

WEB READY DVR SYSTEM

W/ 4 OUTDOOR COLOR NIGHT VISION SECURITY CAMERAS

COMPLETE SYSTEM



Instruction Manual



PRODUCT WARRANTY & REGISTRATION

Please visit our website at www.svat.com to apply for your products warranty registration.

The warranty registration for is located under the support tab on the SVAT website.

We take quality very seriously. This is why all of our products come with a one year warranty from the original purchase date against defects in workmanship and materials.

If you have warranty or support issues please contact us using any of the following methods:

SVAT Electronics USA 2315 Whirlpool St., Unit 333 Nlagara Falls, New York USA 14305 SVAT Electronics Canada 4080 Montrose Road Niagara Falls, ON Canada L2H 1J9 Phone: 866.946.7828 Fax: 888.771.1701

Email: support@svat.com Website: www.svat.com

Warranty Terms

- SVAT products are guaranteed for a period of one year from the date of purchase against defects in workmanship and materials. This warranty is limited to the repair, replacement or refund of the purchase price at SVAT's option.
- 2. When service is required, the warranty is validated by the submission of a fully completed warranty card.
- This warranty becomes void if the product shows evidence of having been misused, mishandled or tampered with contrary to the applicable instruction manual.
- Routine cleaning, normal cosmetic and mechanical wear and tear are not covered under the terms of this
 warranty.
- The warranty expressly provided for herein is the sole warranty provided in connection with the product itself and no other warranty, expressed or implied is provided. SVAT assumes no responsibilities for any other claims not specifically mentioned in this warranty.
- 6. This warranty does not cover the shipping cost, insurance or any other incidental charges.
- You MUST call SVAT before sending any product back for repair. You will be given a Return Authorization number. When returning the product for warranty service, please pack it carefully in the original box with all supplied accessories, and enclose your original receipt or copy, and a brief explanation of the problem (include RA#).
- 8. This warranty is valid only in Canada and the U.S.A.
- 9. This warranty card cannot be re-issued.



CAUTION

RISK OF ELECTRIC SHOCK, DO NOT OPEN



TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE THE COVER (BACK).

NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO

QUALIFIED SERVICE PERSONNEL.

Graphic Symbol Explanation:



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating maintenance (servicing) instructions in the literature accompanying the appliance.

WARNING: TO PREVENT FIRE OR SHOCK HAZARDS, DO NOT EXPOSE THIS UNIT TO RAIN OR MOISTURE

CV0204DVR www.svat.com

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WHAT IS INCLUDED



1x 4CH DVR



4x CV65 Cameras



4x Camera Power Adapters







4x 60ft Extension



Software Installation CD



5x BNC Connectors



1x DVR Power Adapter



RJ-45 Ethernet Cable

- 4 Window Warning Stickers
- Mounting Hardware
- 1 Year Warranty

- Instruction Manual
- Online/Toll Free Tech Support

WHAT IS COMPATIBLE

The CV0204DVR is compatible with TVs, VCRs, computers and other SVAT systems including:



CV65



CVP400C



CVP403C



CVP500C



CVP3017M

1

SAFETY PRECAUTIONS

Disposal of Old Electrical & Electronic Equipment (Applicable in the European Union and other European countries with separate collection systems).

This symbol on the product or on its packaging indicates that this product shall not be treated as household waste. Instead it shall be handed over to the applicable collection point for the recycling of electrical and electronic equipment. By ensuring this product is disposed of correctly, you will help prevent potential negative consequences for the environment and human health, which could otherwise be caused by inappropriate waste handling of this product. The recycling of materials will help to conserve natural resources. For more detailed information about recycling of this product, please contact your local city office, your household waste disposal service or the shop where you purchased the product.

The power cord is the main power connection. Therefore, constantly plug and unplug of the power cord might result in malfunction of the product.

Do not install the product in an environment where the humidity is high. Unless the product is waterproof or weatherproof, otherwise it can cause the image quality to be poor..

Do not drop the product or subject them to physical shocks.

Except for vandal-proof or shockproof product. Otherwise it will result malfunctions to occur.

Never keep the product to direct strong light.

It can damage the product.

Do not spill liquid of any kind on the product.

If it gets wet, wipe it dry immediately. Alcohol or beverage can contain minerals that corrode the electronic components.

Do not expose to extreme temperatures.

INTRODUCTION

This complete system comes with four outdoor cameras and can display all four at the same time. Customize the recording and set a 24 hour recording schedule based on your preferences. You can choose to have the DVR record continuously during the day, then record only when motion is detected at night. And since each camera is equipped with night vision, you can view and record in pitch blackness!

This DVR can record four different camera views (quad view) simultaneously and play it back at a smooth 30 frames per second. During playback you can even display each camera in full screen or view all four without losing quality. Finding your recorded footage is a breeze. Just search for the time and date it was recorded and the file will be displayed. Everything is stored on the DVR's internal hard drive allowing you weeks of recording. The DVR can be set to overwrite old footage when the drive does run out of space, allowing you continuous recording, year after year.

The CV0204DVR also has a built-in internet server for remote viewing. Just plug the DVR into your internet connection and set it up with the included software. Then simply type in your IP address to monitor your home or business remotely, from any internet-enabled computer in the world! You can even play back recorded footage, save picture or movie files to your computer, and more, all through a web browser.

FEATURES

- Easy setup and installation
- Live monitoring through the internet from anywhere in the world
- · Includes 80GB hard drive
- Includes 4 color outdoor night vision cameras
- Password protected recording and menus
- Supports up to 4 color or B&W cameras
- 15 infrared LEDs let you see in the dark
- Has built-in motion detection
- · Find your recorded footage fast and easy
- Has built-in time and date stamp
- M-JPEG compression technology
- Easily connects to any TV or Monitor

1. CAMERA SETUP

Step One

Locate a desired mounting location for the camera and fasten in using the included hardware. Connect the supplied wire to the wiring on the back of the camera.



Step Two

Connect the other end of the provided wire to the RCA inputs on your monitoring device. Also connect the power supply to the cable.



Step Three

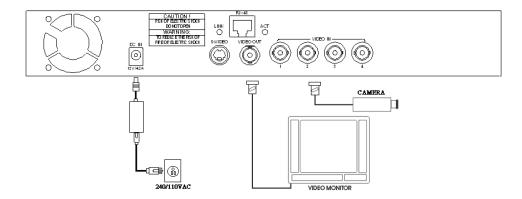
Turn the monitor on. On most TVs and VCRs you will have to access the Input, or AC Channel to view the images.



2. INSTALLATION

CONNECTORS ON THE REAR PANEL

Please setup the connection by following the illustration shown below (detailed instructions on using the network function can be found in Section 9):

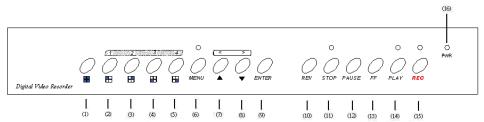


- 1) Plug the power cord into your DVR and plug it into an outlet. SVAT recommends plugging it into a surge protected power bar for your device's protection.
- Plug the BNC Connectors into each video input you plan on using. For example, if you are using 3 cameras with this system, then plug BNC convertors into inputs 1-3. Plug BNC convertor into the video output as well.
- 3) Plug your camera(s) into the video input jacks using the 60ft extension wires.
- 4) Use an RCA wire to connect your television to the video output of the DVR. Make sure the RCA wire is plugged into the video input of your television. Note: This system does not support audio, so if you are using an audio/video RCA wire, there is no need to plug in the red or white inputs. On your television switch to the video/audio input channel

5) Your system is now installed and ready for use.

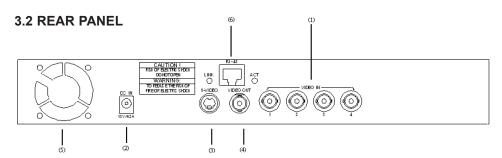
3. NAME AND FUNCTION OF EACH PART

3.1 FRONT PANEL



- 1.

