CCTV42 System2 DVR

User Manual

For H.264 4/8/16 channel digital video recorder

CAUTION

- **Please read this user manual carefully to ensure that you use the device correctly and safely**
- **The contents of this manual are subject to change without notice**
- **This device should only be used with the supplied power transformer. Check mains input voltage is correct before using. If you intend to leave the DVR off for a long time remove the plug from the mains socket**
- **Do not install this device near any heat sources such as radiators**
- **Do not install this device near water. Clean only with a dry cloth**
- **This machine is for indoor use only. Do not expose the DVR to rain or a damp environment. In the event of any foreign substance entering the machine's case cut off the power supply immediately and have it inspected by a qualified technician before restarting**
- **Do not block any ventilation openings, allow sufficient ventilation around the machine**
- **Do not power off the DVR whilst it is recording. Select "shut-down" on the right of the menu bar to exit Turn off the power when shutdown is complete**
- **Refer all servicing to qualified service personnel, there are no user serviceable parts within this product**
- **This manual is suitable for CCTV42 System2 digital video recorders. All examples and pictures may vary slightly depending on which version on the DVR is being used**

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1 Introduction

1.1 DVR Introduction

Your CCTV42 System2 Digital Video Recorder (DVR) is designed specifically for CCTV systems. It uses high performance video processing chips and an embedded Linux system. It incorporates many of the most advanced technologies such as H.264 compression CODEC, Dual streaming, SATA interface, high resolution VGA output, mouse operated graphics based user interface, Internet Explorer hosted remote access and control over the internet or your local network as well as full functionality mobile phone access. The System2 DVR from cctv42 has powerful functions, combine this with high stability and it becomes suitable for a diverse range of applications including retail outlets, offices, factories, warehouses, homes etc.

1.2 Main Features

COMPRESSION FORMAT
• H.264 compression CODEC with variable bit rate to maximize hard drive storage times whilst maintaining image quality

LIVE SURVEILLANCE
• HD VGA output up to 1280 x 1024
• Enhanced security for office / retail with covert masking of live display option
• Displays record state on screen
• USB mouse control. Wireless mouse option available

RECORD MEDIA
• 4 & 8 Ch DVRs Support a single hard drive up to 2TB, 16Ch supports a maximum of 2 hard drives, each 2TB

BACKUP
• Supports USB 2.0 devices when making backup copies
• Saves recorded files in AVI format when remote accessing over the internet

RECORD & PLAYBACK
• Record modes: manual, scheduled, motion detected and alarm sensor triggered recording
• Auto recycles hard drive when full
• Resolution, frame rate and picture quality are all individually adjustable
• 4 audio input channels
• Search recorded footage using either time search or event search
• Deleting or locking of individual files
• Remote playback over local area network (LAN) or internet

ALARM
• 1 channel alarm output and 4/8/16 channel alarm inputs, 4ch/8ch/16ch DVR
• Schedule when motion detected or alarm sensed recording takes place
• Stores pre and post event recordings
• Select which camera or cameras record when motion or alarm is triggered
• PTZ camera can be sent to a preset point or on a tour following a motion or alarm trigger

PAN / TILT / ZOOM (PTZ) CAMERA CONTROL
• Supports a wide range of PTZ protocols and baud rates using RS485
• Supports 128 PTZ presets and 8 auto cruise tracks
• PTZ camera movement can be controlled over the internet using a computer or mobile phone

SECURITY
• Custom user access rights
• Log search, system setup, two way audio, file management, disk management, remote login, live view, manual record, playback, PTZ control and remote live view to keep track of who does what and when
• 1 administrator and 15 users with individually selectable access rights.

