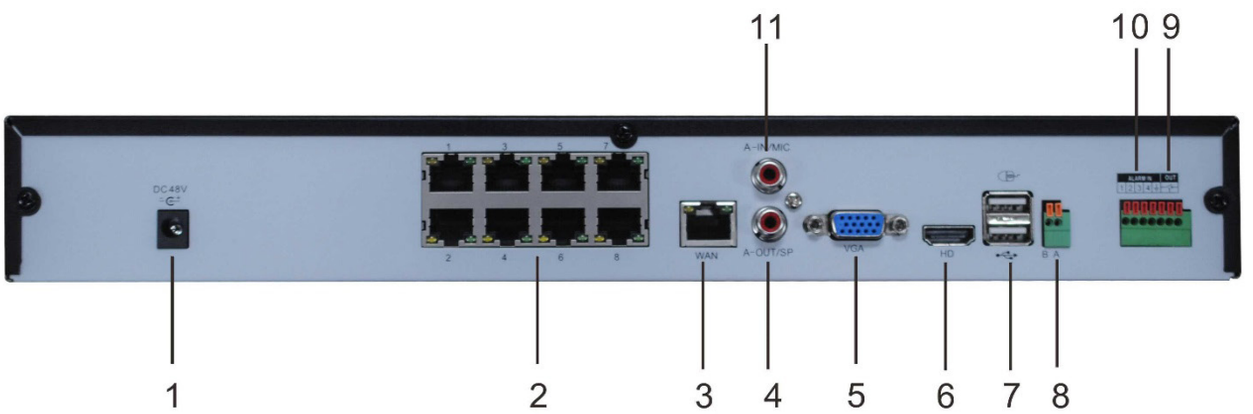
PRO3600N4-4K



1. PoE Camera Ports
2. RJ45 Network Interface (LAN1)/ USB2.0
3. Audio Output
4. HDMI Video Output
5. USB 3.0
6. Alarm Input
7. Alarm Output
8. RS485 Interface
9. Power Switch
10. 110-220VAC Power Supply Plug
11. VGA Video Output
12. Audio Input
13. E-SATA

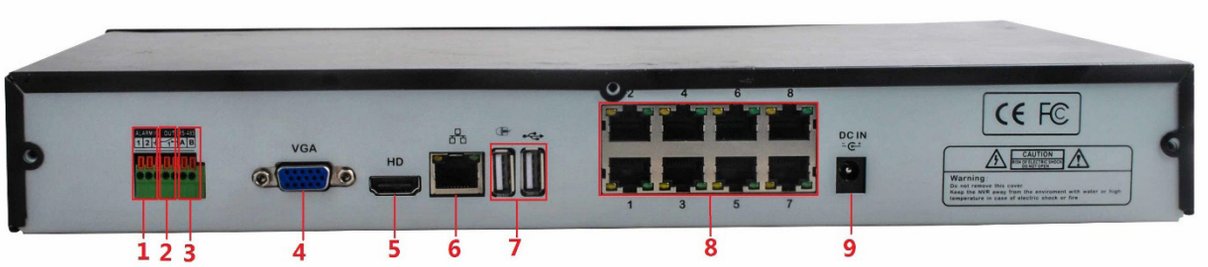
Cameras connect to LAN1 (PoE gigabit network switch)

PRO1600N3-5MP



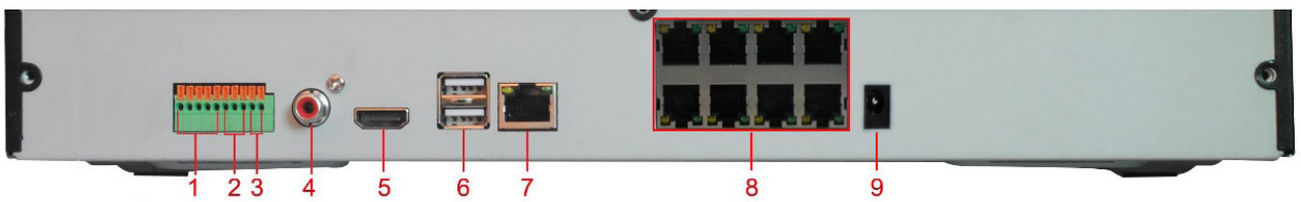
1. DC48V
2. PoE Camera Ports
3. RJ45 Network Interface
4. Audio Output
5. VGA Vido Output
6. HDMI Video Output
7. USB 2.0
8. RS485
9. Alarm output
10. Alarm Input
11. Audio Output

PRO800N2-5MP



1. Alarm Input
2. Alarm Output
3. RS485
4. VGA Video Output
5. HDMI Output
6. RJ45 Network Interface
7. USB 2.0
8. PoE Camera Ports
9. DC48V

PRO1600N2-4K/PRO800N2-4K



1. Alarm Input
2. Alarm Output
3. RS485
4. Audio Output
5. HDMI Video Output
6. USB 2.0
7. RJ45 Network Interface
8. PoE Camera Ports
9. DC15V

INSTALLATION

INSTALLATION REQUIREMENTS

Unplug the device from power before opening the device case.

- Install the device in a horizontal position.

Do not install the device in a vertical or tilted position.

- The device's operating temperature range is 32˚F to 122˚F (0˚C to 50˚C).

Do not locate the device in places with high temperature, humidity, dust, or smoke.

- The device is not water-resistant or waterproof. Do not place objects containing liquid such as a glass or mug on the device.
- In order to ensure normal heat dissipation, install the device in a well-ventilated area.
- Use Uniden's recommended specific surveillance hard disk drives (Western Digital Purple or Seagate SkyHawk surveillance hard drives) when adding a hard disk drive.
- Verify that the NVR power supply and AC outlet are reliably grounded.

HARD DISK INSTALLATION

CAUTION: IF YOUR SYSTEM HAS LESS THAN 128 CHANNELS, CONFIRM THAT THE DEVICE IS POWERED OFF AND UNPLUGGED FROM POWER BEFORE INSTALLING ANY HARD DISK DRIVES.

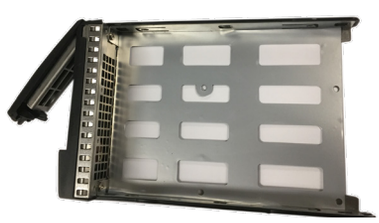
Install optional 1, 2, 8, or 16 HDDs into the device, depending on specific model requirements.

PRO12800N0-4K HARD DISK DRIVE INSTALLATION

This is a hot-swappable model - no need to power down.

1. Press the red release button on an HDD slot and pull out the hard disk tray.

Release Buttons



Hard Disk Drive Tray

2. Remove the hard disk from its box and slot it into the tray. Use screws to attach the hard disk to the tray.
3. Insert the hard disk tray into the empty HDD slot.

PRO3600N4-4K/PRO3600N8-4K AND PRO6400N0-4K HARD DISK INSTALLATION

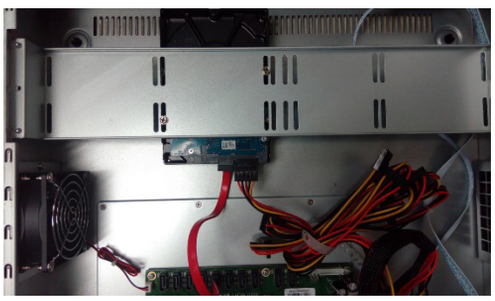
1. Remove the cover from the NVR by unfastening the screws on the case cover.
2. Fix the HDD to the HDD bracket with screws. If installing the HDD on the under bracket,

remove the upper bracket.

3. Connect the HDD power lines and data cable.
4. Close the cover and fasten it with the screws.

Disassemble the case

Fix hard disk



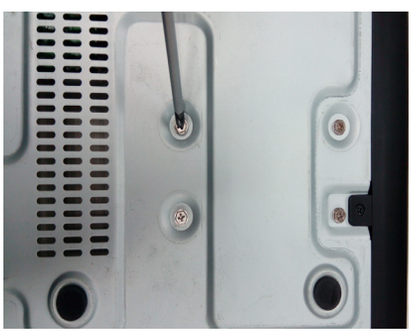
Connect hard disk lines

Lock the case

PRO SERIES 8 AND 16 CHANNEL NVR HARD DISK INSTALLATION

1. Unscrew the upper cover screws and open the cover.
2. Fix the hard disk to the metal NVR base with screws.
3. Connect the HDD power lines and data cable.
4. Secure the cover again.

Open the cover



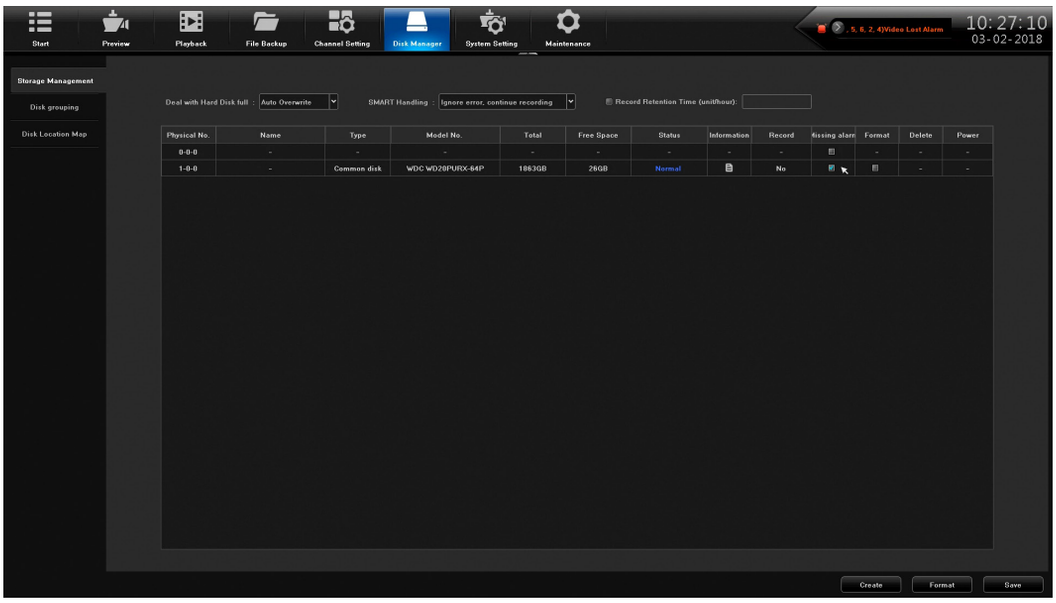
Install HDD

Connect HDD power lines and data cable

CLEAR DISK MISSING ALARM

Clearing the alarm silences it; however, it does not prevent the alarm from sounding again.The only way to fully clear the alarm is to correct the condition that caused the alarm in the first place.

