

***Hi Performance Embedded
Linux Stand Alone DVR***

RTS series



EL12004RT



Quick Guide

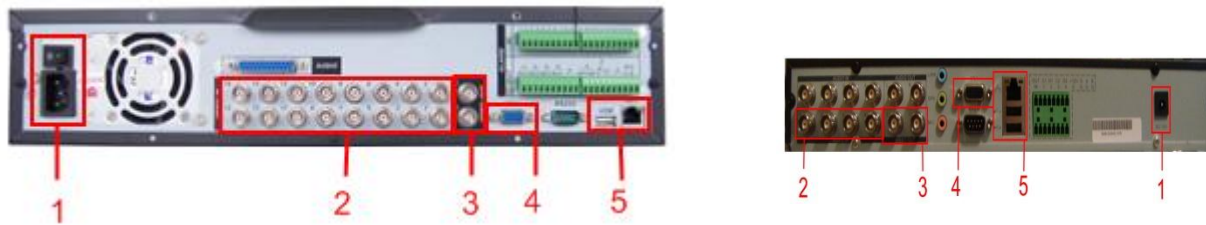
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I. Connecting the Device.

Before powering up the system make sure to connect the video inputs/outputs, network cable and usb mouse. Refer below for basic connection.



Regular E series Embedded DVR

EL series

No.	E series		EL series	
1	Power Connector and Switch		Power Connector	
2	BNC camera inputs 4/8/16 channel		BNC camera inputs 4 channel	
3	BNC camera outputs	BNC output 1	BNC camera outputs	
		BNC output 2	BNC output 2	BNC output 1
4	VGA output		VGA output	
5	USB and Network connector		USB and Network connector	

The Video output on the embedded system can work by pair, BNC output 2 will work with either VGA or BNC output 1, but VGA and BNC output 1 will not function together. And BNC output 2 will only display cameras with no control GUI, it will only follow what is on the main display The Embedded system from manufacture default will always use VGA as its primary output. When experiencing these types of display outputs from either BNC 1 and VGA.



A. Blurry or Overlapping video



B. Center Green Line



C. No GUI or Control GUI buttons

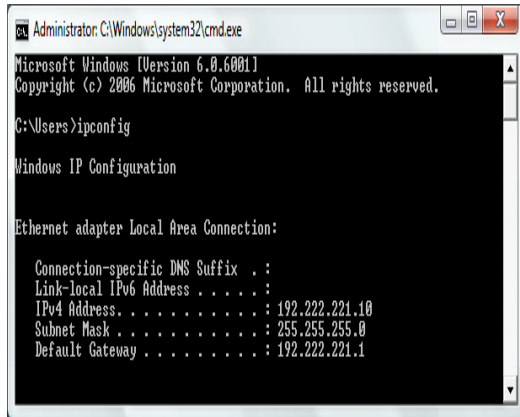
Blurry or Overlapping video happens when the DVR system uses the other video output, meaning if the monitor is connected to the BNC output 1 but the DVR is set to uses the VGA out. While the Center Green Line, happens when the DVR system is turned on with no VGA output connected. To set the DVR to the correct output, press and hold the star or asterisk button on the regular E series and the shift button for EL systems.

For the No GUI or Control buttons move the video BNC connector to Video BNC output 1.

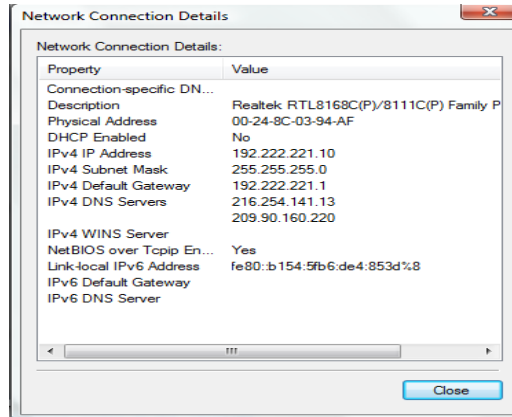
II. How to connect the DVR to the Network and Internet.

1. Network Address.

User must assign an Ip address, subnet mask and gateway. To know what network settings to use, do a ipconfig on command prompt or get the network status of your existing computer.



ipconfig result



network status

The Subnet Mask and Default Gateway will remain the same on the DVR but the IP address would be different mainly the last octet or number, each device on the network must have its own unique IP address. On the example the IP address is 192.222.221.10, 10 being the last number. So assign to the DVR any last number between 2-9 and 11-254.

