

1 Year  
Warranty



# INSTRUCTION MANUAL

Version 1.0



**Wired**

**Model#**

**CLEARVU4**

[www.svat.com](http://www.svat.com)

# TABLE OF CONTENTS

<b>1. WHAT IS INCLUDED .....</b>	<b>1</b>
<b>2. BUTTON FUNCTIONS AND CONNECTIONS .....</b>	<b>1</b>
2.1 Front Panel .....	1
2.2 Rear Panel .....	2
<b>3. INSTALLATION.....</b>	<b>2</b>
3.1 Camera Installation .....	3
3.2 Monitor Installation .....	3
3.2 Audio Installation .....	3
<b>4. POWER TO DVR .....</b>	<b>4</b>
<b>5. DVR OPERATION.....</b>	<b>5</b>
5.1 Live Mode.....	5
5.2 Record Mode.....	7
5.3 Playback Mode.....	8
5.4 Search.....	9
<b>6. MENU SETUP DESCRIPTION .....</b>	<b>10</b>
6.1 Eight/ Sixteen Camera Mode Rescan .....	11
6.2 DATE/ TIME SETUP.....	11
6.3 Camera Setup .....	12
6.3.1 Edit Camera Title 1-8.....	12
6.3.2 Edit Camera Title 9-16.....	13
6.3.3 Video Adjust .....	13
6.3.4 Motion Detection .....	14
6.4 Record Setup .....	15
6.5 Schedule Setup .....	16
6.6 Hard Disk Setup .....	17
6.7 CF Card Setup .....	17
6.8 OTHERS .....	19
6.8.1 Password.....	20
6.8.2 Buzzer .....	20
6.8.3 Relay Output (Advanced users) .....	21
6.8.4 Alarm Input (Advanced users) .....	22
6.8.5 Sequence Dwell Time.....	23
6.9 Factory Default.....	23
<b>7.DVR NETWORKING GUIDE.....</b>	<b>24</b>
7.1 Introduction.....	24
7.2 Prepare Your Computer.....	25
7.3 Prepare Your DVR.....	26
7.4 Connect To The Internet.....	27
7.5 Find Your External IP.....	29
7.6 Forwarding Outside Your Network.....	30
7.7 Finalizing The Set-Up.....	33
7.8 Additional Troubleshooting .....	34

<b>8. FUNCTION SETUP .....</b>	<b>35</b>
8.1 Main Display.....	35
8.1.1 View.....	36
8.1.2 Image Recording .....	36
8.1.2.1 Save As JPEG:.....	37
8.1.2.2 Save As AVI: .....	37
8.1.2.3 DVR Control .....	37
8.2 Advanced Network Setup .....	39
8.2.1 Advanced Network Setting .....	39
8.2.2 User Setup.....	40
<b>9. DVR TROUBLESHOOTING .....</b>	<b>41</b>
<b>10. NETWORK INSTALLATION .....</b>	<b>42</b>
<b>11. HARD DISK INFORMATION.....</b>	<b>42</b>
<b>12. APPENDIX .....</b>	<b>42</b>
<b>13. CAMERA GUIDE .....</b>	<b>43</b>
13.1 Features Of The CV67 .....	43
13.2 Camera Installation Tips.....	43
13.2.1 Mounting.....	44
13.2.2 Troubleshooting.....	45
<b>14. SPECIFICATIONS.....</b>	<b>45</b>

# 1. WHAT IS INCLUDED



1 DVR (320GB HDD)



16 Indoor/Outdoor Night Vision CCD Cameras



16 Camera Mounts w/ Hardware



1 10ft RCA to RCA (male) A/V Wire



1 RCA Female to 3.5mm (male) A/V Wire



18 RCA to BNC Connectors



Software CD



10ft RJ45 Ethernet Cable



16 x 60ft 4 PIN DIN to RCA (male) Video/ Power Wires

- 1 Power Adapter for DVR
- Online/ Toll Free Support
- Instruction Manual
- Quick Start Guide
- 1 Year Warranty
- 16 Power Adapters for Cameras

# 2. BUTTON FUNCTIONS AND CONNECTIONS

## 2.1 Front Panel



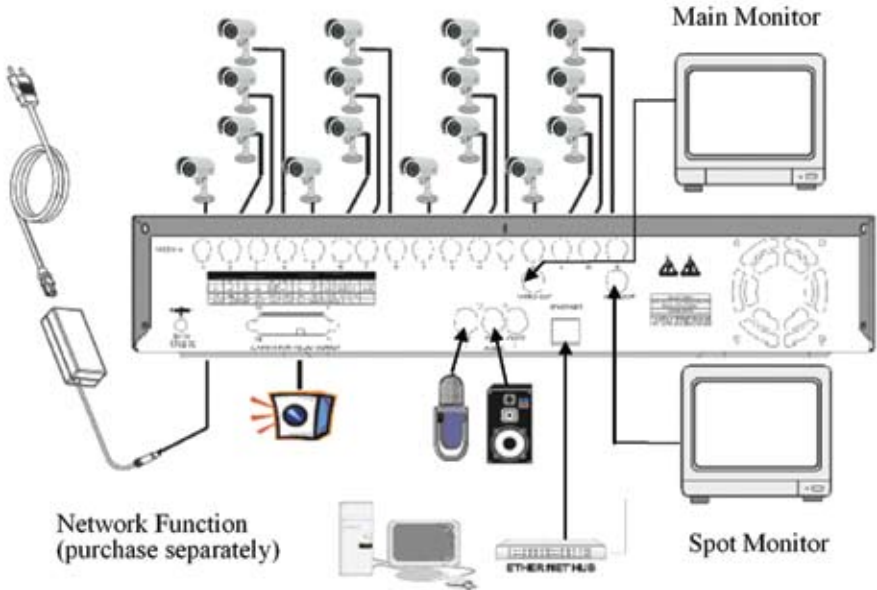
1. LED Indicators (Alarm/Play/HDD/Record)
2. Removable/Lockable HDD Casing: 3.5" IDE HDD
3. Camera Channel Select (1-16)
4. Record Button
5. Stop Button
6. Play Button
7. Pause Button
8. Split Button – Switch between Full Screen/ Quad Screen/ 9-Split Screen
9. Auto Sequencing Button – Automatically cycle through all the camera channels
10. Search Button – Quickly search your recorded footage by date and event.
11. Menu Button
12. Exit/Info Button – Return to the previous menu/view system information
13. Enter/Display Button – Confirm selection/show or hide onscreen display
14. CF Card Slot
15. Left Button – Change values in the menu screen/rewind
16. Right Button – Changes values in the menu screen/fast forward
17. Up Button – Navigate the onscreen menu/change camera channels
18. Down Button – Navigate the onscreen menu/change camera channels

## 2.2 Rear Panel



1. BNC Video Inputs – Connects the cameras to the DVR
2. Power Input – DC power input (12V)
3. Alarm Input/Output Port
4. RCA Audio Input – For connecting a microphone/audio supported camera (not included)
5. RCA Audio Output – For connection to your TV/monitor
6. BNC Video Output – For connection to your TV/monitor
7. Ethernet Port – For connection to your local area network and Internet
8. BNC SPOT Video Output – Additional connection to your TV/monitor, only displays video when motion recording is activated
9. Cooling Fan

## 3. INSTALLATION



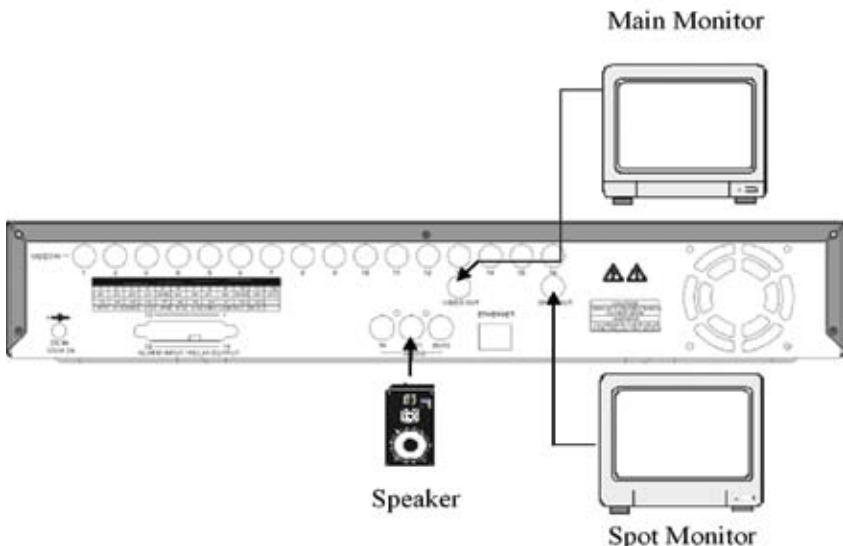
### 3.1 Camera Installation

1. Plug the 4 pin DIN female connection on the camera into the 4 PIN DIN male connection on the 60ft video/power wire.
2. Match the two arrows on top of both connecting cables.
3. Plug the camera's power supply into the power jack located on the 60ft video/power wire.
4. Plug the camera's power adapter into an AC outlet.
5. Connect the 60ft video/power wire's male RCA plug to the VIDEO IN port of your TV/monitor/VCR/DVR.
6. If your VIDEO IN port is a BNC connection (common with DVR units), you will need to attach the BNC to RCA adapter before connecting the camera.

### 3.2 Monitor Installation

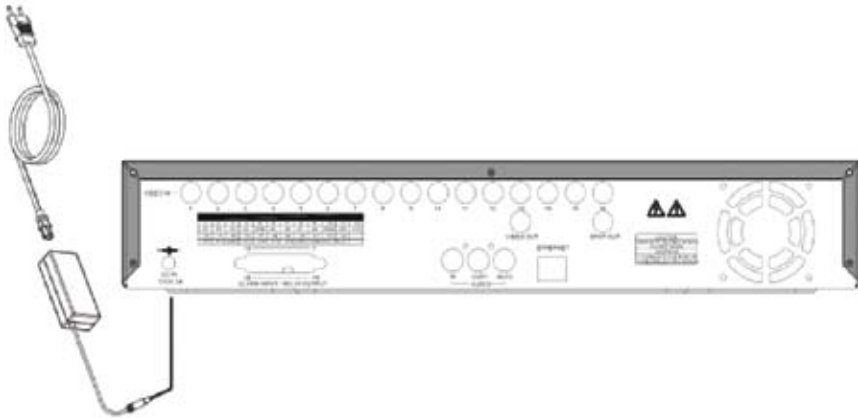
1. Connect an RCA male wire (not included) to the VIDEO OUT Monitor port on the DVR. Plug the other end of the RCA wire to the RCA VIDEO IN port on the TV/monitor.
2. For motion activated viewing (SPOT), connect an RCA male wire (not included) to the VIDEO OUT SPOT port on the DVR. Plug the other end of the RCA wire to the RCAVIDEO IN port on the TV/monitor. Note that the video will only be displayed when MOTION or ALARM recording is triggered.

### 3.2 Audio Installation



1. If you have an audio supported camera or microphone with an RCA Audio Out connection, you may connect it to the Audio In port on the DVR.
2. Connect an RCA audio wire (not included) to one of the Audio Out ports on the DVR.
3. Connect the other end to the Audio In port of your TV/monitor/speaker.

## 4. POWER TO DVR



1. Insert the power supply wire into the rear DC 12V Port on the DVR.
2. Insert the power cord into the power supply.
3. Plug the power cord into a power outlet. We recommend using a surge protected power bar and/or Uninterrupted Power Supply (UPS) backup. To turn the DVR on and off, use the power switch on your UPS or power bar. This DVR does not have a power switch. This is for your security and helps to prevent users from accidentally turning the DVR off.

