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1 - 16 Camera Inputs	Up to 16 camera inputs are available for digital video storage.
1 - 16 Sensor Inputs	Up to 16 digital sensor inputs can be connected to the system. (See appendix D for setup)
1 - 4 Digital Outputs (Relay Outputs)	Up to 4 digital outputs are available for use. Relays can be used to activate a siren or lights or can be linked back to the sensor inputs to activate certain events. (See appendix D for setup)
Sound Recording and Two Way Communication	Sound can be recorded in conjunction with video images. Two way voice communication between the DVR server and a remote client is also possible.
Multi-Monitoring	It is possible to view 1, 4, 6, 9, 10, or 16 cameras in a single screen.
PAN/TILT/ZOOM/FOCUS	Pan Tilt Zoom (PTZ) cameras can be controlled both via the server and remotely using the web software or remote client.
Auto System Recovery - Watchdog	When the DVR detects a system error such as a lockup or DVR server failure, it will automatically reboot the system, thereby restarting the server and allowing it to recover from any errors.
Motion Detection and Sensor Triggering	Image recording can be set up to be triggered by motion within the camera view or by sensor activation. This allows the system to record only when there is activity thereby saving hard drive space.
Scheduled Recording	Image recording can be scheduled to occur only during certain time periods. The user can set certain cameras to record at specific times.
Data Backup and Automated Backup	Recorded image data can be backed up onto different media (DAT, CD, or DVD); you can specify the camera to backup, and the date and time. The backup process can also be scheduled.
Digitalized Video Search	Recorded data can be reviewed digitally; one camera at a time or all at once. Searches are done by selecting the date and time period. You can extract images from the video to save or print. Images can be enlarged or edited, however, watermarking will be lost once this is done.
Network Support (TCP/IP Protocol)	With network support, you can log on to the DVR from any remote computer, search and download video data, and even change the settings of the program.

Function	Specification	
Camera Input	4, 8,12 or 16 Ports	
Sound Input	2 Ports (standard), 4 Ports (optional)	
Sensor Input	4, 8, 12 or 16 Ports	
Relay Output	4 Ports	
Composite Output	1 Port selectable (Switching, Quad, User controlled)	
Image Format	MPEG4	
Recording Mode	Display, Normal, Motion, Sensor Scheduled Recording	
Remote Control	Full remote control ISDN, ADSL, LAN and TCP/IP	
Backup	DAT, CD, DVD, Network	
PAN/TILT/ZOOM/FOCUS	RS-232 Interface RS-422/485 (optional)	

2. Main

The first screen you will see after logging onto the DVR Server will be the main screen below. To view all of the PTZ, image control and camera control buttons, click on the button.



A	x1	Clicking on these buttons will display the corresponding number of camera views on your main screen.
	0	With each click, the 'next page' button will cycle through all the available cameras in sequence, displaying each camera, or group of cameras, depending on the screen view selected.
	0	Clicking once on 'Auto Next Page' will cycle through all the available cameras in sequence, according to the screen view selected.
	0	Clicking on this button magnifies your camera view to near full screen. Alternatively use hot keys F5 and F6. F5 magnifies the screen to near full, click again to return to normal size, or click F6 to enlarge the screen further to full screen. Press F6 again to return to near full screen and F5 to return to normal.
	O P E N	This button displays the PTZ controls and the camera/image controls on your screen. If you are not logged in you will be prompted to enter your password to open the controls.

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The bar and numbers on the upper part of this feature indicate the total number of volumes available and the number of volumes being used. The images in the centre indicate the current status of network connections and backup. If backup is in progress the image on the left will be lit, if
someone is remotely connected, the right hand image will be lit, and the IP address will appear when the mouse is held over it.
The current date and time appear in the lower section.
These buttons allow the user to switch between the Camera Control menu (see E and F) and the Image Control menu (see F).
These numbers correspond to preset camera views. Clicking on them will move your on screen camera view to the preset view. (Only available with a PTZ camera.)
Click on this button to open the above preset numbers graphic. (Only available with a PTZ camera.)
Clicking 'Tour' will activate your chosen sequence of presets. (Only available with a PTZ camera.)
Clicking on A/P will activate a preset auto pan from one point to another. (Only available with a PTZ camera.)
The power buttons can be used to activate features on the camera eg. a light.
Use the + and - buttons to adjust the zoom and focus.
Camera control menu for PTZ cameras. The number in the centre of the menu indicates which camera is being controlled. Use the grey arrows underneath to switch between cameras. The arrows around the outside control the view of the camera.
Image control menu. You can adjust the brightness, contrast, hue and saturation using the + and - buttons. The number in the centre of the menu indicates which image is being adjusted. Switch between images by clicking on the arrows underneath.
The Setup button activates the 'DVR Setup' program (see chapter 3). The main program will continue to run in the background.
The Search button activates the 'DVR Search' program (see chapter 4). The main program will continue to run in the background.
Click on the login button to login and make all features accessible - search, setup etc. Click on logout if you wish to be prompted for a password when trying to access these features.
The Power button turns off the main program.
The Burn CD button launches the CD burning utility. (See Appendix C)

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H	Relay Ports 🍞 🛛 🕄 🍕	These buttons both control and show the status of the relays. Clicking on them will activate the relay.
Ι	Emergency Record	This feature enables you to begin recording in an emergency situation. Clicking on the Emergency Record button will override any settings you may have, and will initiate recording on all cameras.
J		The status of the cameras are shown in this graphic. The top row indicates the connection status. A light will flash if the camera is disconnected and will be steady if it is connected. If a camera is disabled in the software, the LED will be off. The lights on the bottom row indicate whether or not the camera is recording. If they are on, recording is in progress.

3. Setup

Click on the **Setup** button. Enter your user name and password and click **OK**. The following screen will appear.



3.1	Disk Tool	Use to setup and maintain a file system. (The program will create it's own file system so that large amounts of data can be handled safely, thereby lessening the danger of system failure).
3.2	System	Use to setup your network connection options, choose how to view your initial screen, setup sound recording, automatic restoration etc.
3.3	Camera	Using this feature you can adjust camera settings, setup digital outputs and schedule record times.
3.4	Sensor	Adjust/create settings for sensors.
3.5	Automated Backup	Setup automatic backup schedules.
3.6	User Admin	Use this feature to create and manage your users and assign their access levels on the DVR.

Click on **Disk Tool** in the Setup screen to view the below screen.

Volume Info	ormation					
	Total	4,986	Max volume	58		
) Used disk	1,149	Used volume	e O		
	Usable disk	3,837	Add Volume		0 🖨 🛛 Add	
C driv	e					
Hard drive	Used/total space	Used rate(%)	Max volume	Used volume	Add Volume	^
C:1	1,149/4,986	23	58	0	0	
D:\ F:\	175,213/179,444 2,342/10,001	97 23	2736 117	2732 0	0	
1.3	2,042/10,001	20	117	v	v	
						_
						~
					1	
			0%			

Disk Information

Total Volume: The number of volumes you have allocated for use Current volume: The total number of volumes that are currently in use

Volume Information

Total: The total capacity of the selected hard disk Used disk: The amount of hard disk space currently being used Usable disk: The amount of space on the hard disk that is currently available Max volume: The total number of volumes available Used volume: The number of volumes being used

By selecting each of the various drives in the table you will be able to see the status of each drive.