1. From Disk Manager/Storage Management, uncheck any Missing Alarm column boxes.

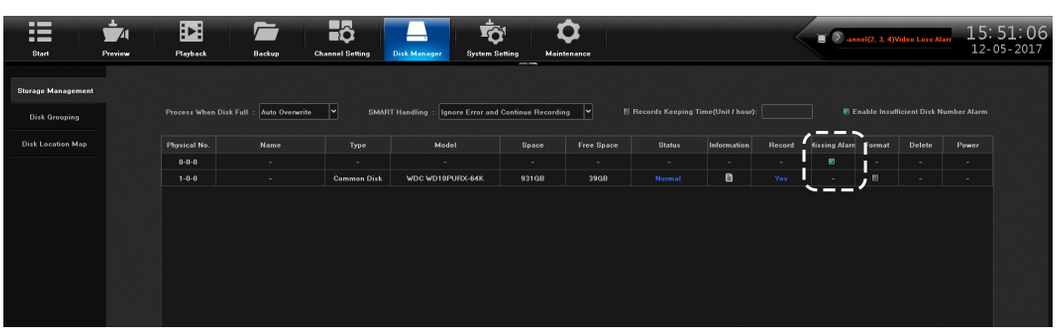


2. Click **Save**.

DISABLE DISK MISSING ALARM

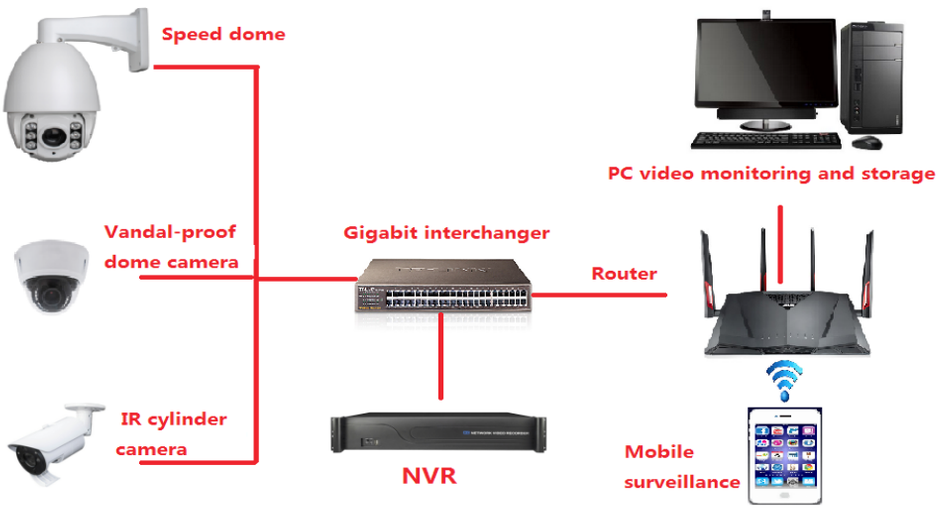
Disable this alarm for any HDDs that are not present.

1. Login to the NVR system.
2. Select *Disk Manager.* The *Storage Management* side tab screen should display the physical drives connected to the system.
3. Each installed HDD will have information populated along its row. If a row is not populated with a HDD, uncheck the box in the *Missing alarm* column to disable this alarm for this uninstalled HDD.



4. Repeat this procedure for every installed HDD.
5. Click **Save** in the bottom left corner.

NETWORK CONNECTION SCHEMATIC DIAGRAM



Although it is not required, at this point in the installation you may run cables and install the cameras.

If installed outdoors, the cable and all cable connections must be routed inside the wall.

INITIAL TURN UP

RECOMMENDED TURN UP ORDER

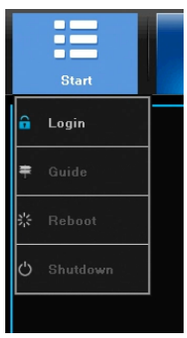
INITIAL SYSTEM SETUP	
_____	In the Guide (see page 18), set: • Default Language • Display Resolution (Default - 1920 x 1080) • LAN1 and LAN2 Network Settings When finished, select *Next time no longer display* and click **Finish**.
_____	Go to *System/Time Setting, Device Time tab* (see page 19) and set: • Device Time • Date Format • Time Zone • Enable Daylight Savings Time and set start and end dates. • Network Time Protocol (NTP) is enabled by default. Change to internal time source if desired (see page 19). Turn off if the customer does not want the recorder to go out on the internet.
_____	The recording schedule default is for all cameras to record all the time (*Channel Setting/Schedule Setting/Recording Setting*). Set up specific recording schedules (see page 20).
_____	From *System Setting/User Management*, set up new users and change the Admin password (see page 19).
_____	From *System Setting/Alarm Management/Alarm Input* (or *Alarm Output*) top tab, set up alarm inputs and outputs (see page 22).
_____	From *System Setting/Network Parameter/Email Setting* top tab, set up email notification (see page 23).
_____	From *System Setting/Network Parameters/DDNS Setting* top tab select *Enable DDNS* to set up remote DDNS access (see page 24).
_____	From *Maintenance/System Information/Device Information* top tab, update firmware if desired (see page 25). (The device will automatically reboot after upgrade.)
HARD DISK DRIVE (HDD) SETUP	
_____	Go to *Disk Manager/Storage Management* and uncheck *Missing Alarm* for all non-installed HDDs (see page 25).
_____	From *Disk Manager/Storage Management*, verify HDD quantity and sizes (see page 26). Shut down and add HDDs if needed.
_____	Set up Redundent Array of Independent Disks (RAID) array (for systems 36 channels or greater) (see page 26). • Set up RAID type and format. • Assign cameras to HDDs/RAID. ***NOTE: Pre-installed HDDs are factory-formatted and ready for use.***
ADD IP CAMERAS	
_____	Plan and set up IP addresses (see page 29).
_____	Add IP cameras (see page 29). Change IP address of each camera to put it in the same range as the network connector (LAN1 or LAN2) that the camera is connected to (see page 29). *Connect Success* displays.
_____	Add Channels to Preview Groups From *Channel Setting/Channel Grouping*, set up *Preview Groups* (see page 31

_____	From *Channel Setting/Channel Grouping/Tour* (right column), set up *Tour Groups* if desired (see page 31).
_____	Check and adjust camera images for focus and field of view in *Preview* (see page 33).
_____	From *Preview,* set up *PTZ Presets* (page 33), *Cruise* (page 34 if applicable), and *Pattern* (page 34 if applicable).
_____	Set individual camera settings for each channel if desired (see page 35): Other areas to set up include but are not limited to: • Motion Detection (From *Channel Setting/Channel Parameter/Motion* top tab, page 37) • Privacy Mask (From *Channel Setting/Channel Parameter/Privacy Mask* tab, • page 38) • Snapshot Parameters (From *Channel Setting/Channel Parameter/Snapshot Parameters* tab, page 37) • Video Tampering (From *Channel Setting/Channel Parameter, Video Tampering* tab, page 39

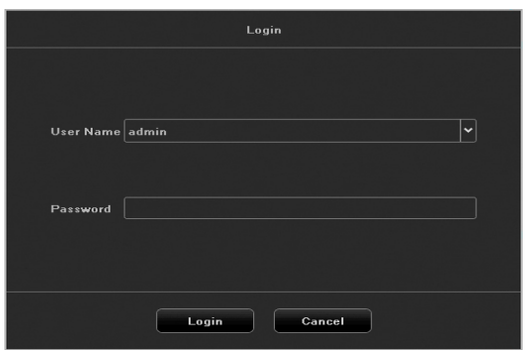
INITIAL SYSTEM SETUP

LOGIN SYSTEM

1. Click the icon; a drop-down menu displays. Options are:
   - **Login:** Logs the current user into the system. (After login, this selection changes to **Logout**.)
   - **Guide:** Configure the system.
   - **Reboot:** Restart the device.
   - **Shutdown:** Closes ProSeries operations and powers down the device.
2. Click **Login**; the Login interface displays.



Dropdown Menu

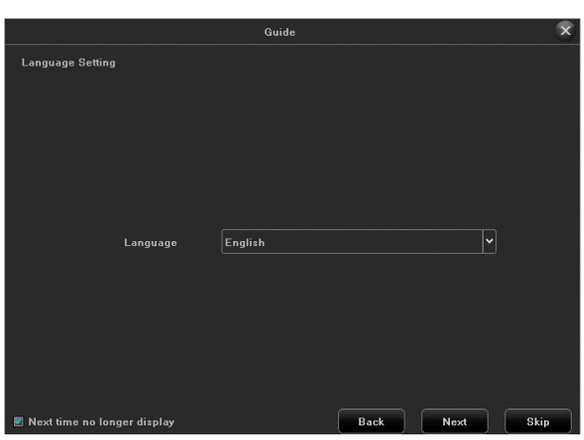


User Login

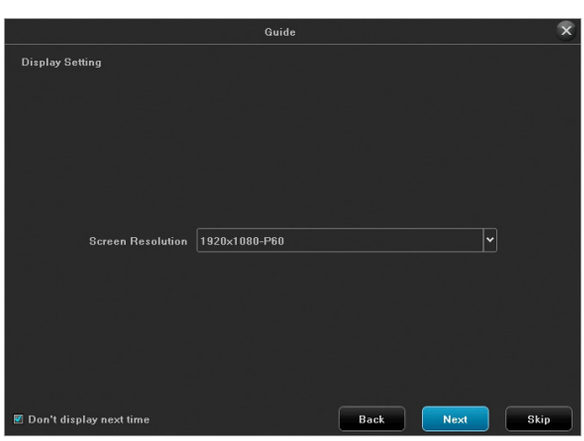
3. Enter user name (default user name: admin). Leave password field blank if using default user name.

INITIAL SETUP

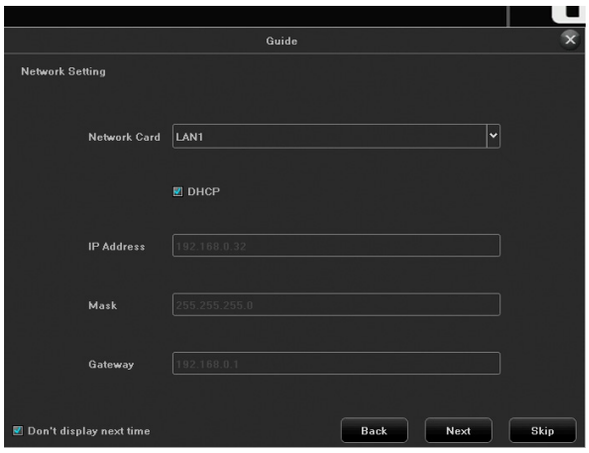
1. Click the icon again and select **Guide**. Go through these screens to configure the system:
   - *Language setting:* Select user language (Default: ENGLISH) as shown in figure 5.3. Click **Next**.
   - *Display setting:* Select the screen resolution (Default: 1920x1080-P60). Click **Next**.
   - *Network setting:* Check the dropdown list for *Network Card*. If you only have one LAN port, do not set a static IP address and leave DHCP enabled. If you have more than 1 LAN port, disable DHCP and write down the IP address, mask, and gateway that the DHCP server/router assigns as shown in figure 5.5. Click Next.
   - *Uniden ProSeries:* QR codes display to download the Uniden ProSeries a. Apple QR code downloads app for iOS version and Android QR code downloads the Android version as shown in figure 5.6.