**The DVR will power on and you will see a boot screen. After the DVR initializes your cameras should be displayed and recording will begin immediately.**

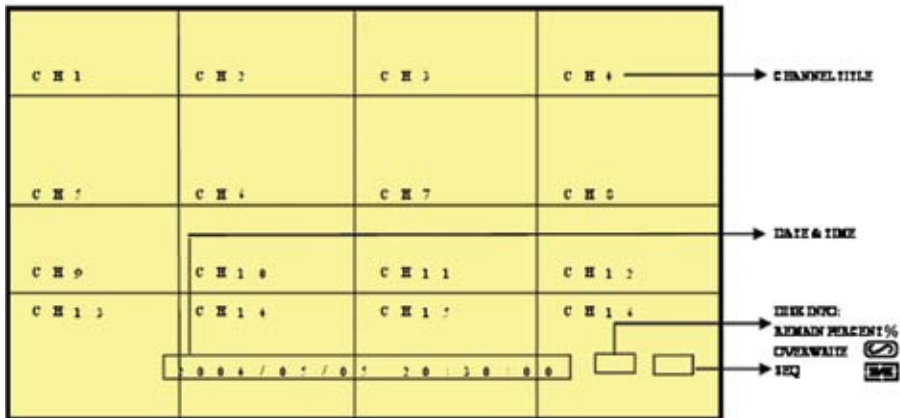


### Important notes before operation

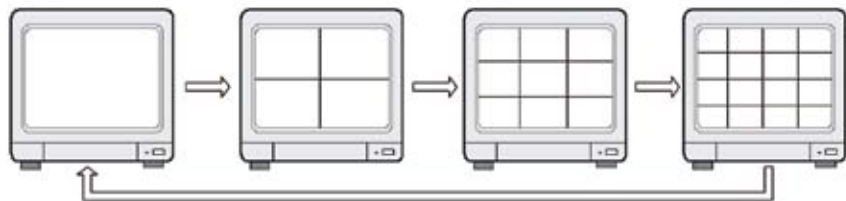
1. To power off the DVR, make sure the DVR is not recording to prevent file corruption. If on manual record, press STOP to stop recording and wait for the REC light to turn off before you power off the DVR. If in schedule record, press MENU and enter the password to enter the menu screen. When the record light turns off, you can power off the DVR.
2. The default password is 12345678.
3. This DVR does not support HDD hot swap. To prevent damage, please enter the main menu to stop all HDD activities, then power-off the device before replacing the hard disk.
4. After power-on, the DVR auto detects the video system (NTSC/PAL) of the first camera connected. When no camera has been connected, the video system will be the same as the previous setup.
5. After power-on the system auto enters 9-split screen mode, and continues with the previously setup recording schedule (auto resume recording)

# 5. DVR OPERATION

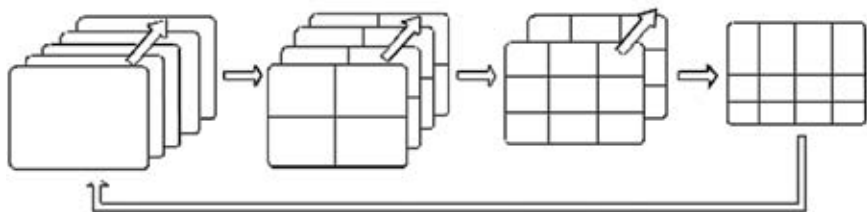
## 5.1 Live Mode



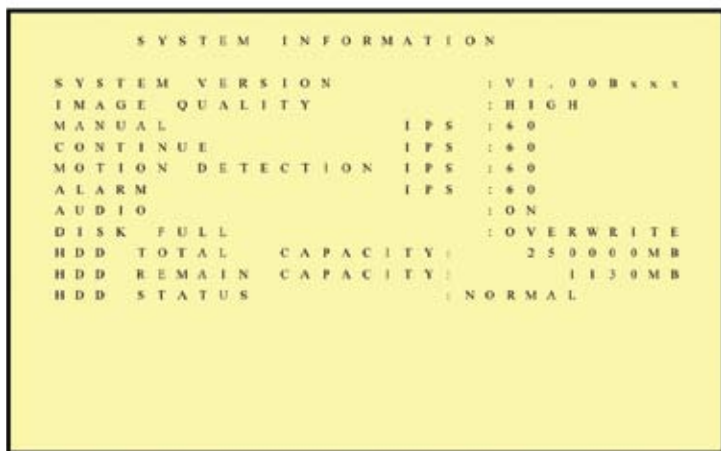
1. Press the “DISP” button to turn the onscreen display ON or OFF. The onscreen display shows the channel, date, and time.
2. Press the “INFO” button to display system information and configuration.
3. When the hard disk information icon turns to red, this indicates that the hard drive is full. To avoid this situation, set the DVR recording mode to OVERWRITE.
4. Press the channel buttons to switch between full screen camera views. (CH1 – CH16).
5. Press the “SPLIT” button to switch between “Full Screen/Quad Screen/ 9-Split Screen”.
6. Press the “SEQ” button to turn Sequence Mode on or off. Full screen channel auto sequence will skip the channels that show video loss (i.e. the cameras that are unplugged or not powered on).
7. When video loss occurs, a video loss message will be shown on the screen.
8. During an alarm triggered event the corresponding channel name will be changed to the color red.
9. During a motion triggered event the corresponding channel name will be changed to the color red and display “M”.
10. When an alarm event occurs, the SPOT monitor (when plugged into the SPOT Out port) will immediately switch to the full screen view of the channel that has been triggered by an alarm event, and will then return to previous channel switching status.
11. Live monitoring operations have no effect on recording functions.



Full Display and Quad Display Switching Order



Full Display and Quad Display Sequencing Order



System Information: Screen shot

## 5.2 Record Mode

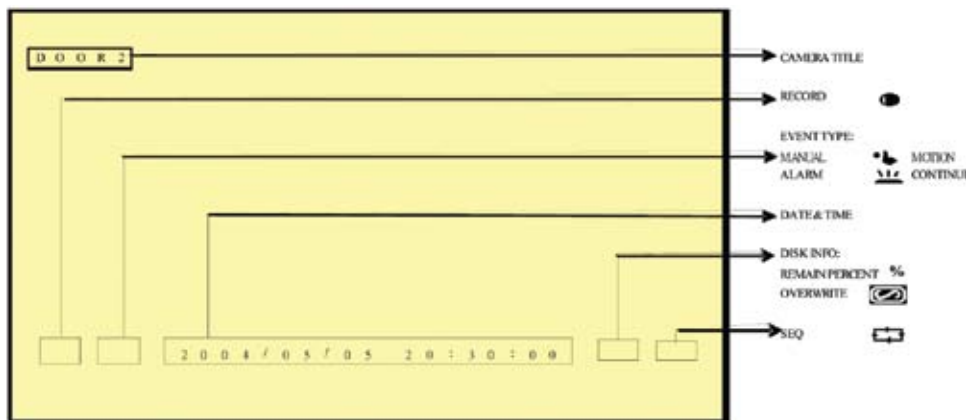
### Quick Glossary of Recording Terms:

**Manual Record:** This is the simplest of recording modes. Just press record to record video from your cameras. The system will continue recording until you press stop.

**Continuous Record:** This is a schedule record mode that allows you to specify what hours of the day you would like to record. The system will continue to record for those specified hours. During this time, you cannot press stop to halt recording. You must press menu.

**Motion Record:** This is a schedule record mode that allows you to specify which hours of the day you would like to record when movement is detected. After motion is detected, the system will record for a duration that you specify. During this time, you cannot press stop to halt recording. You must press menu.

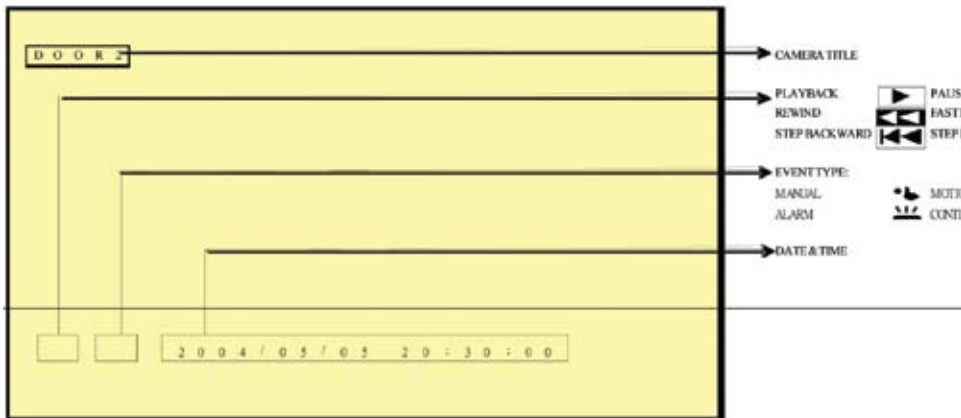
**Alarm Record:** This is a special recording method that requires you to have alarm sensors wired in to the DVR. You must buy these alarm sensors separately from a 3rd party, and SVAT does not offer support on motion sensors. This feature is for advanced users only. If you have alarm sensors wired correctly, the alarm record function will allow you to specify which hours of the day you want to record when your alarm sensor is triggered. After your alarm is triggered, the system will record for a duration that you specify. (During this time, you cannot press stop to halt recording. You must press menu.)



1. Manual Record: Under monitoring mode, press the “REC” button to enable all (CH1 – CH 16) camera recordings, and the “STOP” button to stop manual recording.
2. When schedule recording (ALARM/ MOTION DETECTION/ CONTINUOUS RECORD) has been activated, recording can not be stopped by pressing the “STOP” button. You must enter the menu screen to disable recording.
3. After entering playback mode or menu setup, when the correct password has been entered, all recording activities will stop. When exiting playback mode or menu setup, and schedule recording has been switched on, schedule recording will auto resume.
4. At power on after a power loss, the system auto returns to the recording mode scheduled before power-loss.

### 5.3 Playback Mode

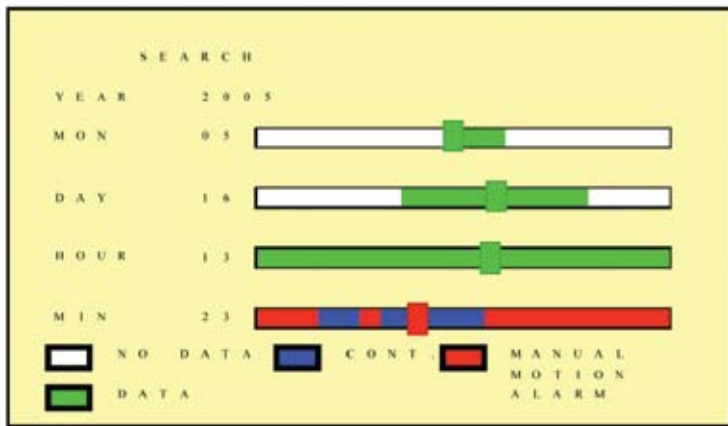
1. When pressing the PLAY button and when the playback password is set to “ON”, the system will request to enter a password. When the correct password has been entered, all recording activities will stop and playback mode will begin.
2. Press the “PLAY” button to play back starting from the previous playback end time (continues from where you left off).
3. Press the “DISP” button to switch on/off the channel, date, and time message display.



4. Press the “INFO” button to switch on/off the system information display.
5. Press the channel buttons to play back a camera channel in full screen (CH1 – CH16).
6. Press the “SPLIT” button to switch to “Full Screen/ Quad Screen/ 9-Split Screen”.
7. The SEQ button does not function during playback.
8. Press the “PAUSE” button under normal playback to pause.
9. During pause status, hold the “LEFT” button to step rewind playback, and the “RIGHT” button to step forward playback.
10. During normal playback, press the “LEFT” button to adjust the rewind playback speed (x1/ x2/ x4/ x8/ x16/ x32/ x64 ), and the “RIGHT” button to adjust the forward playback speed (x1/ x2/ x4/ x8/ x16/ x32/ x64). Press the “PLAY” button to return to normal speed and the “PAUSE” button to pause.
11. Connect the audio output to your TV/monitor/speaker input (using an RCA wire) to enable audio playback.
12. Press the “STOP” button to stop playback and return to live monitoring mode or schedule record mode.

