



## Troubleshooting Guide

### BACKING UP FOOTAGE ON A VMAX™ SYSTEM

#### Step 1.

Make sure your mouse is plugged in the back. This will make the upcoming steps easier.



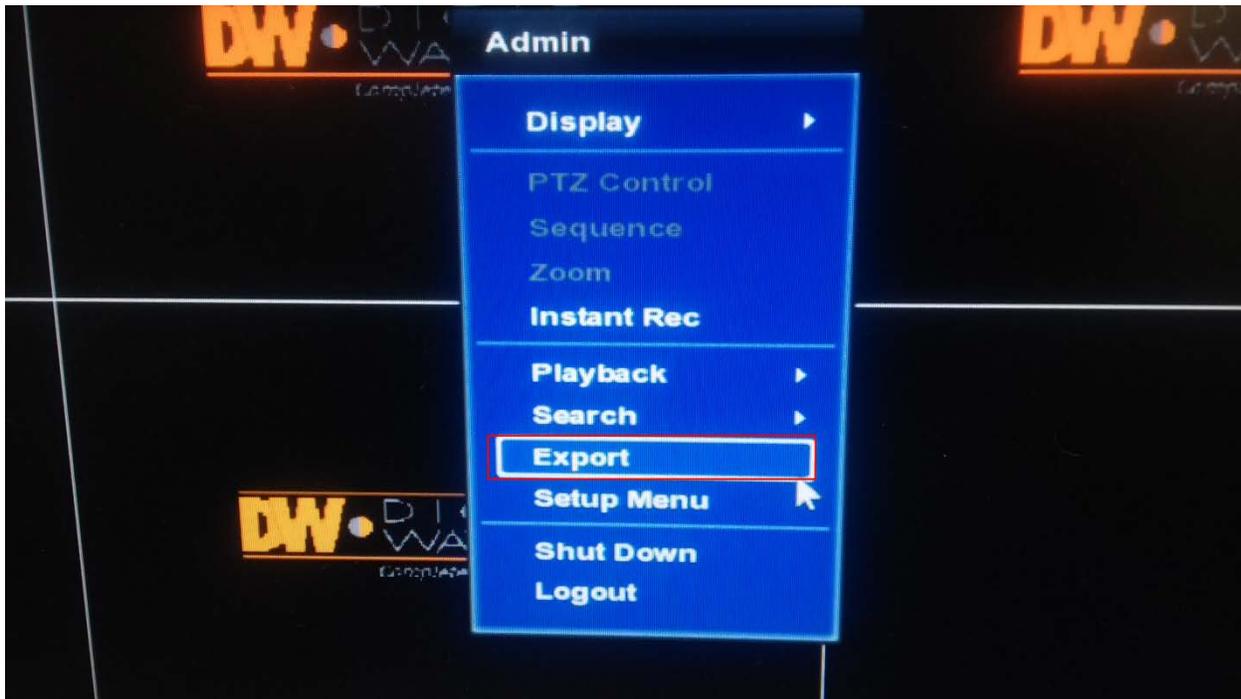


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## BACKING UP FOOTAGE ON A VMAX™ SYSTEM

### Step 2.

Right click and select “Export” or “Backup” (depending on your model).



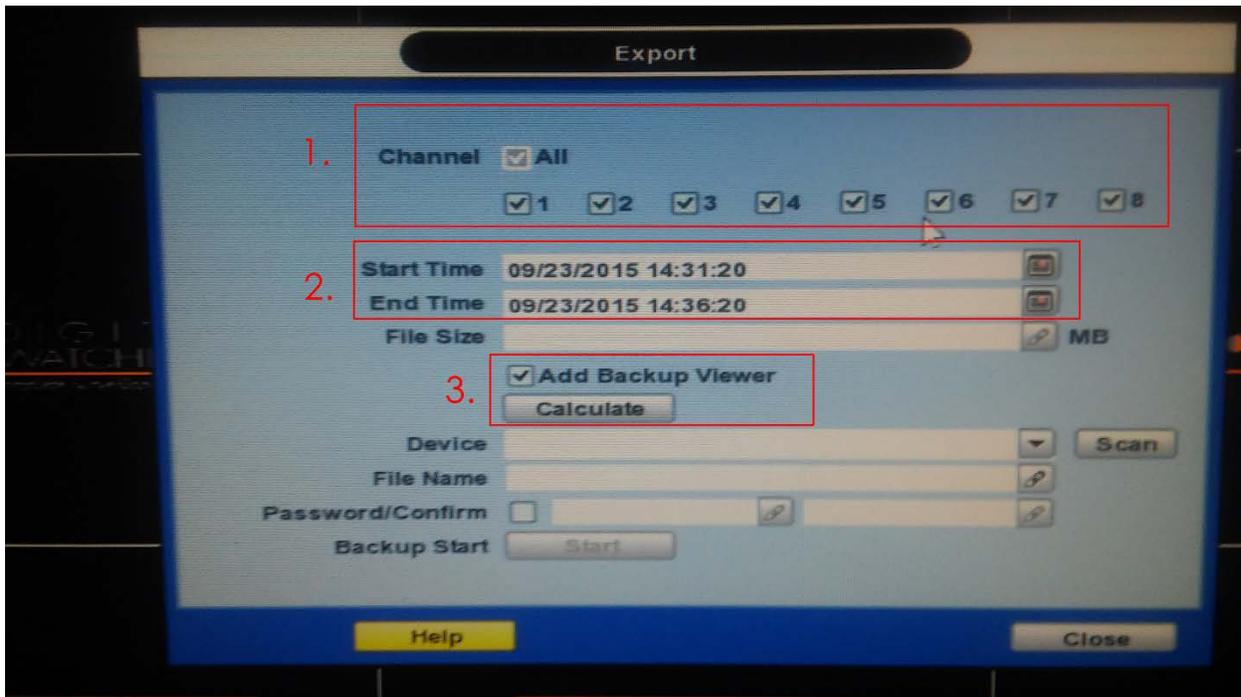


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## BACKING UP FOOTAGE ON A VMAX™ SYSTEM

### Step 3.

1. Select the channels you wish to backup.
2. Select the start time and end time.
3. Checkmark “Add Backup Viewer” and press “Calculate.”





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### BACKING UP FOOTAGE ON A VMAX™ SYSTEM

#### Step 4.

Plug a USB thumb drive into the front of the DVR (this is why we have the mouse plugged in the back!). Make note that your USB thumb drive needs to be formatted in Fat or Fat32 for the DVR to be able to read it.





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### BACKING UP FOOTAGE ON A VMAX™ SYSTEM

#### Step 5.

You will notice that after you pressed “Calculate” your file size auto-populated with information. This is how much storage space your file will take. The DVR will back up a maximum of up to 32GB at a time.

The screenshot shows a web-based interface for configuring a backup. The 'Channel' section has a dropdown menu set to 'All' and checkboxes for channels 1 through 7, with channel 1 selected. The 'Start Time' is 09/23/2015 14:33:03 and the 'End Time' is 09/23/2015 14:38:03. The 'File Size' field is highlighted with a red box and contains the value '19'. Below this, there is a checkbox for 'Add Backup Viewer' which is checked, and a 'Calculate' button. The 'Device' field is a dropdown menu, 'File Name' is a text input field, and 'Password/Confirm' has two password input fields. At the bottom, there is a 'Backup Start' section with a 'Start' button.

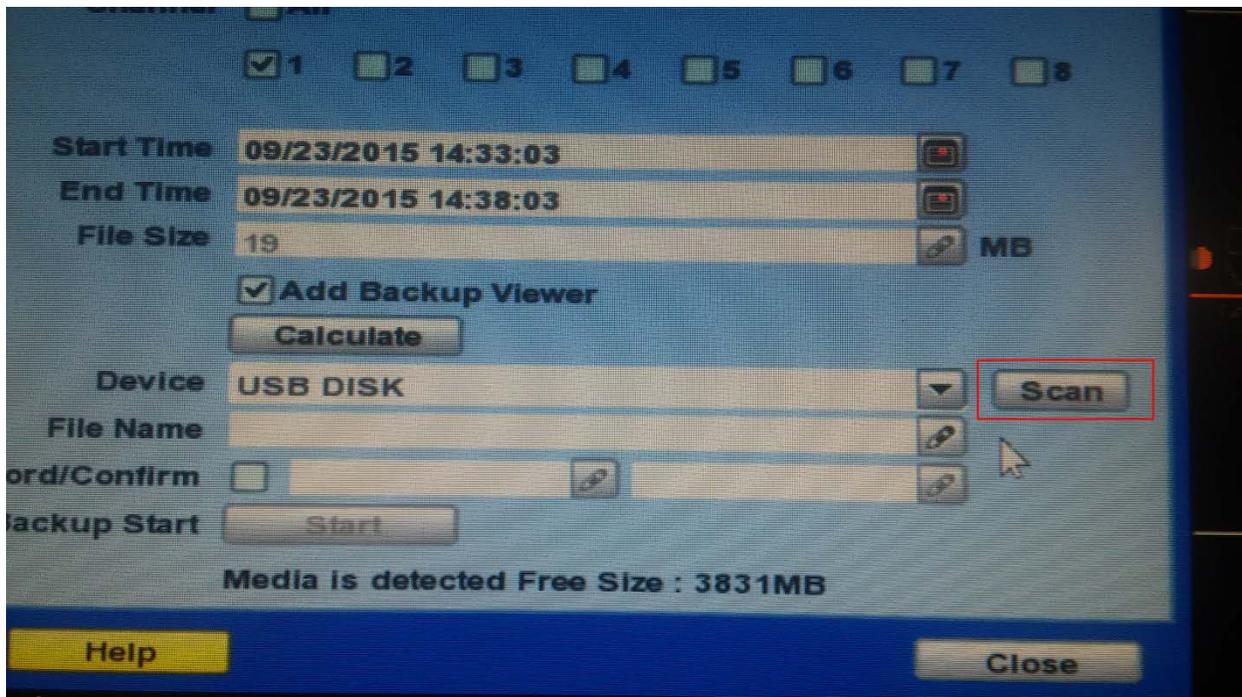


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## BACKING UP FOOTAGE ON A VMAX™ SYSTEM

### Step 6.

Press “Scan” to allow the DVR to detect your thumb drive. It will display the name of your thumb drive on the left and display how much free space is available on the thumb drive at the bottom of the page.