To assign the ip address click on  then  then , network setting interface as shown

Network

IP Address	192 . 222 . 221 . 98			
Subnet Mask	255 . 255 . 255 . 0			
Gateway	192 . 222 . 221 . 1			
TCP Port	4000	HTTP Port	80	
UDP Port	4001	Max Connections	10	
<input type="checkbox"/>	Net View	Fluency	▼	
<input type="checkbox"/>	LAN Download			

ADVANCED SETTING

<input type="checkbox"/> Authorization	Trusted Sites:0
<input type="checkbox"/> NTP	NTPServer : 10
<input type="checkbox"/> MULTICAST	0.0.0.0
<input type="checkbox"/> PPPOE	admin

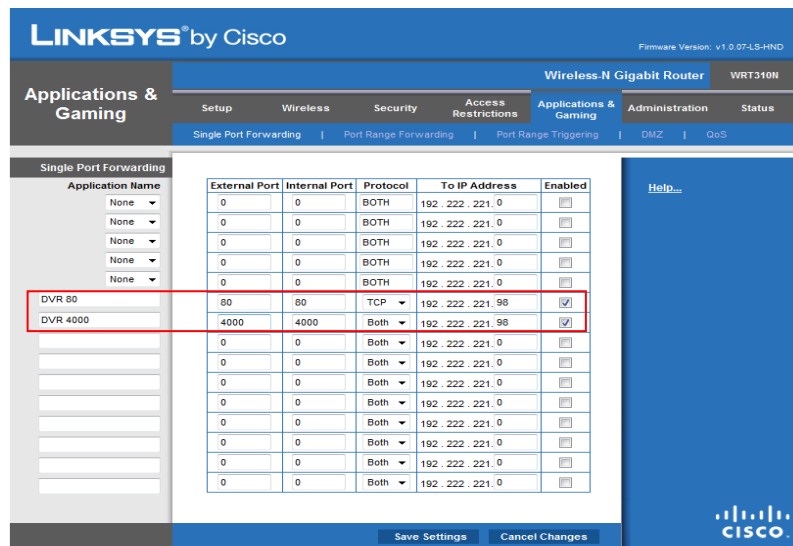
After assigning the IP address save the settings by clicking Save button, then do a menu restart.

note: If router has DHCP enable make sure to stay away from the DHCP range to prevent network conflicts.

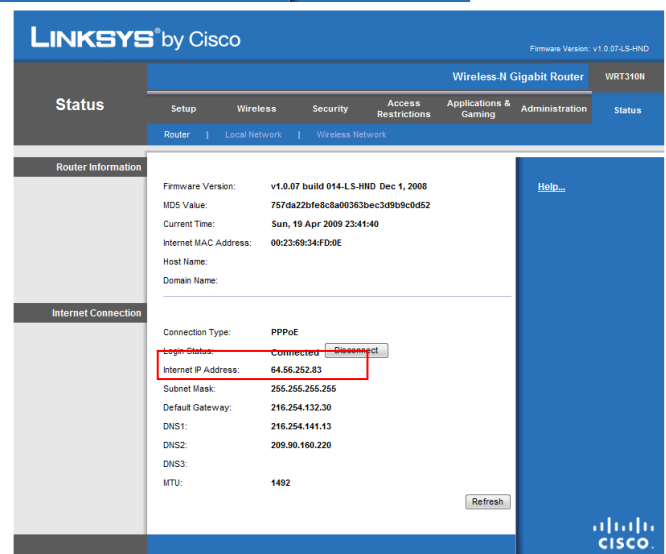
2. Port forwarding.

To access the DVR over the internet user must forward the HTTP port and TCP port. Each router has a unique way of port forwarding some routers call it pin holes or virtual server but all of them will always have a common requirement. As an example a Linksys router is used.

1. Name - User can use any name - ex. DVR 80 and DVR 4000
2. Device IP address - the embedded DVR IP address - ex. 192.222.221.98
3. ports to forward - 80 HTTP port and TCP 4000 - ex. 80 and 4000
 - external/public port - 80 and 4000
 - internal/private port - 80 and 4000
 - port range - 80 to 80 and 4000 to 4000
4. source IP address - if user knows the IP address that will connect to the DVR or use the default which would be any



On the status page of the router make sure the it contains the public IP address. If the Internet/WAN IP address starts with 192 or 172 or 10, it means the ISP modem is routing not bridging. Please contact the Internet Service Provider to bridge the modem.