Language Setting



Display Setting



Network Setting

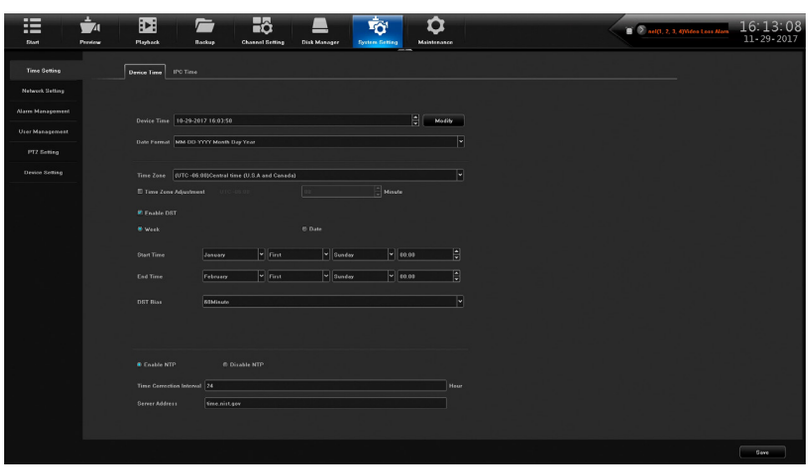
Uniden ProSeries QR Codes

2. Check the *Next time no longer display* box in lower left corner. This series of screens will not display for further startups.
3. Click **Finish**.

SYSTEM SETTING

TIME SETUP

Select the *System Setting* tab. The *Time Setting* side tab displays as the default screen.



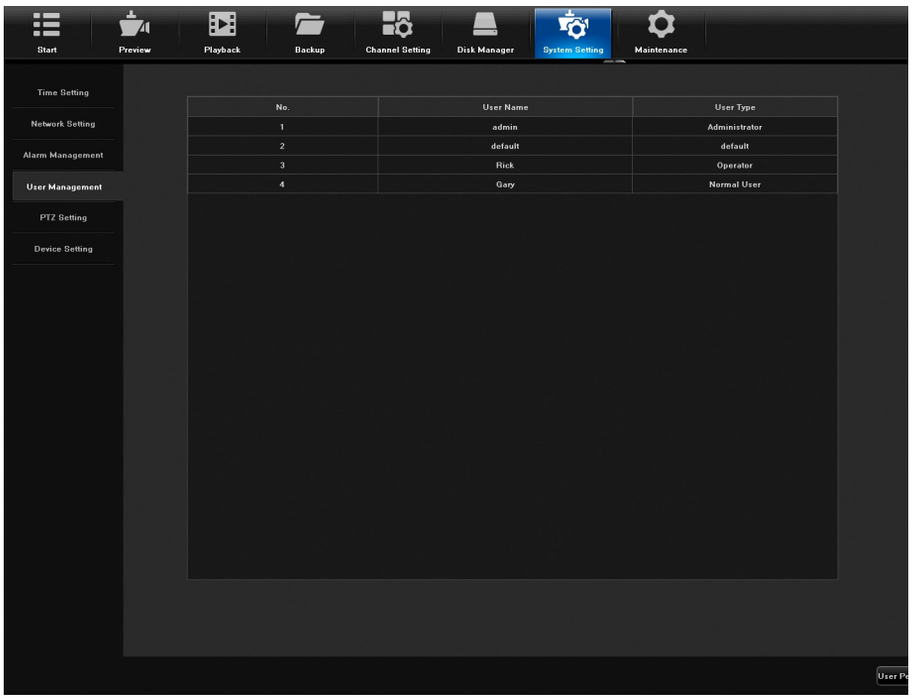
1. Select the *Device Time* top tab and manuallty set the device clock.
   - **Device Time:** Verify and adjust the date and time if needed (Default - Central).
   - **Time zone:** Verify and adjust time zone if needed.
   - **Enable DST:** Verify Daylight Saving Time setting; verify start and end dates.
   - **Enable NTP Time Sync:** Recorder can be synchronized to a standard NTP time source such as a server, a network time clock, or an internet time source (default).

If Server Address is a name and not an IP address, make sure the DNS1 and DNS2 fields in System Setting/Network Parameter are correct.

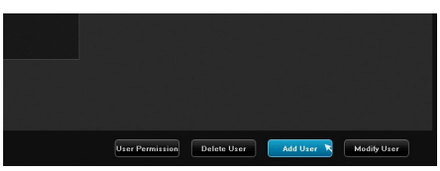
2. Click Save icon to save the settings.

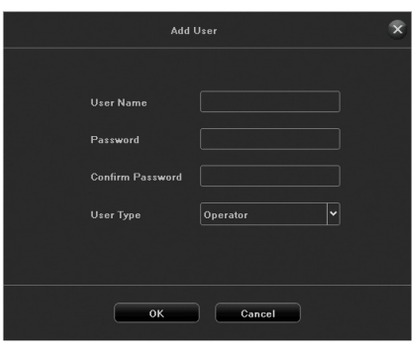
NEW USER/PASSWORD SETUP

1. Go to *System Setting* and select the *User Management* side tab. A list of users displays.



2. Click **Add User** on the bottom right side of the screen. The *Add User* screen displays.





3. Enter the information for a new user (a popup keyboard displays) and select the **Return** button to save the information (↵).

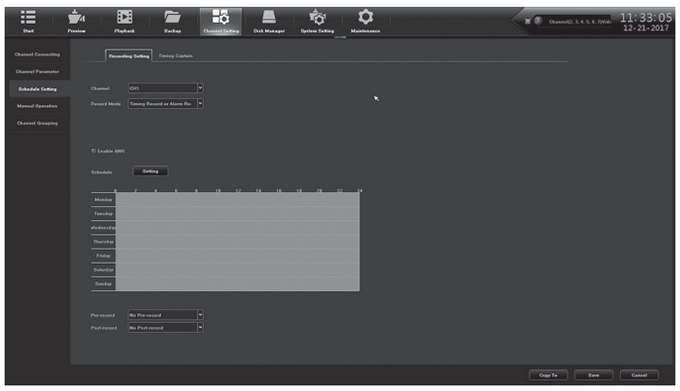
4. The new user displays on the *User List*.

RECORDING SCHEDULE SETUP

The default recording schedule is for all cameras to record all the time. Set up a recording schedule.

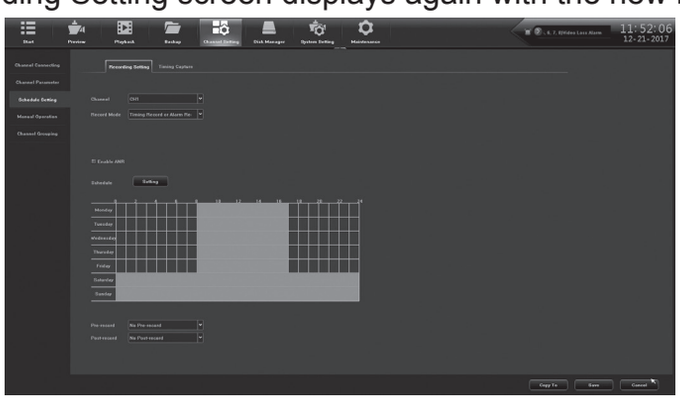
Basic Schedule Setup

1. Select Channel Setting/Planning/Recording Setting. The default recording schedule displays all channels recording all the time.



2. Select Setting. The Arming Schedule popup screen displays.

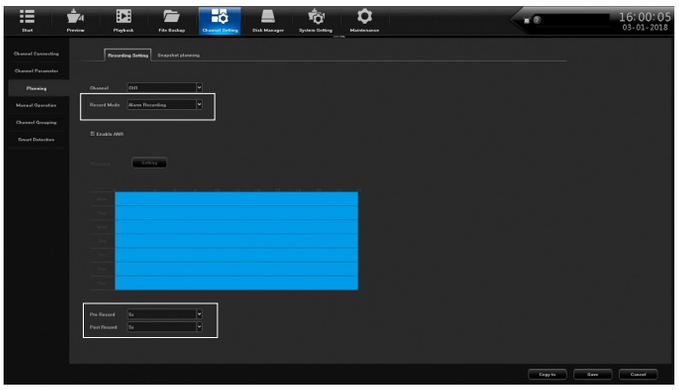
3. Select the day of the week to set, then set up to 8 segments for recording in military time (24-hour) format (00:00 - 23:59). Copy the scheduled recording time to all days or to specific days. Select OK. The Recording Setting screen displays again with the new recording schedule.



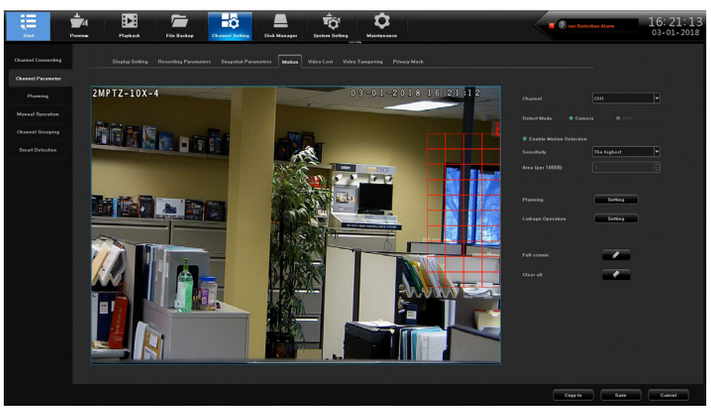
4. If you have an IP camera with an SD card, check Enable ANR (Automatic Network Restoration) to buffer recording from the SD card.