 Quad screen display.
- 2. H CH 1 screen display.
- 3. H CH 2 screen display.
- 4. H CH 3 screen display.
- 5. H CH 4 screen display.
- 6. MENU: Menu button.
- 7. Up direction button.
- 8. Down direction button.
- 9. ENTER: Enter button.
- 10. REW: Rewind button.
- 11. STOP: Press this button during playback and recording to return to monitoring mode.
- 12. PAUSE: Press this button during playback mode to pause.
- 13. FF: Fast forward button.
- 14. PLAY: Play button.
- 15. REC: Record button.
- 16. PWR: Power indicator.



- 1. Video Input [VIDEO IN]: Connect to cameras.
- 2. DC 12V/ 4.2A [Power Input terminal]: power socket.
- 3. S-Video Output [S-VIDEO OUT]: Connect to the monitor.
- 4. Video Output [VIDEO OUT]: Connect to the monitor.
- Cooling Fan.
- 6. RJ45: Internet connection terminal.

4. OPERATING PROCEDURE

4.1 POWERING ON

This DVR is built to be on at all times, and therefore should be connected to a surge protected power bar (UPC power backup). Use the power bar's switch to turn the unit off and on. This is especially important as loss of power while recording could possibly damage the hard drive. Every time the DVR is powered on, it will auto-detect its peripherals (self-testing, warm-up, auto detects the hard drive, etc). It will also detect all video input signals. If it does not detect an input, (eg: no camera present) it will sound an alarm. Press any button on the DVR to stop the alarm. There are 4 camera inputs and channels. Disable the unused channels in the Camera Setup Menu to prevent the alarm from activating every time the unit is powered on.

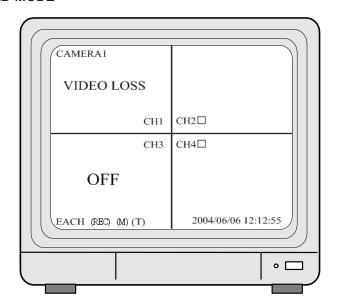
4.2 MONITORING MODE

Monitoring mode is the default mode after the DVR is powered on. It will display all 4 camera views. To display a specific camera, press the corresponding number. This will place that camera's view on your entire screen. To display all cameras again, press the Quad Display button. To start recording, press REC. To stop recording, press STOP.

To reset all DVR settings to their factory default settings (under quad or single display), press the PAUSE button 5 times. The message ALL SETTING DATA IS INITIALIZED will be displayed, and after the reset the default password will be set as 111111.

When the reset is completed, the message DVR RESET COMPLETED. TURN OFF AND ON THE DVR will be displayed. Restart the DVR to continue.

4.3 RECORD MODE



*Note ~ CH1: No block figure next to CH1 indicates that it is not recording.

EACH: Record Type QUAD: Record Type

(M): MASTER HDD

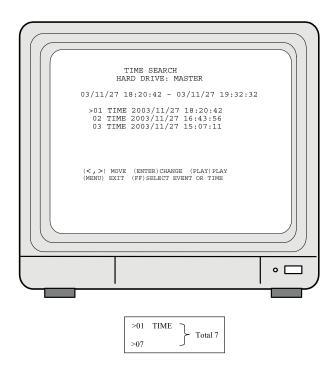
(T): TIMER RECORD (A): ALARM RECORD (M): MIX RECORD

(□): Currently under recording.

VIDEO LOSS: Video input unable to be detected.

CAMERA1: Title for CH 1. OFF: Channel is set to "OFF".

4.4 PLAYBACK MODE



To play your recordings, press PLAY. A list of your recordings will appear after a slight delay. Use the up and down arrows to find the date and time of your recording. The date format is YY/MM/DD (Year, Month, Day). Press PLAY again to begin playback. In playback mode you can also choose to view all 4 of your cameras or an individual camera, if you have recorded in EACH mode. When the recording is done, press STOP to return to live mode.

During playback, press FF to change the playback speed (FF1, FF2, FF3), or press the REW button to reverse playback.

5. SYSTEM SETUP

5.1 MENU

(1) (2)

(3) > SYSTEM SETUP
CAMERA SETUP
RECORD SETUP
BUZZER SETUP
EVENT LIST
HARD DRIVE SETUP

(4) PRESS (< >), THEN (ENTER)
PRESS (MENU) TO EXIT

- 1. Main Menu
- 2. Menu Layer Indication: The device consists of four menu layers.

■ : First Menu Layer (Main Menu)

■■ : Second Menu Layer
■■■ : Third Menu Layer
■■■ : Fourth Menu Layer

3. Menu Operation and Setup

Press the up or down button to move the cursor (>).

Press the ENTER button to enter the sub menu.

Press MENU button:

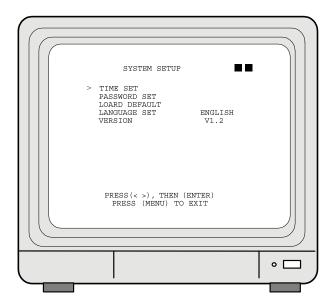
Under the second or third menu layer, the system will return to the previous menu layer (second layer to first layer or third layer to second layer) and will auto update the modified data.

Under main menu (first menu layer), the system will enter live mode.

Press ENTER to increase or decrease the highlighted setting values.

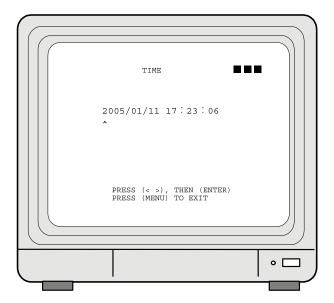
4. Menu Layer Operation Guide

5.2 SYSTEM SETUP



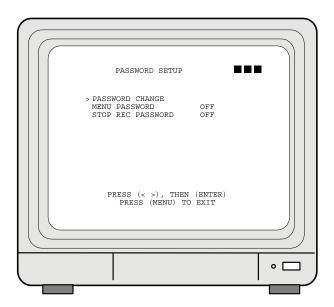
- 1. Cursor (>) position indicates the current function selected.
- 2. Press the up and down buttons to move the cursor.
- 3. Press ENTER button to proceed.
- 4. Press MENU button to exit "System Setup".
- "System Setup" is situated on the second menu layer. Under this menu layer user
 may setup the system time, password, return system to default value, and language
 preference, etc (VERSION displayed represents the FIRMWARE version).

5.2.1 TIME SETUP



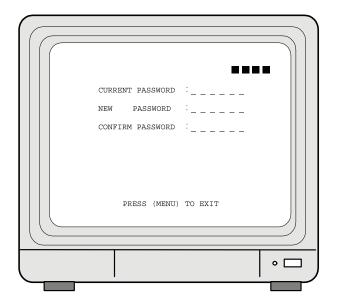
Time Set - Sets the time and date on your DVR. Use the up and down arrows to select a value to change, and press ENTER to change the value. When you are finished, press MENU to return to the previous menu screen. Time is in YEAR/MONTH/DAY format

5.2.2 PASSWORD SETUP



- 1. Cursor (>) position indicates the current function selected.
- 2. Press the up and down buttons to move the cursor.
- Press ENTER button to proceed.
- 4. Press MENU button to exit "Password Setup".
- Select MENU PASSWORD to password-protect your DVR menu from unwanted changes. The password must be entered any time someone tries to access the main menu. Select MENU PASSWORD again to turn this feature off.
- Select STOP REC PASSWORD to password protect your DVR while it is recording. The password must be entered to stop recording. Select STOP REC again to turn this feature off.
- When an incorrect password has been entered, "PASSWORD INCORRECT" will be shown on the display. To disable the message, press button: QUAD, CH1, CH2, CH3, or CH4.

5.2.2.1 CHANGE PASSWORD

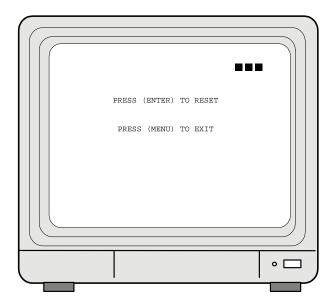


- 1. Press ENTER to show the display above.
- 2. Enter the current password (CURRENT PASSWORD).
- 3. Enter new password (NEW PASSWORD).
- 4. Confirm the new password (CONFIRM PASSWORD).
- When password change is successful, the system will display "PASSWORD CHANGED".

