

**DO NOT DISCARD!**



# DVR Owner's Manual

ORDER NUMBER

Version 3.1

**DO NOT DISCARD!**





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## Disclaimers

- 1) Always test cameras and cables prior to mounting!
- 2) Make sure to weatherproof all your cable connections! Do NOT leave any connections directly exposed to weather.
- 3) Always use appropriate power supply(s) included in package!
- 4) Make sure to change the password on your DVR or NVR recorder!

Be sure to remember this password. Write this password down and store in a safe place. You may enter your Username and Password below for future reference:

USERNAME

PASSWORD

- 5) Hard drives come pre-installed in all recorders prior to shipping.
- 6) If you plan on viewing your cameras remotely remember to check your bandwidth. Without sufficient Internet speeds you may experience delay in your video feed. Each camera that will be viewed remotely could use up to 4Mbps. We recommend a 25 Mbps upload speed. Please check with your provider for further information. Minimum Internet speeds and can be found below:

1 Camera: 256 Kbps  
4 Cameras: 1 Mbps  
8 Cameras: 2 Mbps  
16 Cameras: 14 Mbps

**\*\*The above values are for viewing cameras simultaneously. If you plan on viewing only a few cameras at a time the values will be much less.**

## Hardware Setup

This section of the Owner's Manual will explain how to connect your cameras and cables to your DVR or NVR.

### Connecting to a DVR Using Premade BNC Cables

First, connect the Yellow BNC Video cable to the DVR side. Be sure to use the Video Inputs. Connect the opposite side of the Yellow BNC cable to the cameras.

Next, we will need to power the camera using the Red 12VDC connection on your premade cable. The male side of the Red cable will connect directly into the camera's harness. No splicing will be needed.

The Female Red 12VDC power connection will connect into the camera's power source. The power source will vary depending on what system you have. There are 3 different power options.

#### 1) Individual Power Adapter

\*For connecting one camera at a time



#### 2) 4 or 8 Path Power Splitter

\*Great for connecting up to 4 or 8 cameras using one power outlet



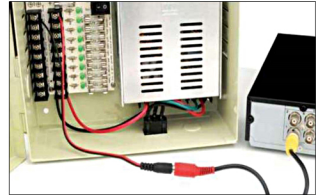
#### 3) 9 or 18 Port Power Box

\*Each camera includes a male pigtail inside of the package. This will need to be connected to the Positive (RED+) and Negative (BLACK-) terminals inside the power box.



## Hardware Setup (Continued)

Here is an example of the power source connected to a power box using a pre-made cable.



### Connecting to a DVR Using RG59 Spool Cable

After cutting the correct length of cable needed to run your camera, we can start by connecting the BNC connectors.

First, strip the cable back like shown (Figure A).



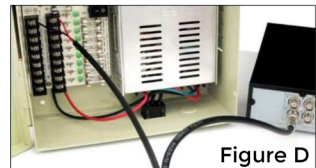
Twist connector onto outer shield, making sure the connector pin is straight and seated correctly (Figure B).



Attach your power connections and use electrical tape, heat shrink or wire nuts to protect them (Figure C).



Use the included Male Pigtail to connect into the power box (Figure D). Be sure to use Red for the Positive (+) terminal and Black for the Negative (-) terminal.



## Hardware Setup (Continued)

The next section will cover connecting IP cameras with an NVR and the various types of cabling used. Keep in mind that most of our IP cameras use PoE (Power over Ethernet) and will not require a separate power source. All of our IP cameras will come with an optional 12VDC connection built in for those who do not wish to use PoE.

### Using Premade Ethernet Cable

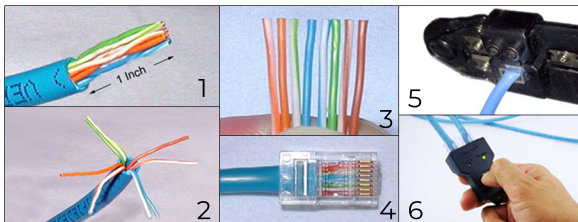
The most popular way to connect an IP camera to an NVR is using a Pre-made Ethernet Cable. The cables are pre-cut and molded so no crimping or cutting is necessary. Simply plug one end of your Ethernet cable into your NVR system and the other end into your camera's input. Once the connection has been made, the camera feed will appear after 1-3 minutes.