## 5.4 Search

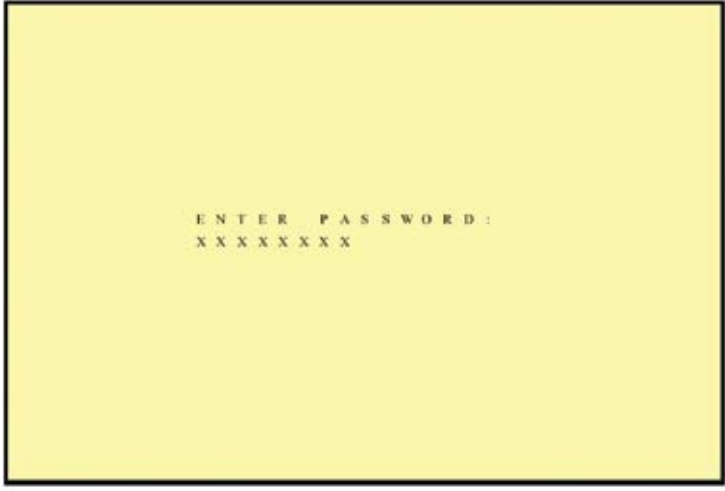
1. When you press the SEARCH button and the playback password is set to "ON", the system will request password entry. When the correct password has been entered, all recording activities will stop.
2. Press the SEARCH button for quick search by date and time. Press the ENTER or PLAY button to enter 9-split screen display.



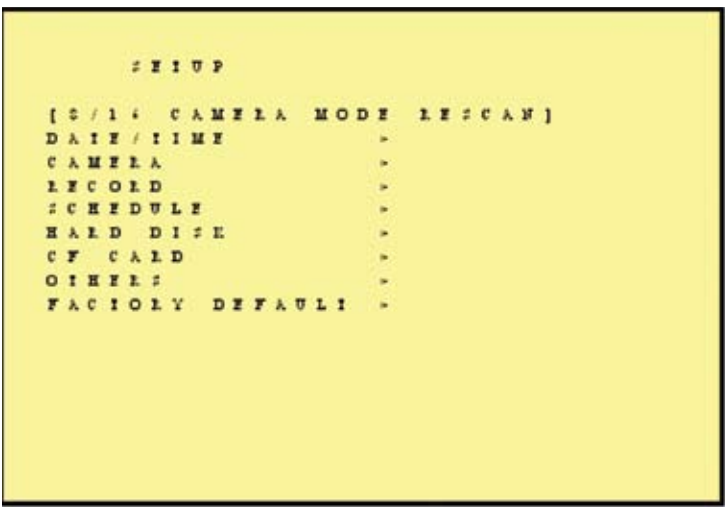
3. YEAR/ MONTH/ DAY/ HOUR:
  - White Index Bar: No recorded data available under this date period.
  - Green Index Bar: Recorded data available under this date period.
4. MINUTE:
  - White Color Bar: No recorded available under this time period.
  - Red Color Bar: Manual recorded data, motion detection recorded data, and alarm recorded data is available under this time period.
  - Blue Color Bar: Schedule recorded data is available under this time period.
5. Use the "UP/ DOWN" buttons to move the cursor to the desired item (YEAR/ MONTH/DAY/HOUR/MINUTE), use the "LEFT/ RIGHT" buttons or drag the index bar to make changes to the setup.
6. After setup has been completed, press the "ENTER" button to enter play mode, or the "EXIT" button to return to live monitoring mode.

# 6. MENU SETUP DESCRIPTION

The password is requested after the "MENU" button is pressed.



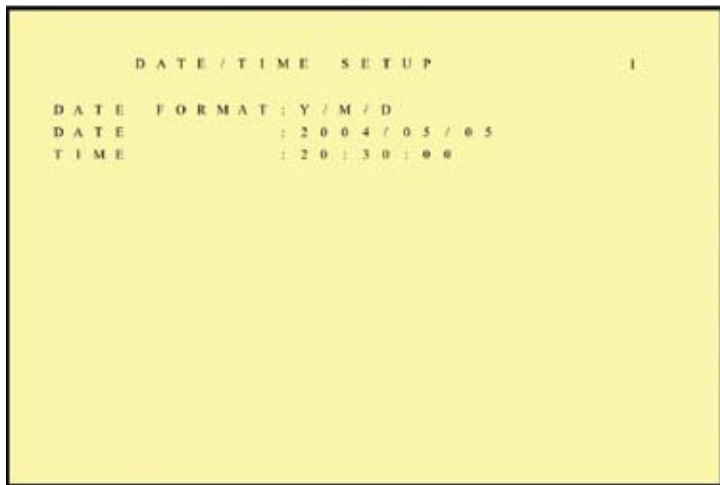
- 1. In order to enter the main menu, the password entered must be correct. After entering the main menu all recording activities will stop.
- 2. Default Password: 12345678 (CH1~CH16 represents number 1~16).



## 6.1 Eight/ Sixteen Camera Mode Rescan

1. When only 8 cameras has been connected (whether it is the first 8 or last 8 cameras), the system will enter 8-ch monitoring display mode. For all cameras to be displayed you will have to reboot the DVR or enter the menu to re-detect 16-ch monitoring display mode.
2. When more than 8 cameras are connected, the system will enter 16-ch monitoring display mode, and when disconnecting the cameras leaving only 8 cameras connected, the system will have to reboot or enter menu to re-detect 8-ch monitoring display mode.
3. Under 16-ch display mode, please avoid mix application on corresponding channels (corresponding channels: 1-9, 2-10, 3-11,..., 8-16) of b/w and color cameras; otherwise color cameras may be auto changed to b/w mode. Therefore, connecting or disconnecting the cameras, the system will have to reboot or enter menu to re-detect the monitoring display mode.

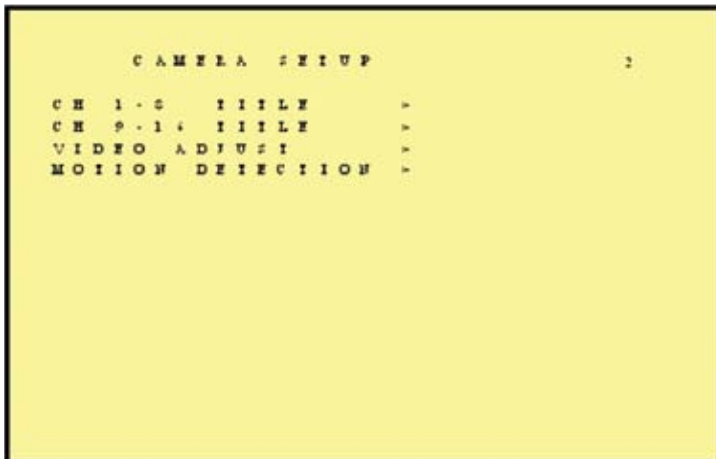
## 6.2 DATE/ TIME SETUP



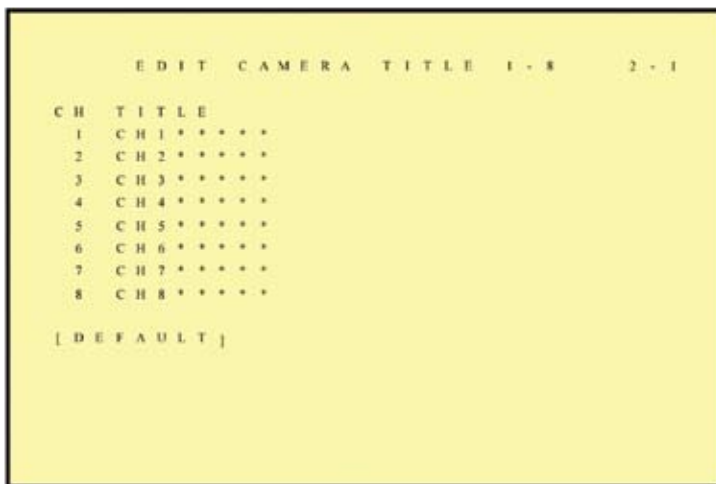
DATE FORMAT (Three Types of Date Format Setup) :

1. Y/M/D: Year/ Month/ Day
2. M/D/Y: Month/ Day/ Year
3. D/M/Y: Day/ Month/ Year

## 6.3 Camera Setup



### 6.3.1 Edit Camera Title 1-8



1. Maximum 8 character titles.
2. Move the cursor to the desired camera number by using the “UP/DOWN” buttons.
3. Move between the characters of the camera title by using the “LEFT/ RIGHT” buttons and use “UP/ DOWN” buttons to edit the camera title (letters A-Z, numbers 0-9 or blank spaces).

### 6.3.2 Edit Camera Title 9-16

```
          EDIT CAMERA TITLE 9-16      2-2  
  
CH TITLE  
 9 CH9 *****  
10 CH10 *****  
11 CH11 *****  
12 CH12 *****  
13 CH13 *****  
14 CH14 *****  
15 CH15 *****  
16 CH16 *****  
  
[ DEFAULT ]
```

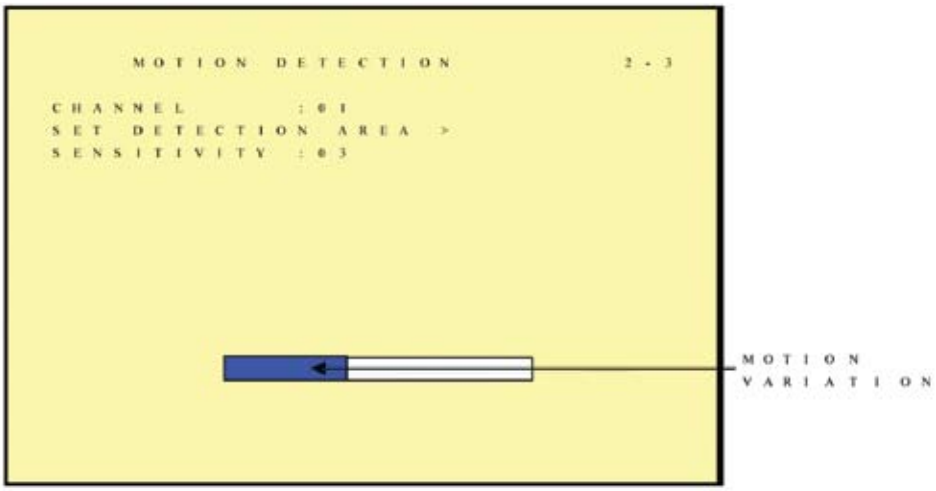
### 6.3.3 Video Adjust

```
          VIDEO ADJUST                2-2  
  
CHANNEL : 01  
  
BRIGHTNESS (1-10) : 05  
CONTRAST (1-10) : 05  
SATURATION (1-10) : 05  
HUE (1-10) : 05  
  
[ DEFAULT ]
```

Adjustable brightness, contrast, saturation, and hue for 1 – 16 CH videos.

### 6.3.4 Motion Detection

You can use these settings to adjust the area and sensitivity of motion detection on each camera channel. These settings are important if you are using motion activated recording, because if adjusted correctly, they can help prevent false triggering of motion recording.