Default Value: 111111

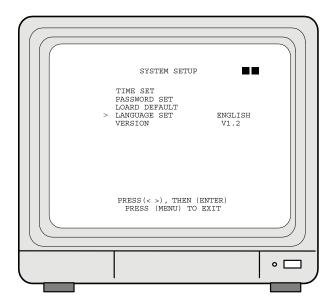
If password entered is incorrect, you will receive a message "NO PASSWORD CHANGED" to inform you (message flashes three times) and the system returns to "Password setup" selection.

5.2.3 LOAD DEFAULT



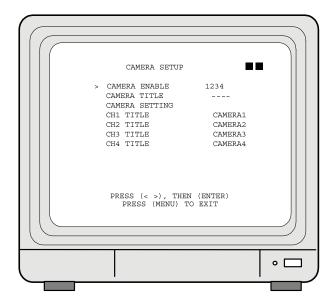
Press enter on this option to return the DVR to its factory default settings. Press enter again to confirm, or menu to cancel. When the message "DVR RESET COMPLETED TURN OFF AND ON THE VCR" is displayed, restart the DVR.

5.2.4 LANGUAGE SETUP



To setup "LANGUAGE SET" function, press ENTER, to select the desired language (languages supported are Chinese and English).

5.3 CAMERA SETUP



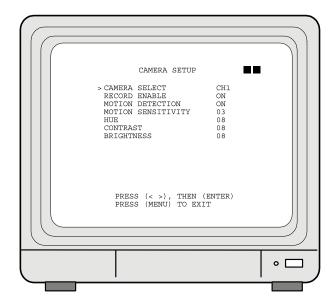
- 1. Camera Enable Select this option to change the camera view combination. For example, if you select (- - -), all camera channels will be disabled, and a black screen will be displayed. If you select (1 2 3 4), all cameras channels will be enabled and displayed. If you select (- - 4), only the camera 4 channel will be enabled and displayed. Use the ENTER button to change these combinations. Note: Disable the camera channels that you won't be using, or the VIDEO LOSS alarm will sound during startup and recording.
- 2. Camera Title Select this option to change whether you want a custom title displayed for each camera, for no cameras, or for some cameras. Use the enter button to select the combination to your preference.
- Camera Setting Allows you to change specific settings for each camera. Please refer to the next section for more details.
- 4. CH(1-4) Title Select a camera and use the up/down and ENTER buttons to change the title (maximum 8 characters). When you are finished, press MENU to confirm. Example: When highlighting "CH1 TITLE", press ENTER to show the display below:

V CH1 TITLE CAMERA1

"V" indicates the position of the cursor. Press the up and down buttons to move the cursor, and press ENTER to change the title (maximum 8 characters).

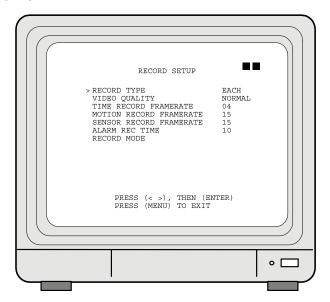
5. All channel titles are setup in the same way.

5.3.1 CAMERA SETUP



- Camera Select Select the camera channel to which you would like to make changes (CH 1-4).
- 2. Record Enable Press ENTER to switch the channel recording on/off.
- 3. Motion Detection Press ENTER to switch the motion detection function on/off.
- 4. Motion Sensitivity Press ENTER to set up the motion sensitivity level (1-5, 1 being the most sensitive).
- 5. Hue Press ENTER to adjust the color of the camera.
- 6. Contrast Press ENTER to adjust the camera contrast.
- 7. Brightness Press ENTER to adjust the camera brightness

5.4 RECORD SETUP

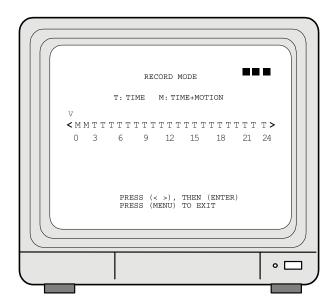


- Record Type Press ENTER to select between QUAD and EACH mode. QUAD
 mode will record all four cameras, but will not let you view each camera individually
 during playback. EACH mode will record all four cameras and allow you to view
 each camera individually during playback.
- 2. Video Quality Press ENTER to change between LOW, MEDIUM or HIGH video quality. Higher quality settings will result in better image clarity but larger file sizes. Lower quality settings will result in reduced image clarity but smaller file sizes.
- 3. Frame Rate Options: Frame Rate is the number of frames recorded per second. 30 frames per second is the maximum, and provides smooth video playback. Fewer frames per second result in the video being less smooth, but smaller in size. There are 2 frame rate options in this menu:
 - -Timer Rec Frame Rate Press enter to set the recording frame rate when the "T" (timer) mode is set up under schedule record.
 - -Motion Rec Frame Rate Press enter to set the recording frame rate when "M" (motion) or "A" (alarm) modes are set up under schedule record.

Recording frame rates available:

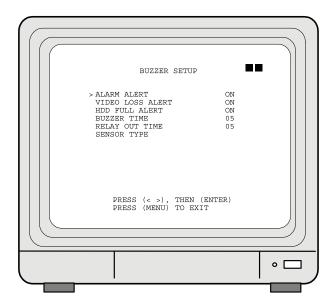
NTSC: 30, 15, 10, 7, 5, 4, 3, 2, 1 PAL: 25, 12, 8, 6, 4, 3, 2, 1

5.4.1 RECORD MODE



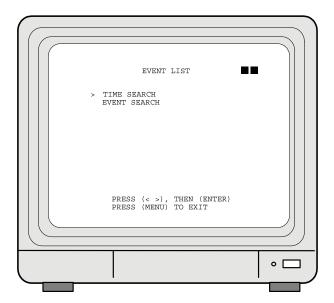
- 1. This menu allows you to set up the preferred type of scheduled recording (time, motion/time&motion, off) throughout a 24 hour day. For example, you may want to record continuously from 9:00 AM to 5:00 PM, but only record when motion is detected the rest of the time. IMPORTANT: after you make changes and return to monitoring mode, you must press RECORD. When you press STOP, the DVR will not adhere to your Record Mode settings until you press RECORD again. Use the up and down and ENTER buttons to change the type of recording for the specified hour of the day.
- T: Time, indicates continuous record.
- 3. M: TIME+MOTION
 - (1) When motion has been detected, it will be recorded by "Motion Record Frame Rate".
 - (2) Otherwise, it is recorded by "Time Record Rate".
- 4. -: OFF. The DVR will not record during the specified time.

5.5 BUZZER SETUP



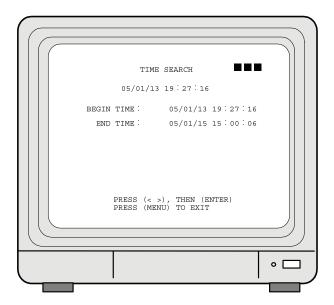
- ALARM ALERT: Press ENTER to setup "ON" or "OFF", whether to trigger the alarm when motion event has been detected (this setup is only active when the system is under record status and schedule record is setup to "M" (Mix).
- 2. **VIDEO LOSS ALERT:** Press ENTER to setup "ON" or "OFF", whether to trigger the alarm when video loss has been detected (this setup is only active when the system is under record or live status).
- HDD FULL ALERT: Press ENTER to setup "ON" or "OFF", whether to trigger the alarm when hard disk is full (this setup is only active when the system is under record status).
- 4. **BUZZER TIME:** Press ENTER to setup the buzzer time to continuous (CONT), and press any button to release this setup.