* 1 Volume equals 66MBs of hard disk space. Video is recorded in these volumes and once all the volumes are completely full the program starts overwriting from the beginning.

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You cannot make adjustments to Disk Tool whilst the main program is running. If you wish to add, delete or clear volumes, you must first exit the main program. On your desktop you will see an icon for DVR Setting.



Double click on this icon to view the Setup screen. You can now enter Disk Tool and make adjustments.

To add a volume:

Select the drive to which you wish to add volumes, by highlighting it in the table. Enter the desired number of volumes in the **Add volume** window. Click the **Add** button to the right of the window. Click on **Create Volume** located on the bottom of the screen. You will be able to see the updated number of volumes available in the table.

To delete volumes:

Click on **Delete Volume** at the bottom of the screen. This will delete all volumes.

To clear volumes:

Clicking on **Clear Volume** at the bottom of the screen will clear all the image data from all the volumes. Use this option if you wish to erase all recorded image data.

3.2 System

Click on System in the Setup screen to view the below screen.

Site Information	Screen
Site Name	Initial screen 4 View V Normal V TV-out auto switching interval Normal 4 v sec PC screen auto switching interval 2 v sec
Network	
Allow remote connections	Auxiliary functions
Code	Keyboard lock (Windows key enable/disable)
Remote notification of events Properties	Enable hardware watchdog (Auto recovery)
Use IP Server Properties	Schedule auto reboot of DVR Properties
	Sound recording Properties
Log write	Use e-mail Properties
📘 System log 📃 Sensor log	Warning on disk full
Motion log User log	Auto log out min

Site Information

Site Name and Site Location. Key in the name and address of the site respectively (optional). Should you export data at any time, this information will show on the print out or in the saved file.

Network

Allow remote connections: Enable users to connect remotely.

Remote notification of events: Be notified remotely of any motion detected, or a sensor being triggered. Select then click on properties.

Method: Choose your notification method from the drop down box (internet/network, use TCP/IP) **IP/Number:** Enter the IP address of the machine to be notified in the window

Log Write gives you the option to select the categories for which you would like to save log information to C:\. Choose the categories by checking the corresponding boxes.

<u>Screen</u>

Initial screen: Select the screen division and size you would like to see when the system is started from the drop down windows.

CCTV monitor auto switching interval and **PC screen auto switching interval**: Specify the number of seconds that you would like to see each camera image for, before the screen automatically switches to the next camera. The view for the CCTV monitor is also selectable: **Normal:** Follows the PC screen, **1view shows** 1 camera at a time **4 view** displays a quad, **9 view** and **16 view**.

Auxiliary Functions

Keyboard lock (Windows key enable/disable): The Alt, Tab and Windows button on the keyboard will be disabled. **Enable hardware watchdog (Auto Reboot)**: The system will automatically reboot should system problems be detected.

Schedule system auto reboot: Set the days and times on which you wish the system to automatically reboot. **Properties**: Input the days and times.

Sound recording: Check if you wish to record sound or use two way communication.

You must then select your channels. Click on Properties and you will be taken to the following screen.

Installed	Audio I	evices	
1 : Realtek	AC97 Audio		
Volume	٢		> 255
Select Cha	nnel		
1 Chann	el 🌒 2 Char	el 🜒 4 Channel 🌒	16 Channel
Select Carr	era		
Sciect Our			
Channel 1	CAM 1	Channel 9 CA	м 9 🕑
Channel 2	CAM 2	Channel 10 CA	м 10 🕑
Channel 3	CAM 3	Channel 11 CA	м 11 🕑
Channel 4	CAM 4	Channel 12 CA	M 12 🕑
Channel 5	CAM 5	Channel 13 CA	M 13 🕑
Channel 6	CAM 6	Channel 14 CA	M 14 🕑
Channel 7	CAM 7	Channel 15 CA	M 15 💌
Channel 8	CAM 8	Channel 16 CA	M 16 🕑
		ОК	Cancel

Installed Audio Devices

The sound cards that are installed in the unit will be displayed. Use the bar underneath to adjust the recording volume.

Select Channel

There are a maximum of 16 channels that can be used for sound (This is dependent upon the model of DVR you are using). Specify how many channels will be used by selecting the relevant number.

Select Camera

For each of the channels selected, you must apply a camera. Use the drop down windows to match the cameras with the audio inputs.

Click on **OK** to return to the System screen.

Attention: When you are using only one channel for audio recording the microphone input is used. For two or more channels the line input is used.

Use email: Check to receive notification of events by email. Click on the **Properties** button to the right to modify the options and properties. You will see the following screen.

Method	SMTP / Login / No RSA 🛛 👻
SMTP Server	mail.isp.on
User	DVR
Password	Xoloolok
From Address	dvr@test.com
To Address	user@test.com
	Test

Property

Method: Select your connection method (your ISP can provide you with this information) **SMTP Server:** Type your mail server address into the window.

User: Enter the user name for the email account.

Password: Enter your password

From Address: Enter the email address from which you wish the notification to be sent. **To Address:** Enter the email address to which you wish the email to be sent.

Click on Test and verify that the email has been received.

After completing all fields click on .OK

You will now find yourself back in the System screen.

Warning on disk full: Once the disk reaches a specified capacity, or after a specified number of days, you will be alerted.

Auto log out: After a specified period of inactivity, the system will automatically log you out.

Click on **Apply** at the bottom of the screen at any time during this process to save without exiting. Click on **Save & Close** to save and exit system setup. You will be taken back to the setup screen.

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Warning on Disk Full Check to receive a warning when the system disk is full. Click on the **Properties** button to the right to modify the options and properties. You will see the following screen.

Warning at value					
O Lastvolume					
Specify the used percent					
Warning at disk					
 Total disk 					
Current disk					
Warning at a term	n				
Start date	2005-09-28				
Warning time	0 🔽 hour 0 🔽 min				
Saving duration (days)	0				
Saving options on w	arning				
 Save on warning 					
No save on warning					
📔 Filled Disk - Notifica	tion Properties				
	OK Cancel				

Warning at value: warns the user when either the last volume is being recorded or at a specified percent.

Warning at disk :

Total disk– the warning at value setting applies to all drives. Current disk— the warning at value setting applies to just the current drive.

Warning at a term: Warns the user a when the selected number of days has expired. Start date: When to begin counting the days Warning time: When you would like to be warned Saving duration: Enter the number of days before the warning.

Saving options on warning

Save on warning: overwrites the oldest image (Default and recommended setting) No save on warning: stops recording when the disk is full. Filled Disk notification: See Chapter 3.7 for notification setup. Click on **Camera**. You will see the below screen. In **Camera setup** you are able to adjust the general camera settings, the camera schedule, colour and motion and the Pan/Tilt settings by switching between the corresponding buttons on the top of the screen. On the left hand side of the screen select the camera that you would like to apply the adjustments to. After making your adjustments you have the option to choose **Select All**, thereby applying the adjustments on screen to all cameras.

