

# ProSeries XVR TECHNICAL INSTALLATION GUIDE

PRO400X1 PRO800X2 PRO1600X2

For trained service/installation personnel only

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Issue 1, June 2018

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

- Pro400X1
- Pro800X2
- Pro1600X2

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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 XVR TECHNICAL INSTALLATION GUIDE

## **OVERVIEW**

This Technical Installation Guide helps the installer to install and initially configure Uniden's ProSeries series XVR surveillance systems. It provides basic instructions to install the XVR receiver and hard drives; it does not provide detailed instructions on how to use the firmware. For detailed firmware operation, refer to the online ProSeries XVR 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 XVR models (version 2.0) with an operating interface of NVR 64 Channel Graphical User Interface (GUI) as a generic example for intallation procedures. Details vary according to the specific model being installed.

## **PROSERIES XVR INSTALLATION GUIDE ATTRIBUTES**

This Guide provides a decription of the various Uniden ProSeries XVR 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."

## Admonishments

A triangle with an exclamation mark ( 1 ) refers to cautionary information to prevent potential injury or equipment damage.

## REQUIREMENTS

- Access to standard AC outlet (AC100~240V, 50Hz~60Hz)
- · Phillips-head screwdriver may be required
- 1280 x 1024 resolution monitor (for initial boot up)
- · External PoE network switch to add IP cameras if required
- Camera network cables if devices purchased separately (only included in Pro Series kits)
- 12VDC power supply
- HDMI or VGA cable (HDMI cable included in Pro Series kits)
- External power supply for up to 16 channels .
  - For 4 and 8 channels: ADP36-S120A30000 Input: 100-240V, 1.0A Output: 12VDC, 3A
  - For 16 channels: ADP060-120500
     Input: 100-140VDC, 1.5A
     Output: 12VDC, 5A

#### Use only the recommended power supply.

Western Digital Purple or Seagate SkyHawk surveillance hard drives

## FIRMWARE AND DOCUMENTATION UPDATES

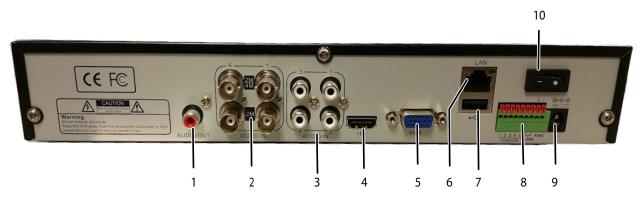
Because Uniden strives to provide the latest technology and quality in all of its products, firmware updates may be available with no prior notice. Check for updates at support.uniden.com/pro-support. Update the firmware manually either locally or remotely through a web browser.

## DEFAULTS

- Administrator user name: admin.
- Administrator password: No password; leave blank.
- LAN1 IPv4 address: DHCP auto enabled
- Default video resolution: 1280 x 1024p
- Factory-installed hard drives are formatted and ready to record.
- Daylight savings time enabled; however, the start and stop dates should be verified.
- Unpopulated hard drive connections will trigger an "unpopulated hard drive" alarm. See page 23 for instructions on how to turn it off.

## **REAR PANEL INTERFACES**

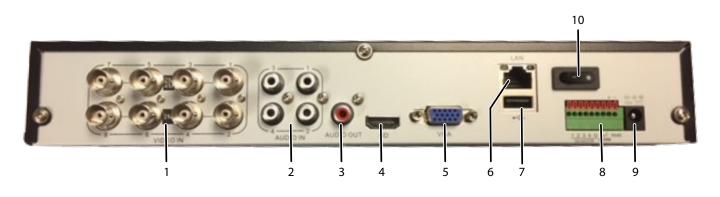
## PRO400X1



1	Audio Out	6	RJ45 Network Port
2	BNC Camera Jacks	7	USB 2.0
3	Audio In	8	Accessories Out
4	HDMI Video Out	9	Power Input
5	VGA Video Out	10	Power Switch

Cameras connect to LAN1 (PoE gigabit network switch)