3. DDNS

If the public IP address is dynamic meaning it changes from time to time. User would need a dynamic dns service provider, so that the DVR will still be accessible even when it changes IP.

A. Register with www.viewdvr.com and remember the Site Name which is needed on the Embedded system

B. Input these settings on the Embedded systems DDNS

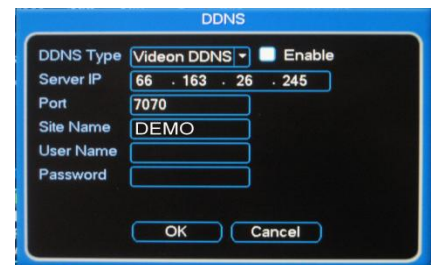
Server IP - 66.163.26.245

Port - 7070

Site Name - the site name that was registered in www.viewdvr.com

Username - leave blank if using Videon DDNS

Password - leave blank if using Videon DDNS

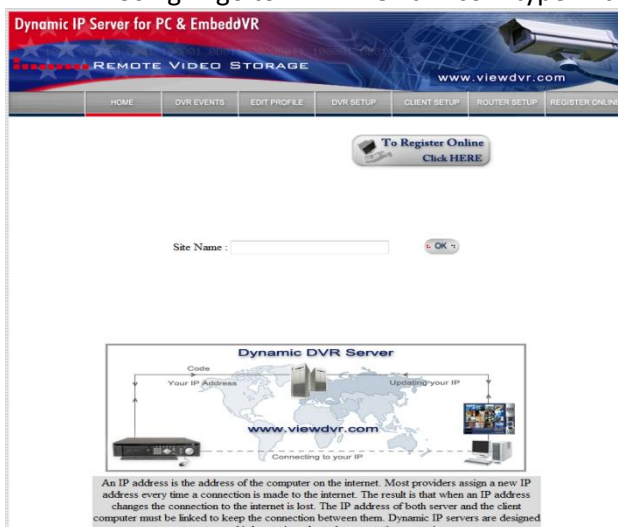


note: Always register a new Site Name when installing a new system.

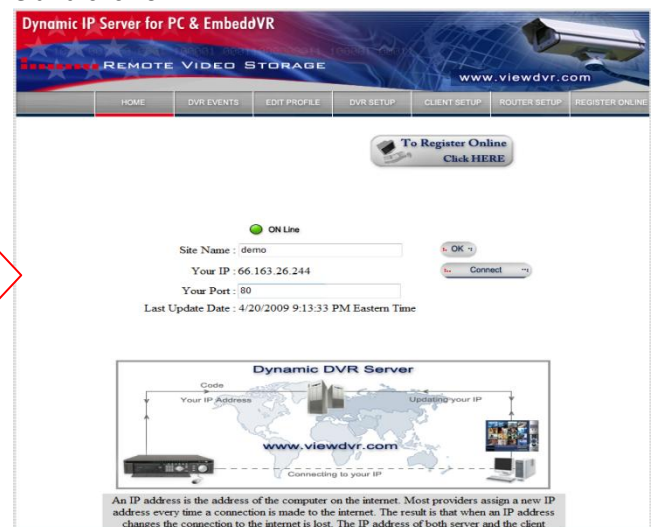
4. Remote Connection

There are two ways to connect to the Embedded DVR.

4.1 Using IE go to www.viewdvr.com type in the site name and click ok




Click OK



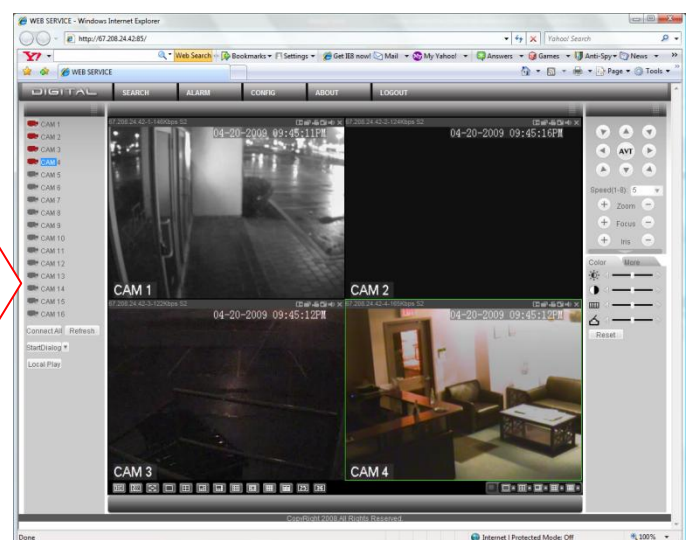
Click Connect to open the Web View. Input user name and password and click login