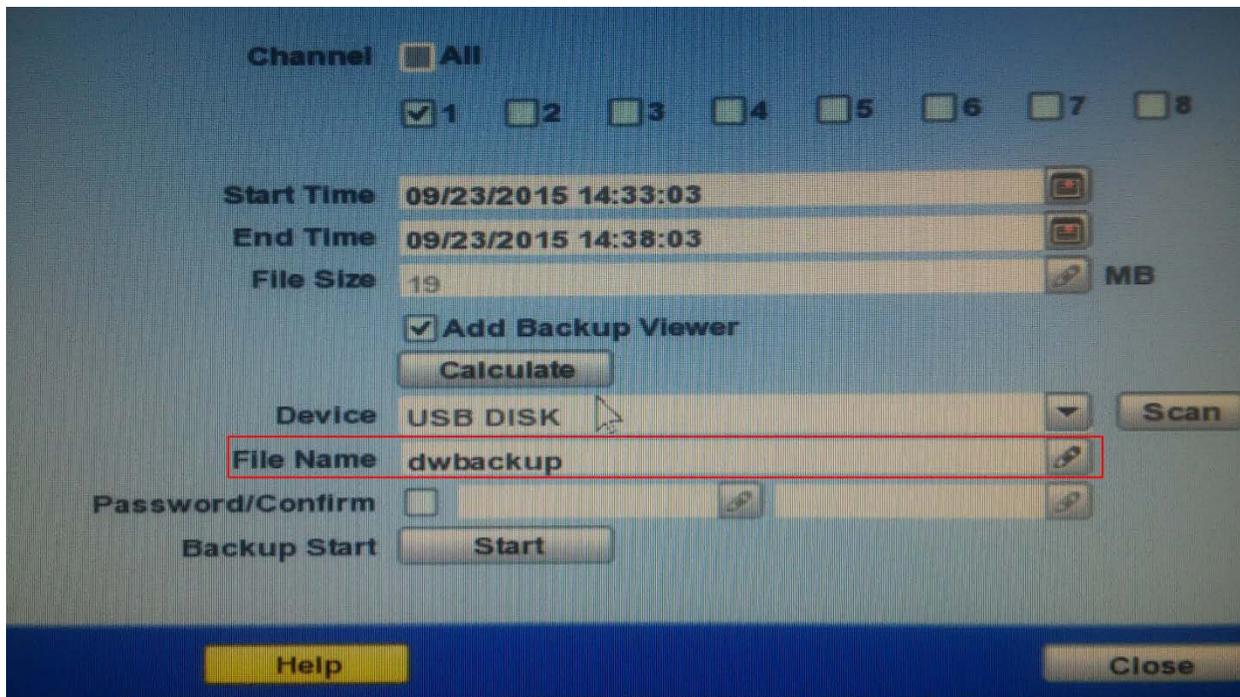


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## BACKING UP FOOTAGE ON A VMAX™ SYSTEM

### Step 7.

Give your file a name. The DVR will not allow you to save without assigning a name for it to be filed under. (Optional: You can also give the file a password for protection, but it is not required. Press the “Start” button after you’ve named the file.



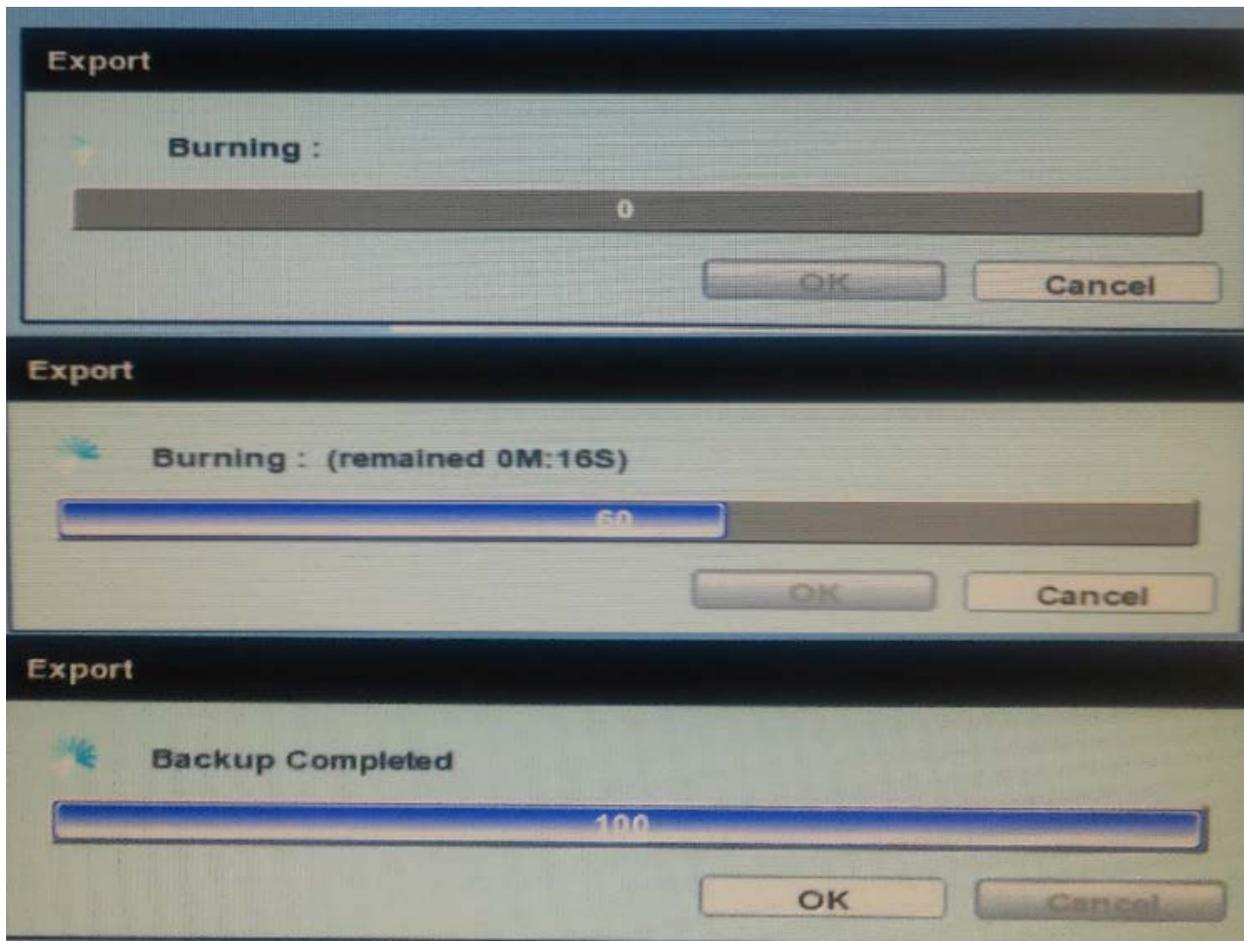


## Troubleshooting Guide

### BACKING UP FOOTAGE ON A VMAX™ SYSTEM

#### Step 8.

Allow your backup to complete. The length of time to back up depends on the size of the file you are backing up. The next photo illustrates the different stages of the backup. After the file completes the backup, press “OK.”





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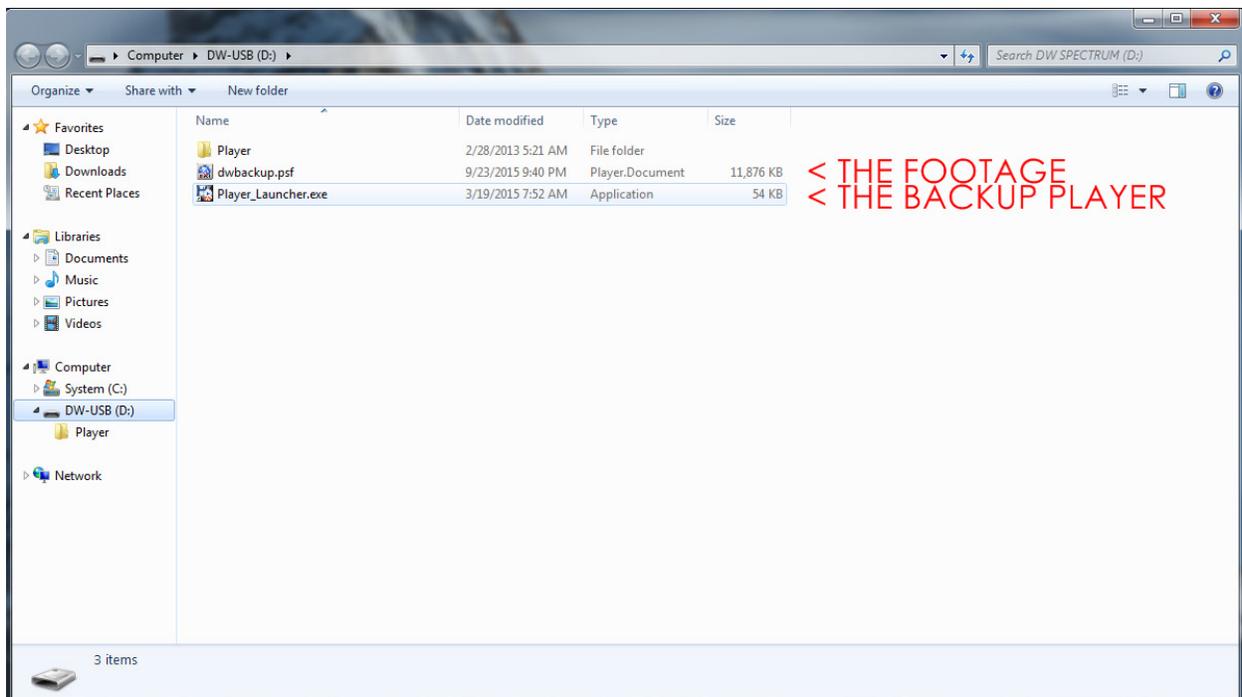
## BACKING UP FOOTAGE ON A VMAX™ SYSTEM

### Step 9.

Plug your USB thumb drive into a Windows® computer. Open the USB thumb drive and you will see;

- The player folder
- The file you backed up (it will end in “.psf)
- The actual player

Double click the player icon and it will open the backup player.



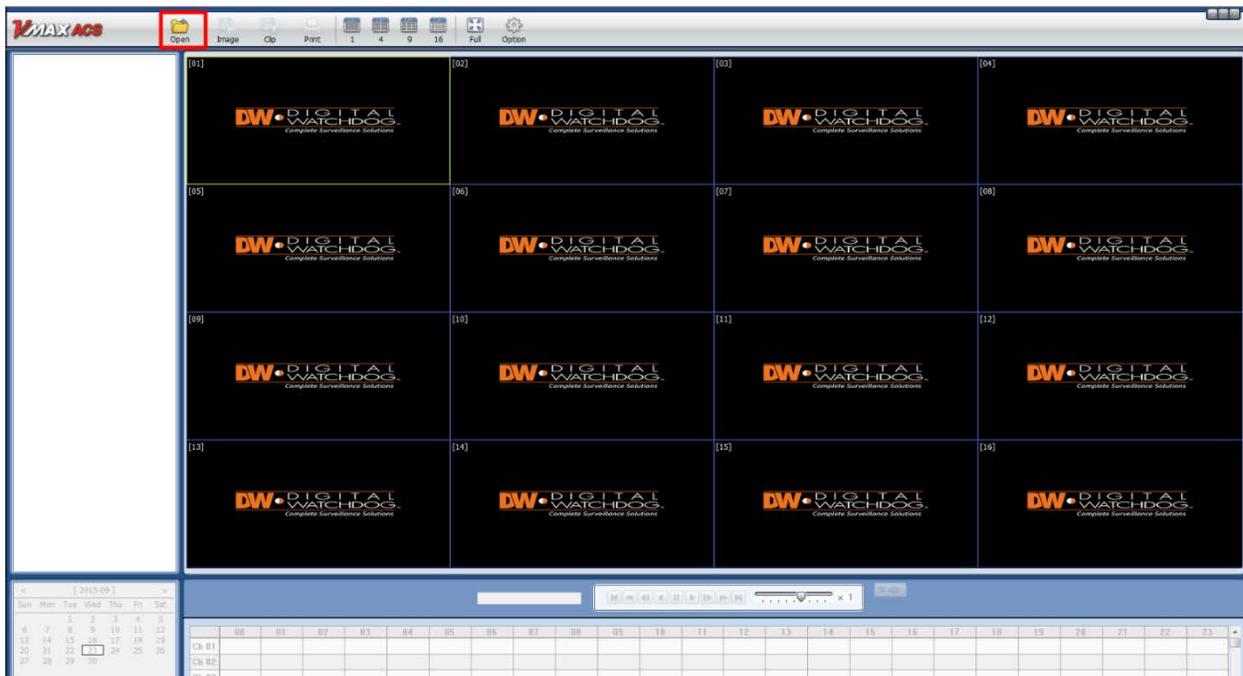


# Troubleshooting Guide

## BACKING UP FOOTAGE ON A VMAX™ SYSTEM

### Step 10.

Click on the folder in the top left of the player.