3.3.1 General

Camera 1 Select All	General Schedule Color & motion
Basic setting Camera name Front Door	Compression format & rate
Resolution 704*480	Low C High 30
Adjust camera frame rate Select frame rate by camera	Transmission format & rate
Security	Pre & Post alarm recording Pre 4 Frames Post 10 Frames
Hide camera (Display)	Event notification
Remove from CCTV display Remove from network display	Video loss - Notification Properties
	irtual Apply Save & Close Cancel

The General screen will show first when you open the Camera setup screen.

Basic setting

Camera name: Enter the name in the corresponding window.

Resolution - 352x240 or 704x240 or 704x480. Choosing a lower resolution will use less space, a higher resolution will result in sharper images.

Adjust camera frame rate

Maximum averaged frame rate (Auto): Record video at the highest frame rate possible.

Select frame rate by camera: Record at your preferred frame rate. Input the number of frames per second in the windows below. The higher the frame rate, the smoother the video. You can save hard disk space by selecting a lower frame rate.

Security

Hide camera (Display): The selected camera will not be shown on the PC monitor. Remove from CCTV display: The selected camera's images will not show on the composite port. Remove from network display: Removes the selected camera from the network.

Compression format & rate

Change the compression rate by moving the setting on the bar below to the left or the right. Positioning the knob to the left will reduce the image size and quality.

Transmission format & rate

The same instructions as above apply. The settings apply to the size and quality of the images when they are transmitted over the network. The higher the quality and size of the images, the more bandwidth that will be used when transmitting them.

Pre & post alarm recording

Use if the selected camera is scheduled to record upon detection of motion, or when a sensor is triggered. Select the number of frames in the drop down windows that you wish to be recorded, prior to and after the motion is detected or sensor is triggered.

Event notification

Video loss notification: See Chapter 3.7 for notification setup.

Click on Apply to save the settings of each individual camera.

You cannot enable or disable a camera, change the frame rate or adjust the compression and transmission whilst the main program is running. You must first close the setup screen and then exit the main program. On your desktop you will see an icon for DVR Setting.



Double click on this icon to view the Setup screen. You can now enter Camera setup and check or uncheck the **Enable Camera** box and adjust settings.

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3.3.2 Schedule





Recording schedule

There are six different recording settings that you can apply on the schedule.

Normal	All images captured on the camera are to be recorded.
Sensor	Record images only when a sensor is triggered.
Motion	Record images only when motion is detected within the camera view.
Display	No images are recorded. They are viewed on the monitor only.
Sensor & Motion	Record images only when either a sensor is triggered or motion is detected.
Normal & Event	Record at a rate of 1 fps (frame per second) when there is no motion detected and no sensor triggered, but record at the maximum frame rate when an event occurs.

Select the recording method you would like to use by clicking on the corresponding button. Highlight the hours and days of the week in the schedule that you wish this recording method to be active on.

Remote notify schedule

Data is transmitted to the remote client software to notify you of events. This schedule is only enabled if the motion and/or sensor recording methods have been selected in the **Recording schedule** and you have checked **Remote**

notification of events in System setup. Click on **Notify** if you would like to be notified; click on **Clear** if you do not wish to be notified, and highlight the days and hours in the schedule accordingly.

These schedules will apply to the selected camera only. If you wish the schedule to apply to all cameras click on **Select All** on the left hand side of the screen.

Click on **Apply** to save the changes.

3.3.3 Colour & Motion

Click on the **Colour & Motion** button on the top of the screen. The below screen will appear. You can use this menu to control the colour of the image, set the motion detection areas and control the sensitivity and rate of motion.

Select All	Camera 1	General Sche	Idule Color & motion
	<image/>	Detection area setting Whole area Partial area Add Select all Delete all Display detected area Detection test	Color control Brightness 104 Contrast 125 Contrast 125 Saturation 127 Unit of the set of the se
	Event notify method	Motion setting Sensitivity adjustment	85
	Motion Detection - Notification Properties	Low (→ High
	Pan/Tilt Camera method Use pan/tilt camera Properties	Rate of motion	85 High
Cam	Virtual Keyboar	Apply	Save & Close Cancel

Detection area setting

Whole area: Select whole area if you wish motion to be detected in any part of the screen. Partial area: Selecting partial enables you to isolate specific areas of the screen where you wish motion to be detected.

To create a zone: Click on **Add**. Use the mouse to select the area on screen that you wish motion to be detected in. A maximum of ten zones can be selected per camera.

To edit the zones: Use the Select all and Delete all buttons. If you wish to clear all the zones, click on Delete all.

To test the detection areas you have set and the motion sensitivity: Check Display detected area and click on the **Detection test** button. Motion detected by the camera will show on the screen in colour.

Motion setting.

Sensitivity adjustment: To increase sensitivity move the knob on the bar to the right. **Rate of motion:** To lessen the amount of motion required to trigger recording, move the knob on the bar to the right.

Colour control

Use to adjust the brightness, contrast, saturation and hue of each camera image. **Default value:** Returns each feature to it's original setting.

Event notification

Motion detection notification: See Chapter 3.7 for notification setup.

Click on Apply to save the settings.

3.3.4 Pan/Tilt

Check Use Pan/Tilt camera Then click on the properties button to view the below menu.

	Camera 1		_	General	Sche	edule	Color & motion
Select All 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	Camera 1	PTZ Camera PTZ_ID Connect settin Com Port 1 Data bit 8	Speed	Ceneral Detection area		Cold Briv Co	pr control ghtness 104 Intrast 125 Intrast 125 Intrast 127 Intration 127 Intration 127 Internet Internet Intern
	Event notify Motion De Pan/Tilt Came	Test	F/Z 6	A.P 6	ient		B5
Came	Use pan/tilt	camera	Properties Virtual Keyboard	Low C)	Save & C	Xiose Cancel

Communication Options

PTZ Camera: Choose the make/model/protocol of the camera/receiver from the drop down menu. **PTZ ID:** Select the id number of the camera.

Com Port: Input the serial port to connect to the computer.

Speed: Choose the speed of the pan/tilt option (this is dependent on the camera equipment being used).

Parity, Data bit, Stop bit : Set in accordance with the Pan/Tilt equipment manual.

Speed

Choose from the drop down menus the Pan/Tilt speed - **P/T**, the Focus/Zoom speed - **F/Z** and the Auto pan speed - **A.P.**

Click Test the following menu appears.

🐨 PAN/TILT TEST		X
RECEIVER D-Protocol(PTZ ID 1	MENU
MANUAL SETTING		A1 A2 A3
PARITY	PORT 1 -	PRESET
DATA 8	BAUDRATE 2400 -	1 11
STOP 1	OPEN CLOSE	2 <u>12</u> 3 13
		4 14
FI	DCUS IN SPEED :	5 15
F0	CUS OUT P/T 6 -	6 16
	00M IN F/Z 6 -	7 <u>17</u> 8 18
	DOM OUT A.P 6 -	9 19
		10 20
	STOP P.S 6	SCAN
		START
MANUAL COMMAND :		STOP
	SEND	EXIT

Open: Disable the Communication Option buttons and to enable all other buttons on the screen. **Close:** Enable the Communication Option buttons, disable all other buttons.

Controls

Provides the controls to adjust the direction of the camera and the focus and zoom. The speed of all functions can also be adjusted.

Manual Command

Allows the user to send specific HEX commands directly to the camera. Type in the command and click send.

Camera menu: Displays an on screen camera menu (if the camera is compatible with this function).