Motion Detection Only Recording Setup

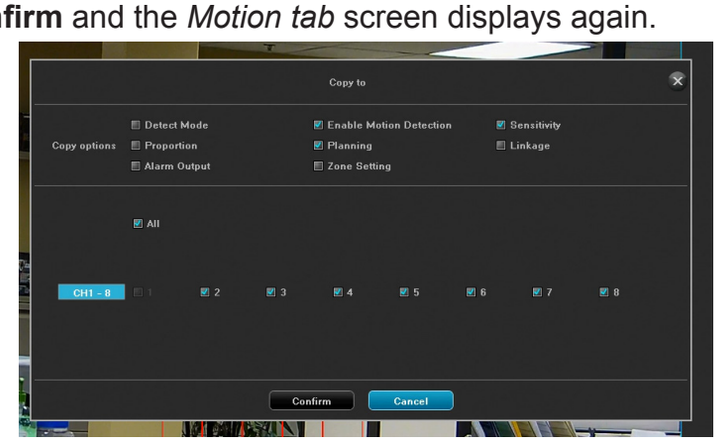
1. From Channel Setting/Planning, select Alarm Recording for Record Mode.If you want the system to save any seconds before or after the recording time, select the number of seconds to save through Pre Record and Post Record.



2. Select *Save*, then click **Exit** to return to the Recording Setting screen.
3. Go to *Channel Setting/Channel Parameter/Motion* tab. For each channel:
   - Enable Motion Detection
   - Select *Full Screen*. A red grid displays. This grid shows the areas that WILL trigger motion detection. If you only want a specific area of the camera's view to trigger motion detection, select *Clear all*, then click and drag the curser over the area you want to trigger recording. This creates a specific red grid. Everything outside of the red grid will NOT trigger motion detection.



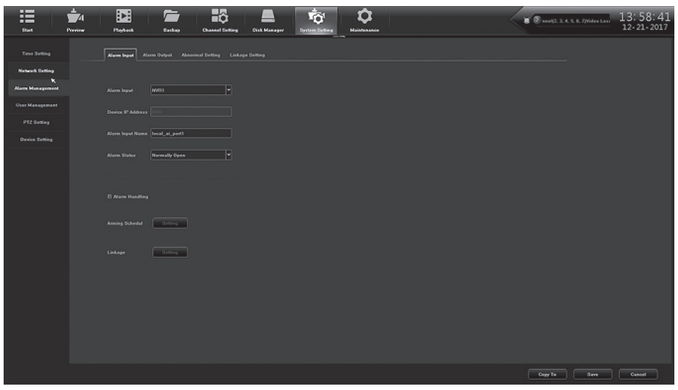
4. Click **Save**.
5. If you want to copy that channel's settings to another channel, Click **Copy** to at the bottom of the screen. The *Copy to* popup screen displays
6. Uncheck the options you don't want to copy. Select *All* (copy to all channels) or select specific channels. Click **Confirm** and the *Motion tab* screen displays again.



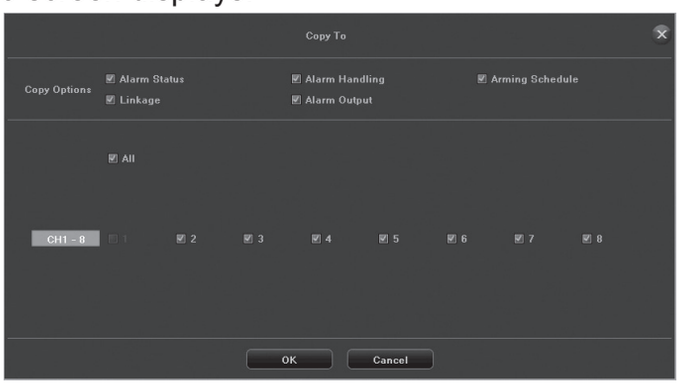
SET UP ALARM INPUTS/OUTPUTS

Alarm Inputs

1. Go to *System Setting/Alarm ManagementAlarm Input,* top tab.



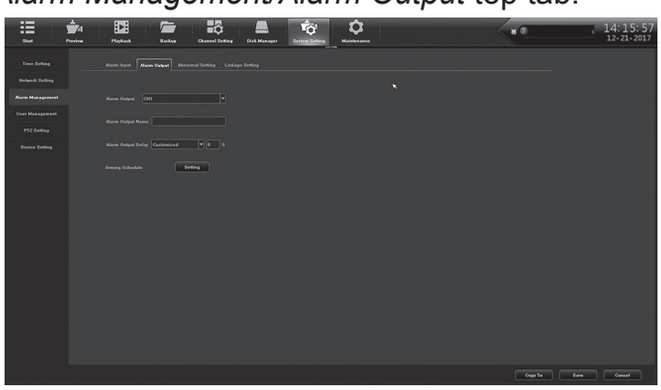
2. Complete the fields. Click **Save** if your are finished. Click **Copy To** to copy the setting to other channels. The *Copy To* screen displays.



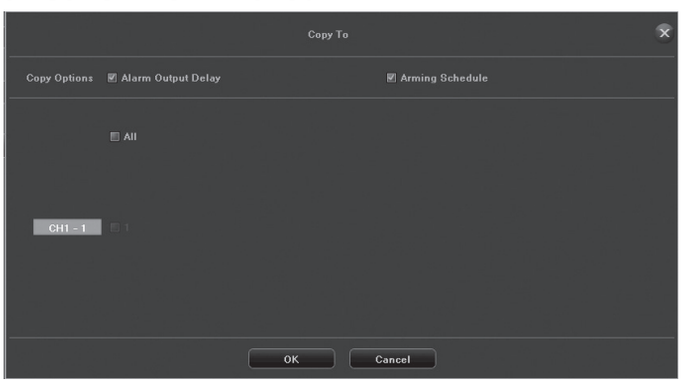
3. Uncheck the options you don't want to copy. Click **All** (copy to all channels) or select specific channels. Click **OK** and the Alarm Input tab screen displays again.

Alarm Outputs

1. Go to *System Setting/Alarm Management/Alarm Output* top tab.

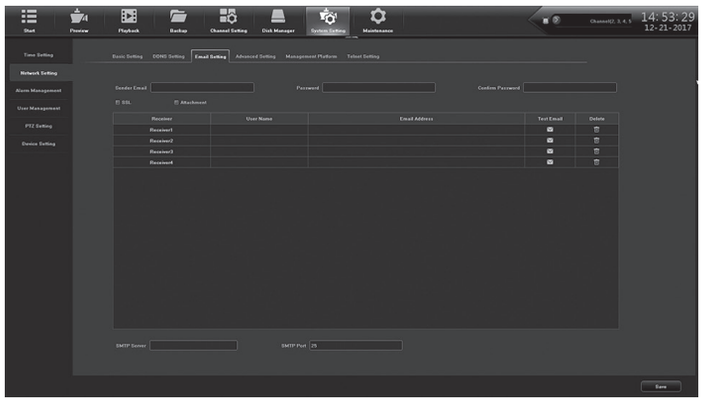


2. Complete the fields. Click **Save** if your are finished. Click **Copy To** to copy the settings to other channels, and then click **Save** when finished.



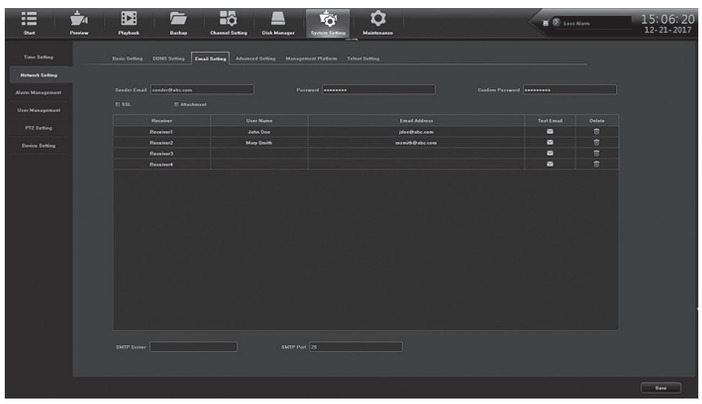
SET UP EMAIL NOTIFICATION

1. Go to *System Setting/Network Setting/Email Setting* top tab. The *Email setting* screen displays.

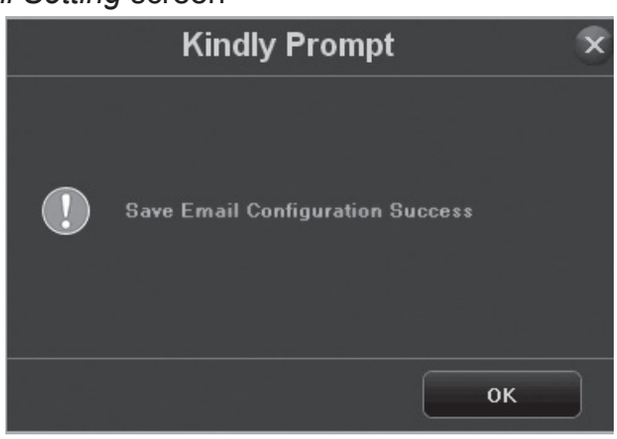


2. Fill in fields using the pop-up keyboard as needed.

   Double-click the User Name and Email Address fields to open the popup keyboard.



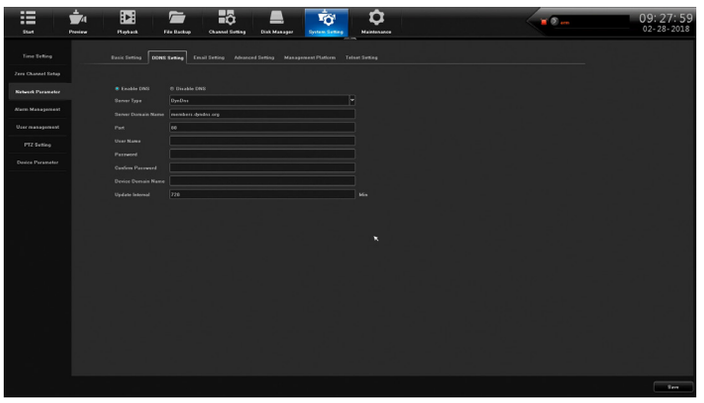
3. Complete the fields. Click **Save** when your are finished. A confirmation screen displays. Click **OK** to return to the *Email Setting* screen



SET UP REMOTE DDNS ACCESS

The Dynamic Domain Name System (DDNS) maps internet domain names to IP addresses.If the IP addresses change, the software contacts the DDNS service to update the account with the new IP address.

1. Go to *System Setting/Network Parameter/DDNS setting* tab.



2. Enter the other fields as needed:
   - Server Type
   - Server Domain Name
   - Port
   - User Name
   - Password/Confirm Password
   - Device Domain Name
   - Update Intercal (in minutes)
3. Click **Save** then **Confirm** when complete.