1. Channel – Select the camera channel in which you would like to make changes
2. Set Detection Area – Select this setting to enter a grid screen for the selected camera channel. In this screen you can set the areas in the camera’s view that you want to enable or block motion detection in. For example, if there are cars constantly driving by in an area on your camera, you can block that area from detecting motion. Use the directions below to set up motion detection areas:

**Area Block Color:**

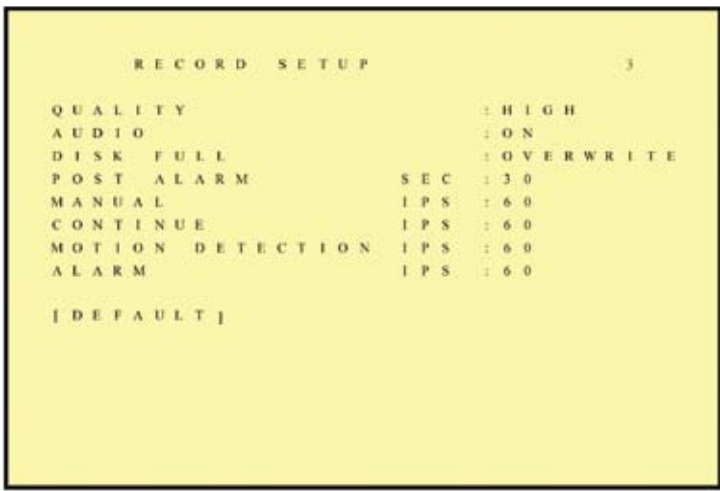
- Grey: Detection Block. These areas will be detected
- Transparent: Non-Detection Block.
- Green: Flashes when motion on the camera is being detected.

Use the green flashes to determine where motion is consistently being detected, and then make sure to set the motion detection area to exclude these areas from motion detection. Follow the directions below:

- Press “SEARCH” button to enable whole detection area.
- Press “MENU” button to disable whole detection area.
- You can set up a maximum of 3 separate detection areas (Detection areas may overlap):
- Press the” UP/ DOWN/ LEFT/ RIGHT” buttons to setup the starting point of the detection area.
- Press the “ENTER” button to confirm the starting point of the detection area.

- Press the “UP/ DOWN/ LEFT/ RIGHT” buttons to drag the window and set the ending point of the detection area.
  - Press the “ENTER” button to confirm the ending point of the detection area.
3. Sensitivity: The blue bar shown on the Motion Detection screen indicates the motion variation of the detection window. When the amount of motion detected exceeds the preset sensitivity threshold, it triggers motion detection recording. For example, if there is slight movement in your camera’s view (e.g. curtains blowing, shadows) you can decrease the sensitivity of that camera channel to avoid false triggering of motion record.

### 6.4 Record Setup



1. QUALITY: LOW/ MEDIUM/ HIGH
2. AUDIO:
  - ON: Audio recording enabled.
  - OFF: Audio recording disabled.
3. DISK FULL:
  - Overwrite: When the hard disk is full the system overwrites your oldest recorded footage (recommended).
  - Stop: When the hard disk is full the system stops recording (message will be displayed).
4. POSTALARM: Recording time after an event (Alarm/ Motion Detection) has been triggered.
5. MANUAL: Set frames per second (FPS) for manual recording.
6. CONTINUOUS: Set FPS for schedule continuous recording.
7. MOTION DETECT: Set FPS for schedule motion detection recording.
8. ALARM: Set FPS for schedule alarm recording (if you have alarm sensors wired into the DVR).
9. DEFAULT: Reload the factory default setting.

### 6.5 Schedule Setup

Use this menu to set up a 24 hour recording schedule. Specify which hours to record when motion is detected, and when to record continuously or not at all.

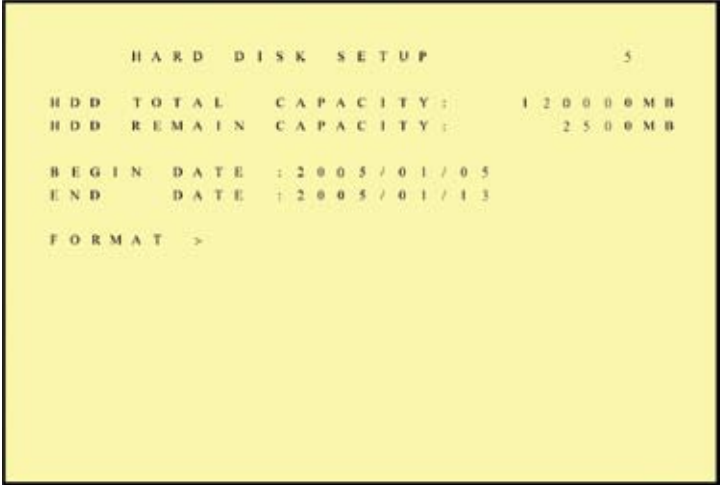


The recording schedule is based on a 24 hour clock that goes from 0~24. Using the directional arrows, move the cursor to the hour of the day you would like to change, and adjust the letter to the one that represents the type of recording you would like. For example, if you want to record only when motion is detected at 12:00 PM, move the cursor to the 12, and use the arrows to change the letter to "M". All types of recording are listed below along with their corresponding letter:

- 1. C: Continuous Recording
- 2. M: Motion Detect Record
- 3. A: Alarm Recording (advanced users only)
- 4. - : None (no recording will occur)
- 5. \* : All (all types of recording are activated)

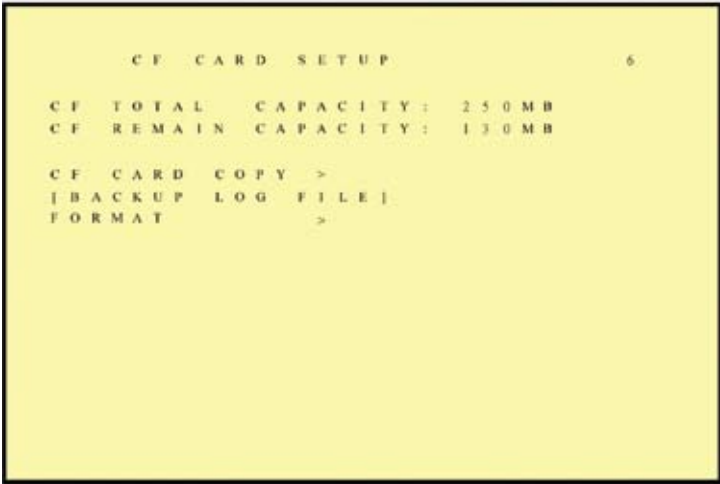
Record Mode Priority:  
Manual Record>Alarm Record>Motion Detection Record>Continuous Record

### 6.6 Hard Disk Setup



- 1. Displays the hard disk total capacity and the remaining capacity.
- 2. Displays the start and end date of the recorded material and when no recorded materials are available, current date is displayed.
- 3. FORMAT: Format the HDD. Warning: This will erase all your recorded footage.

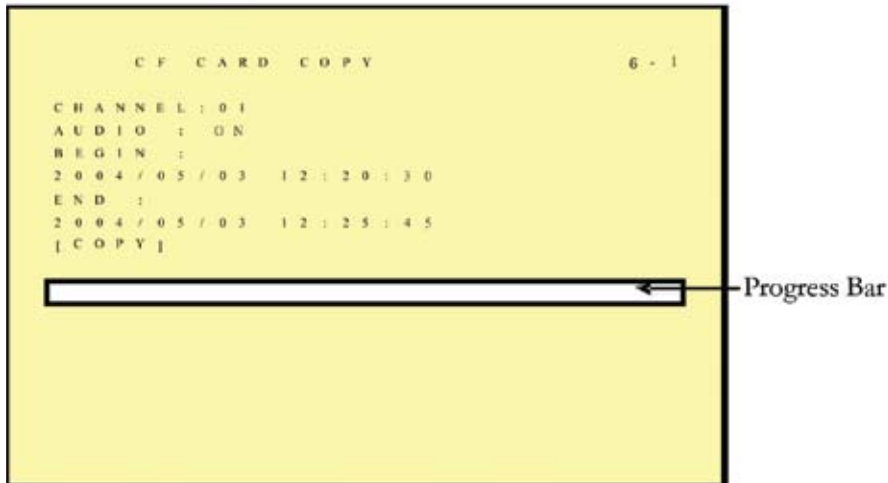
### 6.7 CF Card Setup



- 1. CF TOTAL CAPACITY: Total Capacity
- 2. CF REMAIN CAPACITY: Remaining Capacity
- 3. CF CARD COPY: Copy the selected file to the CF card.
- 4. FORMAT: Delete all data stored in the CF card.

## 6.7.1 CF Card Copy

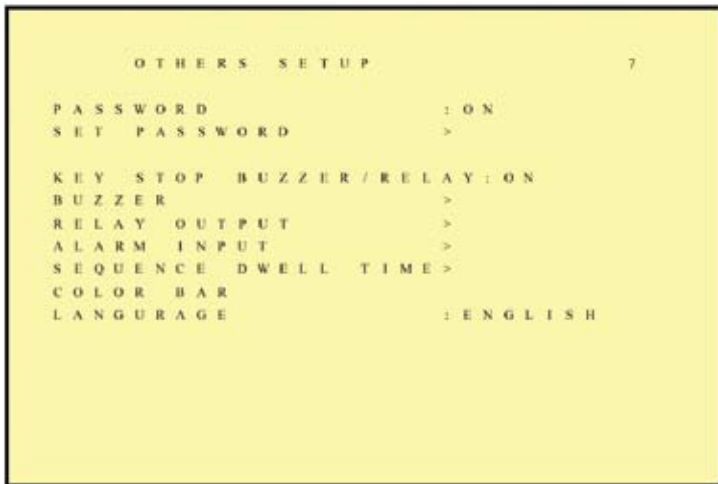
Use this feature to backup your footage onto CF card (CF card reader required to view on a computer). Note that only one camera channel can be recorded at a time.



1. CH: Selectable 1 -16 camera option.
2. AUDIO: Specify whether to record audio or not.
3. BEGIN/END: Specify the start and end time of the desired video clip.
4. COPY: Select "COPY" to start copying to your CF card.

\*When the data size selected exceeds the storage capacity of the CF card, it will start copying from the beginning and stop when the CF card is full. Each channel and event generates a different AVI file. Windows Media Player supports AVI file playback (File size is 720X240. When using a computer to playback, the video aspect ratio is not 1:1, please use a player with adjustable video aspect ratio).

## 6.8 OTHERS

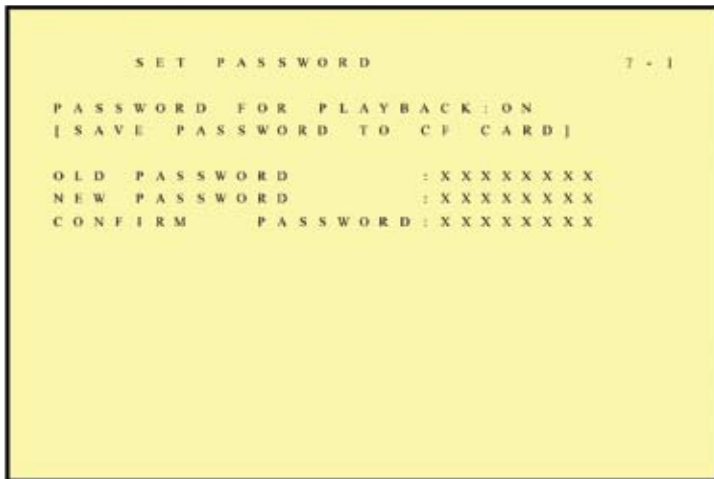


1. **PASSWORD:**  
 ON: Enable password protection, password is required before entering the main menu.  
 OFF: Disable password protection, password will not be required before entering the main menu.
2. **KEY STOP BUZZER/ RELAY:** Use this option if you have an external relay device attached (advanced users). When the buzzer or relay device is triggered by an event, enabling this setting will allow you to press any key to deactivate.
3. **COLOR BAR:** By using the color bar, the user may adjust the color of the monitor.



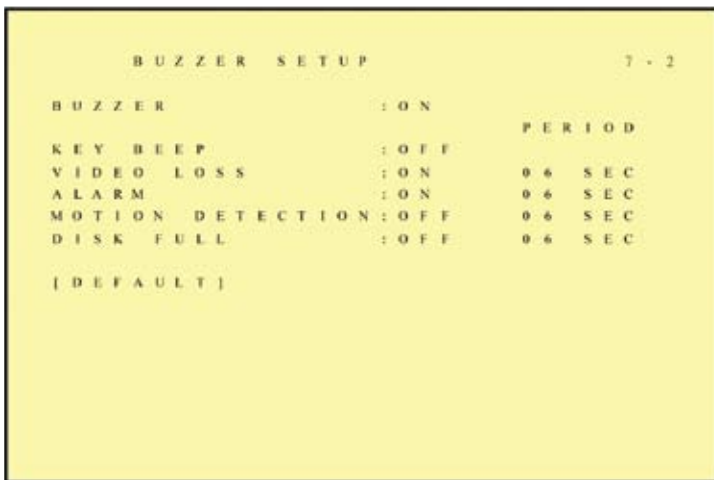
4. **LANGUAGE:** Select the desired language.