Tour: Will activate your chosen sequence of presets.

Preset

Allows for up to ten preset locations to be used. To set up a preset, click on **Preset setup** and then on the number you would like to activate. Move the camera to the desired view and click the same number, followed by **Preset setup**. Follow these steps for as many presets as you would like to use.

Auto scan

Program and run an auto scan. Position the camera so that it is pointed at the location you would like the auto scan to commence from and click on **Start scan** to save this position as the starting point. Follow the same procedure using the **Stop scan** button to set the ending position of the scan. Pressing **Auto scan** will run the scan between the above set parameters.

Exit: Returns you to the PTZ setup screen

Click on OK then Save & Close.

Note : If PTZ control is erratic in the main program, restart the program.

PTZ camera Supported Protocols List:

TYPE1=HRX-1000(Honeywell)	TYPE26=SSP(Samsung Protcol)
TYPE2=HRX-2000(D1)(Honeywell)	TYPE27=SPD1600(Samsung)
TYPE3=GC-655/755(Honeywell)	TYPE28=NKH-97CHE(NikoPT)
TYPE4=D-Protocol(Pelco)	TYPE29=CP-32M(CommaxPT)
TYPE5=HRX-2000(D2)(Honeywell)	TYPE30=MD-1000 Series
TYPE6=Panasonic	TYPE31=SecuMera Pro(TechnoVision)
TYPE7=Philips	TYPE32=HSDN-251(Honeywell)
TYPE8=Kalatel	TYPE33=WPT-101(Wonwoo)
TYPE9=Cannon	TYPE34=P-Protocol(Pelco)
TYPE10=PT102N(C&B)	TYPE35=SCC421(Samsung)
TYPE11=CRR1600i(Fine)	TYPE36=SJ3728R1(Sungjin)
TYPE12=DRX500(Dongyang)	TYPE37=Vicon
TYPE13=5-Series(Pelco)	TYPE38=SCC641(Samsung)
TYPE14=PIH7000(Lilin)	TYPE39=EVI-D30/31(Sony)
TYPE15=HSD251(Honeywell)	TYPE40=SRX100B(Samsung)
TYPE16=LPT-A100L(LG)	TYPE41=KRE301(Kodicom)
TYPE17=SERIM	TYPE42=ORX1000(Kodicom)
TYPE18=SpeedDoom Series(SensorMatic)	TYPE43=KRE303(Kodicom)
TYPE19=DY255-DRXB(Dongyang)	TYPE44=Dragon
TYPE20=DSCP	TYPE45=THZ2201PT(American)
TYPE21=SAE Elec. SpeedDome	TYPE46=Echelon-9107
TYPE22=CRD-J6416	TYPE47=Vicon VPS
TYPE23=KPC-S38CZH	TYPE48=KSD-18DN(KODO)
TYPE24=StarPT	TYPE49=WSJ Series(Wonwoo)
TYPE25=CCD Control Box	

3.4 Sensor

After returning to the Setup screen click on **Sensor**. The below window will open.

	Sensor 1 Sensor to use Sensor location Sensor type Connected camera Check time Check time Sensor trigger - Notification Properties
Senso	Dr Setup

Up to sixteen sensors can be connected. Highlight the sensor you wish to use by clicking on it in the table. Then check the box **Select sensor to use**. The chosen sensor will be shown in the top left hand corner of the screen.

Sensor location: Input the position of the sensor.

Sensor type: Select N.O. for normally open, and N.C. for normally closed.

Connected camera: Choose the camera you would like to start recording when a sensor is activated by clicking on **Select**. You can select from just one camera up to all the cameras in use.

Check time: Defines the intervals at which sensor state will be checked.

Emergency notify: Regardless of the remote notification schedule, notification will be sent when a sensor is triggered.

Sensor trigger—Notification: See Chapter 3.7 for notification setup.

Click on Apply to save the changes or Save & Close to save and return to the setup screen.

(See Appendix E for information on Sensor setup)

Clicking on Automated backup will display the below screen.

3ackup schedule				
Select Day(s)				
📓 Sunday 📓 Mon	day 🔝 Tuesday	📓 Wednesday 📓 Thursday	/ 🔟 Friday	Saturday
Select Time 0	Hour 0	Minute		
Connected camera		Select		
Backup Device		Browse		
ichedule table		Add/Modify	h 4 156 -	Delete
Day(s)	Time	Camera	Modify	
Dayloy	Time	Camera	1 at	
) =
Start backup timer	🗾 Overv	write when the disk is full		

By creating a backup schedule, recorded images can be backed up automatically. Backup starts from the time the last backup stopped, and ends at the time that the back up was scheduled to begin. (On the first backup, it will start from the beginning of the data).

Select Day: Choose the day you wish to run the backup by clicking on it.

Select Time: Hour and Minute: Set the start time of the backup.

Connected Camera: Select the cameras that you wish to backup.

Backup Device : Choose the directory to which the backup data should be saved by clicking on Browse.

Schedule Table: Reflects the backups that have been scheduled.

Start backup timer: The backup program will run automatically on boot up.

Overwrite when the disk is full: When the Backup directory is full it will overwrite the oldest data.

When you have completed all the settings, click on Add/Modify. The information will show in the chart. You can repeat the above steps for as many backups as you wish to schedule. Click on Apply or Save & Close to save the updated schedule.

When finished the backup settings be sure to startup Manual backup (see Chapter 3.9) and click on standby. The scheduled backup will not start automatically if this program is not running.

Click on User Admin to create new users, modify existing users and delete users. You will see the below screen.

New user				Authority			
Username:	1			🔼 Se	etting	🔽 System shu	tdown
Password	*				ackup	Search	
Confirm pass	word:						
Default user				🖸 Co	ommand control ((Pantilt/Image con	trol)
Dondantabor				📃 Ne	etwork access	0	Timeout(min)
Security level	0 1	.evel 1 (Admin)			_		
,				Conne	ected camera A	.11	Select
		.evel 2 (User)					
	• L	.e∨el 3 (Guest)		N N	otify Login 🛛 🛛 🛛		Timeout(min)
User name	Level	Default	Setting	Add/M Shutdown	Control	1odify Search	Delete Backup
Osername	Admin	No	Yes	Yes	Yes	Yes	Yes
mot		Yes	No	No	No	No	No 🗕
mpt guest	Guest				V	V	Yes
	Guest Admin	No	Yes	Yes	Yes	Yes	
guest			Yes	Yes	Yes	TES	
guest 1			Yes	Yes	Yes	TES	

To add a new user:

Select an empty line in the user list. Input a **Username**. Then type in the **Password**. In the window next to **Confirm Password**, retype the password entered above. Under **Security level** choose the level of authority to apply to the user. Level 1 (Admin) affords the user complete authority, Level 3 (Guest) should be used for remote access as it has limited authority.

The features in **Authority** will be available according to the security level applied. Check the boxes for the features that you wish the user to have access to.

Clicking **Network access** enables remote access. You can specify a period of time after which the user will be logged out of the remote program in the window next to **Timeout(min)**.

To select the cameras that you wish the user to be able to view click on **Select** and check or uncheck the applicable cameras numbers accordingly.

Click on the **Add/Modify** button to register the user; you will see the information in the table.