5.6 EVENT LIST



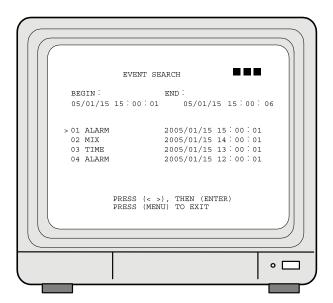
- 1. Cursor (>) position indicates the current function selected.
- 2. Press ← and → button to move the cursor to the desired item
- 3. Press ENTER to proceed.
- 4. Press MENU to exit "EVENT LIST" selection.
- "EVENT LIST" is situated on the second menu layer. Under this menu layer user may setup "TIME SERACH" or "EVENT SEARCH".

5.6.1 TIME SEARCH



- 1. TIME SEARCH: Displays system recording time (begin and end).
- 2. Press \leftarrow and \rightarrow button to select the desired time and date.
- 3. Press ENTER to setup playback starting time and date.
- 4. Press MENU to exit "TIME SEARCH" selection.
- 5. Press PLAY button to play.

5.6.2 EVENT SEARCH



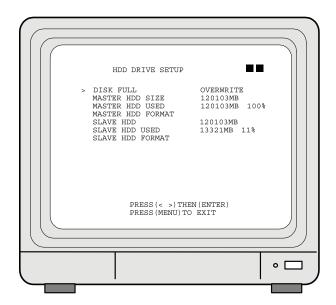
- EVENT SEARCH: Displays all recording events, every page consists of 7 events, and maximum 63 stored events.
- 2. Press PLAY button to play the selected event.

BEGIN: END:

05/01/15 15:00:01 05/01/15 15:00:06

Displays the beginning and end time of each event.

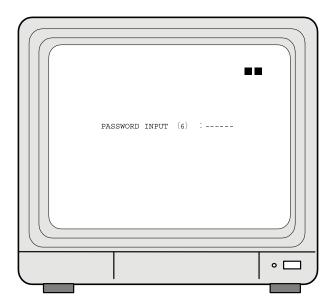
5.7 HARD DRIVE SETUP



- When item "OVERWRITE" has been selected, press ENTER to enable overwrite when both MASTER or SLAVE HDD is full (2 options: OVERWRITE or STOP).
- 2. MASTER HDD: displays the capacity of the MASTER HDD.
- 3. MASTER HDD USED: displays the capacity of the MASTER HDD already used.
- 4. **SLAVE HDD:** displays the capacity of the SLAVE HDD.
- 5. SLAVE HDD USED: displays the capacity of the SLAVE HDD already used.

□ N/A indicates HDD not installed or unable to be detected.

5.7.1 FORMAT



- 1. When proceeding "FORMAT" function, the above display will be shown.
- When password entered is correct, the screen will display the message "PASSWORD CORRECT", "HDD FORMATTED" (flashes 3 times), indicating hard disk format is successful.
- 3. When password entered is incorrect, the screen will display "PASSWORD INCORRECT" (flashes 3 times), and return to "HARD DRIVE" selection.

Once the user formats the hard disk drive (MASTER), the camera title returns to its default setting (CAMERA1/ CAMERA2/ CAMERA3/ CAMERA4), because this setup is stored in the hard disk drive (MASTER).

6. NETWORK REMOTE CONTROL (OPTIONAL)

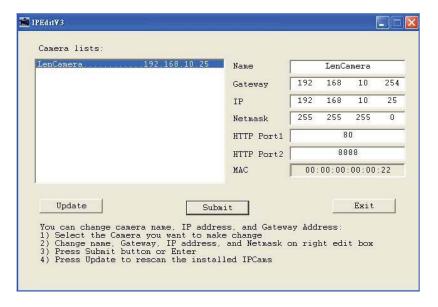
6.1 NETWORK DVR SETUP

Connect the RJ-45 cable to the network port on the back of the DVR, and the other end to your router. Use IPEdit.exe to test the DVR. The network access software is not MAC compatible. It is only compatible with a Windows PC running using the Internet Explorer browser.

Note: Before using PPPoE and DDNS (recommended) connection method, you must first setup an IP Address (using IPEDIT.exe).

6.1.1 ONLINE WITH DHCP SERVER

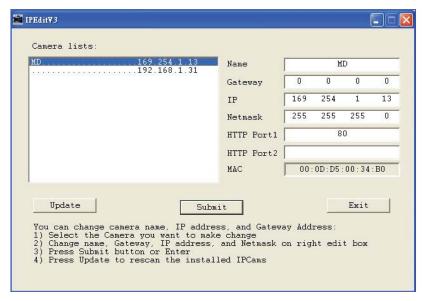
Use IPEDIT.exe to find the installed Network DVR. Select this Network DVR in the Camera List Window. The default configuration will be shown on the right window. Update the IP status.



Online with DHCP Server

6.1.2 ONLINE WITHOUT DHCP SERVER (STATIC IP)

- 1. Use IPEdit.exe to find the installed Network DVR.
- The Internet DVR without IP allocated by DHCP will have a default IP Address of 169.254.1.13
- 3. Select this Internet DVR on the Camera List Window.
- 4. The default configuration will be shown on the right window.
- Under MSDOS mode enter "IPCONFIG" to access Geteway, IP, and Netmask setting values.



Online without DHCP Server

After the "Submit" button is clicked, the IP information of this Network DVR will be updated.

6.2 CONNECTING NETWORK DVR

3 methods for connecting Network DVR:

- Online using Intranet or Static IP
- Online using ADSL (PPPoE) Router
- Online using DDNS Server

6.2.1 ONLINE USING

Setup similar to "6.1 Network DVR Setup".

6.2.2 ONLINE USING ADSL (PPPOE) ROUTER

Setup similar to "6.4.3.3 Connect to ADSL by PPPoE mode".

6.2.3 ONLINE USING DDNS SERVER (RECOMMENDED)

The DDNS service provides the dynamic IP to users to gain access to resources connected to the Internet via a cable or DSL connection. Once you've decided to apply this function, please register your domain name at http://www.dyndns.org (this website supports register free service). Paid DDNS service is applied to long-term users. For more information, please refer to "6.4.4 DDNS Setup".

6.2.4 ONLINE CONNECTION

Note: To access the DVR from outside your router's network, you will need to forward port 80 to your Network DVR. This must be done through your router, and the process varies based on your router's make and manufacturer. For instructions on port forwarding, see the guide at the end of this manual. (Page 45)

Start the Internet Explorer, enter the IP Address of the Network DVR into the Address field, such as 192.168.1.13, or within IPedit, double click on your DVR from the list.

Before connection, "User name" and "Password" will be requested:

Default User Name: admin Default Password: 1234



6.2.4.1 ONLINE CONNECTION

Before entering remote connection, install ActiveX (If you are running Windows XP you most likely have it) and check your browser setup by following the procedures below:

A. Open Internet Explorer under "Tools" and select "Internet Options".



B. Select "Security," then "Custom Level".



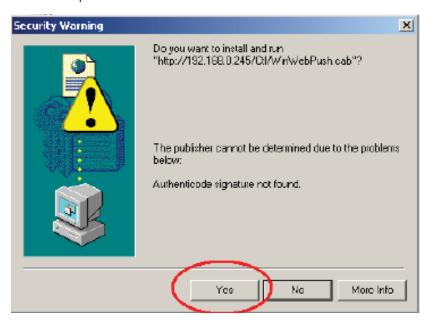
Security -> Custom Level





Change ActiveX settings to the ones seen above

The graphic below will be shown the first time you install the ActiveX Control. Please select "Yes" to accept installation.



Download ActiveX Control

Live view will be displayed when installation is successful.



Live display under ActiveX mode

6.3 MAIN DISPLAY



Remote control DVR - Main Menu

- 1. Live display.
- 2. DVR control button.
- 3. Video setup.
- 4. Configuration: Enter detail setup

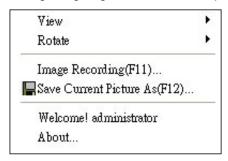
Recording: Displays recording setup menu (for video recording).