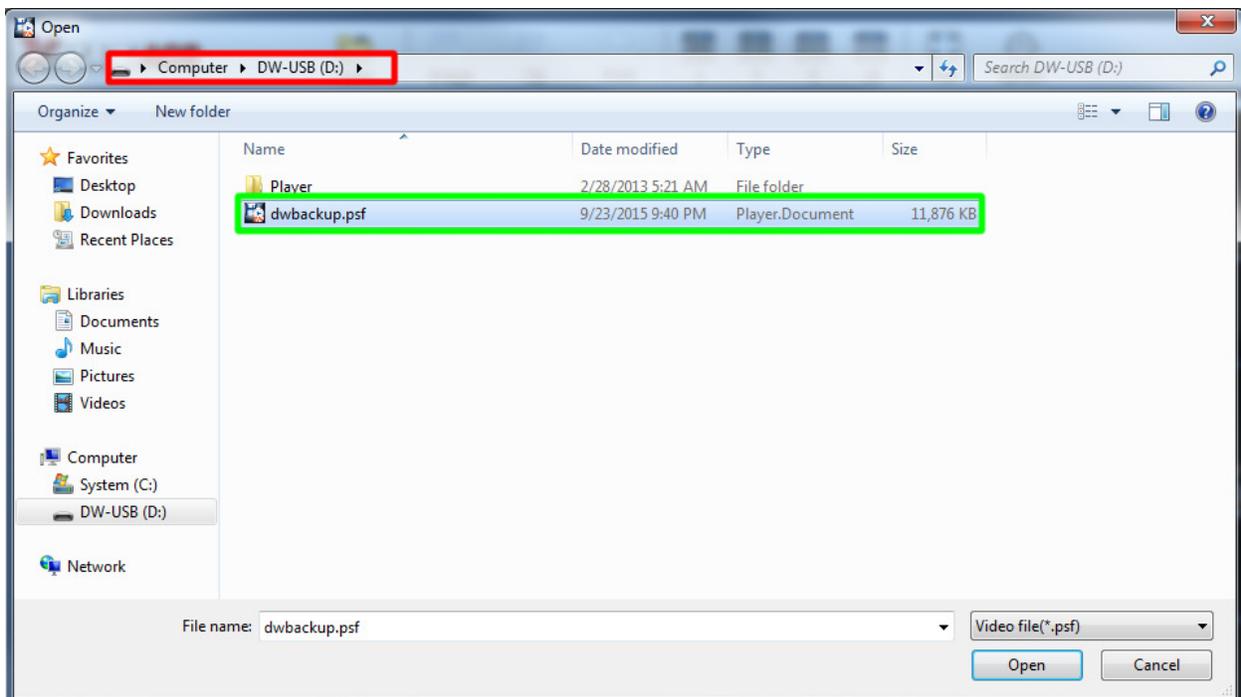


# Troubleshooting Guide

## BACKING UP FOOTAGE ON A VMAX™ SYSTEM

### Step 11.

Select the file from your USB. If you backed up multiple files, you can select which one to view from this screen. Press “Open” after you’ve made your selection.



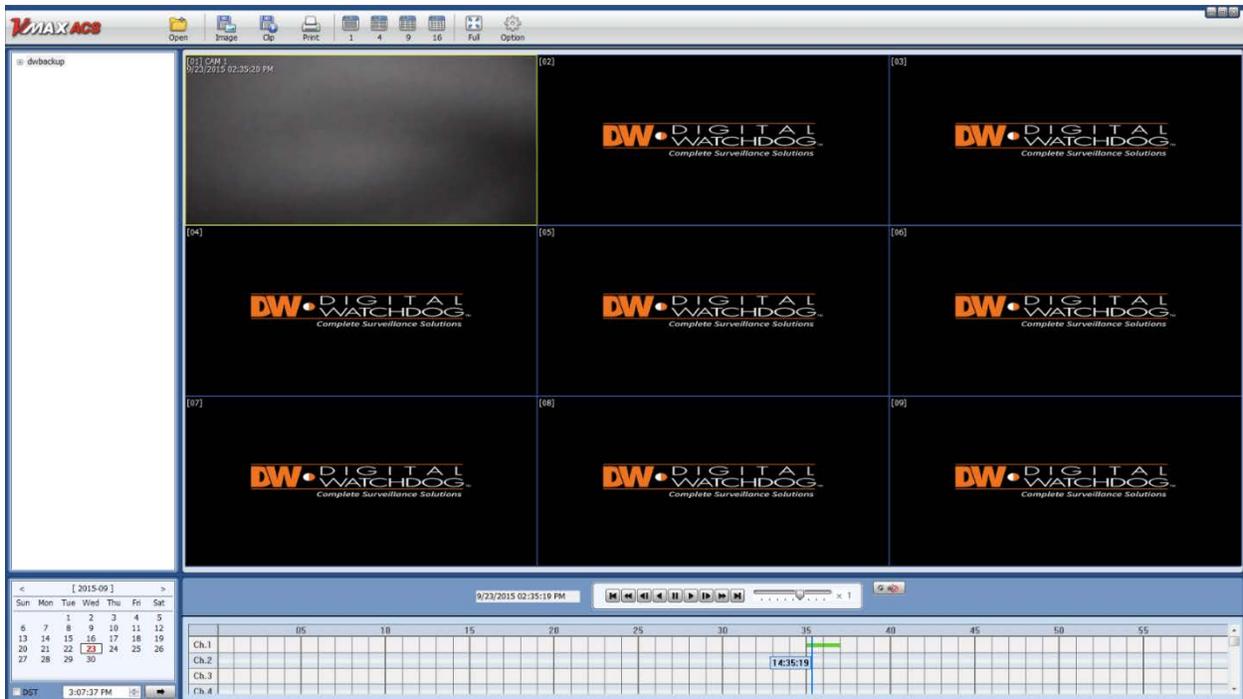


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## BACKING UP FOOTAGE ON A VMAX™ SYSTEM

### Step 12.

Your file will play immediately after selection. You will notice the time stamp, the appropriate camera on the appropriate channel, and easy to use navigation on the bottom of the screen to find specific times and incidents!





## Troubleshooting Guide

# BACKING UP FOOTAGE ON A VMAX™ SYSTEM

## Additional Notes

- Your start time and end time **must** have footage at the exact time.
- External hard drives can work, but are **not** recommended.
- If you forget to add a backup player, our free Pivot™ software includes a player that will play your file.
- The backup is only viewable on Windows machines. Mac® computers will need to rely on the “clip” function on their Mac ACS software.
- The file will only back up in the .psf format. This allows for ease when navigating through your footage on the player.

[Follow this link for our free Pivot™ software.](#) You can also back up from the Pivot software. This is explained in the Pivot manual.



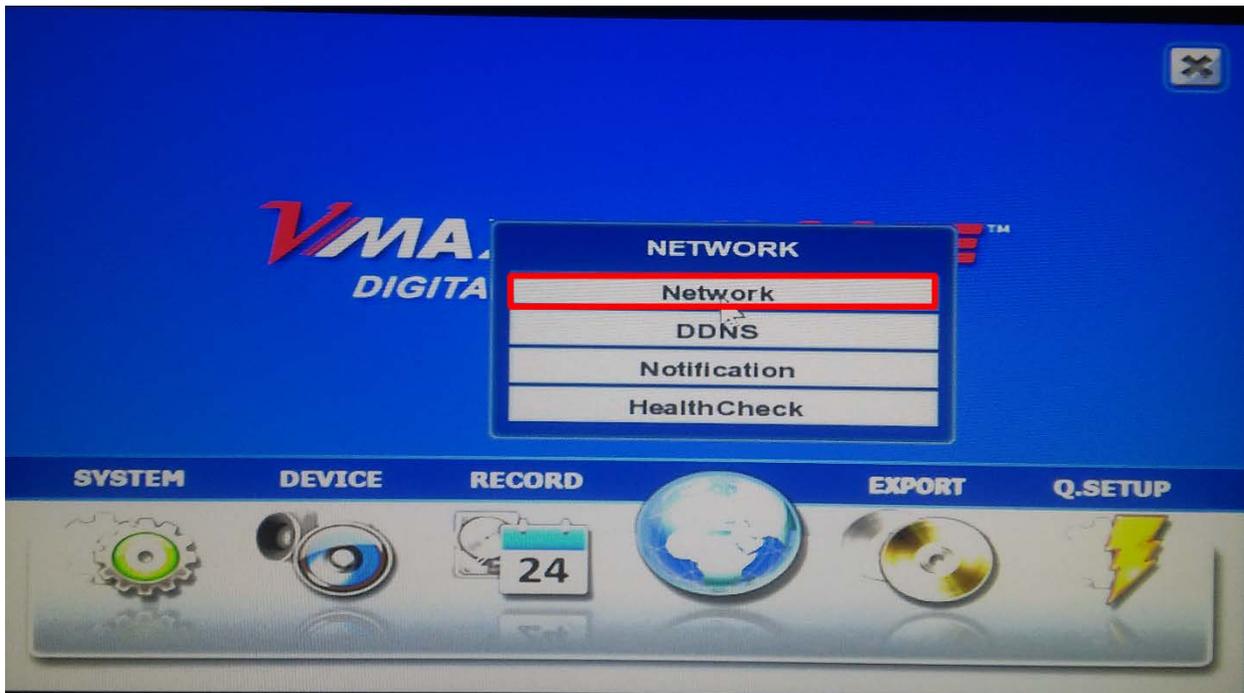
# Troubleshooting Guide

## NETWORK SETUP FOR THE VMAX™ SYSTEMS

This guide offers basic step-by-step instructions to set up your Digital Watchdog® DVR to be viewed anywhere!

### Step 1.

Go to NETWORK > Network on the Setup menu.



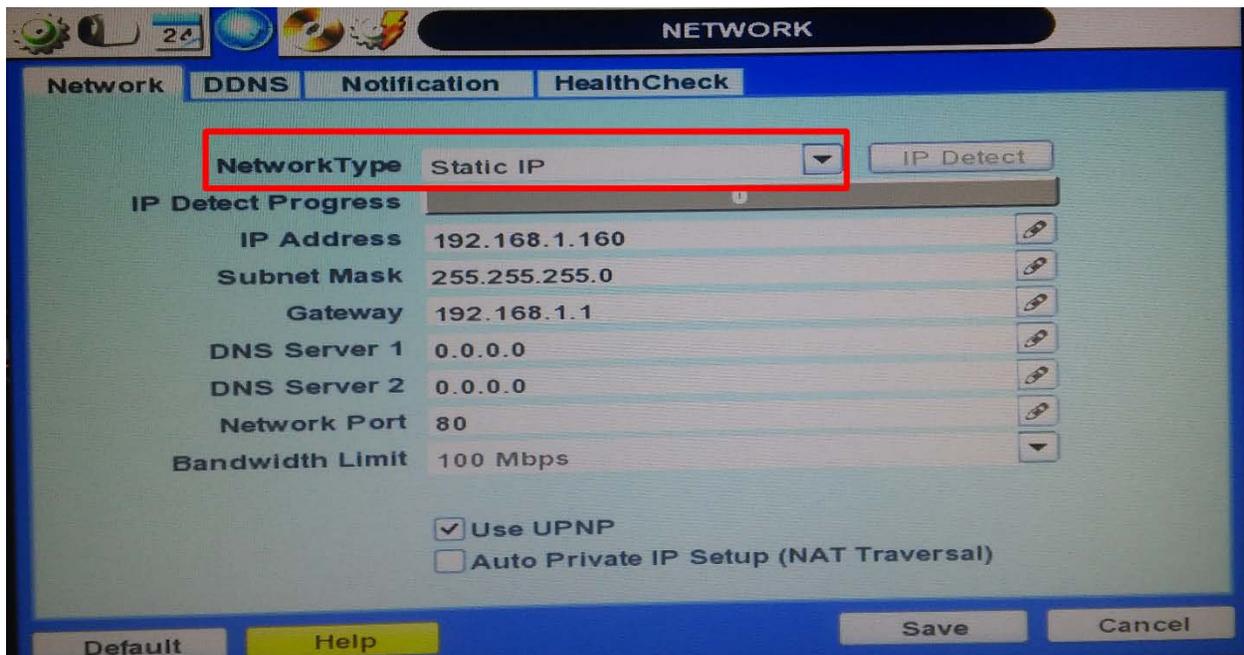


# Troubleshooting Guide

## NETWORK SETUP FOR THE VMAX™ SYSTEMS

### Step 2.

Change the Network Type from “Static” to “Dynamic.”