To edit an existing user:

Highlight the user in the table and make the desired changes. Click on Modify.

To delete a user:

Highlight the user in the table and then click on **Delete**. The user will be removed from the table.

Default User: Choose one of the users to be the default user. Their settings will apply to the Main screen. If the user is blocked from seeing camera one, camera one will be hidden on the Main screen. To view the camera click on the log in button and login as a user set up with access.

Select "event notify" and click on "properties". The following window will appear.

General Relay Email Preset
General
 Beep Use Pc Speaker Mark
■ PopUp ■ TV out 20 ▼
 Second Screen X Y Remote Notify Use Notify Schedule
OK Cancel

General

Beep: A wave file will be played through external speakers when the event occurs. Use PC speaker: The PC speaker will beep when an event occurs.

Mark: A red dot will appear on the camera image where the event occurred.

Popup: The Camera image where the event occurred will be displayed full screen view.

TV out: The camera image where the event occurred will be displayed on the external monitor connected the composite out put.

Second screen: If you have a second VGA monitor connected to the system. The camera image where the event occurred will be displayed on the x,y coordinates entered.

Remote Notify : A notification will be sent to the pre configured IP address.

Use Notify Schedule: Notification will be sent only during the time specified in the Remote notify schedule.

SAFEGUARD

<u>Relay</u>



Select which relay will be activated and for how long.

<u>Email</u>

General Relay Email Preset
Email
Subject
Content
Attach Image 📃
Interval 30 sec 💌
OK Cancel

Subject: Enter the subject line of the email.

Content: You may place any text you wish in this window. The text will appear in the body of the email. If you include any of the reserved words listed below, the server will replace them with the appropriate information.

Reserved word	Replaced with
\$\$0	Camera number
\$\$1	Event type
\$\$2	Time
\$\$3	IP address

Example: \$\$1 was detected on camera # \$\$0 on \$\$2 at IP address \$\$3 = motion was detected on camera 2 on 05-20-2005 1:00:52 at IP address 192.168.0.1

Attach image: Works in conjunction only with the **Event Notify** feature. If you check the box a JPEG image captured from the camera where the event has taken place will be attached to the email.

Send Interval: After the first notification has been sent, no further emails will be sent for the length of time specified in the send interval. If you set the interval to 30 seconds, even though an event may occur 20 times within that 30 second period, only one email will be sent.

General Relay Email Preset
Preset
Camera / Preset 1 Camera 1 🕑 2
Camera / Preset 2
Camera / Preset 3
Camera / Preset 4
Camera / Preset 5
OK Cancel

Preset

Select the camera and preset on that camera you would like to be activated when the event occurs.

Close the DVR program and Click on **Image Authentication**. This program deciphers images saved by the Search (see Chapter 4) or Backup Viewer (see Chapter 3.8) program, and tells you whether or not an image has been altered. You will see the below screen.

Image Path:	
C:\Documents and Settin	ngs/DVRXPV.JPG
and a state of the	the second s
	-
	and state
(refr	100
Harris	NE I STORAGE I I I I I I I I I I I I I I I I I I I
	PGA BUG
Statement Income	
Authentication Status	This is an authentic image
	This is an authentic image
Camera ID	1 2003-05-05 11:16:01
Camera ID Record Time	1 2003-05-05 11:16:01
Camera ID Record Time Modified Time	1 2003-05-05 11:16:01 2003-05-05 18:54:21
Camera ID Record Time Modified Time Organization Computer ID	1 2003-05-05 11:16:01 2003-05-05 18:54:21 DVR
Camera ID Record Time Modified Time Organization Computer ID Windows No.	1 2003-05-05 11:16:01 2003-05-05 18:54:21 DVR 55394-648-4625396-23909
Camera ID Record Time Modified Time Organization Computer ID Windows No.	1 2003-05-05 11:16:01 2003-05-05 18:54:21 DVR
Camera ID Record Time Modified Time Organization Computer ID Windows No.	1 2003-05-05 11:16:01 2003-05-05 18:54:21 DVR 55394-648-4625396-23909
Authentication Status Camera ID Record Time Modified Time Organization Computer ID Windows No. Resolution	1 2003-05-05 11:16:01 2003-05-05 18:54:21 DVR 55394-648-4625396-23909 640 * 480

Click on this button to select an image from your files. With real unaltered images, the image information appears as shown above. If an image has been altered however, nothing will appear; the table underneath the image will remain empty.
Should you wish to print the image, click on this button.
Clicking on this button will end the program.

Backups can be done manually by date and time, or be done automatically using a Backup schedule (see chapter 3.5). Close the DVR program and click on **Manual Backup** to view the below screen.

BACKUP	
 ≥ 2005/09/04[D:] ≥ 2005/09/04[D:] ≥ 2005/09/06[D:] ≥ 2005/09/ <l< td=""><td>9 ÷ 22 ÷ 0 ÷ 0 ÷ Day Hour: Minute 9 ÷ 22 ÷ 23 ÷ 59 ÷ 3 4 5 6 7 8 11 1 12 13 14 15 16 19 20 21 22 23 24</td></l<>	9 ÷ 22 ÷ 0 ÷ 0 ÷ Day Hour: Minute 9 ÷ 22 ÷ 23 ÷ 59 ÷ 3 4 5 6 7 8 11 1 12 13 14 15 16 19 20 21 22 23 24
Clear Select	

Backup Process

Select the date for backup. Choose the camera, date, hour and minute for the backup. The window on the right will show the progress of the backup once it has begun.

Backup Directory

A folder should be created as the location to save the backup to. Locate this Folder using the drop down menu. Double click on it in the window underneath.

Auto Startup: Activates the backup automatically according to the present settings the next time the DVR Backup is opened.

Clear	Erase all settings.
Select	Allows you to enter the start and stop times for the backup.

	Start the backup according to the current settings.
	Stop the backup process.
0~	Run Backup Viewer (see chapter 3.8.1)
	View Backup logs.
Zzz	Switch the backup program to standby mode. (If Automated Backup has been setup, then the manual backup program must be active and left in standby mode in order for it to run.)
Ċ	End the backup program.

3.9.1 Backup Viewer

The operation of the backup viewer is identical to that of the Search, except you must select the file from which to retrieve the backup data.



Select file from which to retrieve the backup data. See chapter 4 for search operation.

4. Search

To search you must exit Setup and return to the Main screen. Click on **Search** in the bottom right hand corner. The following window will open.



You may search single or multiple image data according to date, time and camera. Images can be saved separately and can also be printed.



Click on Date to display the calendar. All dates in red contain video data. Choose the specific date to search. Click on Go To to search for an image on a specific date and time and from a specific camera. The date, time, camera number and image format shown underneath these buttons apply to the image currently displayed.