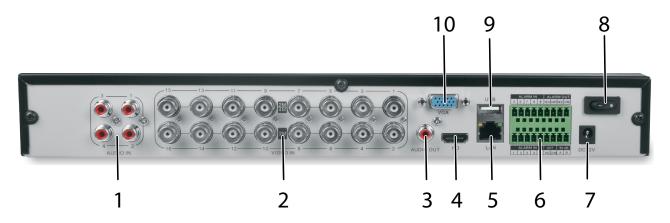
## PRO800X2



1	BNC Camera	6	RJ45 Network Port
2	Audio In	7	USB 2.0
3	Audio Out	8	Accessories Out
4	HDMI Video Out	9	Power Input
5	VGA Video Out	10	Power Switch

Cameras connect to LAN1 (PoE gigabit network switch)

## PRO1600X2



1	Jacks Audio In	6	Accessories Out
2	BNC Cameras	7	Power Input
3	Audio Out	8	Power Switch
4	HDMI Video Out	9	USB 2.0
5	RJ45 Network Port	10	VGA Video Out

Cameras connect to LAN1 (PoE gigabit network switch)

## INSTALLATION



No user servicable parts inside. Contact Uniden for service.

Mise en garde : Ne comporte aucune pièce pouvant être réparée par l'utilisateur à l'intérieur. Contactez Uniden pour l'Ientretien

## INSTALLATION REQUIREMENTS

#### Unplug the device from power before opening the device case.

- Install the device below 2000 meters altitude.
- 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 104°F (0°C to 40°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 XVR power supply and AC outlet are reliably grounded.

## HARD DISK INSTALLATION

The following procedures must only be performed by a service technician.

#### CAUTION: CONFIRM THAT THE DEVICE IS POWERED OFF AND UNPLUGGED FROM POWER BEFORE INSTALLING ANY HARD DISK DRIVES.

#### MISE EN GARDE : SI VOTRE SYSTÈME A MOINS DE 128 CANAUX, VEUILLEZ CONFIRMER QUE LE DIS-POSITIF EST HORS FONCTION ET DÉBRANCHÉ DE LA SOURCE D'ALIMENTATION AVANT D'INSTALLER DES DISQUES DURS.

Install 1 hard disk drive for either the PRO400X1 or PRO800X2 or up to 2 hard disk drives for the PRO1600X2.

#### HARD DISK INSTALLATION

## The following procedures detail adding an HDD to a 16-channel XVR system. Uniden does not support adding additional HDDs to 4- and 8-channel XVR systems.

- 1. Remove the cover from the 12-channel XVR by unfastening the screws on the case cover.
- 2. MOUNT the HDD to the bottom of the chassis using screws coming up through the bottom plate.
- 3. Connect the HDD power lines and data cable.

4. Close the cover and fasten it with the screws.



Open the cover

Install HDD

### **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.

	ull : Auto Overwrite	Y SMART	Handling : Ignore error, con	tinue recording	Y Becor							
Physical No.	Name		Model No.	Total	Free Space	Status	Information	Record	tissing alarr	Format	Delete	Power
0-0-0												
		Common disk	WDC WD20PURX-64P	1863GB	26GB		8					
	Physical No.	Physical No. Name 0-0-0 -	Physical No.         Name         Type           0-0-0         -         -	Physical No. Name Type Model No.	Physical No. Name Type Model No. Total 0-0-0	Physical No.         Name         Type         Model No.         Total         Free Space           0-0-0         -          -	Physical No.         Name         Type         Model No.         Total         Free Space         Status           068         -<	Physical Ho.         Name         Type         Model Ho.         Total         Free Space         Status         Internation           0.9.0         -	Physical No. Name Type Model No. Total Free Space Stabus Information Record 068	Physical No. Name Type Model No. Total Free Space Status Information Record Existing atom 848 B	Physical No. Name Type Model No. Total Free Space Buller Information Record functional format De0	Physical No. Name Type Model No. Total Free Space Status Information Record Variang attar Format Delete 048

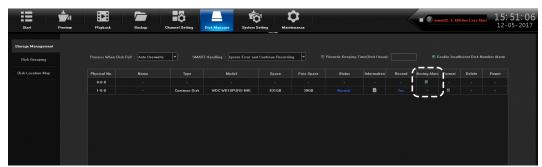
2. Click Save.