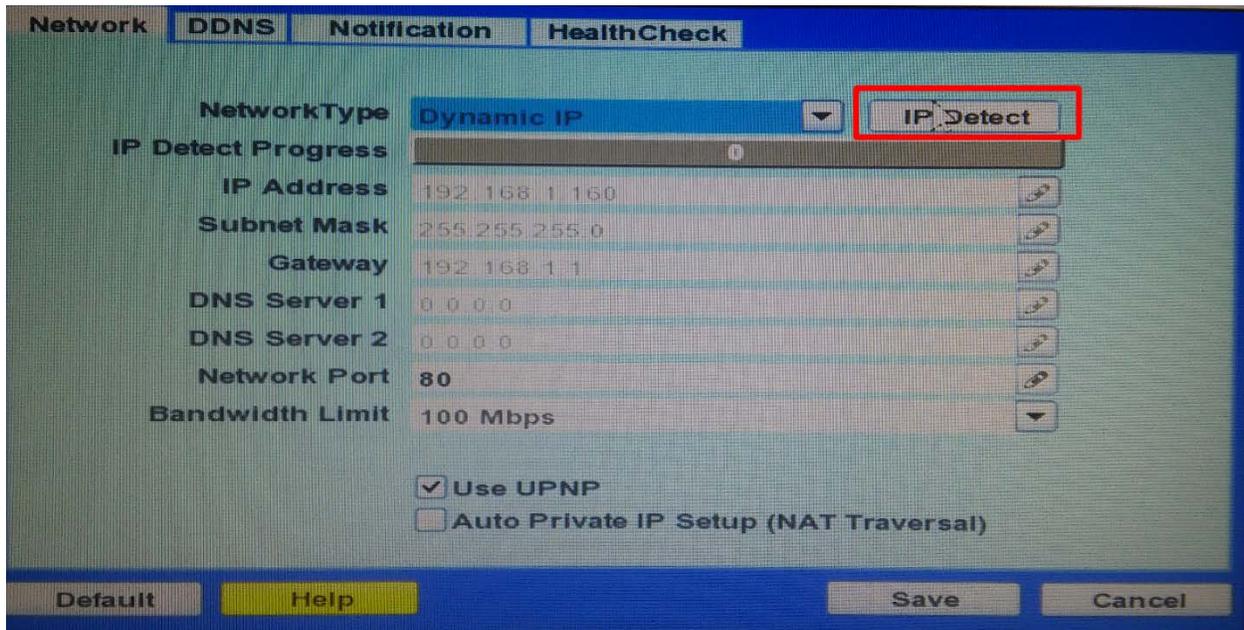


# Troubleshooting Guide

## NETWORK SETUP FOR THE VMAX™ SYSTEMS

### Step 3.

Press the “IP Detect” button and wait for the DVR to find a new IP Address.





## Troubleshooting Guide

### NETWORK SETUP FOR THE VMAX™ SYSTEMS

#### Step 4.

After the new IP Address is detected, set the Type back to “Static” and save your settings.

The screenshot shows a network configuration window with the following fields and values:

Field	Value	Notes
NetworkType	Static IP	Dropdown menu
IP Detect Progress	100	Progress bar
IP Address	192.168.1.190	NEW IP ADDRESS
Subnet Mask	255.255.255.0	
Gateway	192.168.1.1	
DNS Server 1	192.168.1.1	
DNS Server 2	0.0.0.0	
Network Port	80	
Bandwidth Limit	100 Mbps	

Additional options:

- Use UPNP
- Auto Private IP Setup (NAT Traversal)

Buttons: Default, Help, Save (highlighted), Cancel

Your DVR is now set up on the local network!

You can now use this new local IP Address to connect to your DVR on our mobile phone application or computer software while you remain on the same network as the DVR!



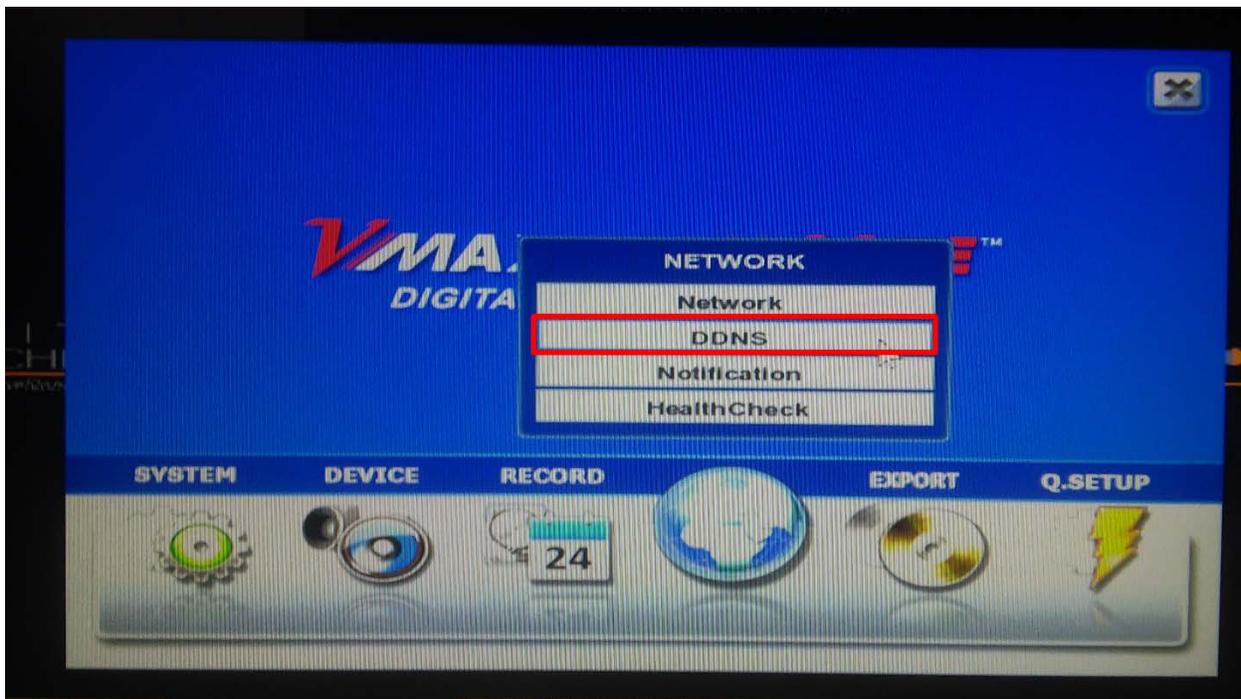
# Troubleshooting Guide

## NETWORK SETUP FOR THE VMAX™ SYSTEMS

### Setting Up a DDNS

#### Step 5.

Select NETWORK > Network > DDNS on the Setup menu.



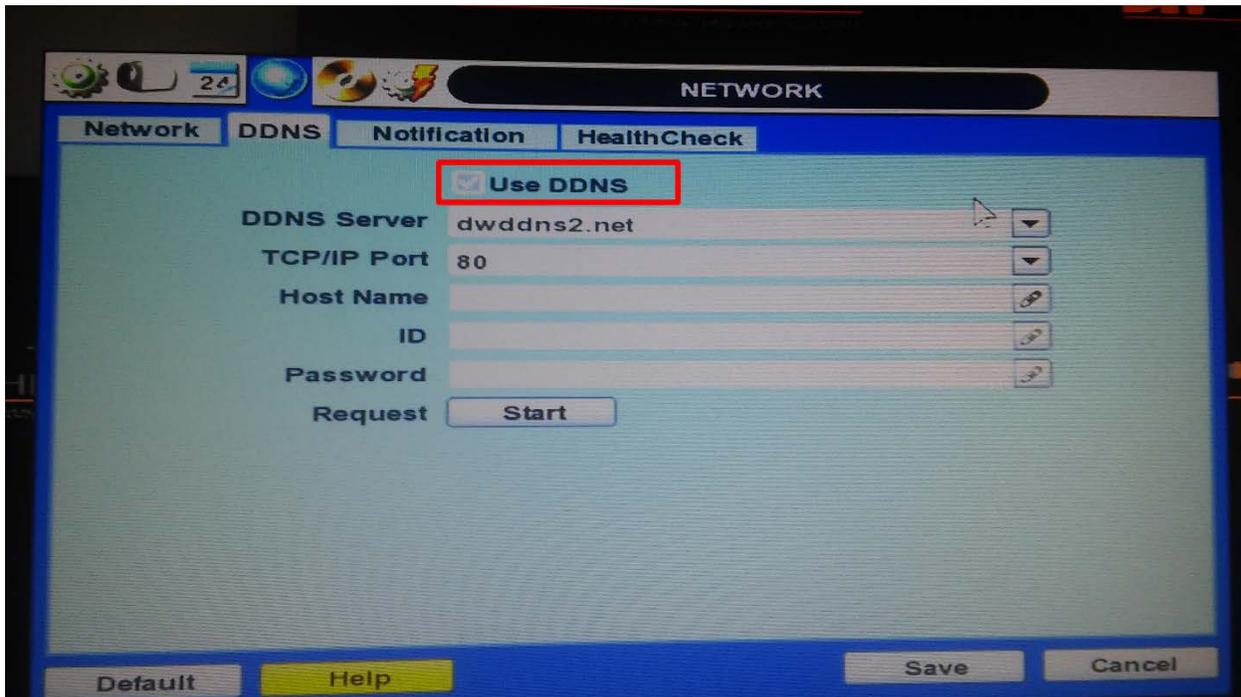


# Troubleshooting Guide

## NETWORK SETUP FOR THE VMAX™ SYSTEMS

### Step 6.

Checkmark "Use DDNS" so the page can be edited.