### Using Custom Ethernet Cable

You may also connect your IP camera to your NVR using a spool of Cat5, Cat5e, or Cat6 cable. We recommend using the T568-B standard for configuring custom cable. For more instructions on making custom cables, please visit our website:

[www.cctvsecuritypros.com/content/pdfs/static-pages/CAT5-Termination.pdf](http://www.cctvsecuritypros.com/content/pdfs/static-pages/CAT5-Termination.pdf)

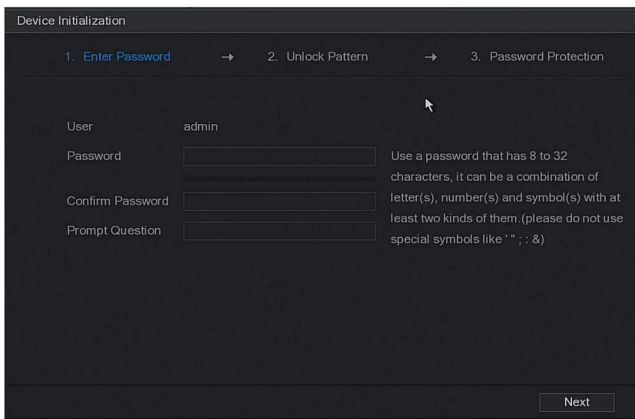


# Software Setup


## Device Initialization

Step 1) First, power on your CCTV Security Pros camera system. The **Device Initialization** screen will appear. When using a CCTV Security Pros system, you are required to set a login password for the admin account (system default user).

**Note:** To ensure the safety of your device, please store your admin login password in a safe place.

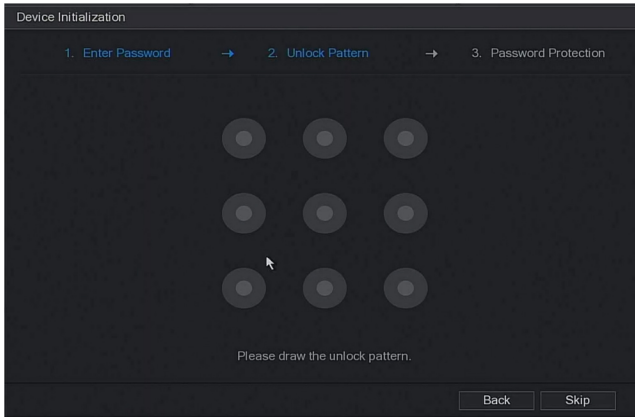


Step 2) Configuring the **admin** login password:

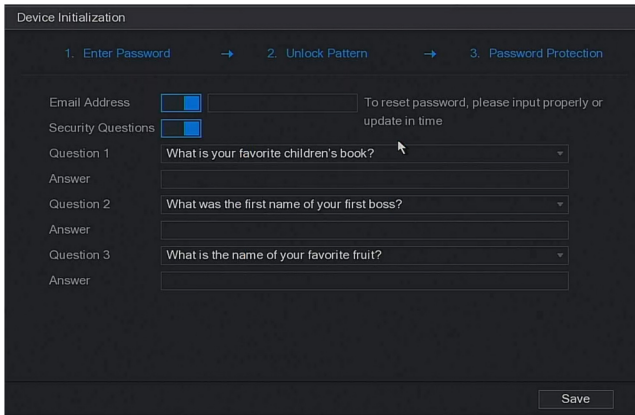
- \* **User name:** The default username is **admin**
- \* **Password & Confirm Password:** Password must have 8-32 characters. It can contain letters, numbers, and special characters (except “”, “””, “”, “:”, “&”). The password must contain at least two of the above types. We recommend choosing a strong password.
- \* **Prompt question:** You can select the following icon if you want the system to provide a password hint: 

## Software Setup (Continued)

Step 3) Click **Next** and **Unlock Pattern** will be shown.