## **DISABLE DISK MISSING ALARM**

Disable this alarm for any HDDs that are not present.

- 1. Login to the XVR system.
- 2. Select *Disk Manager*. The *Storage Management* side tab screen should display the physical drives connected to the system.

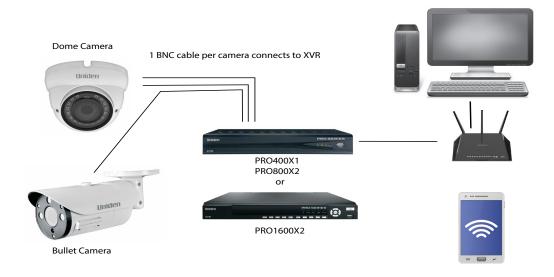
3. Each installed HDD will have information populated along its row. If a row is not populated with a HDD, uncheck the box in the *Missing alarm* column to disable this alarm for this uninstalled HDD.



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

## **NETWORK CONNECTION SCHEMATIC DIAGRAM**

#### XVR NETWORK CONNECTION SCHEMATIC



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

## **INITIAL TURN UP**

## **RECOMMENDED TURN UP ORDER**

	STEM SETUP
	In the Guide (see page 15), set:
	Default Language
	Display Resolution (Default - 1280 x 1024)
	LAN1 Network Settings
	When finished, select Next time no longer display and click <b>Finish</b> .
	Go to System/Time Setting, Device Time tab (see page 16) and set: • Device Time
	Device fine     Date Format
	• Time Zone
	Enable Daylight Savings Time and enable start and end dates.
	<ul> <li>Network Time Protocol (NTP) is enabled by default. Change to internal time source if desired (see page 16). Turn off if the customer does not want the recorder to go out on the internet.</li> </ul>
	The recording schedule default is for all cameras to record all the time (Channel
	<i>Setting/Schedule Setting/Recording Setting</i> ). Set up specific recording schedules (see page 18).
	From <i>System Setting/User Management</i> , set up new users and change the Admin password (see page 17).
	From System Setting/Alarm Management/Alarm Input (or Alarm Output) top tab, set
	up alarm inputs and outputs (see page 20).
	A limited power source must be used for alarm inputs.
	From System Setting/Network Parameter/Email Setting top tab, set up email
	notification (see page 21).
	From System Setting/Network Parameters/DDNS Setting top tab select Enable DDNS
	to set up remote DDNS access (see page 22).
	From <i>Maintenance/System Information/Device Information</i> top tab, update firmware if desired (see page 22). (The device will automatically reboot after upgrade.)
HARD DISP	( DRIVE (HDD) SETUP
	Go to <i>Disk Manager/Storage Management</i> and uncheck <i>Missing Alarm</i> for all non- installed HDDs (see page 23).
	From <i>Disk Manager/Storage Management</i> , verify HDD quantity and sizes (see page 23). Shut down and add HDDs if needed.
	Format any new hard drives (RAID is not available on XVRs.)
	NOTE: Pre-installed HDDs are factory-formatted and ready for use.
ADD IP CA	MERAS
	Plan and set up IP addresses (see page 28).
	Add IP cameras (see page 26).
	Change IP address of each camera to put it in the same range as the network
	connector (LAN1) that the camera is connected to (see page 28). <i>Connect Success</i> displays.
	Add Channels to Preview Groups
	From Channel Setting/Channel Grouping, set up Preview Groups (see page 29
	· · · · · · · · · · · · · · · · · · ·