When you click on Go To you will be prompted to enter a specific day, time and camera number. Click on Go To once you have entered the information and the corresponding image will be displayed. If the exact date and time entered has no data, the data from the closest date and time will be displayed.

r		
B	Burn CD Smart Search Save As Print AVI Save	The Burn CD button launches the CD burning utility. (See Appendix C) Clicking on Smart Search launches the smart search utility (see chapter 4.1) Click on Save As to save the current image displayed, as a JPEG. Clicking on Print, prints the current image displayed. AVI Save saves motion picture images as an AVI file. (See chapter 4.2)
С	Select Panel	Clicking on Search displays the Search menu (see D). Clicking on Image Tool displays the Image Tool menu (see D).
D		Using this Search Menu you can play; both in forward and reverse and search image by image; again both in forward and reverse.
	Sharpen Zoom Soften Original B & W Cancel	Using the Image Tool menu you can zoom in and out, sharpen and soften the image, return the image to its original, change it to Black and white, and cancel - take an edited image back one step in the editing process.
E	POWER	Click to exit DVR Search.
F		Indicates either camera mode or sound mode.
G	$ \begin{array}{c} 1\\ 2\\ 3\\ 4 \end{array} $	Use the arrows to scroll through cameras 1-4, 5-8, 9-12 and 13-16.
H		The hours are shown along the bottom of the graph, the minutes on the top. The blocks indicate which hours have data saved for each camera (camera numbers are on the right of the graph - see G). Click on a block to view the data from the specific camera; the minutes under which there is data saved will be shown by a white square. The red square indicates the image being played back on screen. In order to view these images you must first login as a user setup for access.
Ι	List Bookmark	Click on "Bookmark" to save the location of the video that you are currently viewing. To review bookmarked video click on "List" then select the desired video .

After locating an image in the search screen, click on Smart Search. You will see the below screen.

Smart So	arch					X
			Motion Text From : To : Camera : Sensitivity :	9/16/2005 9/16/2005 CAM 2 • High • 80	▼ 5.00:00 PM 5.59:59 PM *	
No.	Date/Time	Camera	Clear Area Play	Skip Frame : 0	Search Stop	

This search looks for motion within a time period. You can select areas within the image to search for motion. Use the mouse to select the zones you wish to search within. You can select as many zones as you need. To clear the zones, click on **Clear Area**.

Search

From and To: Specify the time period for the search. Camera: Select the camera to search. Sensitivity: Specify the recording sensitivity for the area being searched.

Sensitivity levels range from High:60 and Middle:40 to Low:20. By directly inputting the value, the results may differ. The higher the sensitivity is set, the longer it will take to complete the search. The frame rate will also impact the length of time it takes to search.

After setting the parameters, click on Search. Clicking on Stop will stop the search.

<u>Play</u>



Controls for Reverse play, Play and Stop .

Skip frame: Specify the number of frames to be skipped during playback.

Save: Save a frame to a specific directory. If the video was recorded in MJPEG, the image will be saved as a JPEG. If the video was recorded in MPEG, the image will be saved as a bmp.

Print: Print a specific frame.

Close: Close the smart search window.

On the right side of the screen select the AVI Save button. The following window will open:



Start Time / End Time

Enter the Start and End time for the period of video that you wish to save.

<u>Camera</u>

Select the single camera that you wish to save video from, or multiple cameras. An AVI file will be created for each camera that you select.

Save Directory: Set to C:\Mydocuments by default. If you change this directory the file will not appear in the burn CD tool.

Format: It is recommended that the MP4+exe format be used.

Click the **Start** button to start the save process. Data will continue to be saved until the end time specified is reached. Should you wish to end saving early, click on **Stop**. All data from the start time to the point you click Stop will be saved.

To burn the exported file to a CD, you must close the search screen.

Refer to Appendix C for instructions on completing the CD burning process.

Refer to Appendix D for viewing the exported file.

Support of TCP/IP Protocol (PSTN, ISDN, ADSL etc.)	Use any of the communication protocols to log on to the DVR.
Real-Time Monitoring	Log on to the remote client to watch live video from the DVR.
Searching and Recording DVR data	Search recorded data from the DVR and save it on the remote computer.
Two way Voice Communications	Use the remote client to send audio to and receive audio from the DVR.
PAN / TILT / ZOOM / FOCUS Remote Control	Control the PTZ cameras from the remote client.
Change DVR Settings Remotely	Use the remote client to turn on/off cameras, change recording schedules and reset sensors.
Notify (Automatic message alert from DVR)	The remote client is automatically started upon a DVR event - if motion is detected or an alarm triggered.
Compatible O.S.	Windows 98 / ME / 2000 / XP System.

6. Remote Client Installation

Remote Client

Insert disc. Click on Install Remote client 6.0. Follow the instructions clicking on next as the windows appear.

When the below window appears, click on Continue Anyway.

Hardwa	re Installation
<u>.</u>	The software you are installing for this hardware: Sound, video and game controllers has not passed Windows Logo testing to verify its compatibility with Windows XP. (<u>Tell me why this testing is important.</u>) Continuing your installation of this software may impair or destabilize the correct operation of your system either immediately or in the future. Microsoft strongly recommends that you stop this installation now and contact the hardware vendor for software that has passed Windows Logo testing.
	Continue Anyway STOP Installation

Once the process is complete, you will see the below window. Choose **Yes, restart my computer now** and click on **Finish**.


7. Remote Client

7.1 DVR Login & Configuration

7.1.1 First time login & configuration

Double click on the SafeGuard Remote Client icon below.



on your desktop. The log in window will appear as



Click on **New** and you will be taken to the following screen.

Password	
Confirm P/W	

Input the desired user details in the appropriate windows - Login name, Description and Password. This information does not have to match what is on the DVR. Next to Confirm P/W retype the password you entered in the field above. Click on OK to continue.

The following window will open.

Site name	IP/Tel no.	Method	1

You will need to register your site information in this window. Click on **New** to create a new DVR site. The below window will open.

Site name	USA-DemoRoom
Method	MODEM Property
IP/Tel #	14089438819
User name	1
Password	*

You must complete all fields in the window.

Site name: Enter a name for the site. Site names are not allowed to be repeated.

Method: Choose from the drop down menu -

Select TCP/IP for LAN, Cable Modem and ADSL

 ${\small Select} \; {\small Modem} \; {\small for} \; {\small PSTN} \; {\small Modem} \\$

Select Server for an IP Server.

IP/Tel #: Enter the IP address or telephone number (for PSTN Modem) of the DVR.

User name and **Password**: This user information has to match one of the users already entered on the DVR and they must have permission to access video over the network.

Click OK.

You will be returned to the previous window and the site information you have created will be displayed in the table.

Site name	IP/Tel no.	Method	
Show Room	192.168.1.11	TCP/IP	

To add, edit or delete a site

Highlight the site by clicking on it with the mouse. Do not edit or delete a site while SafeGuard Remote Client is running.

Edit: You will be returned you to the previous window, where you can make all the necessary changes. Click on **OK**. **Delete:** The site information will be removed from the table.

New: Add further sites under the new user name.

To save your settings and continue, click on **Close**.

Change login password
Add, Delete and Edit site information
Setup connection mode
Display configuration
Delete current user

Change login password: Change the passwords of remote client users

Add, Delete and Edit site information: Register or edit site information

Setup connection mode: Set the connection mode; single site or multi sites

Display configuration: Set up the initial display screen, assign a directory to save data and a file name to save system logs and set up captions

Delete current user: Delete the user information that you are logged on with and will be returned to the initial login window.

Click on Setup connection mode.

Setup Connection Mode			
Single site connect	t		
Site name	dvr	•	
Connect on login	2		
C Multiple site conne	ct		
		OK	Cancel

Single site connect: Select if you are only connecting to one DVR.