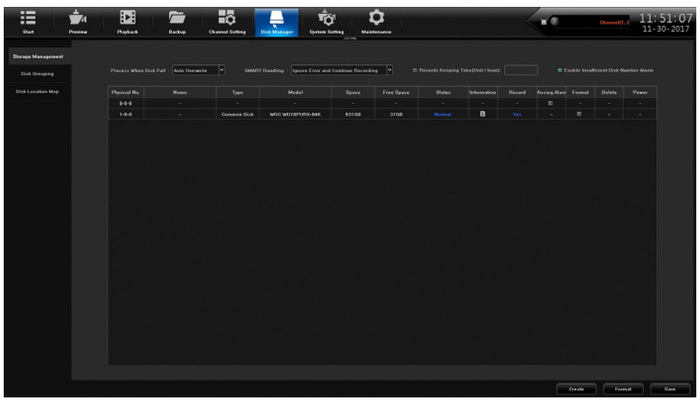
CHECK FIRMWARE VERSION; UPDATE IF NEEDED

1. Go to *Maintenance/System Information/Device Information* top tab. The current firmware version and description display.
2. Go to support.uniden.com and check if your system has the latest firmware version. .
3. If you need to update your firmware, download the firmware to your computer from the support.uniden.com site.
4. Copy the firmware to a USB drive.
5. Insert the USB drive into the receiver.
6. Go to *Maintenance/System Upgrade/NVR Upgrade* tab. Browse to the USB drive and select the firmware upgrade file.
7. Click on the selected file
8. Click **Upgrade**
9. The NVR reboots when the upgrade is complete.

HARD DISK DRIVE SETUP

UNCHECK MISSING ALARM FOR ALL UNINSTALLED HDDS

1. Go to *Disk Manager/Storage Management*. A list of HDDs displays.



2. If the *Missing Alarm* column is checked for any non-installed HDD locations, uncheck it.
3. Click **Save**. A *Success* message displays; click **Exit**.

ADDING HDDS/RAID

The ProSeries XVR and NVR systems can have one, two, or more hard disk drives (HDD). If you want to increase the storage capacity, you can install another physical hard disk drive (or more than one if supported by the recorder) and then format it to create a standard sequential read/write configuration. When the first disk gets full, then the second HDD will be written to, and then the next one, until all HDDs are full. The system will then overwrite the oldest files first (FIFO).

From the same screen as before, review the installed HDDs. If you need more space, shut down the system and install additional hard drives as needed.

If you have an NVR with 36, 64, or 128 channels, then your recorder is RAID capable. There are five types of RAID arrays supported plus one standby option:

- RAID 0 - Striped (min. 2 HDDs)
- RAID 1 - Mirrored (min. 2 HDDs)
- RAID 5 - Striped Disks with Single distributed Parity (min. 3 HDDs)
- RAID 6 - Striped Disks with Dual distributed Parity (min. 4 HDDs)
- RAID 10 - Striped and Mirrored (1+0) (min. 4 HDDs)
- Hot Standby - An installed HDD, ready to automatically replace and rebuild a failed HDD in a redundant array. This will not save your data due to a failure with RAID 0, which has no redundancy.

You will have to decide which RAID mode you want to use. Some options increase the redundancy, and therefore protect your data from a single (or dual, in RAID 6) hard drive failure.

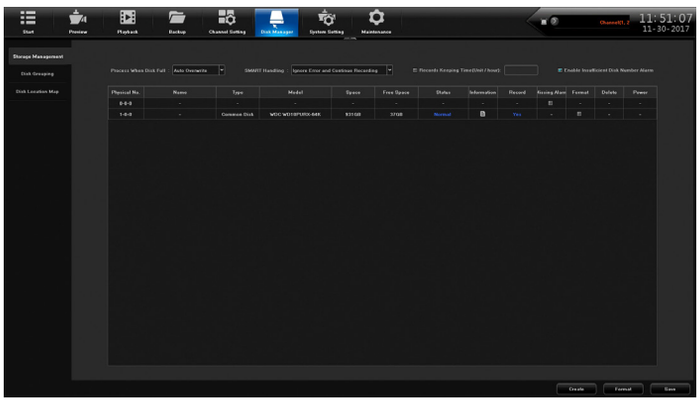
The following systems have two SATA ports, but have room for only one HDD inside the chassis:

- XVR 4 channel - PRO400X1, PRO404X2
- XVR 8 channel - PRO800X2, PRO808X3

Uniden ProSeries recorders come with high-quality hard drives designed for digital surveillance systems with continuous 24/7 recording:

- Western Digital Purple Surveillance HDDs
- Seagate SkyHawk Surveillance HDDs

If your system has a RAID, you will need to configure the array, format the RAID array, and assign the channels before using.



Install the Hard Disk Drives

If you have a 128-channel system, install hard disk into the hot-swappable HDD bay and then proceed to the next section, Enabling the Raid.

1. Shut down the NVR system.
2. Unscrew the two thumb screws on the back of the lid, and open the top cover.
3. Mount the new HDDs to hardware rails toward the front of the chassis.
4. Plug in the SATA cables and power cables to the HDDs.
5. Plug the SATA cables into the motherboard. There are two hard drive controllers with four SATA each. Try to balance the number of disks across both HDD controllers for fastest write times. One recommended order when connecting HDDs is (HDD# labeled on white silk screen next to each SATA connector): HDD1, HDD5, HDD2, HDD6, HDD3, HDD7, HDD4, then HDD8.
6. Close the lid and power up the system.

Enabling the RAID (Optional)

Some of the fields in RAID procedures only display if you are RAID-compatible.

1. Login to the NVR.
2. Select *Disk Manager/Storage Management*. The screen should show the physical drives connected to the system.
3. Each installed HDD will have information populated along the row.
   - If a row is not populated with HDD information, then the system does not detect the HDD.
   - To troubleshoot, shut down the system and check that the SATA cable is plugged in on both ends and the HDD power cable. Try a different SATA port, SATA cable, and then a different HDD.
4. On the left side, select *Advanced Configuration*.
5. Click on the **Enable RAID** check box and click **SAVE** in the bottom right corner. This will enable the RAID and erase all data on the drives. The drives will have to be formatted after configuration. If you want to retain the data, put in new HDDs.
6. Click **Confirm** on the warning box that pops up.

Setting up the RAID if Enabled

1. Select Disk Manager/Array configuration.
2. Select the *Physical Disk* tab to display all the HDDs. You need at least two HDDs to make a RAID.\
3. Select the HDDs to use in the RAID array by putting a check next to the HDD in the *Physical No.* column.

4. Mark unchecked HDDs as *Hot Standby* drives now, or come back and do that later. This allows a RAID to auto-rebuild if one HDD fails.
5. Click **Create array** button in the bottom left corner of the screen. The *Create array* window opens.
6. Enter a name for this array, and select *Array Type* in the drop down menu. The *Array capacity (estimated value)* changes depending on the HDD array number, size, and configuration.
7. Click **Confirm** to build the selected Array. Progress will be shown, and a pop-up window should show that creation was successful. It will also tell you to format the array to make it useful.
8. Click **Confirm** to close the pop-up window.
9. To check your array, select the *Array* tab and the information for all HDD arrays displays. There is also a button to **Rebuild** if needed in the future if you are not using a "Hot Standby HDD.

Formatting the HDDs/RAID

1. From *Disk Manager/Storage Management*, find the row with the HDD or RAID array to be formatted. Click the box in the *Format* column. New RAID arrays display *Need Format* in the Status column.
2. Click the **Format** button at the bottom right corner of the screen.
3. Click **Confirm** in the *Make sure to format hard disk?* popup window.

NOTE: This will permenantly clear all saved video and images.

4. A window will pop-up and show the disk/array name and formatting progress. The system will give an audible alarm during this process. Click **Confirm** to close the *Format Complete* pop-up window.
5. To be safe, uncheck the *Format* box in the HDD row; click **Save** in the bottom left corner.

You MUST assign camera channels to be saved to the new array or new HDDs and arrays, to verify the settings.

CAMERA SETUP

IP address setup is slightly different depending on the size of your network. Larger networks have 2 LAN ports while smaller networks only need 1 LAN port.

1. Go to *Preview/Start/Guide* and skip to the *Network Setting* screen. Click the dropdown arrow for *Network Card*.

   If only LAN1 displays, continue to Set Up IP Addresses - 1 LAN Port Only (see page 28).

   If both LAN1 and LAN2 display, go to Set up IP Addresses - 2 LAN Ports (see page 29).
2. If you have an NVR with a built in PoE switch but have only LAN1 as a programming option, this means that the IP cameras and the NVR will have to all be in the same IP range, and all the devices can be accessed remotely over the LAN.

SET UP IP ADDRESSES - 1 LAN PORT ONLY

1. From *System Setting/Network Parameter/Basic Setting* tab, check *Use Below IP Address*. The *IP*, *Mask*, and *Gateway* fields become active.
2. Enter a static IP address as assigned by the owner or the IT Department. If your system is not in the same IP range as other computers on the LAN, you will not be able to remotely connect to the system.
3. If given DNS1 and DNS2 settings, enter them in the section below the IP settings [required if connecting to another device by name (not by IP address)], such as an FTP, SMTP, or NTP server.

4. Click **Save** in the bottom right corner to save. Reboot is not required.
5. Go to *Channel Setting/Channel Connecting* to add cameras (see Set up IP Cameras on page 29), and make sure each camera has a different IP address in the same range as the LAN.
6. Once each device has an individual IP address, open a web browser on a remote computer or device and access the IP cameras or the recorder.
7. If a WiFi access point is connected to the LAN, connect the Uniden ProSeries Mobile app (or via a web browser) to remotely access the recorder and cameras.

SET UP IP ADDRESSES - 2 LAN PORTS

Set up LAN1 first to connect to the LAN. Set up LAN2 next to connect the IP cameras via an external network switch or an internal PoE switch.

SET UP IP CAMERAS

If you have an NVR with a built in PoE switch but only have LAN1 as a programming option, this means that the IP cameras and the NVR will all have to be in the same IP range, and all the devices can be accessed remotely over the LAN. Once each device has an individual IP address, you can open a web browser on a remote computer or device and access the IP cameras or the recorder.

If a WiFi access point is connected to the LAN, you can connect the Uniden ProSeries Mobile app (or via a web browser) to access the recorder and cameras remotely.

PLANNING IP ADDRESSES

1. From *Channel Setting/Channel Connecting*, check *Modify the IP address* when *adding a channel* box on the right side of the screen. Click **Add All** from the left side of the screen. *Modify the IP address of IPC* displays if needed
2. Select *Forced to modify IP address* and click **Confirm**.
3. System changes all of the cameras' IP addresses and adds them to the system.

ADDING IP CAMERAS

Cameras are normally assigned to LAN2. However, camera assignmentss can also be split between LAN1 and LAN2. If your system is not equipped with LAN2, all cameras are assigned to LAN1.