 From <i>Channel Setting/Channel Grouping/Tour</i> (right column), set up <i>Tour Groups</i> if desired (see page 29).
 Check and adjust camera images for focus and field of view in <i>Preview</i> (see page 31).
 From <i>Preview,</i> set up <i>PTZ Presets</i> (page 31), <i>Cruise</i> (page 32 if applicable), and <i>Pattern</i> (page 33 if applicable).
<ul> <li>Set individual camera settings for each channel if desired (see page 33):</li> <li>Other areas to set up include but are not limited to:</li> <li>Motion Detection (From <i>Channel Setting/Channel Parameter/Motion</i> top tab, "Motion Detection Only Recording Setup" on page 18</li> </ul>
 <ul> <li>Privacy Mask (From <i>Channel Setting/Channel Parameter/Privacy Mask</i> tab,</li> <li>page 37)</li> </ul>
Snapshot Parameters (From Channel Setting/Channel Parameter/Snapshot Parameters tab, page 36)
<ul> <li>Video Tampering (From Channel Setting/Channel Parameter, Video Tampering tab, page 38</li> </ul>

## **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.



		Login	
User Name	admin		~
Password			
	Login	Cancel	

Dropdown Menu

User Login

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

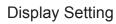
## **INITIAL SETUP**

- 1. Click the tion 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: 1280x1024-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.



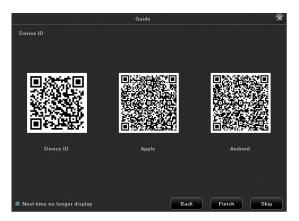
Guide Display Setting
Screen Resolution 1920x1080-P60 V

Language Setting



		Guide	×
Network	Setting		
	Network Card	LANT	
		🖉 DHCP	
	IP Address		
	Mask		
	Gateway		
	isplay next time	Back	Skip

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.

Burt Protes	Fighers Backup Channel Stelling Dick Manager Stelling Manager Manager	■ DanKi. 2. 2. 4994 to 1 Aven 16: 13: 08 11-29-2017
Time Setting	Device Time PC Time	
Network Setting		
Norm Management	Device Time 19-29-2017 19:03:50	
User Management		
	Date Fernat Met DD-YYYY Monk Duy Year	
	Time Zane O/TC -08.805Central time (U.S.A and Cenada)	
	Start Taxa January Y First Y Sunday Y 08.00	
	End line Fabruary Y Farst Y Sunday Y 08.03	
	DST Biss Ø3Minste	
	Server Address Sine rist.gvr	
		Bere

XVR systems have a CMOS clock button cell battery located on the PC board to maintain time should power fail. Only Uniden service technicians should replace the battery (Chaochuang Lithium Cell CR1220, 3V SC).

Battery Disposal Instructions: Check your local government website for battery disposal guidelines. The correct procedure for disposing of different types of batteries may vary significantly by region. Check the website for your state, city, or municipality for information on how to dispose of batteries in your area.

- 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 conto save the settings.

#### NEW USER/PASSWORD SETUP

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

Start	<b>Preview</b>	Playback	Backup	Channel Setting	Disk Manager	System Setting	<b>D</b> Maintenance		
Time Setting									
			No.		User Name			User Type	
Network Setting					admin			Administrator	
Alarm Management					default			default	
					Rick			Operator	
User Management					Gary			Normal User	
PTZ Setting									
Device Setting									
									User P
									over 1

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

elete Uxer	elete Uzer 🕅 Add Uzer 🌂

Add U	Jser	×
User Name		
Password		
Confirm Password		
User Type	Operator 🗸	
ОК	Cancel	

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

Add User	×
Copy Paste User Name TEST	
P 1 2 3 4 5 6 7 8 C Q W E R T Y U I	90 0P
u A S D F G H J K ☆ Z X C V B N M 123/., ⊕ ⊔ ◀ ▶	
OK Cancel	

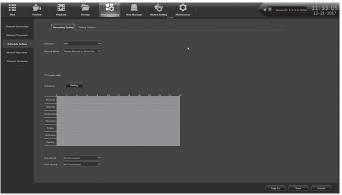
4. The new user displays on the User List.

### **RECORDING SCHEDULE SETUP**

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

#### **Basic Schedule Setup**

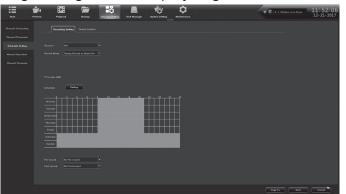
1. Select Channel Setting/Planning/Recording Setting. The default recording schedule displays all channels recording all the time.