## 6.8.1 Password



1. Search/ Playback Password: Specify whether the search or playback mode is password protected. When password is stored on the CF card, after inserting the CF card the password will not be requested by the system.
2. Default Password: 12345678 (CH1~CH16 represents number 1~16).
3. Press the “ENTER” button to enter new password, confirm settings, and press “EXIT” button to exit.

## 6.8.2 Buzzer



BUZZER:

ON: Buzzer is enabled.

OFF: Buzzer is disabled.

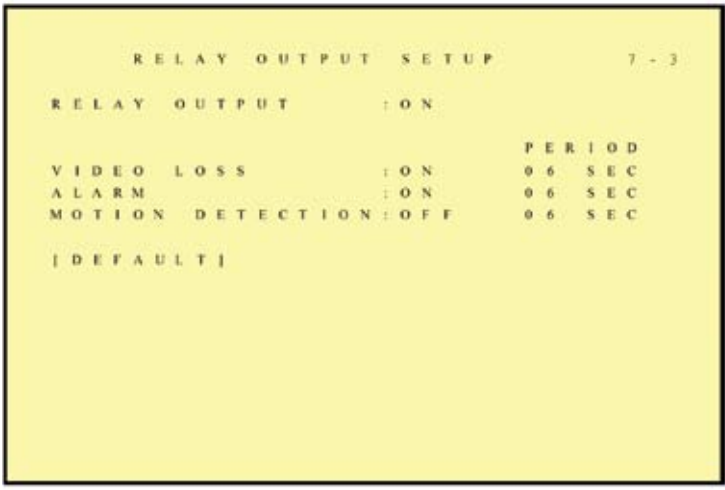
Period: Duration time of the buzzer output.

Buzzer event includes the following:

- 1. KEY PRESSED: Disable/Enable beeping when keys are pressed.
- 2. MOTION DETECTION: Disable/Enable motion detect alarm
- 3. ALARM: Disable/enable motion sensor alarm.
- 4. VIDEO LOSS: Disable/enable video loss alarm
- 5. DISK FULL: Disable/enable disk full alarm.

### 6.8.3 Relay Output (Advanced users)

The installation of any relay output alarm is optional and SVAT cannot offer technical support on such alarms. Contact the alarm sensor manufacturer for more information.



RELAY OUTPUT: A relay output can be connected to an external sounding device or warning device.

Two Types (NO/ NC) of Relay Output Setup:

- ON: Relay output enabled.
- OFF: Relay output disabled.

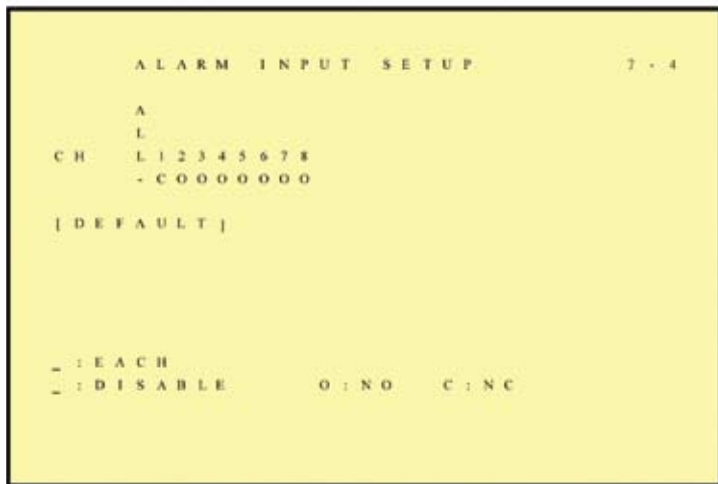
PERIOD: Duration time of the relay output.

Relay output event includes the following:

- 1. VIDEO LOSS: Triggered by video loss.
- 2. MOTION DETECTION: Triggered by motion detection.
- 3. ALARM: Triggered by external alarm.

## 6.8.4 Alarm Input (Advanced users)

The installation of any external alarm sensor is optional and SVAT does not offer technical support on such alarms. Contact the alarm sensor manufacturer for more information.



### Sensor Type

NC → Normal Close (NC) Alarm

Setup NC (Normal Close), the alarm will be triggered during NC status.

NO → Normal Open (NO) Alarm

Setup NO (Normal Open), the alarm will be triggered during NO status.

### All

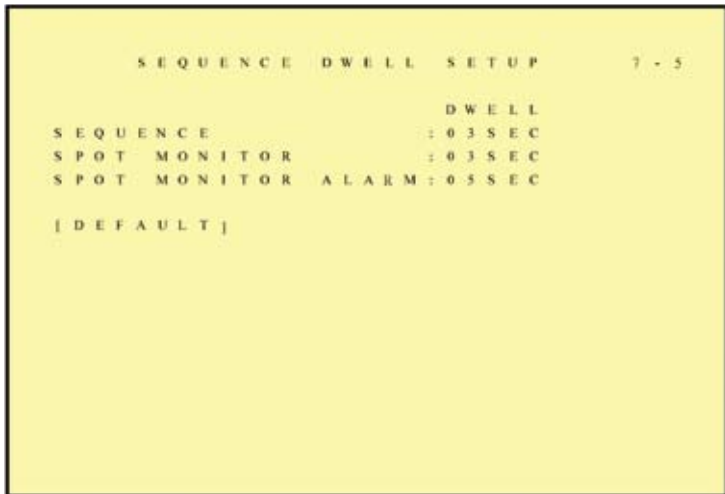
+ (EACH): Alarm input can be individually setup to NC or NO.

- (DISABLE): Disable alarm input can be individually setup.

C: All alarm input is setup to NC.

O: All alarm input is setup to NO.

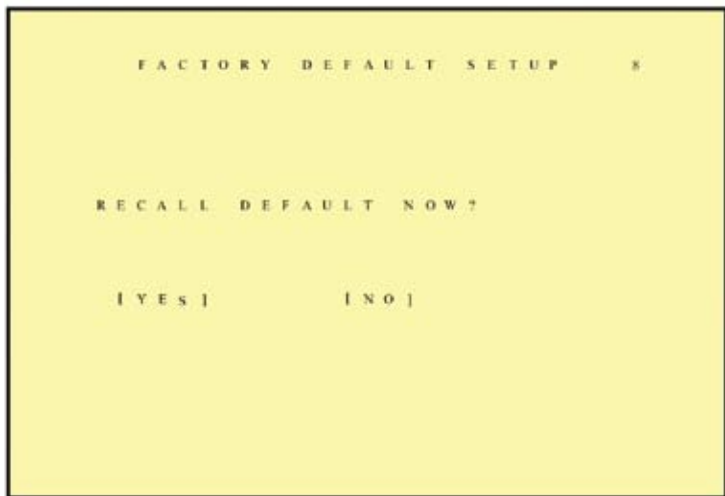
## 6.8.5 Sequence Dwell Time



1. SEQUENCE: Specify how long each camera will be displayed when in sequence mode.
2. SPOT MONITOR: Specify how long video will be displayed on the SPOT monitor when motion is detected.
3. SPOT MONITOR ALARM: Specify the dwell time for the spot monitor alarm.

## 6.9 Factory Default

To return to factory default settings, select the “YES” option and then press “ENTER” to load the factory defaults. Press “EXIT” to exit.



# 7.DVR NETWORKING GUIDE

## 7.1 Introduction

Congratulations on taking a step forward in protecting your valued possessions. Now that you have your video security system in place, connecting it to the internet will allow you to view what's important to you with ease. You will learn about your product and will see that you can do this on your own. The following is a step by step instruction manual on how to connect your system to the internet. You will be able to view your DVR and even watch previously recorded footage with the touch of a button.

**NOTE:** This guide was created using a cable modem and some procedures will be slightly different depending on your hardware. If you are using a DSL modem, you may need to enter your PPPoE settings into the DVR (User name and password provided by your ISP.) For more information refer to section 9.2 of the user manual.

Before you start lets make sure that you have everything you need to do this properly. You should have these ready and connected before beginning:

- DVR connected to a router
- Router connected to the internet. In order for this DVR system to connect to the internet, it must be connected to a router. If you are using a DSL internet connection the setup process is much easier if you use modem with a router integrated in it as this will help avoid any problems connecting your DVR. Please write down the model # of your router in the important information section.
- A PC laptop or computer that is connected to the router so you can make the necessary changes. This system is not Mac compatible. Your computer should have the following specifications:
- **Internet Explorer Version 5 or higher.** If you do not have this program, please go to [www.download.com](http://www.download.com) and get an updated version. You can check your version of Internet Explorer by opening the program. Go to the top menu selection and in the Help menu options, choose About Internet Explorer. The version will be displayed.
- A valid and fully updated version of Windows XP (minimum).

### Important Information

Please fill in the information you receive during this installation in the areas below:

Your router manufacturer: \_\_\_\_\_ Example: D-Link

Your router model #: \_\_\_\_\_ Example: DI-524

Router IP: \_\_\_\_\_ Example: 192.168.1.1

DVR IP: \_\_\_\_\_ Port #: \_\_\_\_\_

Example: 192.168.1.101 Example: 80

External IP: \_\_\_\_\_ Example: 14.14.243.113

DynDNS Username: \_\_\_\_\_ Example: myname1234

DynDNS Password: \_\_\_\_\_ Example: 123ABC

DynDNS Domain Chosen: \_\_\_\_\_ Example: dyndns.org

Sign-In URL: \_\_\_\_\_ Example: myname1234.  
dyndns.org

## 7.2 Prepare Your Computer

Following these steps will allow your computer to view the video.

Before starting to set-up your network connection, you have to be sure that your computer is able to view the footage from the DVR. If you are running Windows XP, you will most likely have this pre-installed.

**NOTE: You will need to do this to any computer that you want to view the footage from.**

1. Open Internet Explorer. Go to the drop down menu in the TOOLS area and select INTERNET OPTIONS. A screen will open.

2. Select the SECURITY tab, then click on the CUSTOM LEVEL button in this tab.



3. Change the ActiveX settings to the ones seen in the images.

- Download signed ActiveX controls: **PROMPT**
  - Download unsigned ActiveX controls: **PROMPT**
  - Initialize and script ActiveX controls not marked as safe: **PROMPT**
  - Run ActiveX controls and plug-ins: **ENABLE**
  - Script ActiveX controls marked safe for scripting: **ENABLE**
- If it is an option:*
- Allow automatic prompting for file and code downloads: **ENABLE**

**NOTE:** If you do not have ActiveX installed and the previous step did not download it, go to [www.download.com](http://www.download.com) and search for ActiveX. Download the ActiveX Download Control.

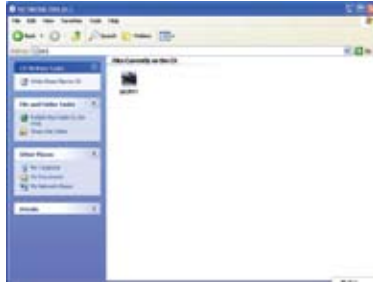


**Your computer is now able to view the feed from the DVR.**

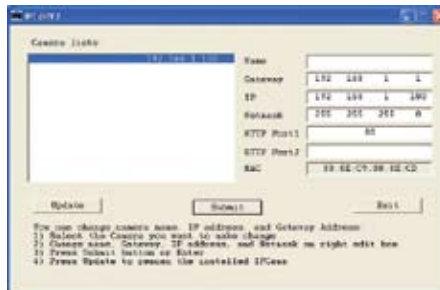
## 7.3 Prepare Your DVR

Next we will set up the DVR to connect to the internet and allow you to view online.