NETWORK
• Supports TCP/IP, DHCP, PPPoE & DDNS protocols
• Internet Explorer hosted browser for remote viewing over the internet
• Select the maximum number people who can remote access the CCTV system at any one time, bar individual IP addresses and see who is remotely accessing the DVR in real time

• Dual stream. Resolution is adjustable remotely dependent on network bandwidth available
• Instant “Snap” picture facility when remote viewing
• Screen colours and be adjusted locally when remote accessing the CCTV system
• Remotely search for footage on the DVR using time or event based searches
• Remotely control PTZ camera movements as well as preset points and auto cruise tours
• Remote access to the full setup menu. Change DVR settings remotely. This allows greater support from CCTV42
• Mobile phone access using Symbian, WinCE, iPhone, Blackberry, Android – including Gphone over WiFi hotspot or 3G network
• Supplied with CMS software which allows several CCTV42 System2 DVR recorders to be accessed over the internet

2 Hardware Installation

If you ordered your DVR and hard drive together from CCTV42, we will already have taken care of this. We install your hard drive, format it and then configure the basic settings on the DVR prior to shipping so it turns up plug and play ready to go out the box.

***Notice**: Check the unit and accessories when your DVR arrives to familiarise yourself with them*
Disconnect from the power before making or removing any connections. Do not hot plug in/out

2.1 Installing the Hard Drive

2.1.1 Hard Drive installation – hard drives ordered at the same time as a DVR will already have been installed free of charge by cctv42.

***Notice**: 1. The 4 & 8 channel DVRs support one SATA hard drive up to a maximum capacity of 2TB. The 16 channel DVR supports 2 hard drives up to 2TB each. For the avoidance of doubt standard computer SATA hard drives are not designed to be used in DVR recorders. You need specific hard drives for this application.*
2. Hard drive capacity will vary according to the recording settings used. Refer to “Appendix B” to calculate recording times available from a given sized hard drive.

Step 1: Unscrew and open the top cover of the DVR
Step 2: Connect the power and data cables to the hard drive. Place the HDD onto the bottom case as below.

Step 3: Screw the HDD as below.
Note: For ease of installation connect the power and data cables first and then screw the hard drive to chassis.

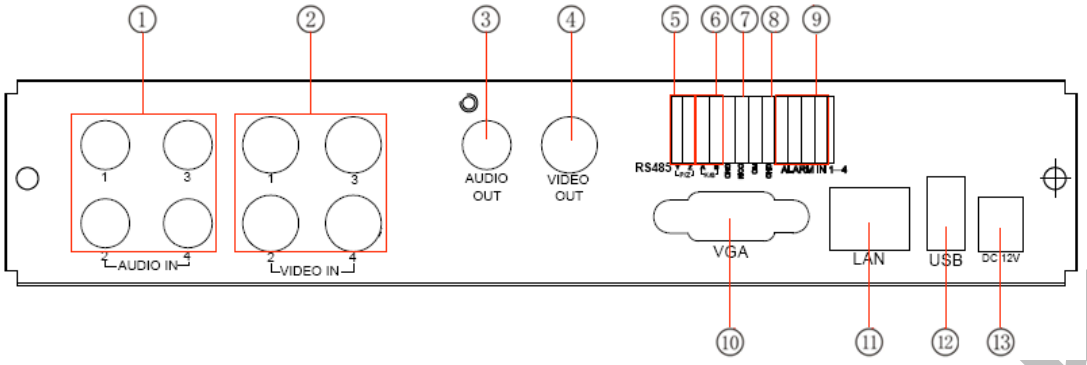
2.2 Front Panel Instructions

Item	Type	Icon	Name	Description
1	Compound button	REC	REC	Record manually
		MENU/+	MENU/+	1. Enter menu 2. Increase the value
		BACKUP/-	BACKUP/-	1. Enter backup mode 2. Decrease the value
		SEARCH	SEARCH	Enter search mode
		⏯	PLAY /PAUSE	1. Enter play interface 2. Pause playback
		⏩	FF	Fast forward
		⏪	REW	Rewind
		■/ESC	STOP/ESC	1. Quit play mode 2. Exit the current screen
2	Input button	Direction button		Change the selected item
		Multi-screen		Change on screen display mode to single or multi camera display
		Enter button		Confirm selection
3	USB		USB port	To connect external USB devices such as USB flash memory, USB backup HDD, USB mouse. Also used to update firmware
4	POWER	POWER	POWER	Instant switch off