default username: admin

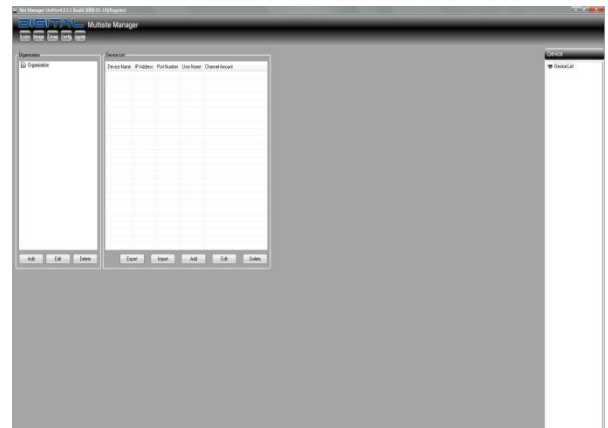
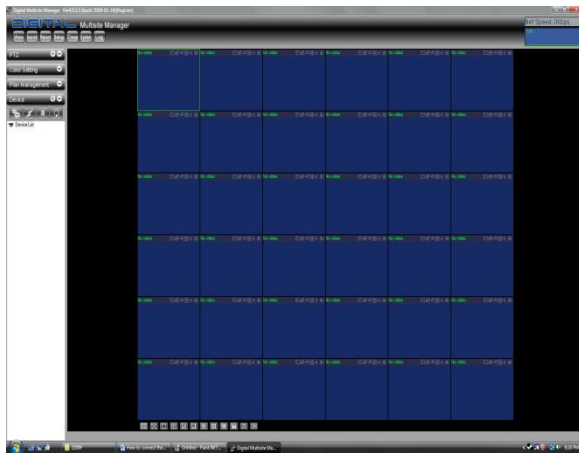
default password: 1234



Login



4.2 Multi-site Manager



Install the Multi-site Manager and add the Sites.

On the Add Menu user can add the device they need to connect too.

Add a device

Device Class: **DVR** IP Address: 67 . 208 . 24 . 42

Device Name: Demo ☐ Domain Name:

Port Number: 4000 ☐ DDNS:

User Name: admin DDNS Port: 0

Password: Password field Alarm channel: 4

Total Channels: 4

Device name: Any Name
 Port: Service/TCP Port
 User Name: Use to login on DVR
 Password: Use to login on DVR
 Total Channel: number of cameras
 IP Address: Public IP address of the DVR or
 DDNS server IP 66.163.26.245
 Domain Name: Domain name of the DVR
 DDNS: DDNS Site Name of the DVR
 DDNS Port: for Viewdvr it is 7070
 Alarm channel: no. of alarms on the DVR

Add a device

Device Class: **DVR** DDNS IP Address: 66 . 163 . 26 . 245

Device Name: Demo ☐ Domain Name:

Port Number: 4000 ☒ DDNS: Demo

User Name: admin DDNS Port: 7070

Password: Password field Alarm channel: 4

Total Channels: 4

Example 1. By Direct IP address

Example 2. By DDNS

After adding the Site Click on the connect button and click the on 1 of the viewing window and click on