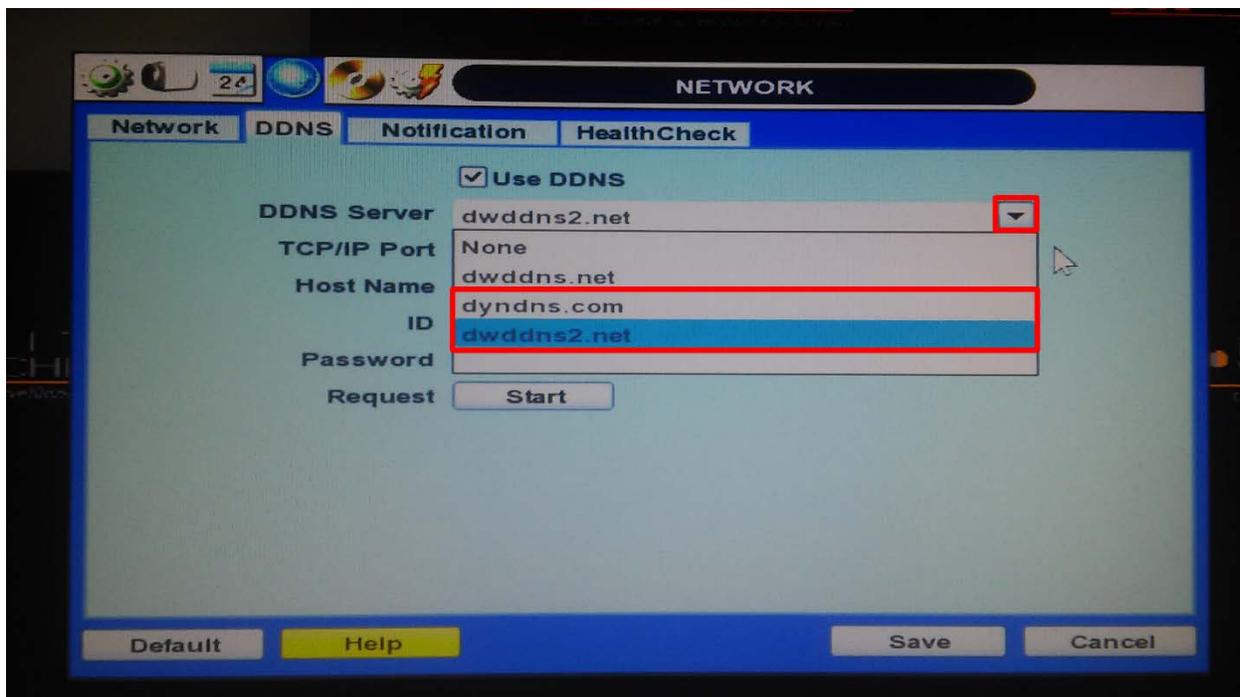




## NETWORK SETUP FOR THE VMAX™ SYSTEMS

### Step 7.

Select either “dwddns” or “dwddns2” as your DDNS server. These are free DDNS servers that we provide for your convenience.



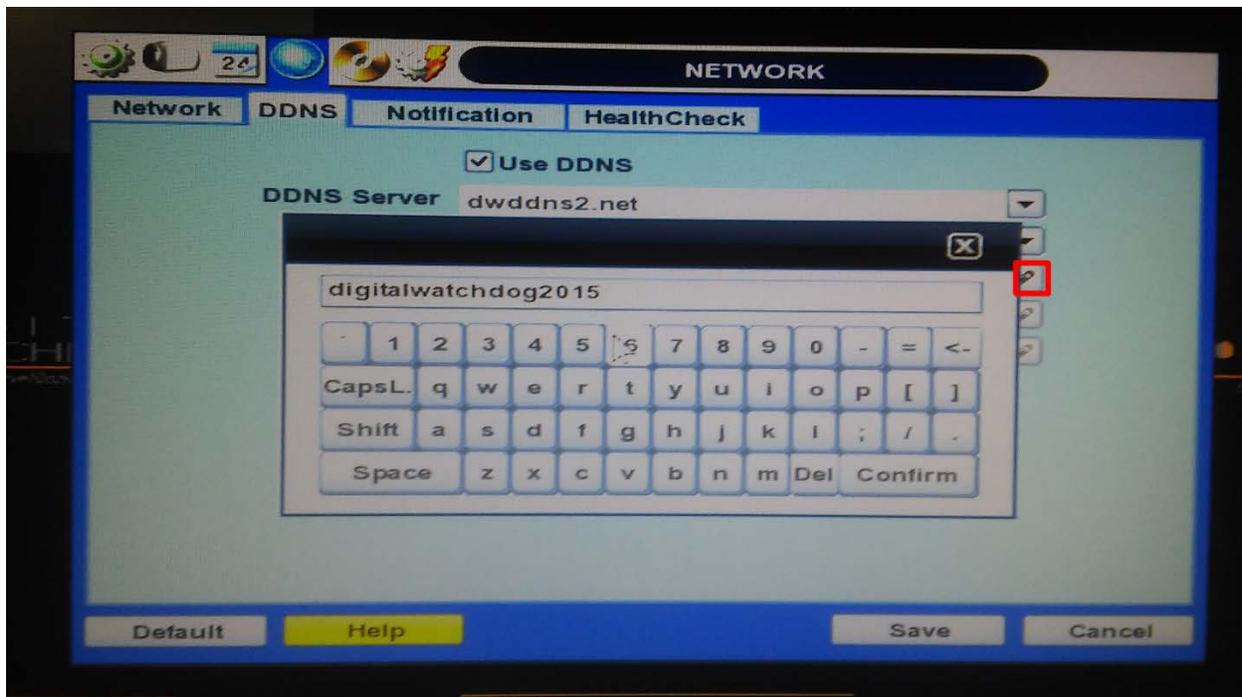


# Troubleshooting Guide

## NETWORK SETUP FOR THE VMAX™ SYSTEMS

### Step 8.

Press the pencil icon next to “Host Name” and enter the name you would like your DVR to have. **The DDNS will accept alphanumeric characters only. No spaces or special characters.** After you create your name, press “Confirm.”



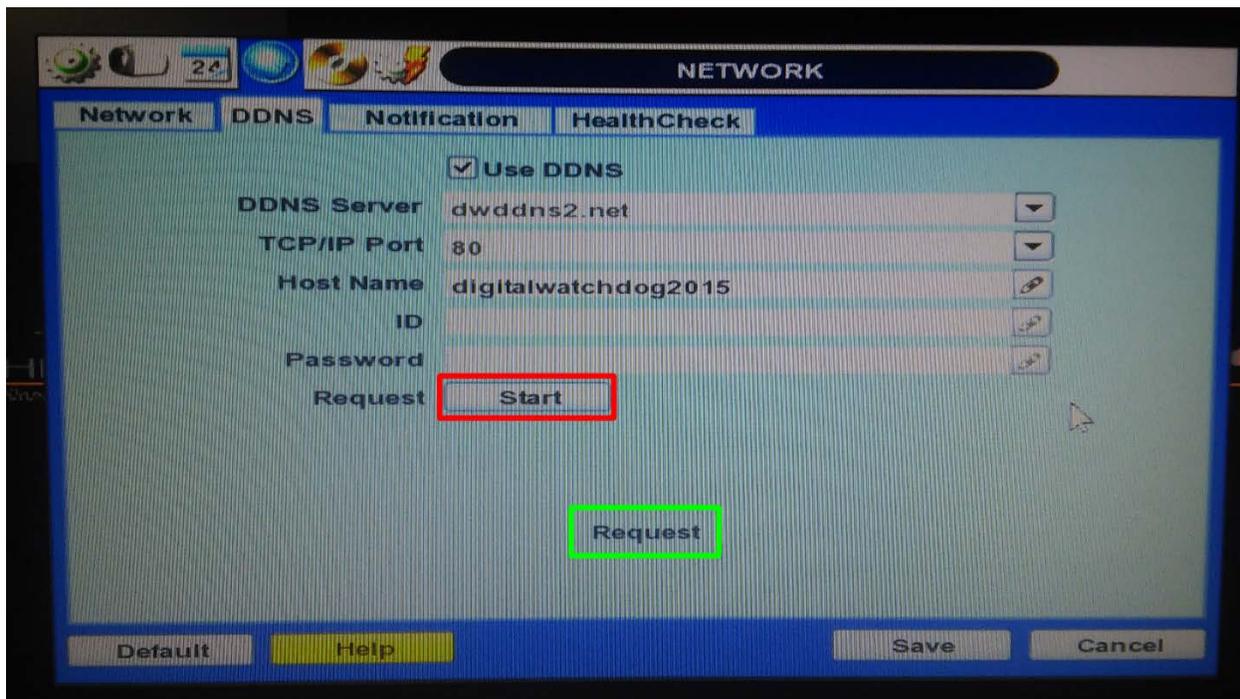


# Troubleshooting Guide

## NETWORK SETUP FOR THE VMAX™ SYSTEMS

### Step 9.

Press the request “Start” button on the page to register your DDNS.



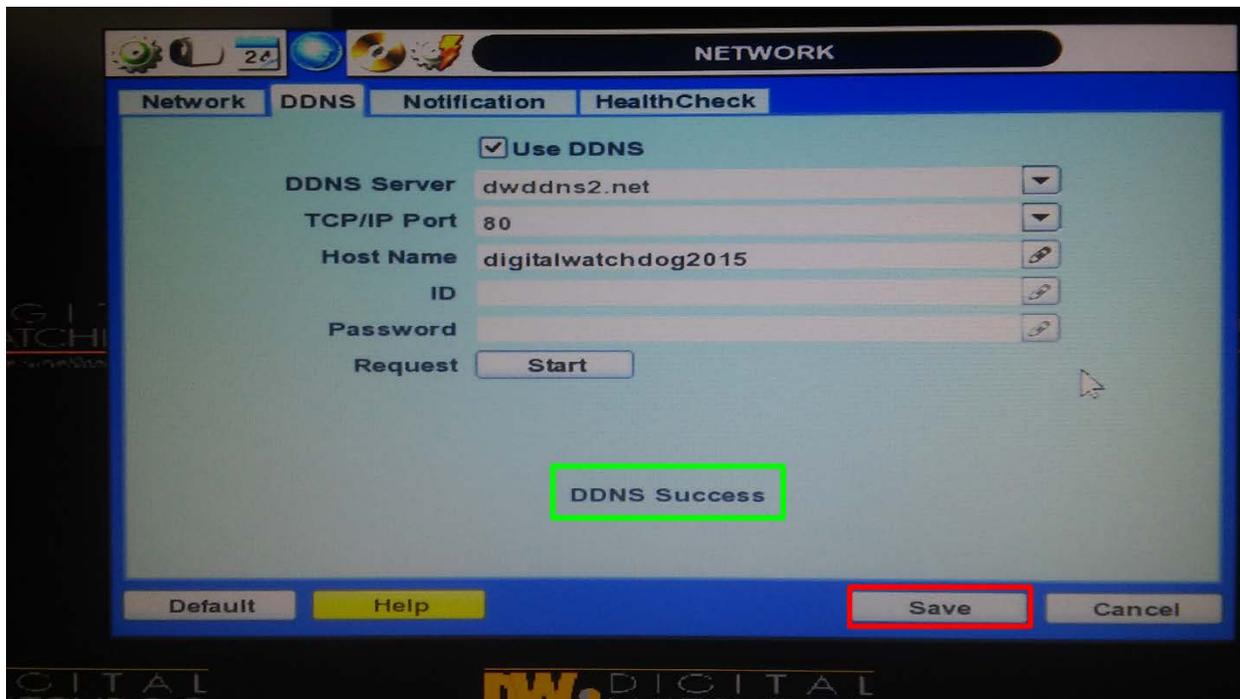


## Troubleshooting Guide

### NETWORK SETUP FOR THE VMAX™ SYSTEMS

#### Step 10.

If the request returns “DDNS Success,” save. Congratulations! Your DDNS address is now registered! It will be found as “(hostname).(ddnsserver)”.



You have now created your remote address!

This address will allow you to connect on your mobile phone application or computer software from a remote location.

For this address to work, you now need to allow Port Forwarding on your router.



# Troubleshooting Guide

## NETWORK SETUP FOR THE VMAX™ SYSTEMS

### Setting Up Port Forwarding

#### Step 11.

To set up Port Forwarding, you will need to access your router's user interface on a computer. This can usually be found by entering the gateway found under the network page on the DVR. In our example, we're using "192.168.1.1"



#### Step 12.

Go to a computer on the same network. Type the gateway into the address bar of any web browser (Internet Explorer, Chrome, Safari, etc.) And press "Enter."





## Troubleshooting Guide

### NETWORK SETUP FOR THE VMAX™ SYSTEMS

#### Step 13.

This should display a prompt asking for your router's log in information. This information is found most commonly on the actual routing device. (Note: This is **not** your Wi-Fi information.)