2.3 Rear Panel Instructions

2.3.1 Rear Panel Interface

The rear panel interface for 4 camera System2 DVR



Item	Name	Description
1	Audio in	4 CH Audio input
2	Video in	Video camera input channels from 1-4
3	Audio out	Audio output, connect to monitor or amplifier
4	Video out	Connect to monitor
5	P/Z	Connect to PTZ camera control
6	K/B	Connect to keyboard
7	ALARM OUT	Relay output. Connect to external alarm
8	+ 5V and GND	+5 V and Ground
9	ALARM IN	Connect to external alarm sensor 1-4
10	VGA port	VGA output, connect to monitor
11	LAN	Network port connect to internet router
12	USB port	Connect USB mouse or external USB device
13	DC12V	Power input from transformer

The rear panel interface for 8 Camera System2 DVR

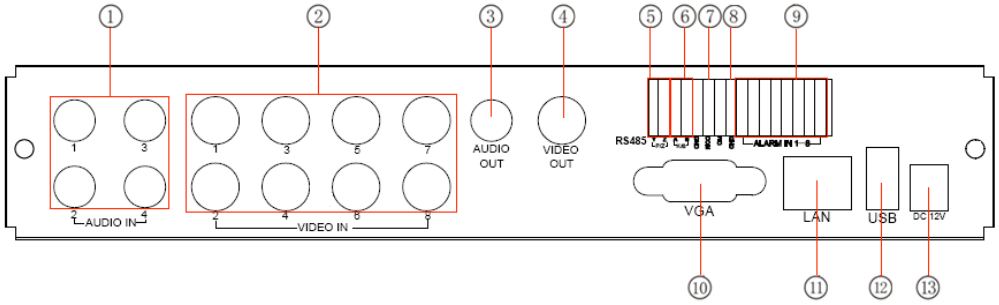
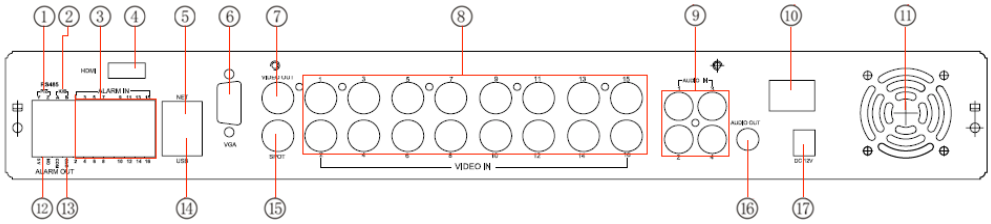


Fig 2.4 Rear Panel for 8-ch

Item	Name	Description
1	Audio in	4 CH Audio input
2	Video in	Video camera input channels from 1-8
3	Audio out	Audio output, connect to monitor or amplifier
4	Video out	Connect to monitor
5	P/Z	Connect to PTZ camera control
6	K/B	Connect to keyboard
7	ALARM OUT	Relay output. Connect to external alarm
8	+ 5V and GND	+5 V and Ground
9	ALARM IN	Connect to external alarm sensor 1-8
10	VGA port	VGA output, connect to monitor
11	LAN	Network port, connect to internet router
12	USB port	Connect USB mouse or external USB device
13	DC12V	Power input from transformer