Snapshot: Pop-up window displays live images, right mouse click to save. **Note:** To view complete interface, PC resolution must be adjusted to 1024*768.

6.3.1 LIVE DISPLAY

- · View/ Make changes on image display.
- · Rotate/ Make changes on image direction.
- Image Recording/ Record function setup.
- Save Current Picture/ Save the current image.
- Welcome! Administrator/ Display current user name.
- · About/ Version description.

Move the cursor inside the image range, right mouse click to display 9 function selections:



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6.3.2 VIEW

Two types of display method:

- 1. Resizable: Adjustable image size.
- 2. Actual size: The actual image size.

6.3.3 ROTATE

Four types of rotate settings:

- 1. Rotate 0: Default state
- 2. Rotate 180: Rotate the image by 180 degrees.
- 3. Flip horizontal: Image flips horizontally.
- 4. Flip vertical: Image flips vertically.

6.3.4 IMAGE RECORDING

Image Recording Setup Display:

Save as JPEG: Save as picture file Save as AVI animation file

Save as JPEG:

No Limit: Unrestricted image storage (continuous).

Number: Image storage according to "number".

Save interval: Image storage according to "1/10 second" (e.g.: Enter "10", then 1 frame is stored per second. Enter "50", then 1 frame is stored in 5 seconds).

Size: Image storage according to "size". Time: Image storage according to "time".

Save Path: Image storage according to "Save Path". Pre Name: Image storage according to "Prefix Name".

Save as AVI:

CV0204DVR

No Limit: Unrestricted image storage (continuous).

Number: Image storage according to "number".

Save interval: Image storage according to "1/10 second" (e.g.: Enter "10", then 1 avi file

is stored per second. Enter "50", then 5 avi files are stored in 5 seconds).

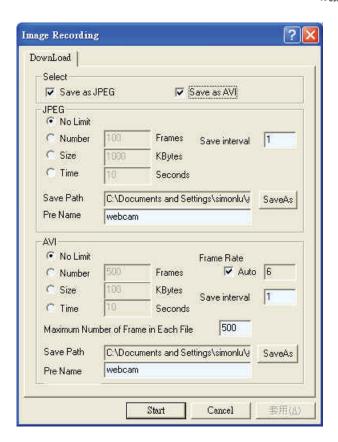
Size: Image storage according to "size".

Frame Rate: Image storage according to "frame rate".

Time: Image storage according to "time".

Maximum Number of Frame in Each File: Image storage according to "maximum frame".

Save Path: Image storage according to "Save Path". Pre Name: Image storage according to "Prefix Name".



6.3.5 SAVE CURRENT PICTURE

Select to save live images.

6.3.6 DVR CONTROL SETUP

Supports DVR remote control function (Please refer to 6.1 Front Panel Buttons and Controls, on page 5).

6.3.7 QUALITY SETTING

Network DVR provides 5 image quality settings. The user can select the quality setting from the "Quality" list box.

- Highest
- High
- Medium
- Low
- Lowest

6.3.8 RESOLUTION SETTING

The network DVR provides six resolution settings. The user can select the quality setting from the "Resolution" list box.

- 176 x 144
- 160 x 120
- 320 x 240
- 352 x 288
- 640 x 480
- 704 x 576

Note: The device supports auto video system detection (NTSC/ PAL).

6.3.9 ADVANCED SETTINGS

Network DVR provides the advanced settings for the following:

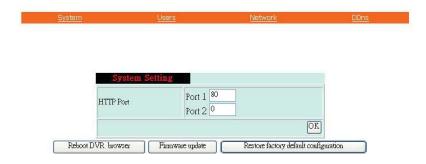
- Brightness
- Contrast
- Saturation
- Hue

6.4 CONFIGURATION (FOR ADVANCED USERS)

Only the administrator can select the "Configuration"; the ordinary user account does not have this privilege to access this function.

6.4.1 SYSTEM SETTING

The number on Port 1 and Port 2 may be changed, press "OK" button to save the setting.

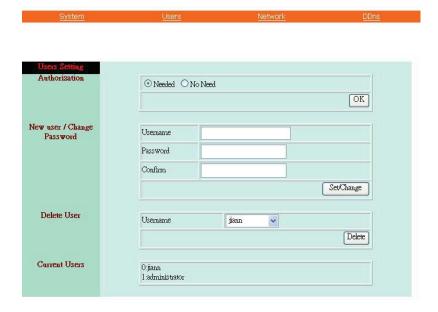


System Setting Display

- Reboot DVR: The system needs 30 seconds to reboot the DVR's network (Rebooting does not affect hard drive recording).
- Firmware update (Please refer to 6.4.5).
- Restore Factory Default

6.4.2 USER SETTING

- User Authorization Setting
- Add User or Change Password
- Delete User Account
- Current Users



User Setting Display

6.4.2.1 USER AUTHORIZATION SETTING

Select item "Needed" to enable user authorization function, then each time before login to Network DVR the Login window will request for "Username" and "Password". To disable user authorization function, select item "No Need".

6.4.2.2 NEW USER / CHANGE PASSWORD

Enter a new user name and password information to create a new user account, or enter an existing user account, then set a new password to replace the old password, and select "OK" to create the account or change password. After selecting "OK" button, the "Current User List" would display the newly created user account (Maximum 20 users, user name and password setup are limited to 10 characters).

6.4.2.3 DELETE USER

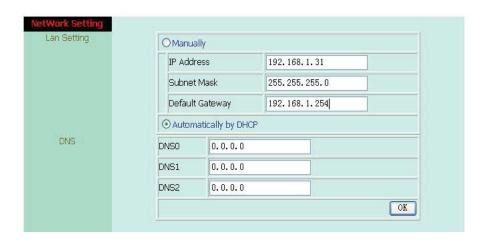
Enter the user account that you wish to delete, click "OK" to delete the account. After selecting "OK" button, the selected user account will be deleted from the "Current User List".

6.4.3 NETWORK SETTING

6.4.3.1 FIXED IP

To setup follow the steps below:

- 1. Select item "Manually".
- 2. Enter "IP Address", "Subnet mask", and "DNS".
- 3. Click "OK" button to save the setting.



User Setting Display

6.4.3.2 DHCP

The "DHCP" is automatically set as the default network setting of the Network DVR. When a Network DVR is connected into the LAN, it will issue DHCP packets to request an IP address that is dynamically assigned by the DHCP server. If it is unable to get a DHCP address, the Network DVR will assign a default IP address such as "169 254 1 13"

6.4.3.3 CONNECT TO ADSL BY PPPoE MODE

To setup follow the steps below:

- 1. After setup, rebooting enables automatic connection to ADSL.
- Enter the "Username" and "Password" fields with the account and password provided by the ISP.
- 3. If item "Send mail after connected" is selected, the mail will be automatically sent when connected to the ISP.
- 4. Click "OK" button to save the settings.

Note: In order to activate the function, it is necessary to reboot the device after the setup.

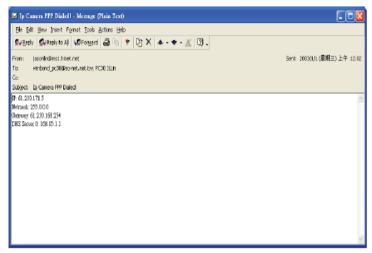


ADSL Setting Display

If the Network DVR and ADSL modem are connected by a hub, the user can select "Dial On Power Up" to perform the connect operation. However, if the Network DVR and ADSL modem are connected directly, then please note the following steps below.

- Power off Network DVR.
- 2. Connect Network DVR directly to the ADSL modem (using RJ-45 Ethernet port).
- 3. Power-up Network DVR.
- Network DVR will start dialing.
- 5. Once connected, mail the IP address information to the preset e-mail address.
- After 10 times of connection failure, it aborts the operation and the user can reconnect it by LAN to find the cause.

Note: If item "Send mail after connected" is selected, then the Network DVR will send a mail that contains the message "Dial Up IP Address/ Netmask/ Gateway/ DNS Server" will be mailed to the preset e-mail address.