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

				Arming Sch	edule				×
Week:	Monday		•						
🗹 Period1	00:00			23:59					
E Period2									
E Period3									
E Period4									
E Period5									
E Period6									
E Period7									
E Period8									
Сору То	E All								
	🗏 Monday	🔳 Tuesday			🗏 Thursday	🗏 Friday	🔳 Saturday	🔳 Sunday	
			C	ок	Cance				

3. Select the day of the week to set, then set up to 8 segments for recording in military time (24hour) 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.



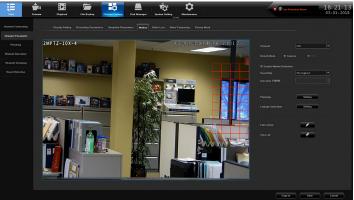
4. If you have an IP camera with an SD card, check Enable ANR (Automatic Network Restoration) to buffer recording from the SD card.

#### 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.

			16:00:05 03-01-2018
Channel Connecting	Privating Selling: Strayshot (dancing		
Channel Pasanster			
Planning	Observed OH Y		
Monwal Operation	Record Mode Name Recording		
Channel Grouping Desart Detection	E Leader /MII		
	Parana		
	The second se		
	a second s		
	Produced In P		
	Peat Record Ss		
		Copyta	Garcel

- 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.

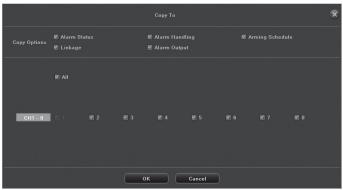
	🔳 Detect	Mode		🕅 Enable M	lotion Detectio		Sensitivity		
Copy options	Propor			Ellanning			Linkage		
	🗏 Alarm			Zone Set					
	Z AII								
CH1 - 8	1	2	₿ 3	₹ 4	₹ 5	☑ 6	2 7	₹ 8	

#### SET UP ALARM INPUTS/OUTPUTS

A limited power source must be used for alarm inputs.

#### **Alarm Inputs**

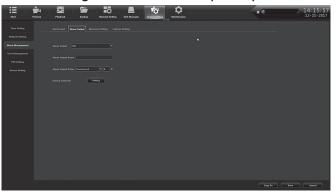
- 1. Go to System Setting/Alarm ManagementAlarm Input, top tab.
- Complete the fields. Click Save if your are finished. Click Copy To to copy the setting to other channels. The Copy To screen displays.



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.

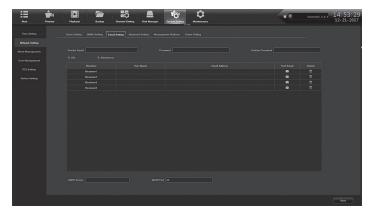


2. Complete the fields. Click **Save** if your are finished. Click **Copy To** to copy the settings to other channels, and then click **Save** when finished.



#### 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.

	1 Destant 1	Tere Bankary Channel Strettery Disk Manager		 09: 27: 59 02- 28- 2018
Time Belling		Enal Seting Advanced Seting Mana	geneet Platform Talent Setting	
Zere Channel Setup				
Network Personator	Enable DNS Server Type	B Divable DNS		
Nam Management				ан <sub>1</sub> м <sub>1</sub> м 1
User management		60		
PTZ Setting				
Device Parameter	Password Canforn Password			
				$\frac{1}{2}$ (a) $\frac{1}{2}$ (b) $\frac{1}{2}$ (c)
				이 모이 있는 것이 있는 것이 없다.
				8.00

- 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

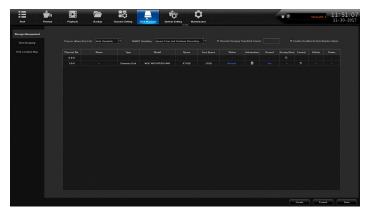
- 1. Go to *Maintenance/System Information/Device Information* top tab. The current firmware version and description display.
- 2. Go to support.uniden.com and check if your system has the latest firmware version. .
- 3. If you need to update your firmware, download the firmware to your computer from 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/*XVR *Upgrade* tab. Browse to the USB drive and select the firmware upgrade file.
- 7. Click on the selected file
- 8. Click Upgrade
- 9. The XVR 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 can have one or two hard disk drives (HDD) depending on the model (HDD max size: 8TB per hard disk). 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.