1. Go to *Channel Setting/Channel Connecting*. Check *Modify the IP address when add channel* on the right side of the screen. Click **Add All** from the left side of the screen. *Modify the IP address of IPC* displays if needed
2. Select *Forced to modify IP address* and click **Confirm**.
1. System changes all of the cameras' IP addresses and adds them to the system.

PREREQUISITES

- Static IP address in LAN1 (and LAN2 if equipped)
- Make sure your IPC's static IP address is in the same range as LAN2, if equipped. If you do not have LAN2, then make sure the IPC range is the same as LAN1 on the system.
- Power up the recorder and select *Channel Setting/Channel Connecting*.

1. Select search protocols and then click **Search**. Recorder scans the network for IPCs while a countdown displays in the **Search** button. When done, a list of IPCs display below the **Search** button.
2. In the left column, put a check next to the cameras that you want to assign to a channel. Don't worry about the order of channels at this time. As they are checked, the IPC should show up on

the right side with a channel number. Follow these guidlines:

- 4K cameras - select the IPC with the SLINK protocol (Proto. column).
- IPCs included in a NVR kit - select the I8S protocol for these IPCs.
- IPCs that show I8H - use this protocol if the above don't apply.
- IPCs that only show I8 - use this protocol if none of the above don't apply.
- If you are not using a Uniden IPC, select the Onvif protocol.
- If the IPC does not show up, check the IP address and the network, and try again.

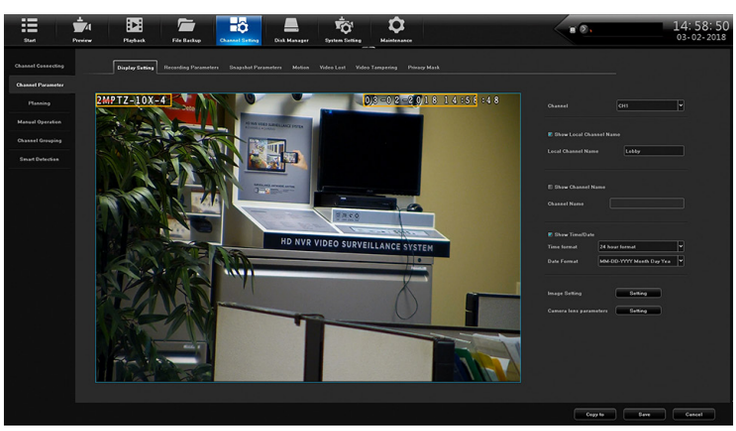
3. When the IPC shows up on the right side, it will automatically be assigned the next channel number. After a few seconds, the Status column should display *Connect success* for each channel. f not, make sure the IPC and the LAN are in the same IP range.
4. On the left side, double left-click the IP address to display the *IPS Details* window. Review IP address and Subnet Mask. If anything needs to change, click **Modify**, then **Confirm**, and finally **Exit**. Close the window and return to the *Channel Connecting* screen.
5. From *Channel Setting/Channel Parameter/Display Setting*, select a channel in the *Channel* drop down list. Check the *Show Local Channel Name* box to create a name to display for that channel (un-check this box if you do not want the name to show up in the picture).
6. After all cameras are connected and working, go to the *Preview* screen and show all cameras. You can put the cameras in whatever display order you want. With the mouse, click and drag a camera from its current layout location and drop it in another location to swap locations. Confirm the swap in the pop-up confirmation screen.

SET UP CHANNEL GROUPS

You can name your channels and then put them into collections called groups. For example, if you have named three channels Foyer, Front Door, and Front Parking, you can create a group called Front Entrance and then add the channels to that group. When you need to check the front entrance, view that channel group through *Preview*.

Name Channels

1. Go to *Channel Setting/Channel Parameter/Display Setting* tab. Enter a name for that channel and any other parameters as desired.



2. Click **Save**, then **Exit**.
3. Repeat for other channels.

Create a Preview Group

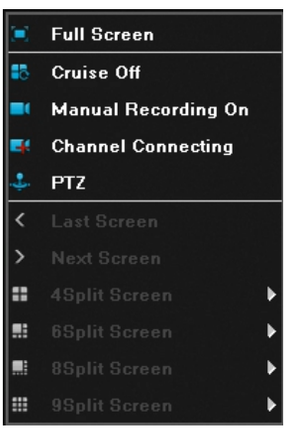
1. From *Channel Setting/Channel Grouping/Preview groups* tab, select **+** . The *Group Name Setting* window displays.
2. Click inside the *Group Name* field and popup keyboard displays. Enter a name for the group, select the return arrow, and click **Confirm**.
3. The new preview group displays on the right side.

Assign Channels to the Preview Group

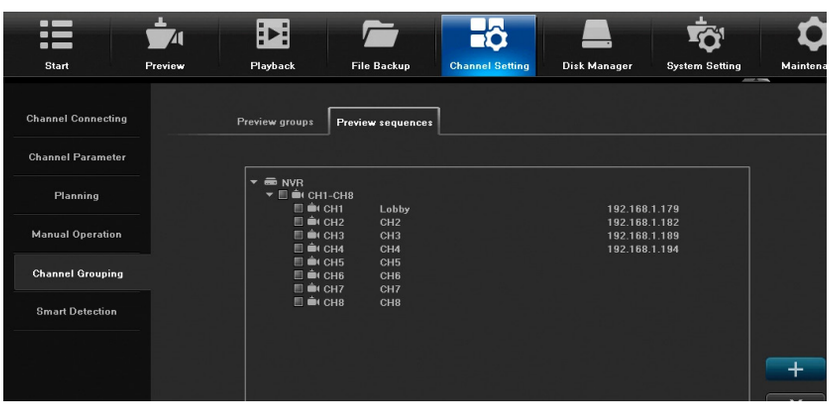
1. From *Channel Setting/Channel Grouping/Preview groups* tab, select a Preview group on the right side to add cameras to.
2. On the left side, select the channels to add. Click **>>>** to add the channels to the selected *Preview* group. These channels now display under that group.

SET UP CAMERA TOURS

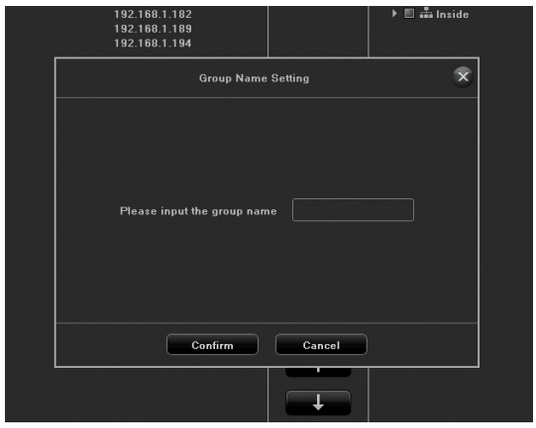
You can set up the system to automatically display the cameras in a specific order. This order is called a tour. You can set up multiple tour groups. From the *Preview* screen, select the Tour icon ( ) at the bottom of the screen to turn Tour on and off. When Tour is on, the icon turns blue.



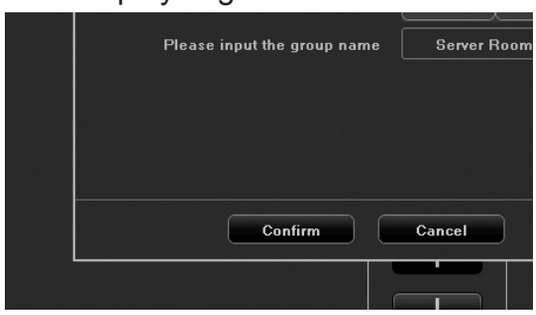
1. Go to *Channel Setting/Channel Grouping/Preview Sequences* tab.



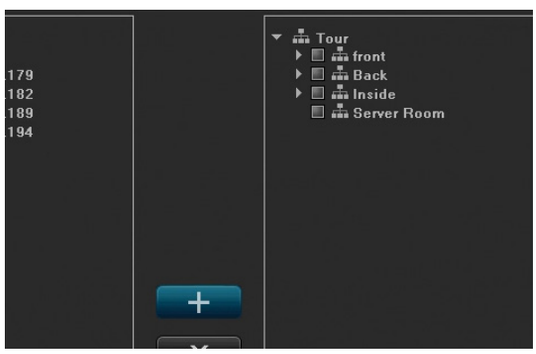
2. Select **+** to add a tour group. The *Group Name Setting* screen displays.



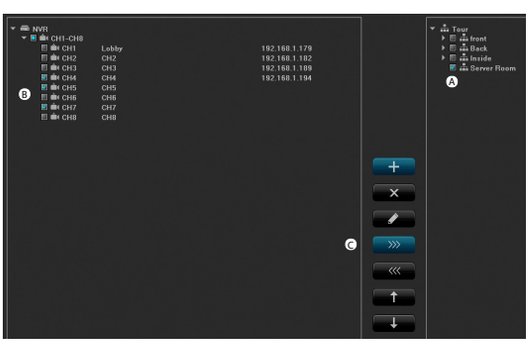
3. Using the popup keyboard, enter the new tour group's name and select the Return icon ( ). The *Group Name Setting* screen displays again. Click **Confirm**.



4. The new tour group displays.



5. Select the tour group to add cameras to (See A in the following graphic). Select the cameras that belong in that tour group (see B in the following graphic). Then select the right arrows to move the cameras into the selected tour group (see C in the following graphic).



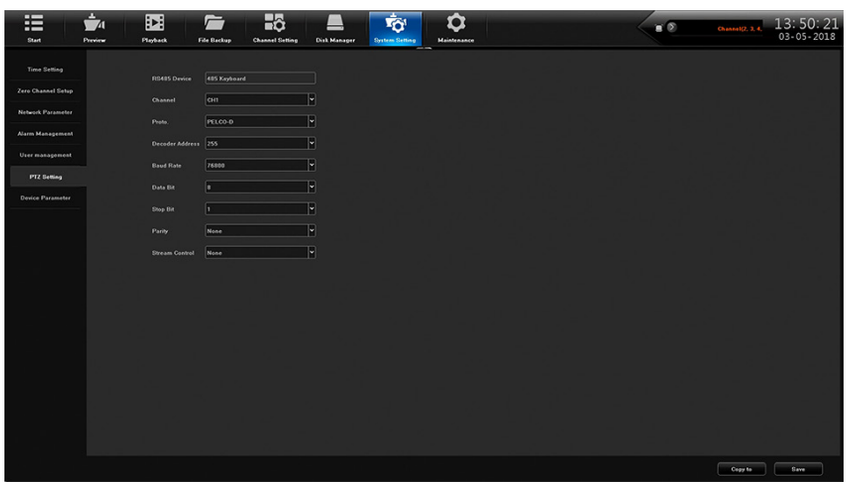
6. If you need to change the order in which the cameras display within a tour group, select the camera and then either the up or down arrows (see D in the previous graphic). The selected camera moves either up or down in display order.