A screenshot of a login dialog box. At the top left is a yellow key icon with a blue globe. To its right is the text "Please type your user name and password." Below this are two rows of labels and values: "Site: 192.168.1.1" and "Realm: RT314". There are two text input fields: the first is labeled "User Name" and contains the text "admin"; the second is labeled "Password" and contains a series of asterisks. Below the input fields is a checkbox labeled "Save this password in your password list", which is currently unchecked. At the bottom right are two buttons: "OK" and "Cancel". The background of the dialog box is a light gray, and the text is in a dark gray font.



# Troubleshooting Guide

## NETWORK SETUP FOR THE VMAX™ SYSTEMS

### Step 14.

Depending on the router, the next step can be found in different places. In this case, we want to select “Applications and Gaming.” (Also known as Pinholes, Port Forwarding, Single Port, etc.)

The screenshot shows the Linksys WRT54GL router's web interface. The top navigation bar includes 'Setup', 'Wireless', 'Security', 'Access Restrictions', 'Applications & Gaming' (highlighted with a red box), 'Administration', and 'Status'. Below this, there are sub-tabs for 'Basic Setup', 'DDNS', 'MAC Address Clone', and 'Advanced Routing'. The main content area is titled 'Automatic Configuration - DHCP' and contains the following fields:

- Language: English
- Internet Connection Type: Automatic Configuration - DHCP
- Router Name: WRT54GL
- Host Name: [Empty field]
- Domain Name: [Empty field]
- MTU: Auto
- Size: 1500

On the right side, there is a blue sidebar with the following text:

- Automatic Configuration - DHCP :** This setting is most commonly used by Cable operators.
- Host Name :** Enter the host name provided by your ISP.
- Domain Name :** Enter the domain name provided by your ISP.
- More...**
- Local IP Address :** This is the address of the router.



# Troubleshooting Guide

## NETWORK SETUP FOR THE VMAX™ SYSTEMS

### Step 15.

Fill in the requested information. The port number should be the same number you have under the DVR's network page. In our example, we are using 80. The address used is the DVR's IP Address that we received from the IP Detect. Ours is 192.168.1.190. Make sure the rule you've created is enabled. Save the setting.

The screenshot shows the Linksys WRT54G router's configuration interface. The 'Applications & Gaming' section is active, and the 'Port Range Forward' tab is selected. A table lists various port forwarding rules. The first rule, for 'DVR', is highlighted with a red box, showing a start port of 80, end port of 80, protocol of Both, IP address of 192.168.1.190, and the 'Enable' checkbox checked. Other rules include 'ooma' for various ports and protocols, and a final empty row.

Port Range					
Application	Start	End	Protocol	IP Address	Enable
DVR	80	to 80	Both	192.168.1.190	<input checked="" type="checkbox"/>
ooma	123	to 123	UDP	192.168.1.104	<input checked="" type="checkbox"/>
ooma	514	to 514	UDP	192.168.1.104	<input checked="" type="checkbox"/>
ooma	1194	to 1194	UDP	192.168.1.104	<input checked="" type="checkbox"/>
ooma	3386	to 3386	UDP	192.168.1.104	<input checked="" type="checkbox"/>
ooma	3480	to 3480	UDP	192.168.1.104	<input checked="" type="checkbox"/>
ooma	10000	to 20000	UDP	192.168.1.104	<input checked="" type="checkbox"/>
ooma	110	to 110	TCP	192.168.1.10	<input checked="" type="checkbox"/>
ooma	443	to 443	TCP	192.168.1.104	<input checked="" type="checkbox"/>
	0	to 0	Both	192.168.1.0	<input type="checkbox"/>

Port Range Forwarding: Certain applications may require to open specific ports in order for it to function correctly. Examples of these applications include servers and certain online games. When a request for a certain port comes in from the Internet, the router will route the data to the computer you specify. Due to security concerns, you may want to limit port forwarding to only those ports you are using, and uncheck the **Enable** checkbox after you are finished. [More...](#)

Save Settings Cancel Changes



# Troubleshooting Guide

## NETWORK SETUP FOR THE VMAX™ SYSTEMS

### Step 16.

Double check your work at <http://canyouseeme.org>. If you test your port number and it comes back successful, you are done!

The screenshot shows a web browser window with the address bar displaying [www.canyouseeme.org](http://www.canyouseeme.org). The page title is "CanYouSeeMe.org" and the subtitle is "Open Port Check Tool". Below the title, there is a brief description: "This is a free utility for remotely verifying if a port is open or closed. It is useful to users who wish to verify port forwarding and check to see if a server is running or a firewall or ISP is blocking certain ports."

The main content area is divided into two sections. On the left, a light blue box contains the test results: "Success" (highlighted with a red box), "I can see your service on [IP address].34 on port (80)", and "Your ISP is not blocking port 80". Below this, there is a "Your IP:" field showing the IP address and a "Port to Check:" field with the value "80" (highlighted with a red box). A blue "Check Port" button is located at the bottom of this section.

On the right, there is a "Common Ports" table:

Common Ports	
FTP	21
SSH	22
Telnet	23
SMTP	25
DNS	53
HTTP	80
POP3	110
IMAP	143

Below the table, there is a section for "Other Applications".



# Troubleshooting Guide

## NETWORK SETUP FOR THE VMAX™ SYSTEMS

### Additional Notes

- Your DVR's local IP Address will only work when you are on the same network. This means your phone or computer is connected to the same Internet.
- Your DDNS that you created generally only works when you are off the same network as the DVR.
- Some routers and Internet service providers do not allow the use of port 80. If this is the case, simply change the port number on the network page to something else and forward that port instead.
- If the DDNS address fails to register, try a different name or another DDNS server.
- The DDNS name you create will be going to a server. This means that the name you want to use may be taken. It is recommended to make your DDNS name unique to avoid any issues with registration. Refrain from host names like "DVR," "digitalwatchdog," "myhome" or anything else that might be commonly used. A common creation method is a favorite food and special year (ex. Papaya1978). This will reduce the likelihood of someone else having the same name that you would like to use.

This is a basic guideline. Not every router will look like this one, nor will they all have Port Forwarding enabled the same way. If you still have issues getting your ports forwarded, your Internet service provider has the means to do this for you.



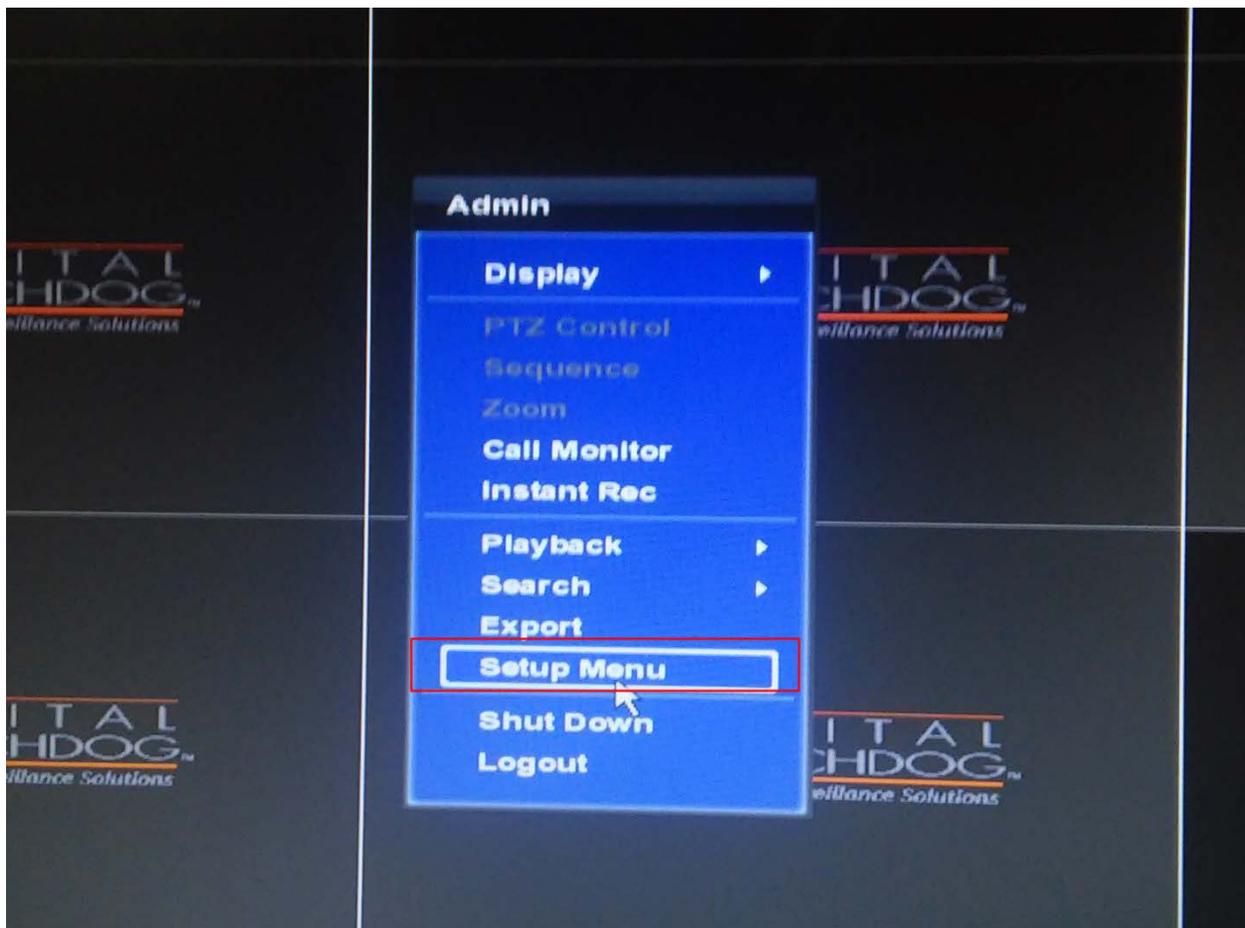
# Troubleshooting Guide

## UPGRADING YOUR DVR'S FIRMWARE

Upgrading your unit's firmware is a vital part of keeping your DVR healthy and in optimal working order. Firmware can improve your unit's functionality, add features and even resolve some issues. These are instructions for upgrading your firmware from the DVR.

### Step 1.

Log in to your unit. Right-click and select "Setup Menu."





# Troubleshooting Guide

## UPGRADING YOUR DVR'S FIRMWARE

### Step 2.

Select "SYSTEM > System Info."