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

The PRO1600X2 also has 2 SATA ports and does have room for 1 additional HDD inside the chassis.

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



#### Install the Hard Disk Drives

- 1. Shut down the XVR 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.
- 6. Close the lid and power up the system.

#### Formatting the HDDs (Optional)

#### XVR system hard drives are factory formatted.

- 1. From *Disk Manager/Storage Management*, find the row with the HDD to be formatted. Click the box in the *Format* 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**

The Uniden ProSeries XVR recorders can record Analog/HD over Coax by connecting cameras to the BNC inputs on the back of the recorder. The IP cameras and the XVR receiver will all have to be in the same IP range for all the devices to 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.

To add IP cameras (IPC) to the XVR you must enable this feature.

## IP CAMERA SETUP

The XVR will record 2MP IPCs and 4MP IPCs (but only half as many). Enabling this feature will require resturcture of the channel maximum in the system and then a system reboot, so this feature should be enabled early in the installation process.

- 1. Power up the system and login as the Admin.
- 2. Go to System Settings and select Device Settings on the left column.
- 3. In the *Display Mode* field, click the drop down box and select the second option (highlighted in blue) for BNC and 2MP IPC option (4 channel XVR shown). This option adds the most IPCs.

Start Preview	Proteck	inchay Channel Setting Dick Manager Styles Setting	••• 16:39:53 12-21-2017
Time Setting			
Network Setting	Device ID		
Alarm Management	Device Name		
User Management	Device Serial No.	82ab0123dH3b0H5781a	
PTZ Setting			
Device Setting	HDD Number	1 Panel Type 02	
	Alarm Input No.	4 RS485 Device 485 Keybeard	
	Alarm Output No.		
	Language:	English	
	Resolution	1920×1000 /%0	
	Info Display	Channel No. 05D+IP	
	Instant Playback	Smin 🛛	
	Auto Logout Time	(min	
	IPC Pretocol	Setting	
	Auxiliary User	© Enable   © Disable	
	Display Mode	Alaslag(2045):1538) + 40igata(2045):1538) + 9Provine + 4Profesk. Alaslag(2045):1538 + 4Provine + 4Profesk Alaslag(2045):1538 + 4Provine + 4Profesk Zanalg(2045):1538 + 4Provine + 19pafask	
	Mouse Speed	2Audus(293221346) + 20upta(253221346) + 4Provine + 195ghttd; Lowert + ( <sup>2</sup> 93221346) + 20upta(253221346) + 4Provine + 195ghttd; Lowert + ( <sup>2</sup> 93221346) + 20upta(253221346) + 4Provine + 195ghttd;	
			Sare

- 4. Click the 4th option (which shows *2Digital* in the above screenshot) for 4MP cameras, but at half the maximum number of cameras. This doubles the maximum resolution for each camera (if the camera is 4MP or higher), but halves the maximum number of cameras.
- 5. After the selection is made, select Save in the bottom right corner.
- 6. A pop-up window will warn that the system will need to be rebooted, so select *Confirm* and the system will reboot automatically after a short wait.
- 7. When the XVR is ready, login as Admin, go to *Channel Setting*, and add the IPCs to the system.
- 8. Finish setting up all the camera settings for each camera.

NOTES:

- After all the cameras are set up, it is recommended (on a new install) to format the Hard Disk Drive(s) and start fresh.
- 1080p is about 2MP. If your camera's maximum resolution is 1080p, then there is no reason to set the higher resolution (2592 x 1944) option.
- The *Channel Setting* screen shows different options after IPC is enabled, to allow the scanning and adding of IP addresses. It is suggested you connected the required BNC cameras, and make any desired changes before enabling this IPC option.