SET UP PTZ CAMERA(S)

Configure PTZ Camera

From *System Setting/PTZ Setting*, set the following parameters:

- Channel
- Protocol
- Decoder Address
- Baud Rate
- Data Bit
- Stop Bit
- Parity
- Stream Control



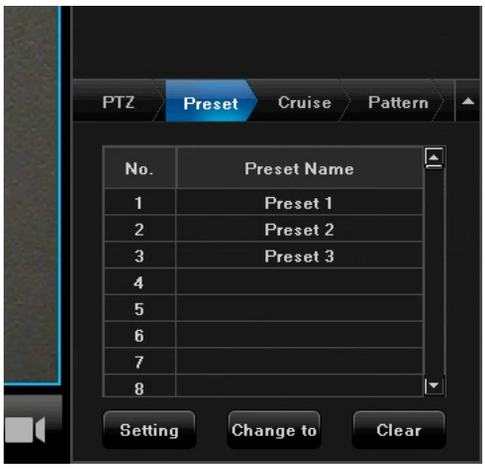
Adjust PTZ Camera

From *Preview/PTZ* tab on the right side, adjust the PTZ camera according to the following graphic:

Set Up PTZ Presets

Each preset records the specific position of the camera when you select Setting. Use these presets to create a cruise progression.

1. Position the camera to a spot you want to view.
2. Select *Setting*. Preset number displays.
3. Repeat these steps for all the areas you want to view with this camera.

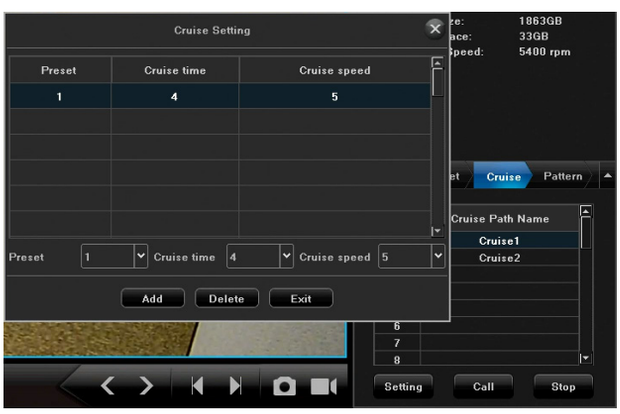


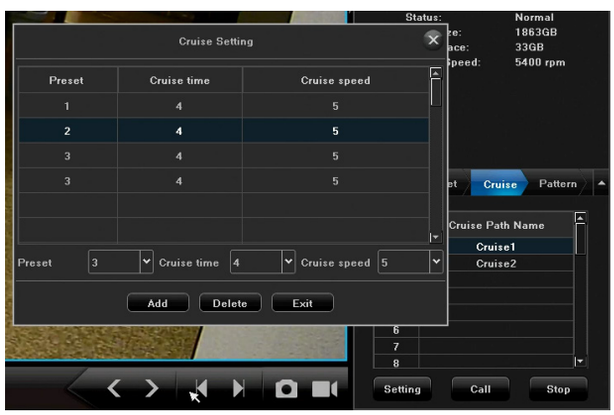
Set Up PTZ Cruise

PTZ cruises use presets to create a cycle of camera images from preset positions.

Set up Presets first.

1. From the *Cruise* tab, select *Setting*. The *Cruise Setting* screen displays.
2. Select which Presets you want to assign to that specific cruise setting, how long the camera will stay at that position (seconds), and how quickly the camera will move from one position to another (1 = Slower; 16 = Faster).
3. Click **Add**. Those selections display in the next row down.

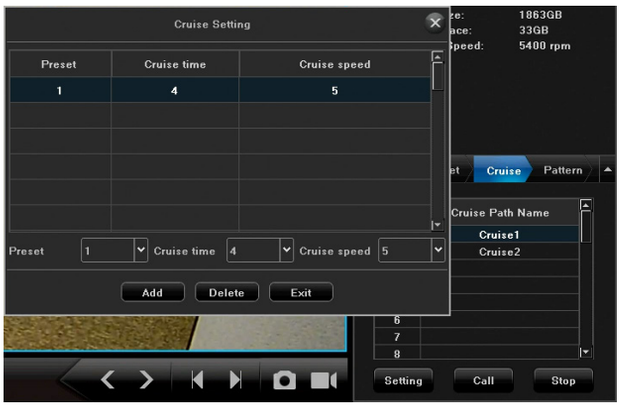


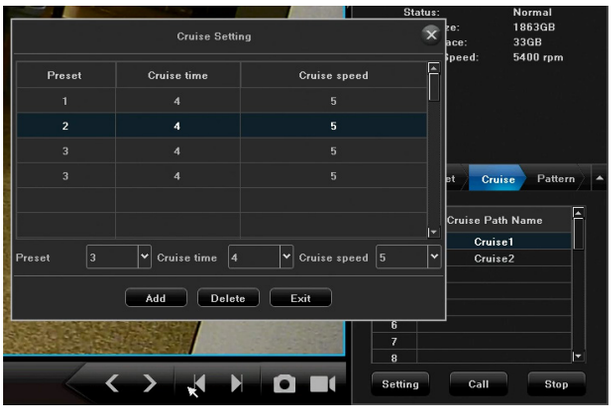


Set Up PTZ Pattern

This tab lets you record the PTZ camera as you change views without having to stop and restart recording. Save this series of PTZ camera changes as a pattern path. You can record up to 100 position changes.

1. From the *Pattern* tab, click on a *Pattern Path Name* row and then click **Start Rec**.(**Start Rec** changes to **Stop recording**.)
2. Go to the *PTZ* tab. Position the camera where you want it to record.
3. Let the camera record in that position until you want to change positions. Change positions.
4. Repeat the previous step until you are finished recording. Go back to the *Pattern* tab and click **Stop recording**.
5. Double click on the *Pattern Path Name* and rename it through the popup keyboard if desired.
6. Select a *Pattern Path Name* and click **Call** to run through the PTZ positions saved in that pattern.

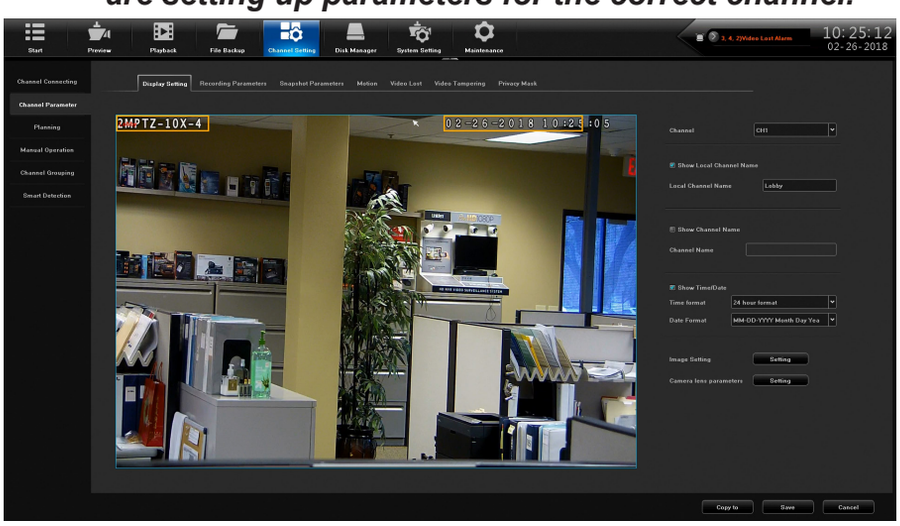




Set Camera Settings for each Channel

From *Channel Setting/Channel Parameters*, you can set camera/channel characteristics. Each of the tabs has a Channel field where you can select which channel's characteristics you are working with.

As you select different parameter tabs, double check the channel field to be sure you are setting up parameters for the correct channel.



Display Setting Tab

(See previous illustration.)

Enter a name for the channel and decide if the channel name and the date and time will display on the screen. Parameters include:

- Channel Name
- Show Local Channel (Local Channel Name)
- Show Channel Name (Channel Name)
- Show Time/Date (Time Format/Date Format)
- Image Setting
- Camera lens parameters

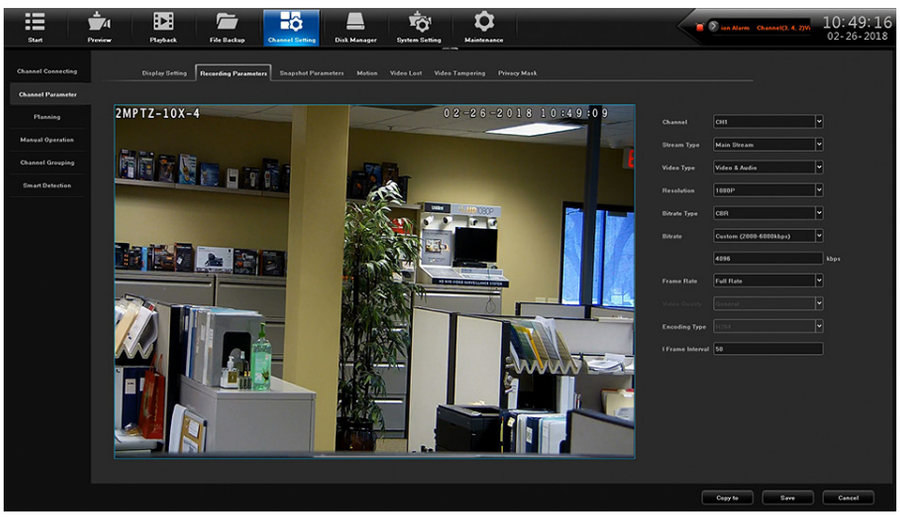
The parameters vary according to the type of camera you are configuring. A PTZ camera may have different parameters than an IP camera.