Site name: Choose the single site that you wish to connect to from the drop down menu.

Connect on login: All cameras start transmitting automatically. If you choose single, it is recommended (for broadband users) that you check Connect on login. If left unchecked, users will have to click the camera button manually to start transmission.

Multiple site connect: If there is more than one DVR site that you wish to connect to, choose multiple.

Once you have entered your choice, click on **OK**. If you chose single site connect you will be returned to the previous window, if you chose multiple site connect, you will see the following window.

os	Site name	Camera number(s)	Pos	Site name	Camera numb	er(s)
⊽ 1	11	• 1 •	9	[Not Used]	• 9 •	
₹ 2	11	- 2 -	□ 10	[Not Used]	• 10 •	
₹ 3	11	• 3 •	□ 11	[Not Used]	• 11 •	
₹ 4	11	• 4 •	□ 12	[Not Used]	• 12 •	
₹ 5	11	▼ Partial ▼ 5,6,7	3 🗆 13	[Not Used]	• 13 •	
₹ 6	11	▼ AII ▼	I4	[Not Used]	• 14 •	
7	[Not Used]	• 7 •	□ 15	[Not Used]	• 15 •	
8	[Not Used]	▼ 8 ▼	□ 16	[Not Used]	• 16 •	

Pos: Each number corresponds to the positions of the images on your main screen. Checking the box will allocate whichever site name and camera number you choose, to that position on your main screen.

Site name: Select the site which you want to be able to view cameras from.

<u>Camera number(s)</u>: Select the camera at that site that you wish to view. You also have the option to choose **Partial** or **All**. If you choose All, all the cameras of that DVR site will show in rotation in the chosen position. If you choose Partial, the window next to it will become active. Enter into this window, the numbers of the cameras that you wish to view in this one position eg. If you enter 1, 3, 6 in this window, cameras 1, 3 and 6 will show in rotation, in the order

you enter them, in the one position. Click on **OK** to save changes.

Return to the Configuration setting window, and click on **Display configuration** to open the below window.

Display Configuration		
Initial view	4 Screen	
Data location	D\\	Browse
Log file	C\nettxt	Browse
Switching interval	4 Second	
On screen display	•	
Position r	umber 🔽 Site name 🔽 Cam	era No/Name
Name display	Always	
Use IP Server	Code 00001 Server	63.198.200.243
	OK	Cancel

Initial view: Select the number of screens you wish to see when you log in to the remote client. You can choose to see a 1, 4, 6, 9, 10 or 16 screen division.

Data location: Click on Browse to select the location you wish data to be saved.

Log file: Set by default at C:\dvslog.txt. You can also create your own file name to save system access logs. Select it using the **Browse** button.

Switching interval: Applies to the time between which images will change on one screen. Input the desired number of seconds.

<u>On screen display</u>: Choose the features you would like to see displayed on your main screen by checking those you want - **Position number**, **Site name** and **Camera No/Name**.

<u>Name display</u>: Select **Always** if you want to see the features displayed at all times, or **On mouse-over** if you want to see them only when the mouse is held over the particular screen.

Click OK to save and close, and click on Close in the Configuration setting window.

7.1.2 Edit configuration settings

Double click on the SafeGuard Remote Client icon on your desktop. Enter your Login name and password and then click on **Edit**.

LOG IN NAME	-
LOG IN P/W	
	Minimized screen

You will see the Configuration setting window discussed in Chapter 7.1.1. Follow the instructions described p34 -

Remote Client

Double click on the SafeGuard Remote Client icon on your desktop. Enter your **Login name** and **password**. The main screen will appear according to your configuration.



D	Camera Control Image Control	Clicking on each of these buttons will toggle between the corresponding menus located in section E.
	Compression Rate	
E	1 2 3 4 5 6 7 8 9 10 Preset Tour Power 1 Power 2 Power 3 Power 3 200m € Pocus € 1 Image: Constraint of the second s	Camera Control menu. Clicking on Preset will display the preset buttons; 1-10. These numbers correspond to preset camera views. Clicking on them will move your on screen camera view to the preset view. (Only available with a PTZ camera.) Click on Tour to activate on your screen, your chosen sequence of presets. Clicking on A/P will activate a preset auto pan from one point to another. (Only available with a PTZ camera.) The power buttons can be used to activate features on the camera eg. a light. Use the + and - buttons to adjust the zoom and focus. The bottom menu is the PTZ control menu. The number in the centre of the menu indicates which camera is being controlled. Use the grey arrows underneath to switch between cameras. The arrows around the outside control the view of the camera.
	HIGH SPEED	Compression Rate menu. Click on the High speed arrow to increase the rate of data transfer but to decrease the image quality. Click on the Low speed arrow to decrease the rate of data transfer and increase the image quality.
	+ + Bright. Cont. 127 127 + 127 Sat. O 127 Hue	Image control menu. You can adjust the brightness, contrast, hue and saturation using the + and - buttons. The number in the centre of the menu indicates which screen is being adjusted. Change screens by clicking on the arrows underneath.
F	POWER O	The Power button turns off the DVR Net main program.
G	C Local Search Remote Search Remote Setup	Click on Local Search to search through data saved on the remote client. Click on Remote Search to search through data saved on the DVR and save the data on the remote client computer. Click on Remote Setup to change the DVR settings through the remote client.
Η	Sound Control	Use these buttons to enable voice communication between the DVR user and remote client user. Moving left to right: Send voice, Receive voice, Send and receive voice, Cancel.
Ι	1234567890123450	The numbers in the top row correspond to the cameras. The bottom row indicates whether or not a camera is connected. A yellow button indicates a connection, a white button, no connection. The connection can be turned on and off by clicking on the buttons.
J	Relay Port (1) (2) (3) (4	Clicking on the numbers turns the corresponding relay on or off.

Click on Local Search in the main SafeGuard Remote Client screen. The following window will appear.

20020522 -		1
test2		
Select search da	ata	
Saved while	viewing	
Saved while	searching	

Saved files by date: Select the date to view video (YYYYMMDD). In the window underneath, the name of the sites where the video was recorded will appear. Select the site you wish to review by clicking on it.

Select search data

Saved while viewing: Search images that were saved from live video

Saved while searching: Search for images that were saved while searching recorded images.

Once you have defined your search click on **OK**. You will see the below screen.



Refer to chapter 4. Search, in the DVR Server section for instructions on the operation of the remote client Local Search screen.

Click on **Remote Search** in the main SafeGuard Remote Client screen. The following window will appear.

Select search test2	SIL		-

Your registered sites will show in the window. Select the site that you wish to search by clicking on it. Click **OK**. You will see the below screen.



Refer to chapter 4. Search, in the DVR Server section for instructions on the operation of the remote client Remote Search screen.

Click on **Remote Setup** in the main SafeGuard Remote Client screen. The following window will appear.

		X
Select a site to setup		
mpt dvr		
	OK	Cancel

Select the site you wish to setup and click on **OK**. You will be taken to the DVR Setup screen (see p.5). Refer to the instructions Chapter 3, p.5 - 25 for instructions on DVR Setup.

NB. Some features are not available using remote access.