Step 4) Draw and set up and unlock pattern with your mouse. You may skip this step if you do not want to set a pattern lock.



Step 5) Configure password security information. Your email and/or security questions can be used to reset the admin password.

## Software Setup (Continued)

### Step 5) (Continued)

- \* **Email:** Enter an email address to be used when resetting your password. When resetting your password with your email, a security code will be sent to your email address to unlock your account.
- \* **Security questions:** Security questions can also be used to reset your password.

**Note:** You may configure or update your email address or security questions by going to the Main Menu > Settings > System > Account.

Step 6) Click **OK** to complete the **Password Configuration** setup. The system will continue to the **Startup Wizard**. We recommend following the Startup Wizard to configure the rest of your CCTV Security Pros system.

## Completing the Startup Wizard

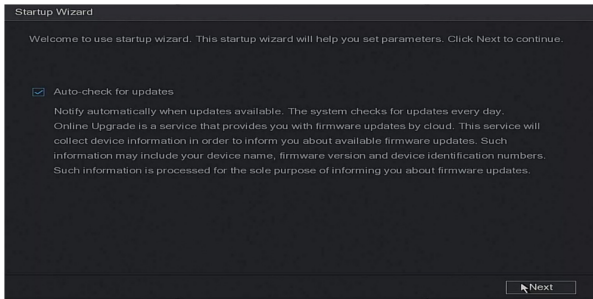
Please follow the Startup Wizard to configure the following options before system use:

- \* **Auto Updates**
- \* **General Settings:** Language, Date and Time
- \* **Enabling DHCP** to connect to your router or modem (optional)
- \* **Enabling P2P/Easy4IP** for remote viewing (optional)
- \* **Camera Encode Settings** (Configuring Camera Resolutions - optional)
- \* **Snapshot Settings** (optional)
- \* **Basic Recording Schedule**
- \* **Advanced Recording Schedule** (optional)
- \* **Snapshot Schedule** (optional)



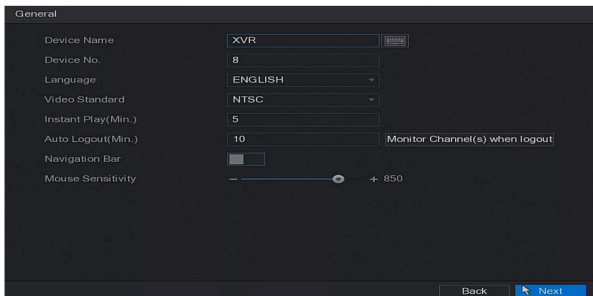
## Software Setup (Continued)

**Auto Update:** Your CCTV Security Pros Recorder can be configured to update automatically. These updates include performance and security improvements and is highly recommended to enable. You may disable this feature by removing the check box. Select next when you are ready to proceed.



### General Settings

**General System Settings:** The General menu has a few settings that should be kept at the default positions for the best user experience. The **Device Name** and **Language** can be changed to your preference. Click **Next** to move on to the next menu.



**Date and Time:** Enter in your **System Time**. You can also select your time zone next to the system time. You may change the

## Software Setup (Continued)

format of the system time from a 24 Hour clock to a 12 Hour clock if you prefer. You may enter the Daylight Savings Time setting under "DST." After your changes have been made, click **Next**.

The screenshot shows a 'Date & Time' configuration window. It includes fields for System Time (2018-05-07 10:31:38), Date Format (YYYY MM DD), Date Separator (-), Time Format (24-HOUR), DST (Week), Start Time (Jan 1st Su 05:00), End Time (Jan 1st Mo 00:00), NTP (Manual Update), Server (time.windows.com), Port (123), and Interval (60). Navigation buttons 'Back' and 'Next' are at the bottom right.