Recording Parameters Tab

Set up a channel's recording characteristics through Channel Setting/Channel Parameter/ Recording Parameters Tab. Parameters include:

- Channel

- Stream Type
- Video Type
- Resolution
- Bitrate Type
- Bitrate
- Frame Rate
- Encoding Type
- I Frame Interval



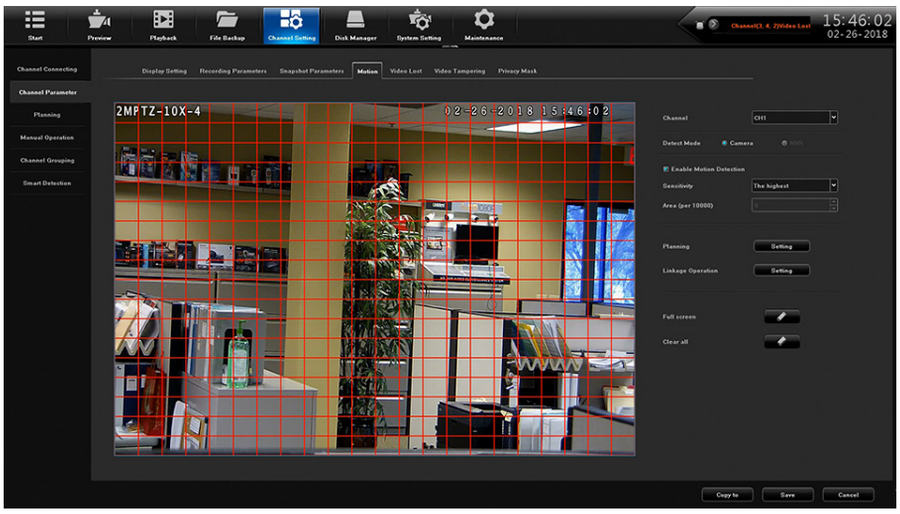
Motion Tab

This tab lets you define areas that WILL be triggered if motion is detected. When you open this tab, a red grid covers the screen (Default = Full Screen). Parameters include:

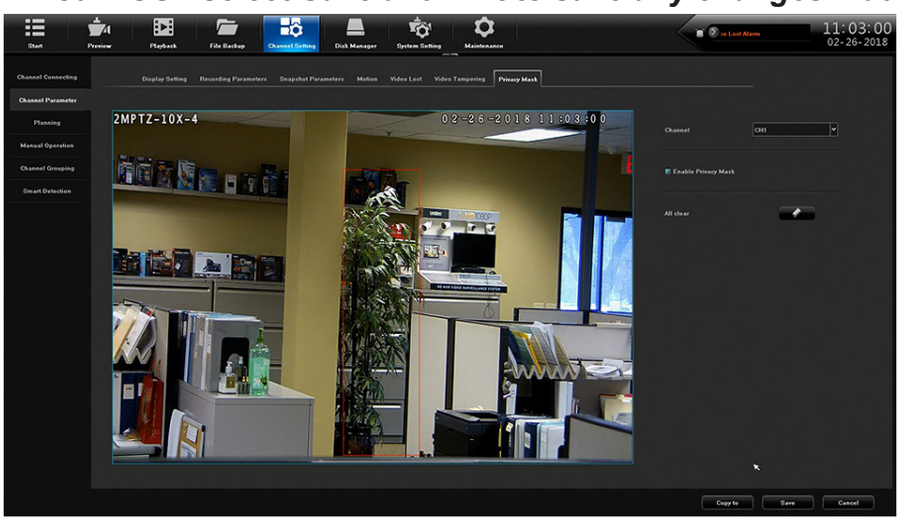
- Channel
- Detect Mode
- Enable Motion Detection
- Planning
- Linkage Operation
- Full screen
- Clear all

To select specific areas to be triggered, click **Clear** all to clear the grid from the screen. Then, click and drag over areas you want to be affected by motion detection. These new grids will be sensitive to motion and will record when triggered.

To hide areas from view, use the *Privacy Mask* tab (see page 37).



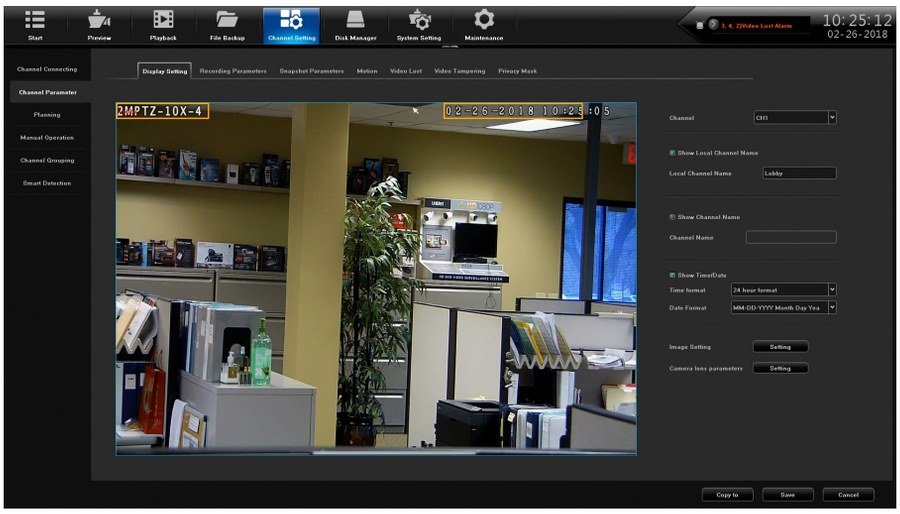
You MUST select Save and Exit to save any changes made.



Privacy Mask Tab

When you select *Channel Setting/Channel Parameter/Privacy Mask* tab, you can use the same click and drag process to block out areas you do not want to be viewed. For example, you can block out a security keypad from being viewed. When you have the screen set up how you want it, click **Save**; the area selected becomes a black box. Click **Exit** on the confirmation screen. Parameters are:

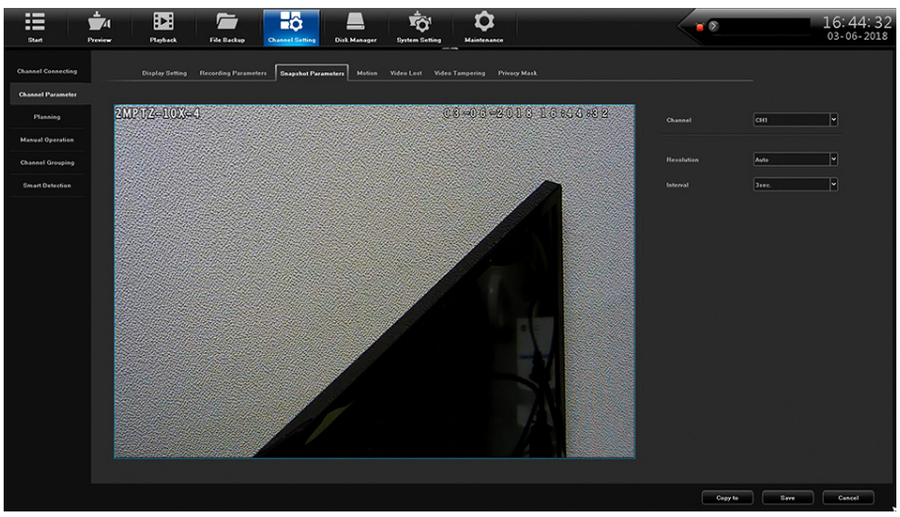
- Channel
- Enable Privacy Mask
- All clear



Snapshot Parameters

Set up a camera to take a snapshot at specific intervals and resolutions through *Channel Setting/ Channel Parameter/Snapshot Parameters* tab.Parameters are:

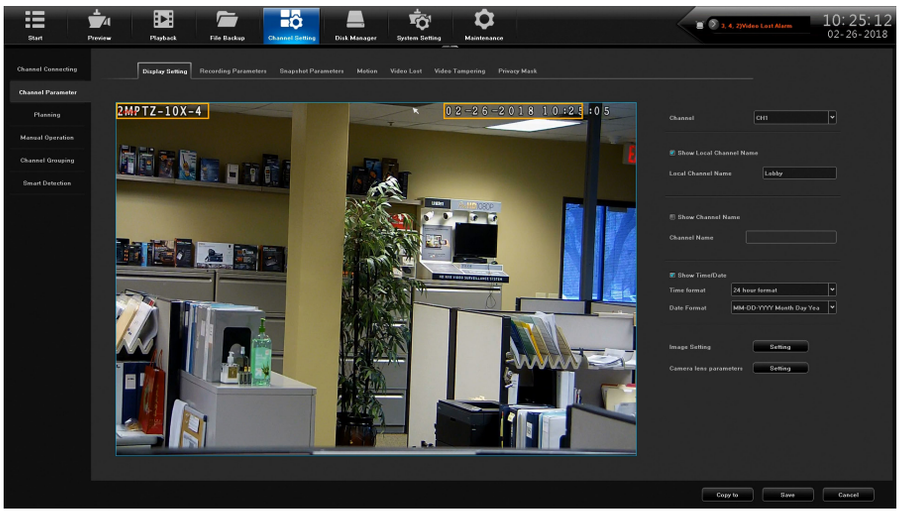
- Channel
- Resolution
- Interval



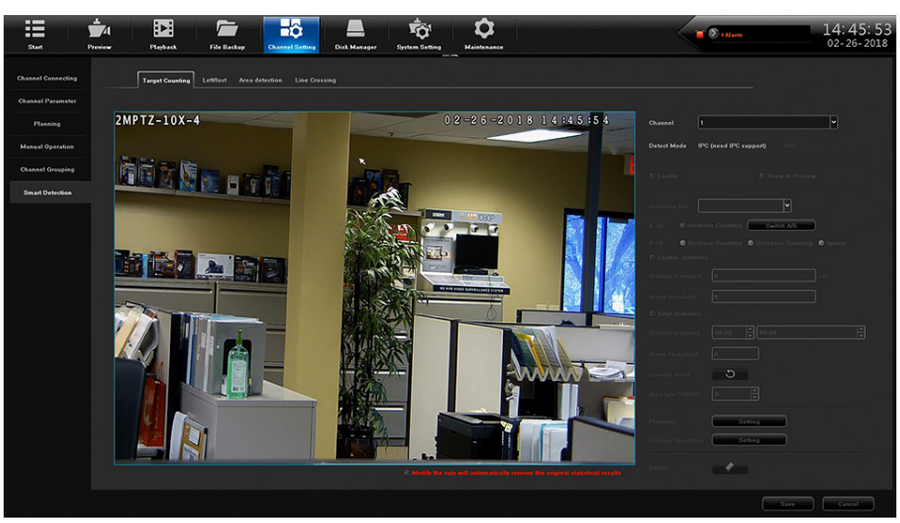
Video Tampering Tab

When you select *Channel Setting/Channel Parameter/Video Tampering* tab, you can set that channel to record in a read-only propriatery I8 video format. Parameters are:

- Channel
- Enable Video Tampering
- Sensitivity
- Planning
- Linkage Operation
- All clear



Smart Detection

When you select *Channel Setting/Smart Detection*, logarithms activate based on the tab settings. These tabs are:

- Target Counting
- Left/lost
- Area Detection
- Line Crossing