1. Place the CD-ROM that was included with the DVR system into your computer's CD-ROM drive. If your computer does not automatically open the CD folder, go to Start/My Computer and double-click on the CD-ROM icon.



2. Drag and drop the IPEDIT.EXE program onto your desktop. This program will give you the information needed to find your DVR's IP address (unique location on your network).
3. **Open IPEDIT.EXE** from your desktop. Depending on your firewall settings, a warning message may appear asking if you want to block or unblock this program. **Click Unblock.**



4. **Click on the UPDATE button.** In the top left area of the program window you should see a set of numbers. This is the IP address of your DVR. Write it down in the information area of this manual listed as **ROUTER IP**.
5. **Open up Internet Explorer.** In the Address bar, enter your DVR's IP address found in Step 4 followed by a space, a colon and the port number. This DVR's default port number is 80. Your IP address should look something like this: 192.168.0.1 :80 Some versions of Internet Explorer will not work with a space in the address bar. If this is the case, try it without the space. eg: 192.168.0.100:80

6. If entered successfully a window will open up with a login screen. The default **USER NAME** is **admin**. The default **PASSWORD** will be **1234**.



- The first time you logon to the DVR, an ActiveX Installation window will appear. Install the ActiveX control.



## 7.4 Connect To The Internet



If your Internet connection is DSL (a broadband connection that comes through your phone line) you may need to configure PPPoE settings in your DVR. If you do not know what type of broadband connection you have, contact your internet service provider. Ask your ISP if your internet connection is cable or DSL.

**If you have cable:** Skip the DSL section below and continue with the **Port Forwarding** Section.

**If you have DSL:** You need your DSL user name and password. You may be able to find it in the documentation that came with your DSL modem. If not, please call your Internet Service Provider to acquire it.

- Click on the CONFIGURATION button in the DVR browser.
- Under **Remote IP Assignment**, enter your DSL user name in the User Name box.
- Enter your DSL password in the Password box.
- Scroll to the bottom
- Click the "Reboot" button.
- Power off the DVR and power it back on to confirm the changes. The changes will not take effect until you restart the DVR.
- Follow the steps listed in the **Port Forwarding** section

## PORT FORWARDING

Port forwarding is a necessary step that opens a path on your home/business network to allow you to view your DVR video feed from outside your network (over the internet). There are hundreds of makes and brands of routers on the market and these instructions have been made using a D-Link router (Model DI-524). If you have a router that is different than shown, please visit [www.portforward.com](http://www.portforward.com) and go to the link marked GUIDES. Once on this page, go to the link marked Port Forwarding Guides by Router. Find your router make and model in the list of links and click on it. You will see a list of various applications. Find a link for any DVR or IP camera and click on it. Follow the instructions but make sure you forward the correct port number (the port number assigned to your DVR. The default port number is 80. )

The steps for your router will be similar to the following. These instructions have also been created without a firewall in place. If you have a firewall, please consult a computer technician.

NOTE: Your router may require a user name and password. If you do not know it, ask the person who configured your network. Portforward.com will provide you with each router's default user name and password.

## D-LINK ROUTER

You will need to enable the ports by locating the port range forwarding screen. With some D-LINK routers the port forwarding screen is located within the Applications & Games or Filters tab; in others it is located in the Advanced Tools tab.

1. Open your web browser. Enter the ROUTER IP address in the address bar as shown below and press ENTER.
2. Enter the user name admin. Leave the password blank followed by pressing the OK button (unless you have set up a user name and password for your router)



3. Select the Advanced tab.



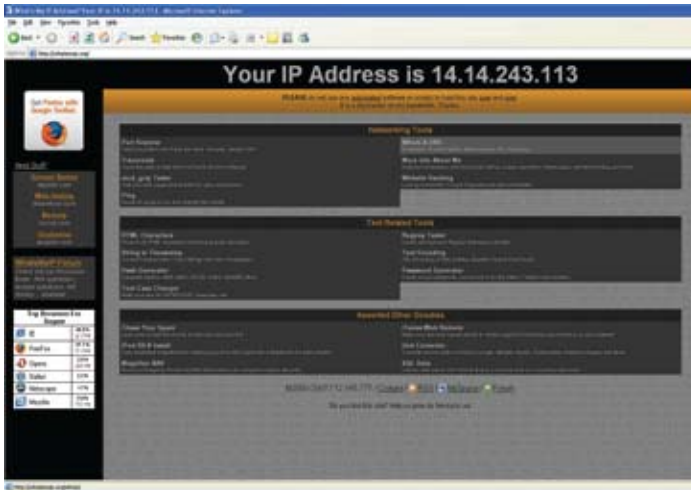
#### 4. Select the Virtual Server tab.

- Enable the Virtual server
- In the Name field type in “DVR”
- In the Private IP field enter the DVR’s IP address.
- In the Protocol field, select Both (This will enable both TCP and UDP).
- In the Private port enter the port number you need to forward. By default this DVR is set to port 80. Use port 80 unless you have a reason to change the DVR to another port (not recommended).
- In the Public port re-enter the port number you entered in the private port field (e.g. 80).
- Select the Schedule to Always.
- Ensure that the Virtual Server (or forwarding that is being set-up) is set to ENABLED.

When complete, select the Apply button located at the bottom of the page to save your changes. Port forwarding is now complete!

## 7.5 Find Your External IP

Now you will need to find your external IP address. This will be the address you will be entering in order to access the DVR from outside your network (over the internet).



There are many ways to find your external IP address. The simplest way is to go to <http://www.whatsmyip.org>. This site will display your external IP address in the top portion of the screen. If you go to <http://www.portforward.com>, it will also display this IP address. Write it down on the second page marked EXTERNAL IP.

### Test Your External IP

Now that you know your external IP address, you can perform a test to ensure your DVR is accessible from outside your network (over the internet).

1. Open Internet Explorer, and in the address bar type in the EXTERNAL IP address, followed by a colon and your port number (default is port 80). It should be similar to the following 2 examples: 14.14.243.113 :80 OR 14.14.243.113:80

2. Press ENTER, and your DVR's login window should pop up. If it does not pop up, your router is not properly forwarding the necessary port. This could be due to a number of problems including incorrect settings, presence of a firewall, or a DSL modem that has its own IP address.

If your DSL modem has its own internal IP address, it will not properly forward the necessary port. You may have to configure PPPoE settings in the DVR to match the settings provided to you by your Internet Service Provider (ISP). Consult your ISP for more information. SVAT technical support cannot troubleshoot modems, since changing these settings can potentially render your modem inoperable.

See section 9.2 Advanced Network Setup for PPPoE configuration instructions.

You should also check all your network connections and go through the above steps again to make sure a configuration error was not made.

## 7.6 Forwarding Outside Your Network.

### Port Dynamic DNS

This section will explain how to associate your IP address with an easy-to-remember URL (domain name)

1. Open Internet Explorer and type in [www.dyndns.com](http://www.dyndns.com)



2. The instructions on creating a dynamic DNS may have changed since the writing of this guide. Create a new account by clicking the link "Create Account"
3. Enter your preferred user name, email address, and password.
4. Do not worry about the optional information. Agree to the Terms of Service by checking the boxes. Click Create Account.



- Now check your email for the confirmation message. You will need to click the link in the body of this message to activate your account. The message may take up to 24 hours to arrive in your inbox. If you cannot find the message in your inbox, please check your junk/spam mail folder.
- When you click the link, a window will appear that displays "Account Confirmed." Click on the login link and enter the user name and password you created.



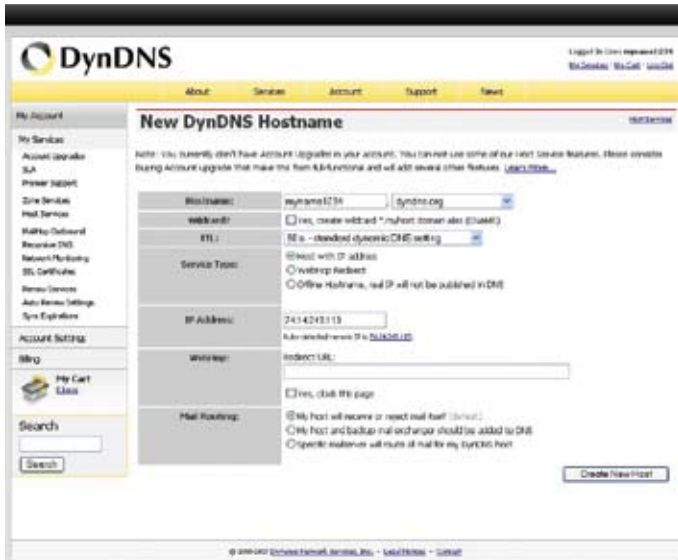
- Click on the Services button located on the top menu



- Click on the Dynamic DNS link



9. Click on the Get Started link located on the right menu
10. Type in a host name (subdomain name). We recommend you use your first name or company name.
11. Choose a domain name from the dropdown menu. We recommend using the dvrDNS.org suffix.
12. In the IP address field, type in your external IP address (it may also be shown below the field).
13. Leave all the rest of the options as-is, and click Create New Host.



14. Your dynamic DNS settings have been created.



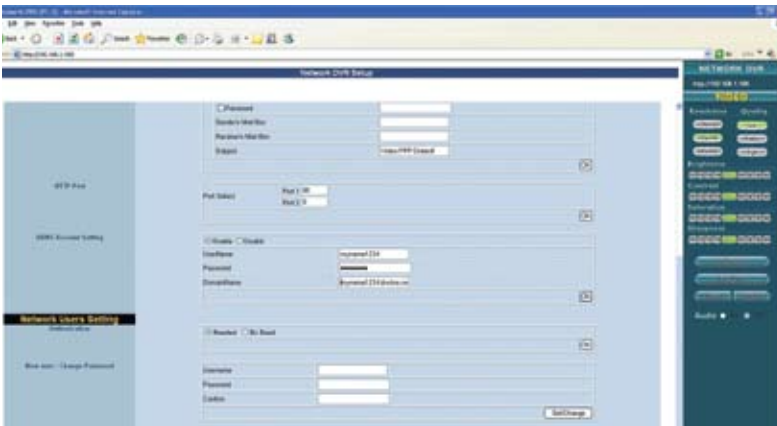
## 7.7 Finalizing The Set-Up

Now you must associate your DVR with the DynDNS account you just created. This will ensure that when your external IP address changes, your domain name (address in the Internet Explorer Address Bar) will remain associated with your new IP address. This will ensure that you will only need to type in your domain name in order to access your DVR, whether you are inside or outside of your network:

1. Log-on to your DVR through your computer by using either the internal or external IP address.



2. Click the CONFIGURATION button.
3. Under the "Network DVR Setup" window, scroll down to "DDNS Account Setting."



4. Make sure the ENABLE button is selected.

5. Enter the username, password, and full domain name you configured at [www.dyndns.com](http://www.dyndns.com).  
Example:  
UserName: myname  
Password: mypassword  
DomainName: myname.dvrDNS.org
6. Click the OK button located in this section to save your configuration. Reboot the DVR by powering it off and then on again to confirm the changes. You must reboot the DVR any time a change is made in the configuration menu.
7. You should now be able to access your DVR simply by typing in your domain name (i.e. [myname.dvrDNS.org](http://myname.dvrDNS.org))



**Note:**

If your router is set to automatically assign an IP address to your DVR (Dynamic/DHCP), your DVR's internal IP address may change if your DVR or router is rebooted. To resolve this problem, you need to configure your router to forward to this new address (simply replace the old private IP address with the new one). To avoid this problem all together, you can set your router to Static LAN IP, which will assign the same IP address to the DVR every time, even when the DVR or router is rebooted.

**7.8 Additional Troubleshooting**

**I press play and nothing happens**

You need to press STOP on the DVR first. This DVR can either record or view video footage. It will not do both at the same time. Please make sure that you press STOP before proceeding.