Click 1st

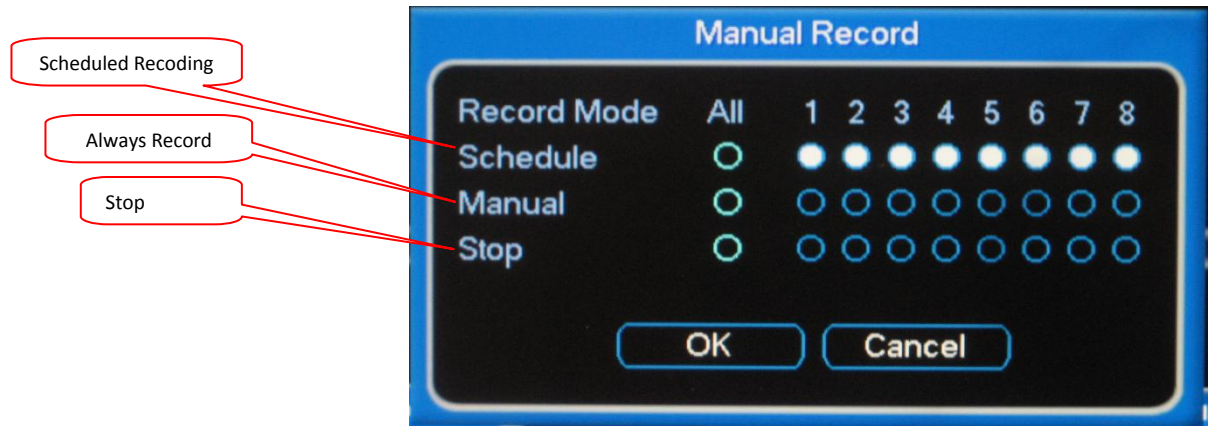
Click next



III. Setting the DVR Schedule

1. Manual Record.

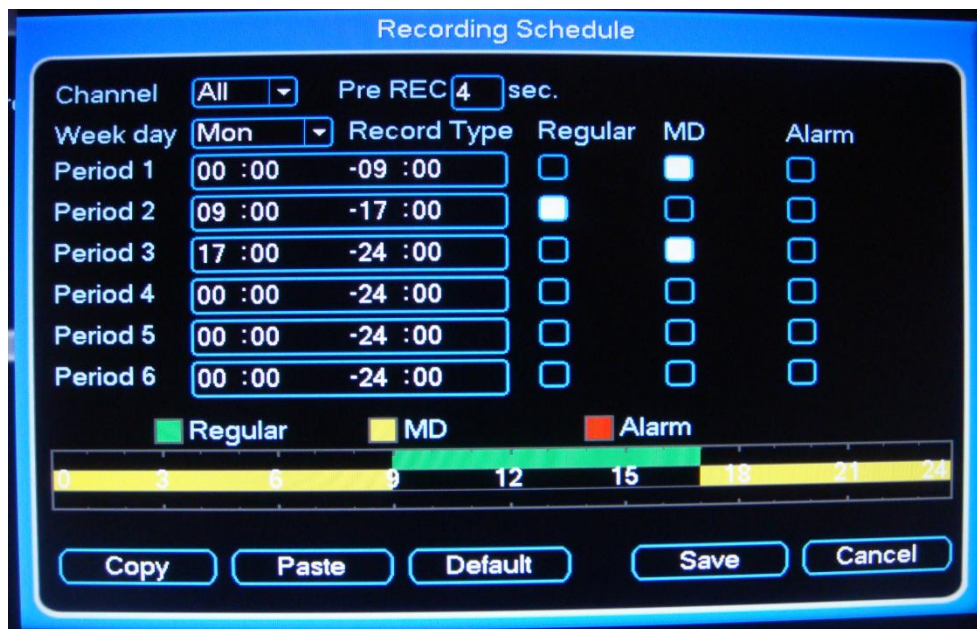
To open the Manual Record menu and enable Scheduled Recording, on the Main Menu select Advance Setup and then click on Manual Record or on the front panel of the DVR press the REC button. On the Manual Record window High light "All" on Schedule. Click OK



2. Setting the Schedule:

Example 1. Schedule the DVR to Regular recording (always record) from 9:00am to 5:00pm and Motion recording for the rest of the day. And for weekends Motion Recording for 24hrs.

- Open the Recording Schedule Menu
- Set the Schedule for Monday and for All cameras.
- For Period 1 set the time from 00:00 to 09:00 then highlight MD for Motion Detection.
- For Period 2 set the time from 09:00 to 17:00 then highlight Regular
- For Period 3 set the time from 17:00 to 24:00 then highlight MD for Motion Detection.



- Press Copy button.
- Select the next day Tue (Tuesday) for Week day, then press the Paste button. The schedule for Tue will now look like the schedule for Mon. Repeat the process until all the week days are set to the schedule.

- To set Motion only for the weekends or for Saturday and Sunday. Select Sat on the Weekday field and All for channel field. Then for Period 1 highlight only MD.

Recording Schedule

Channel **All** Pre REC **4** sec.