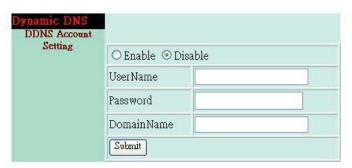
Connection Message Send to User

6.4.4 DDNS SETTING (RECOMMENDED)

Press "DDNS" server connection to start-up the function. It can autonomously and automatically contact the DDNS provider service whenever the router detects that its public IP address has changed. The router logs on to an account you setup and maintain, and updates the account with its latest public IP address. You may register at DDNS Server: http://www.dyndns.org. Follow the instructions on the website to auto detect IP changes and even give your DVR an easy to remember domain name.

To setup follow the steps below:

- 1. Register at DDNS Server: http://www.dyndns.org.
- 2. Apply domain name.
- 3. Click the "Enable" button. Enter "Username" and "Password" and the domain name you registered with dyndns.org.



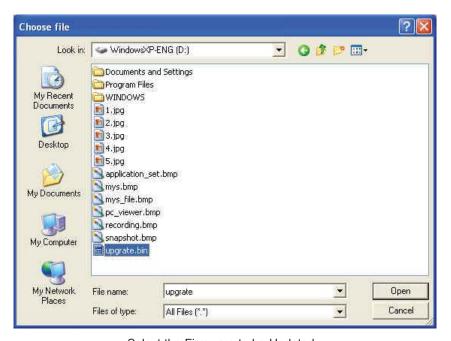
DDNS Setting

After registering the domain name, please enter the information supplied by the administrator to the Network DVR DDNS Account Setting. Select "Enable" button to start-up DDNS server, and press "Submit" button to save the setting.

6.4.5 FIRMWARE UPDATE

SVAT may occasionally release newer versions of firmware for your DVR. Please check your product at www.svat.com to ensure you have the latest version. When new firmware is supplied, you may update to the new version (bin file) through your PC by following the procedures below:

- 1. In the configuration menu of your network DVR, click on Firmware Update.
- Select browse and select the .bin firmware file.
- 3. Press Open.
- 3. Press Upload and follow the onscreen instructions.



Select the Firmware to be Updated



Uploading the Selected Firmware

It is strongly recommended to stop any unnecessary jobs while updating firmware.

Please be patient and the updating process may take a long time.

Click here to begin to update firmware.

Click here to ignore and delete the file uploaded just now.

Firmware Update.

Press "here" button (1) to update Firmware. Press "here" button (2) to delete the file. The message below displays the writing progress of the firmware update. When Firmware update is completed, it will show 100%, and a message "Click here to reboot DVR browser" will be displayed, requesting to restart the Network DVR.

It is strongly recommended to stop any unnecessary jobs while updating firmware. Please be patient and the updating process may take a long time.

Click to begin to update firmware.

Click to ignore and delete the file uploaded just now.

Writing Progress: 34%

Firmware Update Display.

It is strongly recommended to stop any unnecessary jobs while updating firmware. Please be patient and the updating process may take a long time.

Click to begin to update firmware.

Click to ignore and delete the file uploaded just now.

Writing Progress: 100%

Click here to reboot DVR browser.

Firmware Update Completed, prompt to restart the device.

7. TROUBLESHOOTING

Problem	Solution
No display on television	Make sure all RCA and power cables are plugged in securely and in their proper places. Make sure your television is on the correct channel (input mode).
DVR not recording	 Make sure recording is enabled in each camera's setting. Go to Menu>Camera Setup>Camera Setting and enable recording for each camera if it has been disabled. Make sure recording is enabled and set to the correct recording setting in scheduled recording. Go to Menu>Record Setup>Record Mode. If a line (-) is over any hour of the day, that means recording is disabled for that time period. Press enter to enable recording for that hour. Also make sure you press REC when you return to Monitoring Mode, or your scheduled recording will not take effect. Your disk may be full. By default the DVR should start rewriting over your earliest recorded files, but this option may be disabled. Go to Menu>Hard Drive Setup>Disk Full. Set it to OVERWRITE. Make sure your DVR is in Monitoring Mode, and not at a menu screen or in Playback Mode.
No playback	There is a delay while the DVR searches for your recorded files. Wait a few moments and your files should appear. Make sure you are not in Recording Mode. Pressing PLAY during recording will have no effect. Press STOP first. If you have just formatted your drive or your drive is otherwise empty, there will be no files to play back.
During playback, I can't switch to different camera views.	To switch between cameras during playback, you must have recorded your file in EACH mode. Change this setting using Menu>Record Setup>Record Type.

Problem	Solution
Unexpected Alarms (beeps) go off.	 Video Loss - One of your cameras are disconnected. There are a few options: connect a camera, disable that camera's channel if you don't want a camera installed in that channel, or disable the VIDEO LOSS alert alarm by going to MENU>Buzzer Setup>Video Loss Alert. Press enter to disable it. HDD Full - A buzzer activates when your HDD is full. Set the HDD to overwrite to avoid this problem. It will record new footage over your oldest footage. Go to Menu>Hard Drive Setup>Disk Full. Press enter to set it to OVERWRITE. Alarm Alert may be set to ON, which sounds a short alarm whenever motion is detected. Go to Menu>Buzzer Setup>Alarm Alert and press ENTER to disable it.
No picture from camera(s)	 Make sure all the cameras' RCA and power cables are plugged in securely and in their proper places. Make sure the camera channels enabled on your DVR. Go to Menu>Camera Setup>Camera Enable to enable your camera's channel.

8. GLOSSARY

DDNS - Dynamic Domain Name Service. Use dyndns.org to track your IP on the Internet and assign it an easy to remember domain name instead of an IP number.

Dynamic IP (DHCP) - A DHCP server assigns an IP address automatically when a device connects to the network. A dynamic IP can change when a device is restarted.

Firmware - The built-in software that controls the DVR's functions. Higher firmware version may be released to provide additional features. Please check this product at www.svat.com to ensure you have the latest firmware version installed. Go to Menu > System Setup to view the firmware version running on your DVR.

Frame Rate - The number of frames that are recorded per second. Setting recording to 30 frames/second will provide smooth playback but will increase the file size. Setting recording to lower frame rates will make playback less smooth, but will decrease the file size and you will be able to record more video on your DVR's hard drive.

IP (Internet Protocol) - A network and transport protocol used for exchanging data over the Internet. The address is a string of four numbers separated by periods (such as 111.22.3.444) used to represent a computer or other device on the Internet.

Monitoring Mode - The default mode when the DVR starts up. It will display a quad view of your cameras.

Playback Mode - After you press PLAY and select a recorded file, the DVR will enter this mode. You cannot enter recording mode or access the menu system directly from this mode.

Record Mode - The DVR enters this mode after you press record, or when there is a scheduled time or motion recording. You cannot enter playback mode or enter the menu system directly from this mode.

Static IP - An IP assigned to a device that does not change.

9. PORT FORWARDING YOUR ROUTER FOR USE WITH A NETWORK DVR

- 1. Belkin Router
- 2. DLINK Wireless Router
- 3. LINKSYS Wireless Router
- 4. LINKSYS Wired Router
- 5. Westell Router
- 6. Netgear Router
- 7. Netopia Router
- 8. Motorola Router
- 9. 2 Wire Router

Note: Many routers require restarting for changes to take effect.

1. BELKIN ROUTER

The port forwarding process is dependant on the brand and model number of the router being used. Port forwarding of a router is required with your system to allow user access to your network device. Regardless of the Belkin Wired Router being used, the process of port forwarding is similar. You will need to enable the ports by locating the port range forwarding screen. With most Belkin routers the port forwarding screen is located within the Virtual Servers option tab. The set up instruction outlined below is an example of port forwarding using **Belkin Model F5D8230-4**.

Step 1:

Open your web browser. Enter the router IP address in the address bar as shown below (192.168.2.1), followed by pressing **Enter**.

Step 2:

In the status page, select the ${\bf Virtual\ Servers}$ option located down the left hand side of the page.