**My browser keeps freezing**

First make sure you have an up to date browser and that the proper ActiveX options are selected. If they are, you may need to re-install your browser.

**I can't remember my DVR's password**

Call technical support to obtain the DVR's master password

**I can't see at night with my IR night vision camera**

These cameras are spec'd at 10-15ft in the dark. If you placed these cameras outdoors in the open, the night vision will be reduced as there is nothing to reflect the IR emitted from the camera. To help increase the viewing capabilities add additional lighting to the area.

**The color is off on the camera**

These cameras have been designed with a high resolution lens which allows you to see crisp clean images. The best lighting for this system is by using incandescent lighting. Other lighting effects will alter the color. You can adjust the color of the cameras in your menu settings. (see 7.2.2)

**NOTE:**

When entering an external or internal IP address, the port number is required and should be in the following format:

192.168.0.100 :80 OR 192.168.0.100:80 (some browser versions require a space, some do not)

# 8. FUNCTION SETUP

## 8.1 Main Display

Optimal browsing resolution is 1024 x 768.



### Live Display

Move the cursor inside the image range and right mouse click to display the following menu:



## 8.1.1 View

Two types of display methods:

1. Re-sizable: Adjustable image size.
2. Actual size: The actual image size.
3. Status Bar: Reveals current status.

## 8.1.2 Image Recording

This mode allows you to save picture or video files from the DVR to your computer. Image Recording Setup Display:

1. Save as JPEG: Save as picture file
2. Save as AVI: Save as AVI animation file

Note: To prevent asynchronous AVI recording both functions should not be simultaneously selected.



### 8.1.2.1 Save As JPEG:

The following options allow you to customize how the jpeg image files are saved:




- No Limit: Unrestricted image storage (continuous jpeg saving)
- Number: Image storage according to number of frames. For example, if set to 50, 50 frames will be stored in 50 separate jpeg files.
- Save interval: Image storage according to one tenth of a second. For example, if you enter 10, then one frame is stored per second. If you enter 50, then one frame is stored every 5 seconds.
- Size: Image storage according to file size.
- Time: Image storage according to time. For example, if set to 60 seconds, the system will capture jpeg files for 1 minute.
- Save Path: Specify the file path on your computer to save the jpeg files.
- Pre Name: Specify the prefix for the jpeg files, and they will be numbered in the order in which they are captured. For example, setting the Pre Name to "DVR\_" will generate files starting with "DVR\_1", "DVR\_2" and so on.










### 8.1.2.2 Save As AVI:

- No Limit: Unrestricted video storage (continuous avi recording).
- Number: Video storage according to number of frames. For example, if set to 50, 50 frames will be stored per avi file.
- Save interval: Video storage according to one tenth of a second. For example, if you enter 10, then one file is stored per second. If you enter 50, then one file is stored every 5 seconds.
- Size: Video storage according to file size.
- Frame Rate: Specify the frame rate of each avi file.
- Time: Video storage according to time. For example, if set to 60 seconds, the system will capture video for 1 minute.
- Maximum Number of Frame in Each File: Specify the maximum number of frames in each AVI file.
- Save Path: Specify the file path on your computer to save the avi files.
- Pre Name: Specify the prefix for the avi files, and they will be numbered in the order in which they are captured. For example, setting the Pre Name to "DVR\_" will generate files starting with "DVR\_1", "DVR\_2" and so on.

### 8.1.2.3 DVR Control



1. CHANNEL SELECT		Camera Select Button: CH1~8
2. REC		Manual Record Button
3. STOP		Stops manual recording and playback.

4.PLAY		Play Button
5.PAUSE		Pause Button
6. SPLIT		Full Screen/ Quad Screen/ 9-Split Screen
7.SEQ		Automatically cycle between cameras
8.SEARCH		Quick search of recorded videos
9.MENU		Change DVR settings
10.EXIT/INFO		Returns to Previous Menu/ System Information Display Toggle/Confirm Button/ Message Display Toggle
12.ENTER/ DISP		Return to Previous Menu/ System Information Display Toggle/ Confirm Button/ Message Display Toggle
11.UP/DOWN/ REW/FF		Up Directional Button/ Channel Up Button/ Down Directional Button/ Channel Down Button/Left Directional Button/ Right Directional Button

### Resolution Setting

- 120x160
- 320x240 (Pre-set Value)
- 640x480

### Quality Setting

- High
- Middle
- Low (Pre-set Value)

### Brightness/Contrast/ Saturation/ Sharpness

- : Min. Value
- STD: Pre-set Value
- + : Max. Value

The higher values are shown to the right and descend in value as you go to the left.

### Configuration

Advanced Setup - this function can only be adjusted by the administrator (i.e. the user name must be admin).

### Live Video

Back to live video display

### Record

Please refer to 9.1.2 Image Recording

### Snapshot

Press this button to capture one live image and press "RIGHT" button to store the image.

### Audio

Live audio control "On/ Off" (Default: OFF).

## 8.2 Advanced Network Setup

Only “Admin” can select “configuration” (advanced setup).

### 8.2.1 Advanced Network Setting

The screenshot displays the 'Advanced Network Setting' configuration window. On the left, a vertical sidebar lists sections: 'LAN Setting', 'DNS', 'Remote Ip Assignment', 'HTTP Port', and 'DDNS Account Setting'. The main area is divided into three numbered sections:

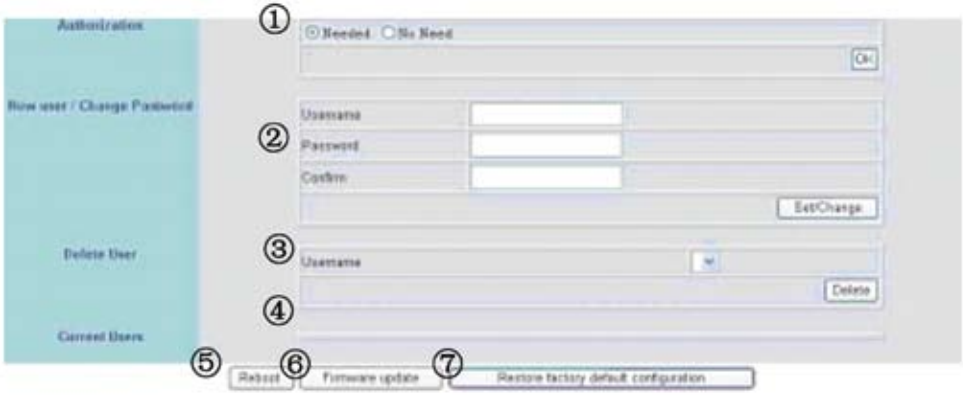
- Section 1 (LAN Setting):** Shows two radio buttons: 'Manually' (selected) and 'Automatically by DHCP'. Under 'Manually', there are three input fields: 'IP Address' (8800), 'Subnet Mask' (8800), and 'Default Gateway' (8800).
- Section 2 (DNS):** Shows three radio buttons: 'DNS0', 'DNS1', and 'DNS2', all set to 8800. An 'OK' button is at the bottom right.
- Section 3 (PPPoE):** Starts with a 'Save & Dial Now' button. Below it is a 'Dial On Power Up' checkbox. Then are fields for 'Username', 'Password', and a 'Send mail (about new IP) after connected' checkbox. Further down are fields for 'Mail Server', 'Username', 'Password', 'Sender's Mail Box', 'Receiver's Mail Box', and 'Subject' (set to 'Volo JPP Dial!'). An 'OK' button is at the bottom right.

Below the PPPoE section, the 'DDNS Account Setting' section (4) is visible, featuring a 'Port Select' section with 'Port 1' set to 'R0' and 'Port 2' set to '0'. Below this are radio buttons for 'Enable' and 'Disable', and fields for 'Username', 'Password', and 'DomainName'. An 'OK' button is at the bottom right.

1. LAN Setting: LAN IP address setting is the same as IPEdit.
2. DHCP: Select item “Automatically by DHCP” to get an IP address.
3. DNS Configuration (Advanced)

- 4. PPPoE: If you have an ADSL modem, you may need to set up PPPoE in order to view your DVR from outside your network. You will need your login information. If you do not have it, please contact your Internet Service provider to provide you with the login information.
- 5. Optional:  
Send mail (about new IP) after connected should be selected if you want to receive an email when your external IP address changes from your ISP. You will receive an email at the receiver's email address when the external IP address changes. If you are unaware of the mail server or username settings contact your ISP for this information.
- 6. HTTP Port: Select the port number (default is port:80)

### 8.2.2 User Setup



- 1. Authentication: Choose whether or not a user name and password are required
- 2. Enter your user name in the User Name box.
- 3. Enter your password in the Password box.
- 4. Re-enter your password in the Confirm box.
- 5. Click the "Set Change" button.
- 6. Click the "Reboot" button.
- 7. Power off the DVR and power it back on to confirm the changes. The changes will not take effect until you restart the DVR.

This section allows you (the administrator) to set up multiple user accounts so other authorized users can access the DVR. These users will be able to view live display, record, and capture images. However, they will not be able to change configuration settings. When you have set up user accounts, be sure to write down the user name and password for each account so you can provide the users with the appropriate login credentials.

Authorization: Specify whether authentication is needed to access the DVR. If you select "No Need," there is a possibility that unauthorized users may access your DVR.

New User/Change Password: Add user or change password (Max. users = 30).

Note: For best results, a maximum of 20 simultaneous users is suggested.

Delete User: Delete user account.

Current Users: Currently registered users.

Reboot: Restart the Network DVR.

Firmware update: Updates the firmware, if a new firmware version becomes available. Firmware updates may be available at [www.SVAT.com](http://www.SVAT.com) (advanced users only).

Restore factory default configuration: Click “Restore factory default configuration” to return to factory default settings **(Please restart the Network DVR after setup has been completed)**

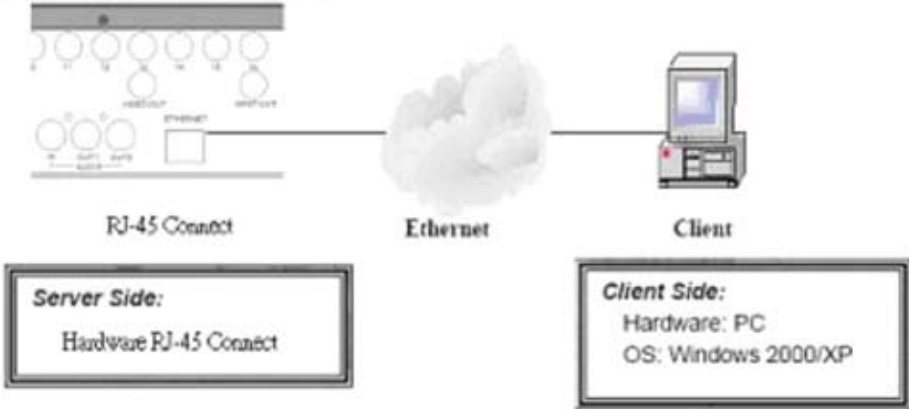
## 9. DVR TROUBLESHOOTING

Before calling technical support 1.866.946.7828, try the following troubleshooting tips:

Problem	Solution
No picture	<ul style="list-style-type: none"> <li>- Make sure the TV/monitor is on the correct input channel</li> <li>- Check all connections and make sure cameras/DVR are powered on</li> </ul>
No sound	<ul style="list-style-type: none"> <li>- Make sure that audio is enabled in the DVR menu</li> <li>- If using a microphone, ensure that it is connected and turned on</li> <li>- If using an audio supported camera, ensure that sound is enabled</li> <li>- Check all RCA audio connections</li> </ul>
No images is shown on the web page	<ul style="list-style-type: none"> <li>- Please follow “8.4.1 Install ActiveX”, setup the IE settings, and install ActiveX.</li> </ul>
IPEdit is unable to detect the DVR’s IP Address	<ul style="list-style-type: none"> <li>- Please check your firewall or antivirus software. Some software may block IP edit from accessing the network. In Windows Firewall, you may have to add IPEdit.exe to the “exceptions” list.</li> <li>- Reconnect the Ethernet cable</li> <li>- See the network guide for more troubleshooting tips.</li> </ul>

# 10. NETWORK INSTALLATION

## Client-Server Definition



# 11. HARD DISK INFORMATION

1. Supports 3.5" ATA 2/ 3/ 4/ 5/ 6 format hard disk.
2. Supports high-capacity hard disk storage (up to 500 GB capacity).
3. This HDD is not hot swappable. To prevent damage, please enter the main menu to stop all HDD activities, then power-off the device before replacing the hard disk.