## Network Settings

For the next step in the **Startup Wizard** you will need to ensure your system is connected to a modem, router or switch that has an Internet connection. The systems do not connect to the Internet through WiFi so you must use a hardwired Ethernet cable attached to your network.

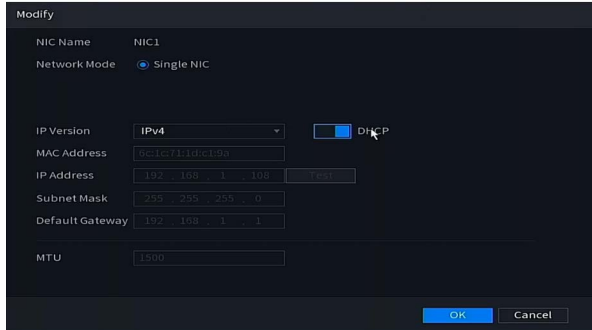
This step is optional and not needed for your system to function. However, it is a standard feature on all CCTV Security Pros equipment of which you may wish to take advantage. If you do not wish to configure your system for remote viewing, feel free to skip this step by clicking the **Next** button.

You may also want to download our **DMSS** iOS and Android app found in the App Store or Google Play Store. The next steps will show you how to configure your Mobile Device or Tablet.

**Enabling DHCP:** Inside of the network settings we will want to click on **Modify** and make sure **DHCP** is switched to **Enabled**.

## Software Setup (Continued)

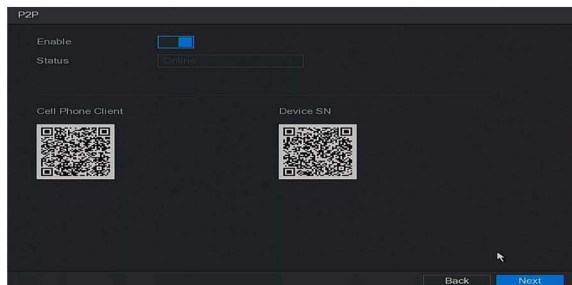
When you enable **DHCP**, the IP address, Subnet Mask, and Default Gateway will change to 0.0.0.0. After DHCP is enabled you can click the **OK/Next** button.



**Note for Advanced Users:** If you would prefer to manually enter the IP address, Subnet and Gateway you may do so by using the Static Option instead.

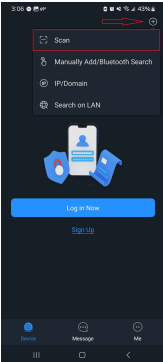

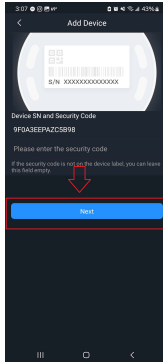

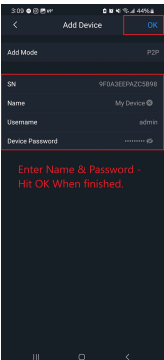
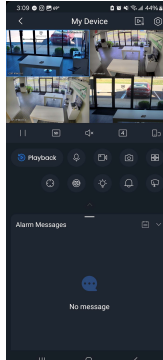
**P2P Remote Viewing Setup:** The next section of the Wizard is your **P2P** setup. Make sure the Enable check box is highlighted with a check inside of it. If your network is set up properly you will see an “Online” status. There are two QR codes in this page. The only one you will need is the “Device SN.” This is your system’s Serial Number or “SN.”

Keep in mind that in order to get this menu to show “Online” you must have an Ethernet cable connected to your router or modem.



## Software Setup (Continued)

**Mobile Viewing Setup:** Download **DMSS** from the App Store or Play Store. Select the **+** icon at the top right corner. Select **Scan**. Scan the Device **SN QR code** found on the right hand side of the **P2P** menu on your system. Do not scan the Cellphone Client QR Code as it will not work. After scanning you will see your SN number on your mobile device. Click **Next**. Select **DVR/XVR** or **NVR**. Enter a **Device Name**, your **Username** (**admin**) and **Password** you configured earlier in this guide and click **Save**. The live view will appear after the device has been saved.