The rear panel interface for 16 camera System2 DVR



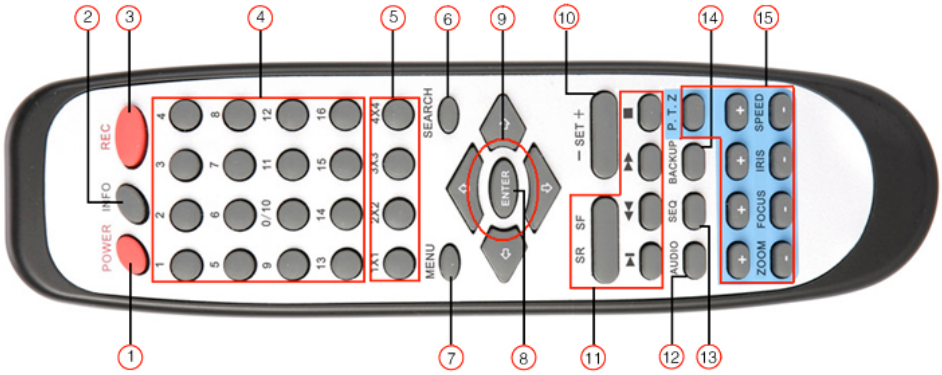
Item	Name	Description
1	P/Z	Connect to PTZ camera control
2	K/B	Connect to keyboard
3	Alarm In	Connect to external alarm sensor 1-16
4	Unused	Unused
5	LAN	Network port connect to internet router
6	VGA port	VGA output, connect to monitor
7	Video Out	Connect to monitor (BNC)
8	Video in	Video camera input channels from 1-16
9	Audio in	4 Channel audio input
10	Power	Power on/off switch
11	Fan	Fan for cooling the device
12	+ 5V and GND	+5 V and Grounding
13	Alarm Out	1-ch relay output. Connect to external alarm.
14	USB port	Connect USB mouse or external USB device
15	Spot	Connect to spot monitor
16	Audio out	Audio output, connect to monitor or amplifier
17	DC12V	Power input from transformer

2.4 Using the remote control - For ease of use we recommend using the supplied mouse rather than the remote controller

The remote requires two AAA size installed as follows:
Step1: Open the battery cover of the Remote Controller
Step2: Insert batteries taking note of the correct pole orientation (+ and -)
Step3: Replace the battery cover

***Notice**: Common remote control problems*
1. Batteries are inserted the wrong way round
2. Batteries have gone flat
3. The IR sender is obscured or not pointing directly at the DVR unit

The remote control functions are as follows:



Item	Name	Function
1	Power Button	Soft power down. Use before switching off the DVR
2	INFO Button	Get information about the DVR such as firmware version and hard drive information
3	REC Button	To record manually. DVR is shipped already recording
4	Number Buttons	Input numbers or choose camera
5	Multi Screen Button	To select multi screen display mode
6	SEARCH Button	To enter search mode
7	MENU Button	To enter menu
8	ENTER Button	To confirm the choice or setup operation
9	Direction Button	Move cursor in setup or pan/tilt PTZ camera
10	+/- Button	To increase or decrease the value in setup
11	Playback Control Buttons	To control playback, Fast forward/rewind/stop/single frame play. The stop button also escapes from the current screen
12	AUDIO Button	Enables audio output in live mode
13	SEQ Button	To enter auto dwell mode
14	BACKUP Button	To enter backup mode
15	PTZ Button	Enables PTZ camera control

Using the remote controller with multiple CCTV42 System2 DVRs
By default the device ID of your DVR is 0. When using the remote controller with a single DVR there is no need to change anything. The remote will function properly. Should you wish to use the remote controller to control multiple System2 DVRs refer to the following steps:

Step1:Make sure the remote control is pointing at the front panel of the DVR. Press “MENU” on the remote. With “Setup” highlighted press “ENTER” on the remote. Use the down arrow on the remote to highlight “Basic” and press “Enter” on the remote. Highlight “System” with the down arrow on the remote and press “ENTER”

Step2: “Device ID” will show the current device number of the DVR. To change it use the down arrow on the remote to highlight the numbered box then press “ENTER”. A keyboard dropdown box will appear. Use the remote up, down, left and right arrows to highlight the desired number(s) and press “ENTER” on the remote. Then highlight “OK” and press “ENTER” finally highlight “Apply. Your CCTV42 DVR now has a new ID number.

Step3: Having changed the DVR ID number you will note the remote no longer controls it! Fear not, there is a

solution. To change the ID control number of the remote press “8” twice, then the number you wish to assign to the remote, then “ENTER” Your remote control will now talk to the DVR again. To make the remote work with a DVR which has a different ID number simply press “8” twice, press the ID number of your chosen DVR then press “Enter” on the remote control.