# 12. APPENDIX

Pin	Definition	Pin	Definition	Pin	Definition	Pin	Definition
1	ALARM 1	2	ALARM 2	3	ALARM 3	4	ALARM 4
5	GND	6	ALARM 5	7	ALARM 6	8	ALARM 7
9	ALARM 8	10	GND	11		12	
13		14		15		16	
17		18		19		20	
21	RELAY OUT-COM	22	RELAY OUT-N.C.	23	RELAY OUT-N.O.		

# 13. CAMERA GUIDE

## 13.1 Features Of The CV67



1. Sun Shield - Helps prevent glare from bright lights.
2. Infrared (IR) - LEDs Allows the camera to see in the dark up to 15ft away.
3. CDS Sensor- Turns on the infrared LEDs when it gets dark out.
4. Camera Housing - Made of anodized aluminum to prevent rust.
5. Camera Mount - Allows the camera to be desk or wall mountable.
6. Connection to Video / Power Wire Converts to RCA.

### IMPORTANT INFORMATION

While this camera is weatherproof, it is not waterproof. Please do not install it in areas that receive direct rain or under eaves trough draining spots. Do not cut the DC power cable of this camera to fit with another power source. Do not cut the video connection wire to fit with a different video connection type. Any unauthorized modifications will void your warranty.

## 13.2 Camera Installation Tips

### THINGS TO CONSIDER BEFORE YOU INSTALL YOUR CAMERA

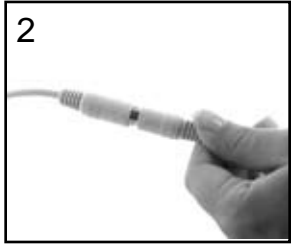
- The camera should be installed between 8 and 13ft above the area to be monitored.
- Ensure there are no obstructions in the camera's view, to maximize viewing area.
- Ensure that the sunshade is positioned to avoid glare and position camera away from direct sunlight.
- Decide whether the camera will be wall-mounted or sit on a desk/table top. If wall mounting, use the mounting hardware in the package. We recommend that the mounting bracket is secured using the included screws for all installations.
- This camera comes with 60ft of video/power wire. Please make sure that you mount the cameras no more than 60ft from the TV/monitor/VCR/DVR.
- We recommend using a surge protected power bar to protect the cameras internal circuitry.

### 13.2.1 Mounting



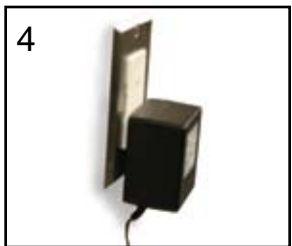
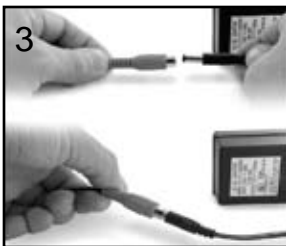
1. Screw the mounting bracket into the camera's mounting hole, turning it clockwise.
2. Mount the camera in the desired location no more than 60 feet from the TV/Monitor/VCR/DVR unless you have purchased additional wiring. You may wall mount or desk mount these cameras.
3. Adjust cameras to the desired viewing angles.

1. Plug the 4 pin DIN female connection on the camera into the 4 PIN DIN male connection on the 60ft video/power wire.



2. Match the two arrows on top of both connecting cables.

3. Plug the camera's power supply into the power jack located on the 60ft video/ power wire.



4. Plug the camera's power adapter into an AC outlet.

5. Connect the 60ft video/ power wire's male RCA plug to the VIDEO IN port of your TV/ monitor/VCR/DVR.



6. If your VIDEO IN port is a BNC connection (common with DVR units), you will need to attach the BNC to RCA adapter before connecting the camera.

### 13.2.2 Troubleshooting

No picture/signal	<ul style="list-style-type: none"> <li>- Make sure your TV/monitor is on the correct video input channel. This is NOT channel 3. Common terms for this channel is INPUT, AV CHANNEL, LINE 1, LINE 2 and AUX. Please use your TV or VCR manual to correctly identify this channel.</li> <li>- If your camera is connected to a VCR/DVR, make sure that it is properly connected to your TV/monitor.</li> <li>- Check all connections to make sure they are secure and properly connected.</li> <li>- Check your power supply to ensure that the camera is powered up.</li> </ul>
Picture is too bright	<ul style="list-style-type: none"> <li>- Make sure your camera is not aimed at direct sunlight.</li> <li>- Adjust the sunshade by sliding it forwards to block out excess light.</li> <li>- Make sure nothing is obstructing the CDS sensor on the camera. If the CDS sensor is blocked, night vision mode will be active and may produce extra light in your camera's picture.</li> <li>- Move your camera to another location.</li> </ul>
Picture is too dark	<ul style="list-style-type: none"> <li>- If using at night, make sure your camera's subject is no more than 15ft away (may vary based on amount of ambient light available).</li> <li>- If using during the day, your camera may not be getting enough light. Adjust the sunshade by sliding it backwards to let in more light.</li> <li>- Check the brightness and contrast settings on your TV/monitor</li> <li>- If your camera is connected to a VCR/DVR, check the brightness and contrast settings on the VCR/DVR</li> <li>- Move your camera to another location.</li> </ul>

## 14. SPECIFICATIONS

### 16 CHANNEL DVR

Functionality .....	Simplex
Video Compression .....	MJPEG
File Format .....	AJP
Live Resolution .....	NTSC : 704 X 480 / PAL: 704 X 576
Recording Frame Rate .....	30FPS
Recording Time .....	750 Days (0.5 Frames Per Second)
Recording Resolution .....	NTSC : 704 X 240 / PAL: 704 X 288
Recording Method .....	Each
Recording Qualities .....	Low/Medium/High
Recording Modes .....	Manual/Alarm/Motion Detection/Continuous
Recording Media .....	Type 1 CF Card in AVI file format
Autostart Recording .....	Yes
Auto Resume Recording .....	Yes
Removable HDD .....	Yes, Lockable

Storage Capacity.....	Max 500GB (HDD), 320GB included
Video Format.....	NTSC/PAL
Video Loss Alarm.....	Yes
Audio Codec.....	G.711
Audio Output.....	2 CH RCA
Audio Bitrate.....	64 kbps
Live Frame Rate.....	120FPS
Live Display.....	Single/ Quad / 9-Split / 16-Split
Network Protocol.....	TCP/ IP / HTTP / PPPoE / DNS / DDNS / DHCP / SMTP
Network LAN IP.....	Dynamic, Static
Network Connection.....	10/100 BaseT Ethernet (RJ-45)
Back-up.....	CF Card, Max 4GB
Play Search Mode.....	Time/Date, Event List
Play Speed.....	Fast Forward (x1, x2, x4, x8, x16, x32, x64)
Play Mode.....	Single/Quad/9-Split/16-Split
OSD and System Menu Display.....	Yes
OSD Language Display.....	Multi-Language
Time and Date Stamp Display.....	Yes
Password Protection.....	Yes, Menu Password
Adjustable Screen Settings.....	Color, Brightness, Contrast
File Transfer.....	CF Card, Max 4GB
Operating System.....	Proprietary
Processor.....	Proprietary
Disk Full Warning.....	Yes
Automatic Overwrite Option.....	Yes
Playback Navigation.....	Rewind, Play, Pause, Stop, Slow Motion
LED Indicators.....	Alarm, Play, HDD, Record
Housing Material.....	Aluminum
Housing Color.....	Midnight Black
Cooling.....	Fan Based
Power Input.....	12V/4.2A
Power Adapter Input.....	AC 100~240V (switching adapter)
Power Consumption.....	12.8W
Operating Temperature.....	41°F ~ 104°F
Operating Humidity.....	<80%
Alarm Sensor Inputs.....	Yes, 16
Alarm Sensor Connection.....	D-SUB (DB25)
Dimensions.....	16.94" x 11.63" x 2.63"
Weight.....	8.75lbs

**OUTDOOR CAMERA (CV67)**

Camera Type.....	Bullet
Image Sensor.....	1/4" Color CCD
Resolution.....	420 TV Lines
Outdoor Use.....	Yes
IP Rating.....	IP65
Focal Length.....	3.6mm

Focus Type .....	Fixed
Night Vision .....	Yes
Number of IR LEDs and Range.....	12, up to 15ft
IR LED Control .....	Automatic (CDS Sensor)
Min. Illumination.....	0 lux
IR Wavelength.....	850nm
Video Output.....	60ft 4 PIN DIN to RCA
(male) Video/Power Wires	
TV System.....	NTSC
Microphone.....	No
Motion Detection.....	No
Viewing Angle .....	60 Degrees
Electronic Shutter .....	1/60 ~ 1/100000 sec
BLCNo	
AGC.....	Automatic
ELCAutomatic	
Line Lock .....	No
Iris Control .....	No
White Balance .....	Automatic
Sun Shield .....	Yes
IR Cut Filter .....	No
Housing Material.....	Anodized Aluminum
Housing Color.....	Midnight Black
Signal/Noise Ratio .....	>48dB
Camera Bracket.....	Yes
Operating Temperature.....	-14°F ~ 122°F
Operating Humidity.....	98%
Camera Power Input.....	DC 12V 300mA
Power Adapter Input.....	120V 60Hz
LED Power Indicator.....	No
Dimensions.....	.4" x 2.25" x 2.25"
Weight .....	0.6lbs

# NOTES

A large rectangular area with rounded corners, containing 25 horizontal lines for writing notes. The lines are evenly spaced and extend across the width of the page.

Crime Stoppers programs are operated as non-profit charities and are managed by a volunteer board of directors who raise funds and pay rewards to individuals who anonymously call with information that helps solve crime.

Rewards are paid for tips that lead to the arrest and indictment of people charged with felony offenses, and to date Crime Stoppers statistics show a conviction rate of approximately 95%.

To receive more information about Crime Stoppers or to make a charitable donation please fill in the fields on the back of this page, cut on the dotted line and mail in.

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PLACE  
POSTAGE  
HERE



## **CRIME STOPPERS INTERNATIONAL**

P.O. Box 614  
Arlington, Texas  
U.S.A. 76004-0614

To receive more information about Crime Stoppers or to make a charitable donation please fill in the fields below, cut on the dotted line and mail in.



## CRIME STOPPERS INTERNATIONAL

Crime Stoppers International is an organization of community based civilian Crime Stoppers programs, which assist police in solving crime. You can find more information about Crime Stoppers at [www.c-s-i.org](http://www.c-s-i.org).

Local Crime Stoppers programs are partnerships between the public, media and local policing organizations. Each program is run by a citizen board, whose purpose is to advertise a local telephone number, which anonymous persons can call with information regarding a crime. Callers (tipsters) may be eligible for a cash reward for their information.

If your community does not have a Crime Stoppers program and would like information about starting one, return this card with the following information.

NAME: \_\_\_\_\_ PHONE: \_\_\_\_\_

ADDRESS: \_\_\_\_\_ CITY: \_\_\_\_\_

PROV/STATE: \_\_\_\_\_ COUNTRY: \_\_\_\_\_ POSTAL/ZIP CODE: \_\_\_\_\_

E-MAIL ADDRESS: \_\_\_\_\_

Charitable donations can be made to "CSI" by returning this card in an envelope with your check or money order to the address on the other side.

Amount \$ \_\_\_\_\_

**THANK YOU**