- 
- 
- 
- 
- 
- 

**Note:** If your P2P status shows "Offline" your cameras will not connect. Please refer to Network Settings located earlier in this section and check your configuration if you're unable to proceed.

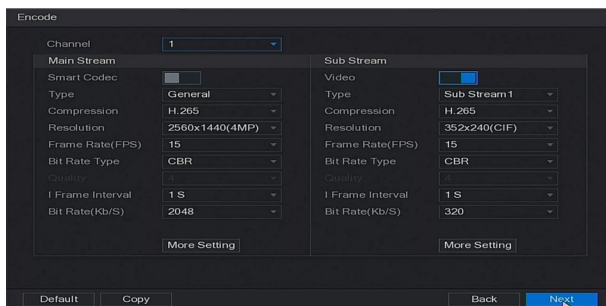
## Software Setup (Continued)

### Camera Encode Settings (Configuring Camera Resolution)

The next section of the Startup Wizard will allow you to fine tune the **Recording Resolution** and **Streaming Resolution**. Your CCTV Security Pros system will auto adapt to the highest available **Resolution** and **Frame Rate**. Most likely, this will not need to be changed. This menu will vary slightly depending on the DVR/NVR and cameras being used.

The column on the left side is the “Main Stream” and is the highest quality stream that gets recorded to your hard drive.

The column on the right side is your “Sub Stream” and is typically what gets streamed to your Mobile Devices and Tablets. This comes in handy when you have limited Internet bandwidth. If you made any changes to this menu be sure to click **Apply**. Then click **Next**.



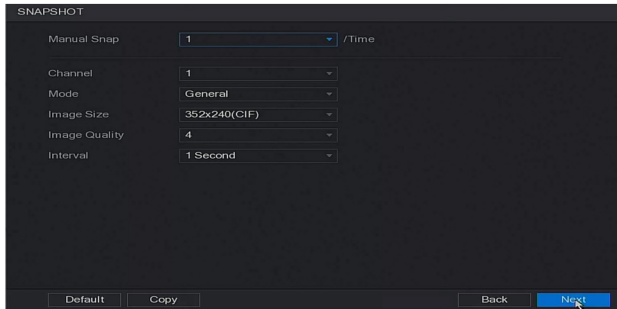
### Snapshot Settings

Your CCTV Security Pros recorder can take snapshots or screenshots of any camera at set intervals. If you plan on configuring this please enter the desired camera, quality and interval you would like to take snapshots and click **Next**.

**Note:** This is an optional setting (screenshot on next page).

# Software Setup (Continued)

## Snapshot Settings (continued)



The screenshot shows the 'SNAPSHOT' configuration window. It contains several settings, each with a dropdown menu:

- Manual Snap: 1 /Time
- Channel: 1
- Mode: General
- Image Size: 352x240(CIF)
- Image Quality: 4
- Interval: 1 Second

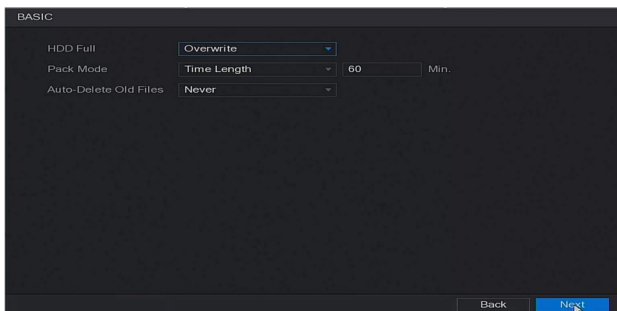
At the bottom of the window, there are four buttons: 'Default', 'Copy', 'Back', and 'Next'. The 'Next' button is highlighted in blue.