#### Set up IP Addresses

- 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 this page. 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.

#### **Adding Optional IP Cameras**

All cameras are assigned to LAN1 IP range.

- 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**. System changes all of the cameras' IP addresses and adds them to the system.

#### Prerequisites

- Static IP address in LAN1
- 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.

	<b>–</b> 4			-0			ž <sup>1</sup>	\$				13:27:04
Start	Preview	Playback	File Backup	Channel Settin	g Disk	Manager System S	etting N	laintenance				2017-12-13
		Search	Add All		Details:	Impor	VExport					
Channel Connecting	Proto.	☑ 18	🗹 18H	185		Onvif 🖉 SL			■ Modify the II	P address when add channel	Total bandwidth 0	Current bandwidth 0
Channel Parameter	Channel	Address	Proto.	OSD	onnection	Device Information	Network Car		Chi	annel	Address	Status
Channel Parameter		192.168.1.4	Onvif			DS-2CV2Q21FD-IW	LAN1		CH	n 🛛	192.168.1.179	Connect success
Planning		192.168.1.5	Onvif			DS-2CV2Q21FD-IW	LAN1		🗵 СН	12	192.168.1.181	Connect success
		192.168.1.181	Onvif			IPC	LAN1		🗵 СН	13	192.168.1.186	Connect success
Manual Operation		192.168.1.186	Onvif			IPC	LAN1		🗉 СН	14		
Channel Grouping		192.168.1.185	Onvif			IPC	LAN1		🔳 СН	15		
channel drouping		192.168.1.179	Onvif			IPC	LAN1		🗉 сн	16		
Smart Detection		192.168.1.185	18			02810123/5a5329dc61e	LAN1		🗉 сн	17		
		192.168.1.185	18H			02810123f5a5329dc61e	LANI		🗉 СН	18		
	🗹 СНЗ	192.168.1.186	18H			028101234ae40dc6eb0l	LAN1		Ш СН	19		
		192.168.1.186	18			028101234ae40dc6eb08	LANI		🔳 СН	110		
		192.168.1.181	18			026401235dacecf97fe2	LAN1		Ш СН	111		
	CH2	192.168.1.181	18H			026401235dacecf97fe2	LAN1		🗉 СН	112		
	CH1	192.168.1.179	18			D826000000000000	LAN1		🗉 СН	113		
									🗉 СН	114		
									🗉 СН	115		
									Е СН	116		
									E CH	117		
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	Channel I	Parameter										
	Channel	СН1					🖌 🗷 Enable	De	vice Information			
	Proto.	18						▼ Mc				~
	Address	192.168.1.179						Ne	twork Type	ТСР		<b>v</b>
	Port	5050							er Name	admin		
	Channel								ssword			
	Channel								ssword			
											Copy to	Save Cancel

- 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:
  - 2MP, 4MP, and 4K cameras select the IPC with the SLINK protocol (Proto. column).
  - IPCs included in a XVR kit select the I8S protocol for these IPCs.
  - 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* pop-up. Review IP address and Subnet Mask. If you are using a non-Uniden IPC, you must create a user name and password. Click **Modify**, make changes/enter a user name/password, click **Modify**, **OK**, 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.

### ANALOG CAMERA SETUP

The ProSeries cameras connect to the XVR systems via a BNC connector, which is analog video or Hi-Definition over coax. These cameras have setting menus that can be changed using the UTC (Up The Coax) menu on the XVR.

- 1. Power up the XVR and login to the system. Go through the Guide screens and configure the system.
- 2. Connect the camera to the XVR using the BNC connectors.

- 3. Select *Preview* in the top left corner of the main system screen.
- 4. Double-click the camera image that you want to change. A full screenlive view of that camera displays.
- 5. Right-click the camera image and select *UTC Ctrl* in the pop-up menu. A floating window that has the channel number in the title bar displays.
- 6. Click **Auto** in the center of the directional controls to open the OSD (On Screen Display) of the camera's Main menu (see picture below).