The DVR can be set to notify a remote client of events. See Chapter 3.2 System Setup. The remote client will register the notification by highlighting the position of the camera where the event occurred in red on your main screen. If you have more than camera view rotating in one position, the position will be highlighted and it will show the camera where the event occurred. In the top right hand corner of the screen, under Event notification, the position number, type of event - motion or sensor and time of the event will be specified. If the program was minimized, it will automatically be maximized.



8. Remote web viewing instructions

To connect to your DVR Server and view the cameras through the web, first open Internet Explorer. Type in http://ipaddress:portnumber eg. http://64.57.222.94:99 and the login window will appear. The username and password used for access will be the ones already configured to access the server.

Enter your login and password



Similar to the DVR server you have access to multiple screen divisions, PTZ and Image control.

Click on search and the following screen appears.



The Calendar is displayed in the top right hand corner. All dates in red contain video data. Choose the specific date to search. Select which camera you would like to view. The hours are shown along the bottom of the graph, the minutes directly above. The hour blocks indicate which hours contain video data. Click on a block to view the data; the minutes which contain video data will be shown by a square. Click on the desired minute. The red square indicates the current image being viewed.



Playback speed; Stop; Play; Next Frame.

```
SAVE AS
```

Saves a still image in a selected directory as a bitmap.

AVI SAVING	Saves the selected video as an AVI file. Find the beginning of the desired video and click on "Stop". Enter the directory you want the video to be saved, under "Folder
c:\	Name". Click on "AVI saving". The name of the file will appear under "File Name". Click on Play, when the desired section of video has elapsed click on Stop then
FILE NAME	"AVI saving".

Ð	Increases the size of
-+	December 11 and 11

the image.





Note: If the active x is blocked by Internet explorer . Add the IP address to the trusted sites as follows.

- Click on "Tools". 1.
- Select "Internet Options". 2.
- Select "Security". 3.
- Trusted sites 4. Click on "Trusted sites".
- 5. Click on "Sites"
- 6. Enter the IP addresses of the DRV under "Add this Web site to the zone:"
- Uncheck "Require server verification (https:) for all sites in this zone". 7.
- Click on "Add". 8.
- Click on "OK" 9.
- 10. Click on "OK"

Trusted sites
You can add and remove Web sites from this zone. All Web sites in this zone will use the zone's security settings.
Add this Web site to the zone:
64.57.222.94 Add
Web sites:
Require server verification (https:) for all sites in this zone
OK Cancel

8.1 Quick Connect Client

Installation:

- 1. Insert Disk and click on "Install Quick connect V 1.0". 2. Click Next.
- 3. Enter the Serial # located on the CD Case, then click next.
- 4. Keep clicking next when prompted then click finished.

Operation: 1. Select either serial # or IP address (If the serial # is used the IP address will be updated automatically.

2. Enter the serial# / IP address

- 3. Enter the user name and password used to access the DVR.
- 4. Click on login

SafeGuard Quick Client v1.0				
Please Log	gin			
⊙ Serial # ⊂ IP	SG161202222 More >			
User Name :	mpt			
Password :	****			
	Remember my password			
	Cancel Login			

5. The following screen will appear.



Connection: Used to switch to a different site and disconnect

Views: Select different screen divisions.

Screen: Select different screen sizes.

About: Version information.

Appendix A

System Recovery: Resetting the DVR to factory defaults. Restoring A SafeGuard DVR Image.

- 1. Reboot/Reset System (press the RESET button or power OFF/ON)
- 2. When Unit Pauses at: 'Please Select The Operating System To Start', use the up/down arrow keys to select: **Recovery**.
- 3. The Safeguard Recovery Wizard will start.
- 4. Click Next.
- 5. Click on **Restore default settings**.
- 6. The system will reboot automatically. Allow to boot normally.
- 7. Redo any customizations, like passwords, motion areas, scheduling etc.

Appendix B

Setting the date and time of the DVR.

1. Stop the DVR server program by pressing the **exit** button of the main camera view program. (It will ask for a user and password to exit)



- 2. On the taskbar double click on the time.
- 3. A dialog box similar to the one below will appear. Set the time and date as required.

ate Vov	embe	er 💊		2003	3	\$	-Time -		
s	М	т	W	т	F	s	1		
						1	÷	1	-
2	3	4	5	6	7	8	1		1
9	10	11	12	13	14	15	•	/	1
16	17	18	19	20	21	22		·	
23	24	25	26	27	28	29			
30								5:38:49 PM	\$
						andard			

4. Select **OK** when completed then restart the DVR server program using the shortcut on the desktop or the start menu.

Appendix C

Burning image data onto a CD



Click on the Burn CD button in the main screen. The following window will open.

					D: 2448/2732 09-16-2005 11:04:04
	SAFEGUARD BURNCD V1.2		Oate	= TTTX 9	
	File Name	Date	Size		Camera Control Image Control
	Cam01(2005_09_27 15_00_06~2005_09		104,428 KB		
Statements of the statement of the state	Burn To CD		Delete Cancel	ā	A/P Power 2
			-		Power 3 ZOOM + FOCUS +
Ver. 11.01.0C - 16 CH					
SAFEGUARD		10 11 12 13 14 15 16	Burn CD Setup		

All files that you have saved in the search screen, will show in the window. (Files must have been saved in the C drive or in My Documents.)

Select files to either 'Burn to CD' or 'Delete'. You may exit by clicking on Cancel.

After selecting the files, click on Burn to CD. The following window will open.



Enter any name for the CD. Click on Next.

The following window will open to show you how the burn process is progressing. Once completed the CD will be ejected automatically.

CD Writing Wizard Please wait		S
Preparing the files for the writing pro	cess	
Estimated time left: 20 seconds		

Appendix D

MP4 Viewer

If the MP4+EXE option was selected when the video clip was saved, the file should appear as follows.



The file name specifies the camera #: 11, Year: 2005, Month: Oct, Day: 17th, Time 9:01:39 am the video clip started. The date and time following the \sim is the end of the clip.

Double click on the file and the following screen appears.

Return to the beginning of the clip.
Progress bar.
Volume control.
Previous frame; Play; Pause; Next frame.
Previous frame; Play; Pause; Next frame.
Rewind; Fast-forward; Speed.
Rewind; Fast-forward; Speed. Exit.

Note: If you selected AVI format or MP4 format (with out exe) you must refer to the manual of the viewer that you are using.

Appendix E

Relay Output and Sensor Input Setup



Sensor & Relay (Digital I/O)			
Pin name	Pin number		
Sensor Input 1~16	1~16		
Input Common 1~2	17, 18		
Relay (Digital) Output 1~4	19~22		
Output Common 1~2	23, 24		

Appendix F

Router, Firewall and Proxy Setup.

If the DVR accesses the internet through a router, firewall or proxy server. The following ports must be opened. 99, 3000, 3001, 3003, 8800.

Appendix G

IP Tracking.

If IP tracking is required go to www.mptdigital.com click on "Support" then "DVR Remote Login". Enter the serial # of the DVR you would like to connect to. Enter the first five digits of the windows serial #(located on the case of the DVR) for the password. Click on login. Your current IP address will be displayed. If you would like to use the Web viewer click on the ip address and refer to Chapter 8 for web viewing instructions. For the remote access software copy the address and enter it into the software. Refer to chapter 7.1 for Login and configuration instructions.