## Basic Recording Settings

Your CCTV Security Pros system is set to overwrite itself after the Hard Drive is full. This is a great feature to keep enabled since the system is set to meant record maintenance-free.

The system will store each recorded file on the Hard Drive in 60 minute files. If you would like to change the duration each file is packed into, you may set that in this menu.

The system is designed by default to NEVER delete old files automatically. This, of course, can be changed but we strongly recommend keeping this setting to “never.” Now click **Next**.



The screenshot shows the 'BASIC' configuration window. It contains three settings, each with a dropdown menu:

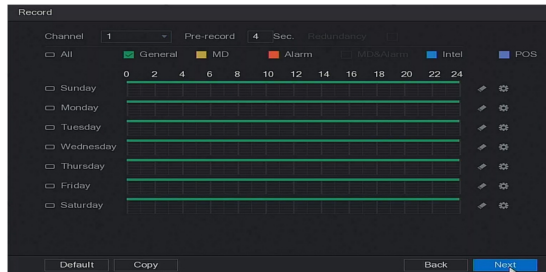
- HDD Full: Overwrite
- Pack Mode: Time Length 60 Min.
- Auto-Delete Old Files: Never

At the bottom of the window, there are two buttons: 'Back' and 'Next'. The 'Next' button is highlighted in blue.

## Software Setup (Continued)

### Advanced Recording Settings

**All CCTV Security Pros systems are configured to record 24/7 right out of the box!** You do not need to set anything here if you plan on recording 24 hours a day, 7 days a week. The example below shows a system set to record 24/7.



The systems can also be configured to **Motion Detection**, which is a popular function. This will conserve hard drive space and make it easier to search for events in the future.

Motion detection can be configured differently for each camera and each day if you choose (**continue to the next section if you prefer to set up motion detection**).

If you plan to keep your system recording 24/7, no changes need to be made. Click **Next**.

### Motion Detection Setup

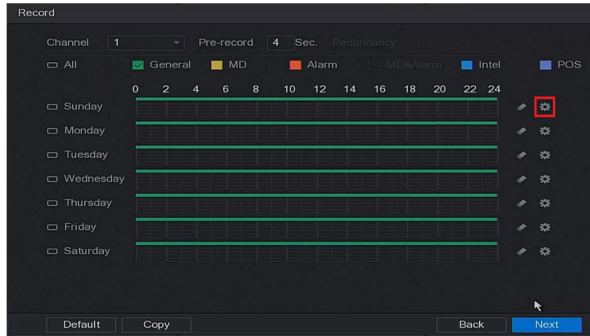
These examples will show a system set to motion detection for **24 hours a day, ALL days of the week**.

Step 1) Click on the **Gear Icon** towards the right hand side of Sunday.

(Please see screen shot on next page.)

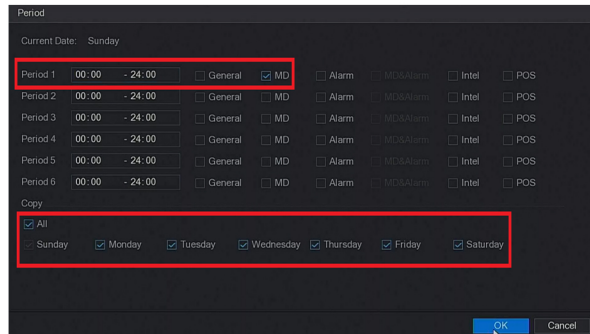
## Software Setup (Continued)

Step 1) (continued)



Step 2) Inside of the next menu you want to remove the check box from General and place next to **MD (Motion Detection)** under **Period 1**.

Be sure to **Copy ALL** days of the week at the bottom. Save this Menu once it looks like this.



Step 3) Your **Schedule Menu** should show yellow lines on each day now.

Be sure to **Copy** to any **Channel** you would like to set to Motion Detection at the bottom left of the screen.