# Troubleshooting Guide

## UPGRADING YOUR DVR'S FIRMWARE

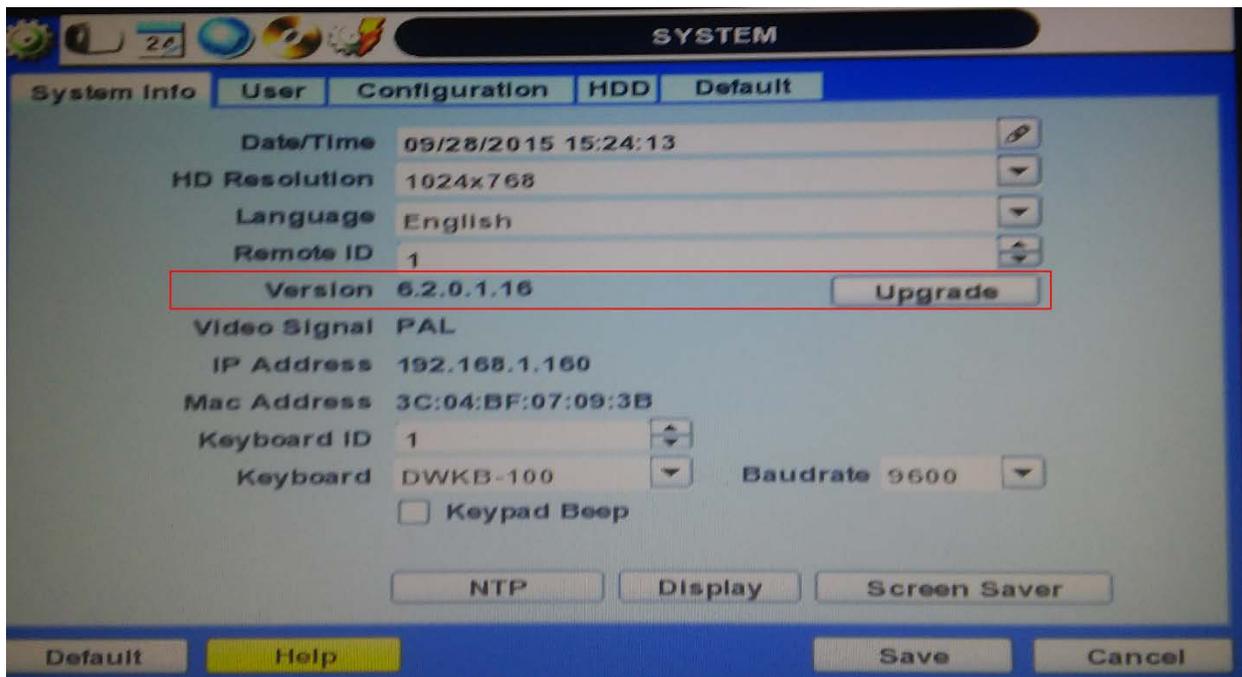
### Step 3.

You will find the firmware version you currently use about halfway down the page. Press "Upgrade."

*The next steps will be broken down into two methods:*

*"A" Will refer to the FTP (network method).*

*"B" Will refer to the USB method.*

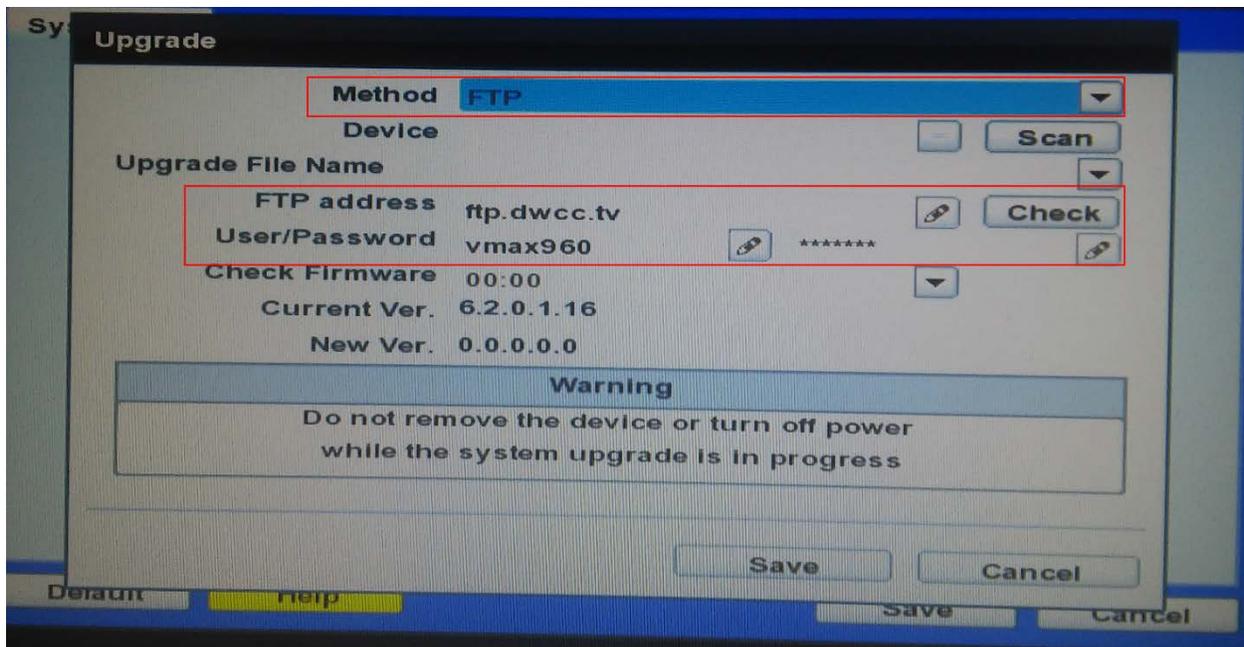




## UPGRADING YOUR DVR'S FIRMWARE

### Step 4A (FTP).

There are two methods to upgrade the firmware; over the network (FTP) and with a thumb drive (USB). We will first go over the FTP method. By default, the unit will be on FTP. All of the default information should be correct. Simply press the "check" button.

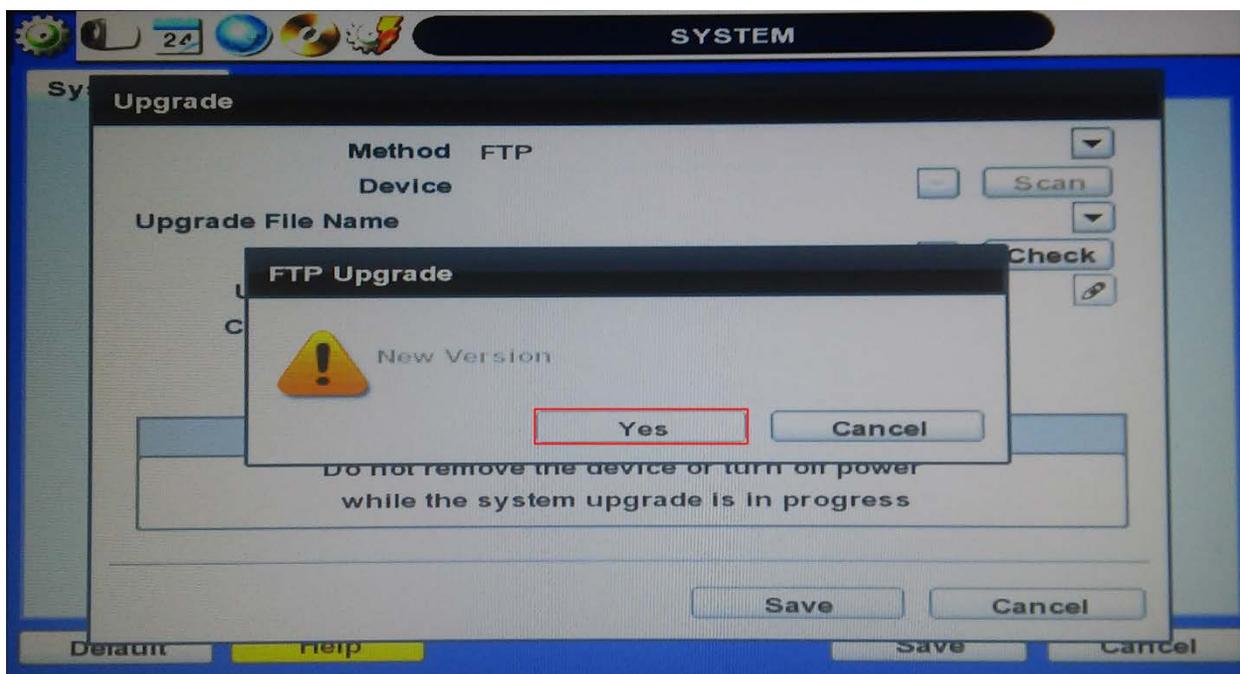




## UPGRADING YOUR DVR'S FIRMWARE

### Step 5A.

Your DVR should find the newest version. It will either say “New Version” or “Current Version is Up to Date.” Press the confirmation button.



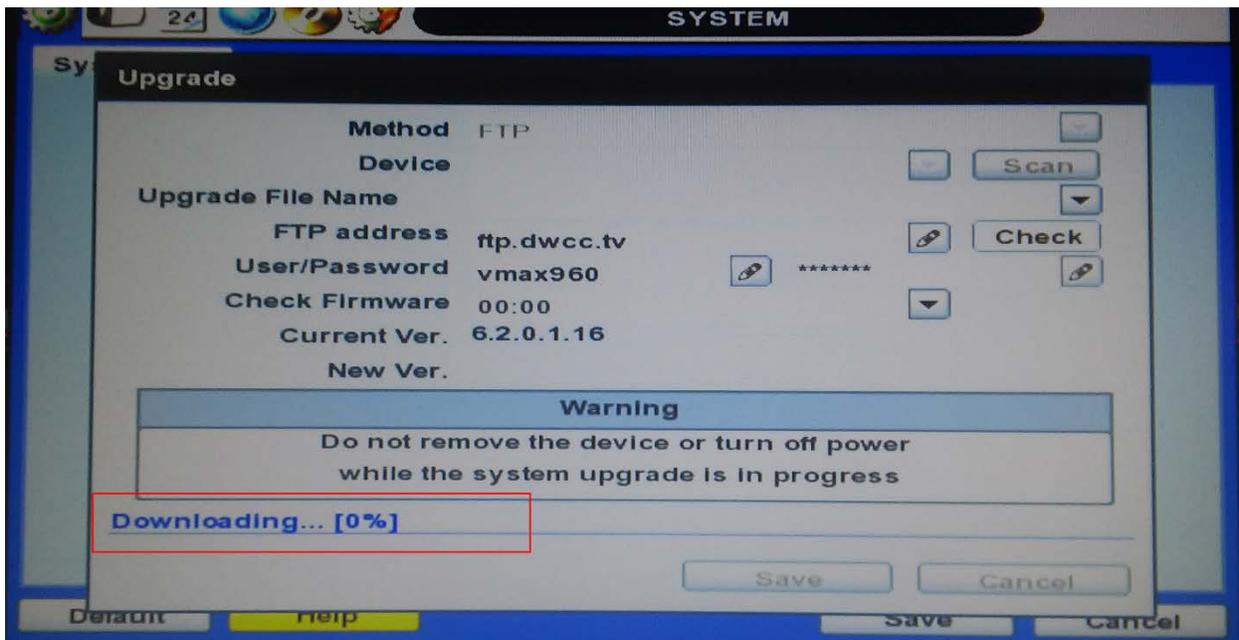


# Troubleshooting Guide

## UPGRADING YOUR DVR'S FIRMWARE

### Step 6A.

Wait. You will see the bottom display information about the progress.