Step 3:

In the Administrator's page, enter your password. The default setting is left blank. Select the **Submit** button.

In the Virtual Server screen proceed as follows:

Enable the system by checking the enabled box

In the **Description** column enter a description of your DVR.

In the **Inbound Port** entry field enter in the first box the first number of the port you need to port forward (e.g. 80) and the ending port number in the second box in (e.g. 80) In the **Type** field, select Both.

In the Private IP Address field, enter the IP address of the DVR

In the **Private Ports** column re-enter in the first box, the first number of the port you need to port forward (e.g. 80) and in the second box the ending port number (e.g. 80). Select the **Apply Changes** button located at the top of the page to save your changes Port forwarding is now complete!

2. D-LINK ROUTER

The port forwarding process is dependant on the brand and model number of the router being used. Port forwarding of a router is required with your system to allow user access to your network device. Regardless of the DLINK Wireless Router being used, the process of port forwarding is similar. You will need to enable the ports by locating the port range forwarding screen. With some DLINK routers the port forwarding screen is located within the Applications and Games or Filters tab; in others it is located in the advance tools tab. The set up instruction outlined below is an example of port forwarding using **DLINK Model DI-524**.

Step 1:

Open your web browser. Enter the router IP address in the address bar as shown below, (192.168.0.1) followed by pressing Enter.

Step 2:

Enter the user name **admin**. Leave the password blank followed by pressing the **OK** button.

Step 3:

Select the Advanced tab.

Step 4:

Select the Virtual Server tab.

In the Name field enter a description of your DVR.

In the **Private IP** field enter the DVR IP address.

In the Protocol field, select Both.

In the **Private** port enter the port number you need to port forward (e.g. 80)

In the **Public** port re-enter the port number you entered in the private port field (e.g. 80) Select the **Schedule** to Always.

If more ports are required to be port forwarded, repeat the above steps. When complete, select the Apply button located at the bottom of the page to save your changes. Port forwarding is now complete!

3. LYNKSYS WIRELESS ROUTER

Enable the system by checking the enabled box.

The port forwarding process is dependant on the brand and model number of the router being used. Port forwarding of a router is required with your system to allow user access to your network device. Regardless of the Linksys Wireless Router being used, the process of port forwarding is similar. You will need to enable the ports by locating the port range forwarding screen. With some Linksys routers the port forwarding screen is located within the Applications and Games or Filters tab; in others it is located in the advance tools tab. The set up instruction outlined below is an example of port forwarding using Linksys Model WRK54GV2.

Step 1:

Open your web browser. Enter the router IP address in the address bar as shown below (192.168.1.1), followed by pressing **Enter**.

Step 2:

Enter the user name and password as shown below (admin by default) and press the **OK** button.

Step 3:

Select the Applications and Gaming tab.

Step 4:

Select the Port Range Forwarding tab.

In the **Application** column enter a description of your DVR.

In the **Start** entry field enter the first number of the port you need to port forward (e.g. 80) In the **End** entry field enter the last number of the port you need to port forward (e.g. 80) In the **Protocol** field, select Both.

In the **IP** address field, enter the computer network IP address you recorded previously during the Quick Set Up Guide process.

Enable the system by checking the enabled box.

Select the **Save** settings button located at the bottom of the page to save your changes. **Port forwarding is now complete!**

4. LINKSYS WIRED ROUTER

The port forwarding process is dependant on the brand and model number of the router being used. Port forwarding of a router is required with your system to allow user access to your network device. Regardless of the Linksys Wired Router being used, the process of port forwarding is similar. You will need to enable the ports by locating the port range forwarding screen. With some Linksys routers the port forwarding screen is located within the Applications and Games or Filters tab; in others it is located in the advance tools tab. The set up instruction outlined below is an example of port forwarding using **Linksys Model BEFSR41**.

Step 1:

Open your web browser. Enter the router IP address in the address bar as shown below (192.168.1.1), followed by pressing **Enter**.

Step 2:

Enter the user name and password as shown below (${\bf admin}$ by default) and press the ${\bf OK}$ button.

Step 3:

Select the Applications and Gaming tab.

Step 4:

Select the Port Range Forwarding tab.

In the **Application** column enter a description of your network device (e.g. monitor)

In the **Start** entry field enter the first number of the port you need to port forward (e.g. 80)

In the **End** entry field enter the last number of the port you need to port forward (e.g. 80)

In the Protocol field, select Both.

In the **IP** address field, enter the computer network IP address you recorded previously during the Quick Set Up Guide process.

Enable the system by checking the enabled box.

Select the **Save** settings button located at the bottom of the page to save your changes.

Port forwarding is now complete!

5. WESTELL ROUTER

The port forwarding process may vary depending on the brand and model number of the router being used. Port forwarding of a router is required to allow user access to your network device. Regardless of the Westell Router being used, the process of port forwarding is similar. You will need to enable the ports by locating the port range forwarding screen. The set up instruction outlined below is an example of port forwarding a Westell Router using **Westell VERSALINK**.

Step 1:

Open your web browser.

Enter the router IP address (192.168.62.1) in the address bar as shown below, followed by pressing **Enter**.

Step 2:

Enter 'admin' in the User Name and 'admin' in the Password dialog box to enter the Westell configuration page.

Step 3:

Select 'Configuration'

Step 4:

Select the **Define Custom Service** Tab.

Step 5:

In the Port Range setting screen, proceed as follows:

In the **Service** Name field, type DVR

In the **Global Port** Range field, enter in the first box, the first number of the port you need to port forward (e.g. 80) and in the second box the ending port number (e.g. 80)

In the **Base Host** Port enter the first port to be forwarded (80)

In Protocol, select TCP

Select the **Next** button when complete

Step 6:

A confirmation window will appear on the screen which shows the same information just entered. Select the close button to continue. You should now be in the Configuration Window screen. Select the Define Customer Service button, followed by selecting the Port Forwarding Ranges of Port option. Finally click the Next button.

Step 7:

Use the Select a Service drop down box and select the configuration just created. Select the Enable button. **Port forwarding is now complete!**

6. NETGEAR ROUTER

The port forwarding process may vary depending on the brand and model number of the router being used. Port forwarding of a router is required to allow user access to your network device. Regardless of the Netgear router being used, the process of port forwarding is similar. You will need to enable the ports by locating the port range forwarding screen. The set up instruction outlined below is an example of port forwarding a Netgear Router using **Netgear Model DG 824M**.

Step 1:

Open your web browser.

Enter the router IP address (192.168.0.1)in the address bar as shown below, followed by pressing **Enter**.

Step 2:

Enter 'admin' in the User Name and 'password' in the Password dialog box to enter the Westell configuration page.

Step 3:

Select the Services button in the Security menu

Step 4:

In the Services menu, select the Add Custom Service button

In the **Services** screen, proceed as follows:

In the Name field, select DVR

In the **Type** field, select TCP

In the Start Port field, enter the first number of the port you need to port forward (e.g. 80)

In the **Finish Port** field, enter the ending port number (e.g. 80)

Check the Apply buttonNext, in the Security option, select Rules

Next, in the Rules screen select Add in the inbound services.

Next, in the **Inbound** services proceed as follows:

In the **Service** drop down list, select the newly created DVR entry.

In the Action field, select ALLOW always.

In the **Send to LAN** Server field, enter your computers IP address.

In the WAN Users field, set to Any.

In the Log field, set to Never.

Click on Apply.

Port forwarding is now complete!

7. NETOPIA ROUTER

The port forwarding process may vary depending on the brand and model number of the router being used. Port forwarding of a router is required to allow user access to your network device. Regardless of the Netopia router being used, the process of port forwarding is similar. You will need to enable the ports by locating the port range forwarding screen. The set up instruction outlined below is an example of port forwarding a Netopia Router using **Netopia Model 3346**.

Step 1:

Open your web browser.

Enter the router IP address (192.168.62.1)in the address bar as shown below, followed by pressing **Enter**.

Step 2:

Enter 'admin' in the User Name and '1234' in the Password dialog box followed by 'OK' to enter the Netopia configuration page.