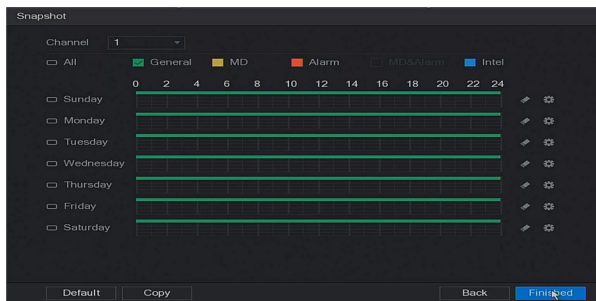


## Software Setup (Continued)

### Snapshot Schedule

If you chose to use **Snapshots** you may set a custom schedule similar to motion detect in the previous figure. If you would like to create a custom schedule for your snapshots you may do that now. Make any changes you would like to make and click **Finished/OK**.

**Note:** This is an optional setting.



*You have now successfully completed the Startup Wizard. Your system should be functioning to your liking and will never need to be configured again, unless you need to make any changes. All of the changes made in the Startup Wizard can be accessed at any time in the future.*

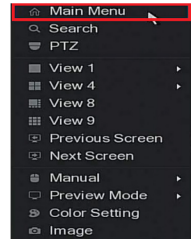
## DVR Search/Backup Guide

This is a quick instructional guide on how to locate and back-up video at your DVR using a USB thumb drive.

We recommend that you use the USB port on the back of your DVR to plug in your mouse and leave the front USB port free for backup.

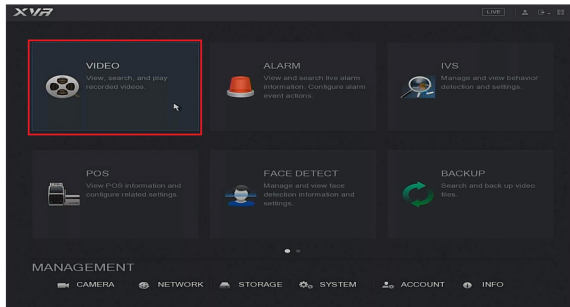
## DVR Search/Backup Guide (Continued)

Step 1) From anywhere on the NVR screen, right click with your mouse and select **Main Menu** from the drop down menu.

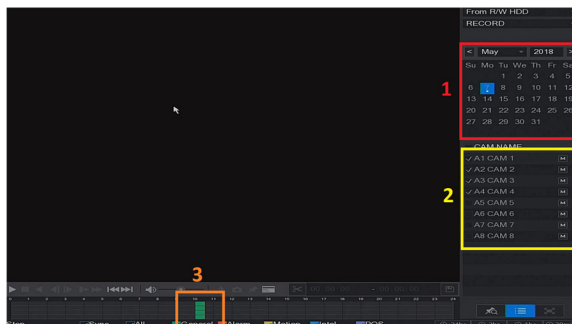


You will be prompted to log in to your NVR. Enter in your username and password and click **OK**.

Step 2) Once you have logged into the DVR, the **Main Menu** screen will appear. Click on the **Video** icon.



Step 3) Now you are at the **Video Screen**. In the upper right-hand corner you will see a calendar. Days that have recorded video are highlighted in blue. Select a day from the calendar (see the red #1).



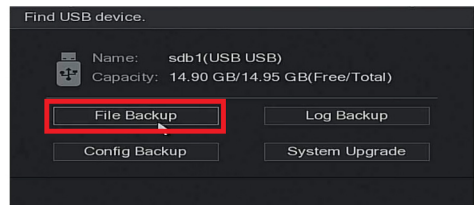
## DVR Search/Backup Guide (Continued)

Step 4) You can review recorded video from one or more cameras at a time. Choose the cameras that you wish to review by clicking the checkbox next to the camera. (see the yellow #2 on previous page).