7. Adjust the camera's settings.

### 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

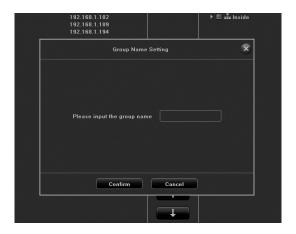
You can set up the system to automatically display the cameras in a specific order. This order is called a tour. You can set up multiple tour groups. From the *Preview* screen, select the Tour icon (



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

				÷		<b>1</b>	0
Start	Preview	Playback	File Backup	Channel Setting	Disk Manager	System Setting	Maintena
Channel Connecting		Preview groups	Preview sequences				
Channel Parameter							
Planning		▼ == NVR ▼ == ≜(CH1	CH1 Lobby		192.168	.1.179	
Manual Operation			СНЗ СНЗ СН4 СН4		192.168 192.168 192.168	.1.189	
Channel Grouping			CH6 CH6 CH7 CH7				
Smart Detection			CH8 CH8				
							+

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



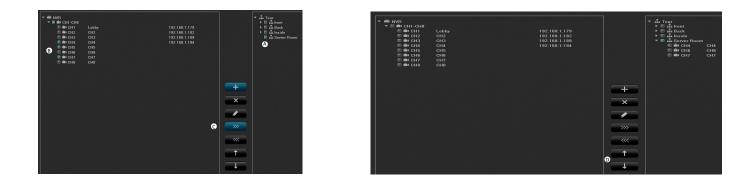
3. Using the popup keyboard, enter the new tour group's name and select the Return icon ( ). The *Group Name Setting* screen displays again. Click **Confirm**.



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

Start Preview	Playback F	de Backup Channe	Setting Disk Menager	System Setting		Channel (2, 3, 4, 13: 50: 2 03-05-20
	RS485 Device	485 Keyboard				
	Channel	Сня				
letwork Parameter		PELCO-D				
	Decoder Address					
		76800				
PTZ Setting						
Device Parameter						
		None	~			
		None	~			
						Copy to Save

#### 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.



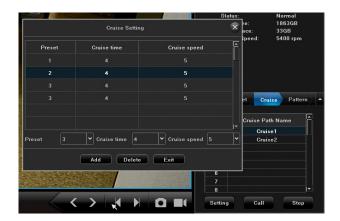
#### Set Up PTZ Cruise

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.
- 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.

	Cruise Settin	g	×	ze: ace:	1863GB 33GB
Preset 1	Cruise time 4	Cruise speed 5		ipeed:	5400 rpm
Preset 1	♥ Cruise time 4	Cruise speed 5	•	et Cru Cruise Pat Cruis Cruis	h Name
			6 7 8 etting	Call	Stop



#### 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**.(**Start Rec**.)
- 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.

Cruise Setting X					ze: 1863GB ace: 33GB speed: 5400 rpm
Preset	Cruise time	Cruise speed		1	ypeed. 3400 rpm
1	4	5			
					et Cruise Pattern 🔺
					Cruise Path Name
					Cruise1
Preset 1	✓ Cruise time 4	✓ Cruise spe	ed 5	<b>`</b>	Cruise2
	Add Delet	e Exit			
			6 7		
	Sector Sector Sector		8		
			Setting		Call Stop

	ze: ace:	Normal 1863GB 33GB		
Preset	Cruise time	Cruise speed	peed:	5400 rpm
	4			
			et Cr	uise Pattern
Preset 3	Cruise time	V Cruise speed 5	Cruise Pa	ise1
	Add Delete	Exit		
		6 7 8		
		Setti	ng Call	Stop

#### 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



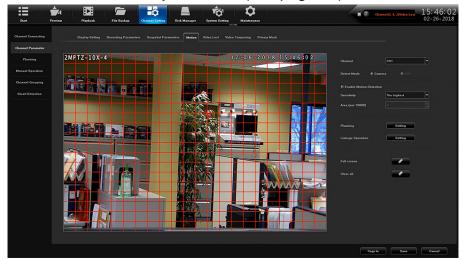
#### Motion Tab

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 36).



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 18 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