## Troubleshooting Guide

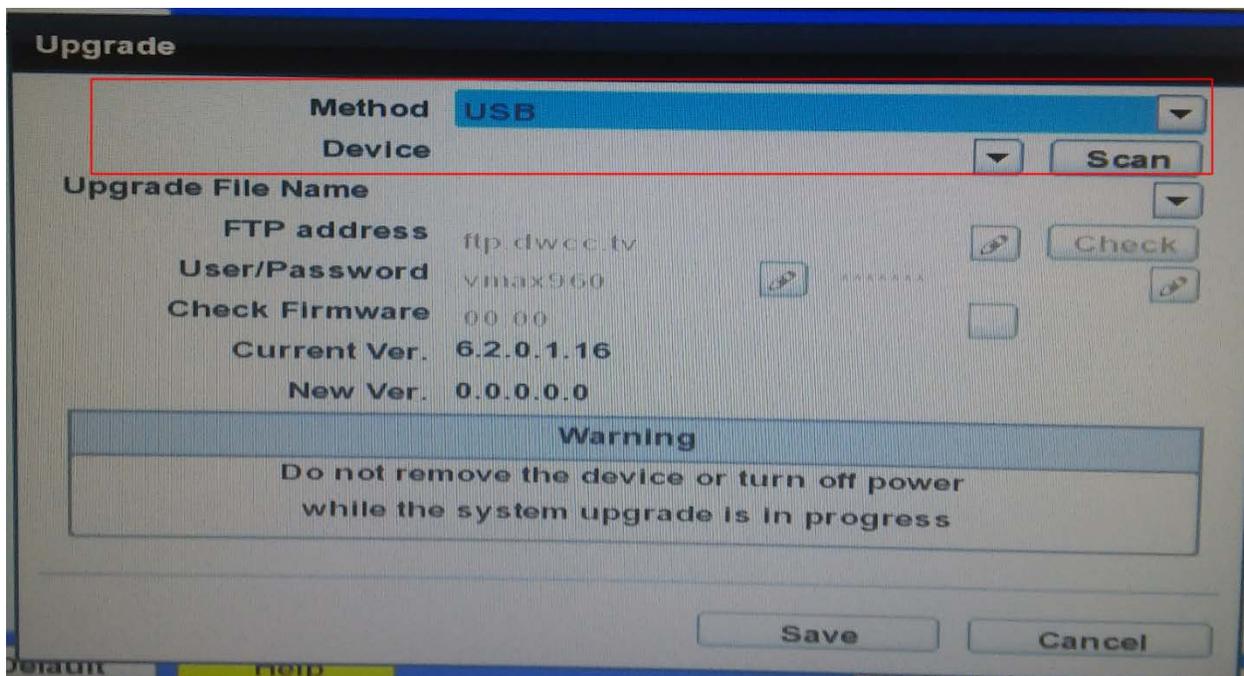
# UPGRADING YOUR DVR'S FIRMWARE

## Step 4B. (USB)

Download the current firmware from our website. You can find your model, then select the "Software" tab, where we will have the most up to date versions available. Download the file and copy it to a thumb drive.

## Step 5B.

Plug the USB stick in the front of the unit. Change the method to USB. You will notice that the FTP information is not being used. This is normal.



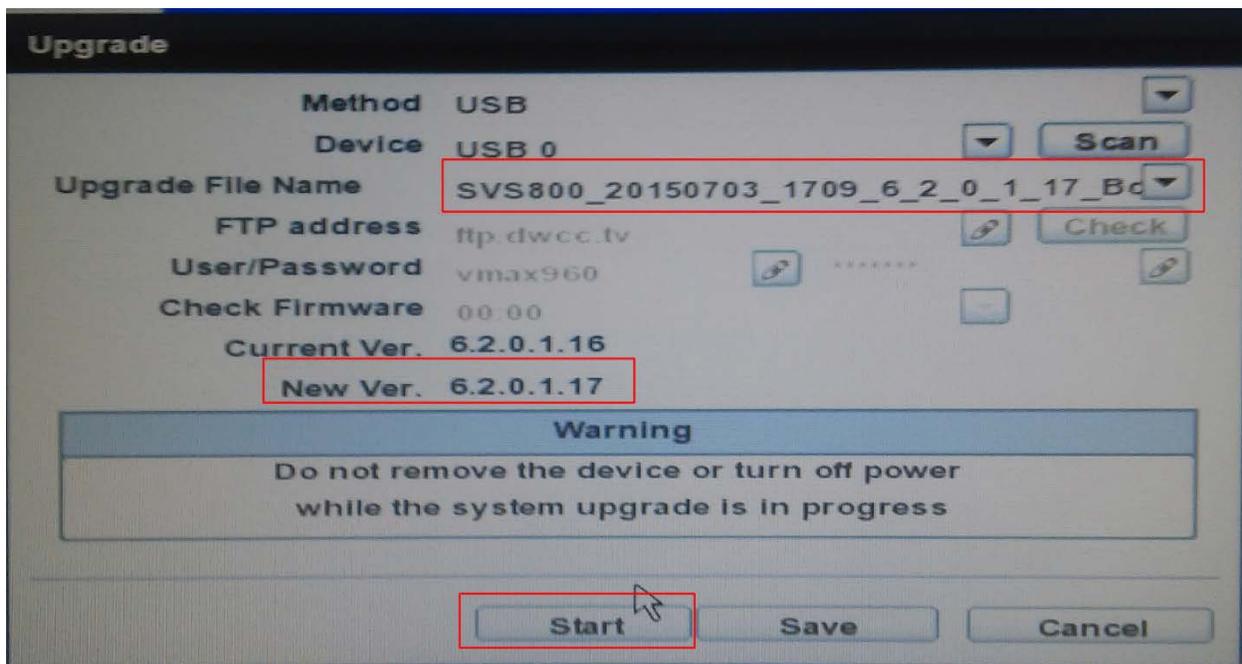


# Troubleshooting Guide

## UPGRADING YOUR DVR'S FIRMWARE

### Step 6B.

Press "Scan." You will notice the USB is found instantly, the newest version will display, and a start button appears at the bottom. Press "Start."



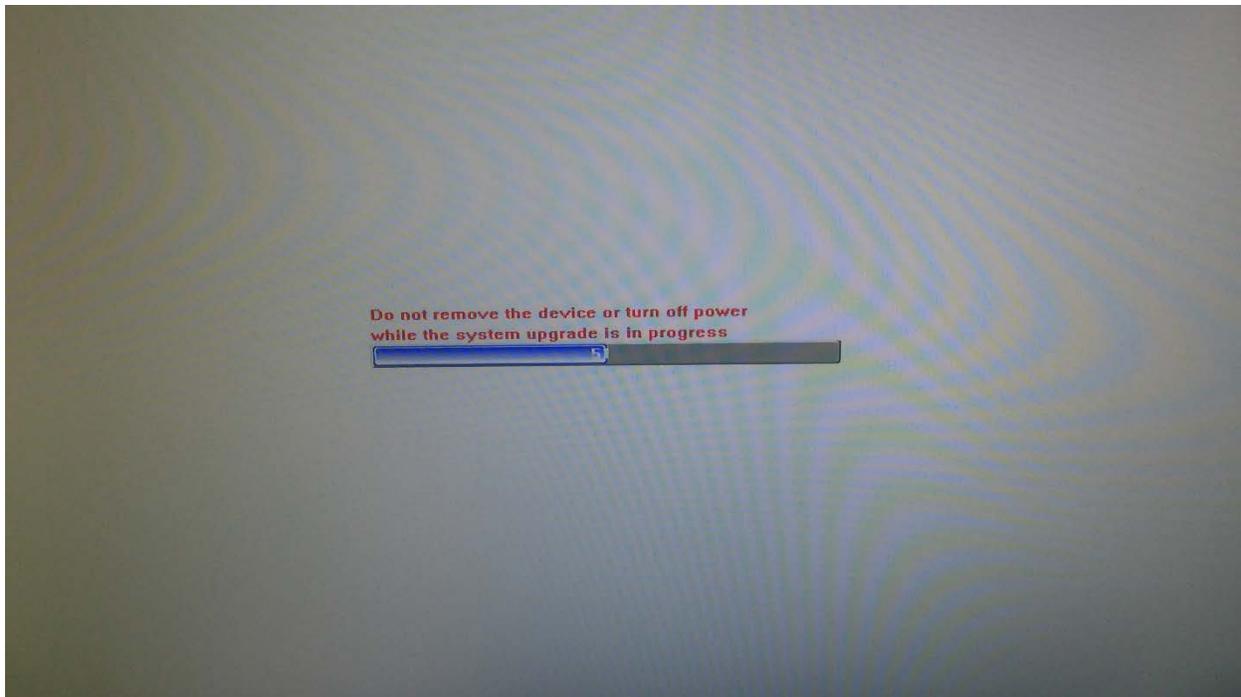


## Troubleshooting Guide

# UPGRADING YOUR DVR'S FIRMWARE

## Step 7.

Both methods will end in the same way; waiting for the upgrade to finish. Both methods will take anywhere from 3-5 minutes. The next screen shows the progress of the upgrades installing. After installation, the DVR will power cycle on its own.



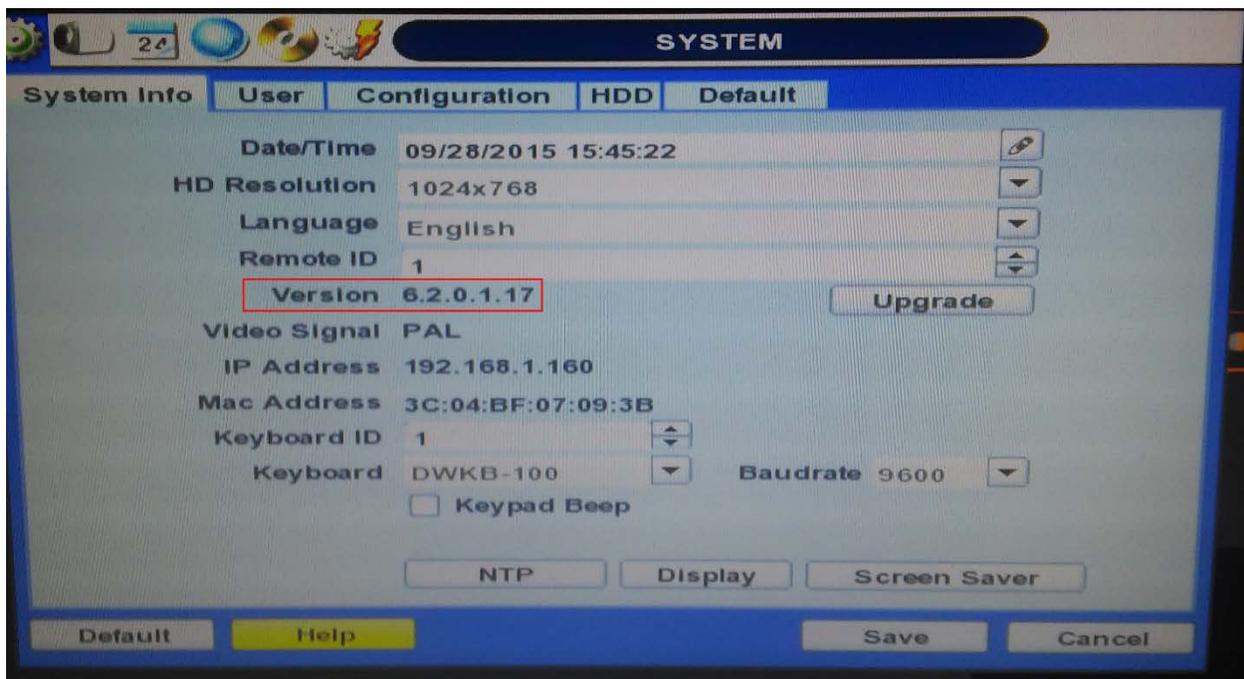


# Troubleshooting Guide

## UPGRADING YOUR DVR'S FIRMWARE

### Step 8.

Once the unit is up and operational, go back to "SYSTEM > System Info" to double check that the upgrade was applied. You should see the most up to date version number!





## Troubleshooting Guide

# UPGRADING YOUR DVR'S FIRMWARE

## Additional Notes

- The FTP method requires the DVR to have a stable network connection. If this method should fail for you, it is recommended to use the USB method instead.
- Firmware is constantly being worked on to ensure your DVR is in good shape. It is recommended to check at least once a month for new firmware.
- Your USB needs to be formatted in either "Fat" or "Fat32" to work.
- When you save the firmware to a thumb drive, **make sure it is in the root folder**. If the firmware is not in the root folder, the DVR will be unable to find the file.
- Do not remove the thumb drive until the unit reboots from the installation. Doing so too early can cause the firmware upgrade to fail.