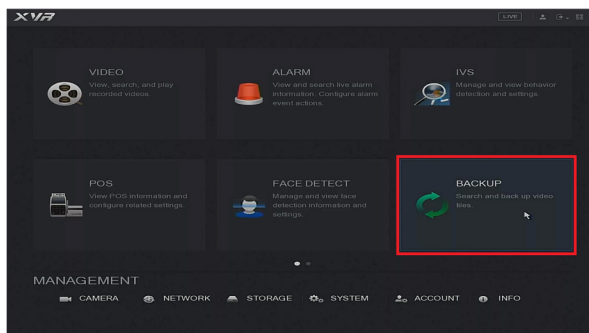
Step 5) Click anywhere along the timeline (in military time) at the bottom of the screen, and video will start playing at the time you choose (see the orange #3 from the previous page). The color may vary depending upon the recording time.

**Make a note of the Start date and time and the End date and time for each camera that you wish to backup.**

*Note: If don't already have a USB thumb drive inserted in the DVR, do so now. It will bring up the **USB Device Auto Pop-Up Screen**. Then just select **File Backup**, and it will take you to Step 8. If you do not see this prompt, continue with Step 6.*

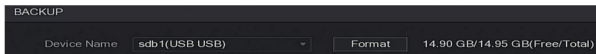


Step 6) Right-click once with the mouse and it will bring you back to the **Main Menu**. Then click on the **Backup** icon.



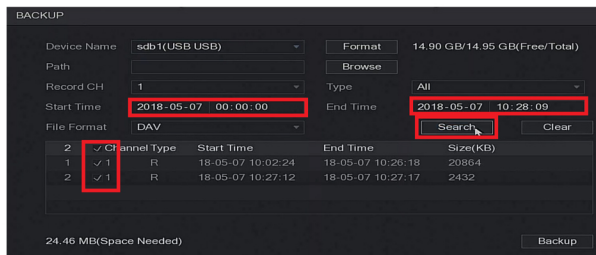
## DVR Search/Backup Guide (Continued)

Step 7) Once at the backup option, you should see your USB drive at the top. If it does not appear please check that the USB drive is inserted properly



Step 8) At the Backup Menu, be sure that the **Type** is set to **All**. Select the **Record CH** (camera) that you wish to backup. (You can add additional channels but only one can be added at a time.) Make sure that **File Format** is set to **DAV**.

Then, using the mouse and the on-screen keypad, enter the **start date and time** and the **end date and time** of the video that you wish to backup. Finally, click the **Search** button and one or more files will be added to the queue.



Please note that only files that are checked will be backed up, and the **Clear** button is also an option to delete files from the queue.

Step 9) You can repeat Step 8 for additional cameras that you wish to add. Once you have all of the files added that you need, click the **Backup** button to begin backing up video to your thumb drive.

(Please see screen shot on next page.)

# DVR Search/Backup Guide (Continued)

Step 9) (continued)

The screenshot shows the 'BACKUP' window of a DVR system. It includes fields for Device Name (sdb1(USB USB)), Path, Record CH (1), Start Time (2018-05-07 00:00:00), End Time (2018-05-07 10:28:09), and File Format (DAV). A table displays search results for channel 2, listing two video files with their start/end times and sizes. At the bottom, it shows '24.46 MB(Space Needed)' and a 'Remaining Time 00:00:10'.

	2	✓ Channel	Type	Start Time	End Time	Size(KB)
1	✓ 1	R		18-05-07 10:02:24	18-05-07 10:26:18	20864
2	✓ 1	R		18-05-07 10:27:12	18-05-07 10:27:17	2432

## You're Done!

After a few minutes (depending on the amount of video that you are backing up) you will see a message showing that your backup has finished. Click **OK** and remove the thumb drive from the DVR. The thumb drive now contains all of the video files and a player that you can use to watch the footage on your computer.

For further help and menu explanation including instructional videos and documents, please visit our Support Tab at [www.CCTVSecurityPros.com/Support](http://www.CCTVSecurityPros.com/Support)



[www.cctvsecuritypros.com/support](http://www.cctvsecuritypros.com/support)  
(888) 653-2288 x 3

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