Step 3:

Select Expert Mode

Step 4:

Select the Yes, enter expert mode button

Select Configure followed by selecting NAT

Step 5:

Select the **Define Custom Service** button

Select Port Forwarding Range of Ports, followed by Next

Step 6:

In the Port Range screen, proceed as follows:

In the Service Name field, type DVR

In the **Global Port Range** field, enter in the first box, the first number of the port you need to port forward (e.g. 80) and in the second box the ending port number (e.g. 80) in the **Post Next Port enter the first port to be forwarded** (80)

In the **Base Host** Port enter the first port to be forwarded (80)

In Protocol, select TCP

Select the Next button when complete

Step 7:

In the **Nat Configuration** Menu, use the **Service Name down** box and select the configuration just created. Select the **Enable** button.

Port forwarding is now complete!

8. MOTOROLA ROUTER

The port forwarding process may vary depending on the brand and model number of the router being used. Port forwarding of a router is required to allow user access to your network device. Regardless of the Motorola router being used, the process of port forwarding is similar. You will need to enable the ports by locating the port range forwarding screen. The set up instruction outlined below is an example of port forwarding a Motorola Router using **Motorola Model SBG 1000**.

Step 1:

Open your web browser.

Enter the router IP address (192.168.0.1) in the address bar as shown below, followed by pressing Enter.

Step 2:

Enter 'admin' in the User ID and 'motorola' in the Password dialog box followed by clicking 'Log In' to enter the Motorola configuration page.

Step 3:

Select the Gateway button

Step 4:

Select the Port Forwarding button

Step 5:

Select In the Add New Port Forward Entry screen, proceed as follows:

In the **Template** field, select **Custom**

In the Name field, select DVR

In the Port Start field, enter the first number of the port you need to port forward (e.g. 80)

In the **Port End** field, enter the ending port number (e.g. 80)

In the **LAN IP** Address field enter the IP address (192.168.0.1)

Check the **Enable** button

Finally click the **Add** button, followed by selecting the **Apply** button.

Port forwarding is now complete!

9. WIRE ROUTER

The port forwarding process may vary depending on the brand and model number of the router being used. Port forwarding of a router is required to allow user access to your network device. Regardless of the 2 Wire Router being used, the process of port forwarding is similar. You will need to enable the ports by locating the port range forwarding screen (Note: in many 2 wire systems, it is located in the firewall setting). The set up instruction outlined below is an example of port forwarding a 2 Wire Router using **2 Wire Model 1800G**.

Step 1:

Open your web browser.

Enter the router IP address (192.168.1.254) in the address bar as shown below, followed by pressing Enter.

Step 2:

Select the Firewall Tab.

Step 3:

Select Firewall Settings...

Step 4:

In the **Edit Firewall Settings** tab, select add a new user defined application **Step 5**:

Select the Back button to return to the Edit Firewall Screen

In the Edit Firewall Settings proceed as follows:

In the Application Name field, type DVR

In the Protocol selection, select TCP

In the **Port field**, enter in the first box, the first number of the port you need to port forward (e.g. 80) and in the second box the ending port number (e.g. 80).

Select the Add Definition button.

Step 6:

In the Edit Firewall Settings proceed as follows:

In the Select a Computer field, select DVR

In the **Edit a Firewall** Setting, check the **Allow Individual Applications** box and highlight the DVR application which you just created. Click **Add**.

Finally select the **Done** button at the bottom of the screen. **Port forwarding is now complete!**

10. DVR SPECIFICATIONS

Functionality	Simplex
Video Compression	Modified MJPEG
Resolution	720 x 480
Recording Frame Rate	Max 60 days, 15 days with 4 cameras Max 640 x 224 Low, Medium, High Manual, Schedule, Motion Detection
Video Format Video Loss Inputs Display Output	Auto Detection 4ch BNC
Live Viewing Resolution Frame Rate	720 x 480
Play	
Search Mode Speed Mode	Normal, Fast Forward
OSD Language	English/Traditional Chinese
Password Protection	Menu Password, Stop Recording Password
Alarm	Motion Detection, Video Loss
Network Network Protocol LAN IP Network Connection	Static, Dynamic
Operating System	Written using Linux
Processor	Propietary
Disk Full Warning	Yes
Automatic Overwrite Option	Yes
LED Indicators	Power, Record, Play, Live
Housing Material	Aluminum

Housing Color	Graphite Grey
Power Input	DC 12V 2A
Power Adapter Input	AC 100-250V 50/60Hz
Cooling	Fan Based
Operating Environment	
Temperature	41°F ~ 104°F
Humidity	30 ~ 80%
Dimensions	12.6" x 1.8" x 10.6"
Weight	6.6lbs (without HDD)

11. CAMERA SPECIFICATIONS (CV65)

Camera TypeBullet
Image Sensor1/3" color CMOS
Resolution330 horizontal TV lines
Outdoor UseYes
IP RatingIP68
Focal Length6mm
Focus TypeFixed
Night VisionYes
Number of IR LEDs and Range15 LEDs, 10ft
IR LED ControlAutomatic (CDS sensor)
Min. Illumination0 lux
IR Wavelength850 nm
Video Output4 PIN DIN to RCA w/ 60ft extension wire
TV SystemNTSC
MicrophoneYes, built in
Motion DetectionNo
Viewing Angle90 degrees
Electronic Shutter1/50 ~ 1/500000 sec
BLCno
AGCno
ELCno
Line Lockno
Iris Controlno
White Balanceno

Sun Shield	Yes
IR Cut Filter	No
Housing Material	anodized aluminum
Housing Color	platinum silver
Signal/Noise Ratio	>48%
Camera Bracket	Yes
Operating Environment TemperatureHumidity	
Camera Power Input	DC 9V 200mA
Power Adapter Input	120V 60Hz
LED Power Indicator	
LED Power Indicator Dimensions	No

SVAT SUPPORTS CRIME STOPPERS

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 offences, 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.

PLACE POSTAGE HERE

CRIME STOPPERS INTERNATIONAL

P.O. Box 614
Arlington, Texas



CV0204DVR www.svat.com

SVAT SUPPORTS CRIME STOPPERS

E-MAIL ADDRESS

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.



STOPPERS INTERNATIONAL

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 Crime Stoppers at www.c-s-i.org programs, which assist police in solving crime. You can find more information about Crime Stoppers International is an organization of community based civilian Crime Stoppers ocal Crime Stoppers programs are partnerships between the public, media and local policing-

starting one, return this card with the following information

If your community does not have a Crime Stoppers program and would like information about

(tipsters) may be eligible for a cash reward for their information

NAME: PROV/STATE ADDRESS CITY: PHONE POSTAL/ZIP CODE

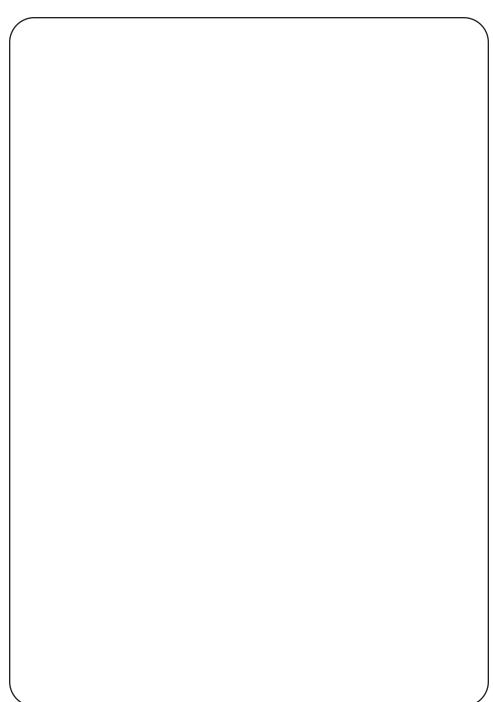
the address on the other side Charitable donations can be made to "CSI" by returning this card in an envelope with your check or money order to

THANK YOU

Amount \$

CV0204DVR www.svat.com

NOTES





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