Week day **Sat** Record Type Regular MD Alarm

Period	Start Time	End Time	Regular	MD	Alarm
Period 1	00 :00	-24 :00	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Period 2	00 :00	-24 :00	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Period 3	00 :00	-24 :00	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Period 4	00 :00	-24 :00	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Period 5	00 :00	-24 :00	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Period 6	00 :00	-24 :00	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

☒ Regular
 ☒ MD
 ☐ Alarm

0 3 6 9 12 15 18 21 24

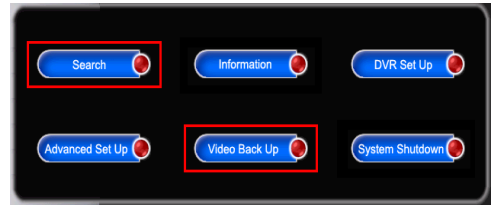
- Then Copy and Paste to the Sunday field

IV. DVR Search & Backup Procedures

Before beginning any backup procedures, make sure to have the CD's, DVD's and USB drives that is supported by the DVR. The DVR's drive tray will show what type of media it supports, if it shows only CD it mean will only support CD's but if it shows DVD and CD it can support both media. Make sure to insert the CD, DVD or USB drive before starting the backup procedure, connecting it while in the backup window may cause it not to be detected nor seen. For USB drives make sure that the drives are in FAT32 format.

There are two ways to start a backup, highlighted below, they are:

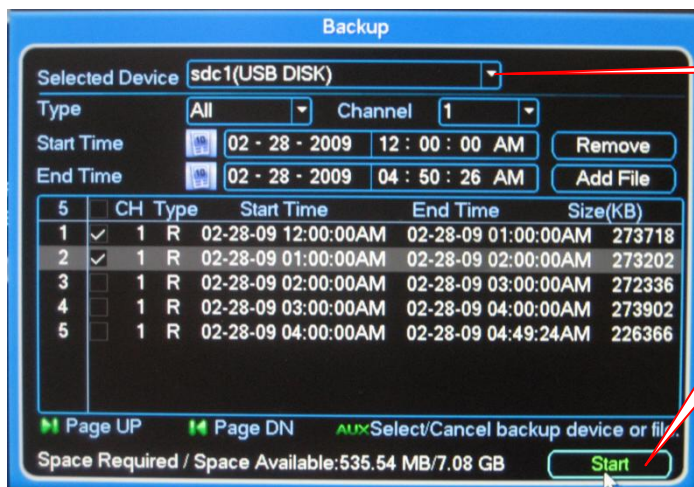
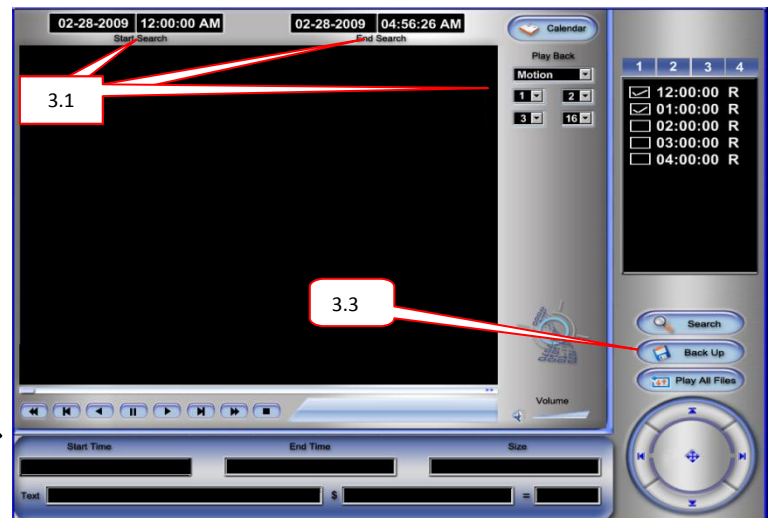
- Searching for the video you wish to backup in the "Search" window
- Searching by time and date in the Video Backup menu



The following steps will guide you through backing up the files from the "Search" window:

1. Login to the DVR. Pressing the login button
2. Enter the Username/Password. (Default: admin / 1234)
3. Select "Search" this will open the Search Window

- 3.1 Enter the time/date at the top-left corner, and the channel numbers you want to view on the top-right.
- 3.2 Place a check next to the videos you want to save using the file list on the right.
- 3.3 Select the "Back Up" button on the top right, this will open the backup window as seen below



USB Drive or CDRW/DVDRW

Click to start backup