2.5 Controlling your CCTV42 System2 DVR with a mouse.

2.5.1 Connect Mouse

The supplied USB mouse plugs into the port on the rear panel. We also offer an optional wireless mouse. See CCTV42.co.uk

***Notice**: If the mouse doesn't work make sure it’s is plugged into the USB mouse port on the back of the DVR not the USB port on the front of the DVR*

2.5.2 Using the Mouse

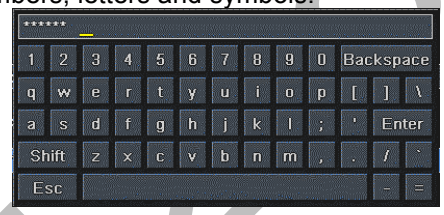
The structure of the main menu is identical to accessing via the remote control.

In live view:

Double-click the left button on a small camera view to make it full screen. Double-click to return to the previous screen display.
Right click to show the control bar at the bottom of the screen. From here you access the set up menu. Left click the far left icon to enter the main set up menu. Right click to exit a page or to hide the control bar.

In setup:

If want to input a value move the cursor to the desired box and click (left). An input window will appear as below. This particular input box supports numbers, letters and symbols.



You can change some values with the mouse wheel such as time. Move cursor over the value and roll the wheel when the value blinks.
Some screens such as the motion detection area select operate on a click and drag basis. In the start position Click and hold the left then drag to select an area. The scheduled recording screen also works in this way.
Right clicking the mouse returns you to the previous screen.

In playback:

Left click your chosen operation function. Click the” X” to return to live mode.

In backup:

Left click your chosen operation function. Right click to return to the previous screen.

In PTZ control:

Left click the choosen PTZ camera function. Right click to shut control box.

Basic Functions (assumes mouse operation)

2.6 Power On/Off

Before powering up the unit, please ensure all the connections are properly made
.

2.6.1 Power on

Step1: Connect the supplied 12 volt transformer to the DVR. Switch on your CCTV42 System2 DVR on the rear panel

Step2: the DVR will boot up and the power indicator will glow blue

Step3: On initial start up a set up wizard will be shown and this will guide you through the initial configuration settings. If you have purchased a hard drive and DVR together everything will have been done already and your DVR will arrive plug and play. When using the set up wizard refer to the relevant sections which cover each aspect of configuration.

If the menu screen is not visible when powering up you may need to swap the primary output from BNC to VGA or visa versa. To do this press and hold the "ESC" button on the front panel of the DVR

.

Note: The System2 DVR from CCTV42 is designed to only display menu settings on either the VGA monitor or BNC monitor at one time. Pressing and holding the "ESC " key toggles between the two.

2.6.2 Power off

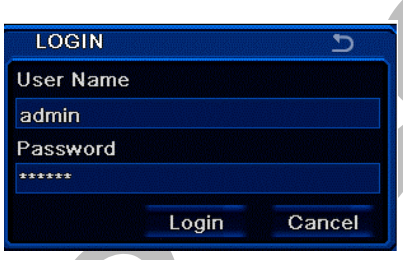
By remote control:
Step1: Press the "POWER" button, the Shut down window will appear, click OK. The unit will power off after a while.
Step2: disconnect the power

By keyboard and mouse:

Step1: enter into the Menu (right click to get the initial menu bar displayed), then select "System Shut Down" icon, the Shut down window will appear.
Step2: click OK and the unit will power off after a while.
Step3: disconnect the power

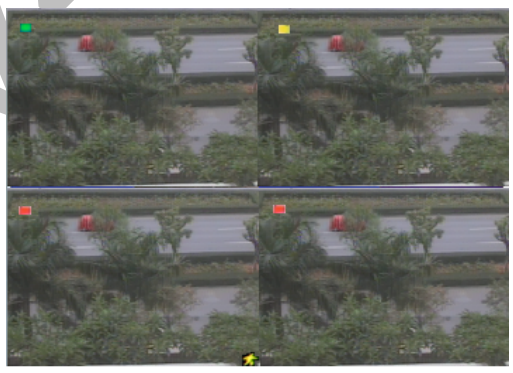
2.7 Login

When ever the DVR is powered down you must log in to ensure no unauthorized access takes place. Right click the mouse to display the menu bar. Clicking on any icon will display the LOGIN box. Enter the username and password using the pop up keyboard, click "OK" then click "Login"



- ***The default user name is "admin" (lower case) and password is "123456"***
- *See section 3.7 "User management configuration" for details of how to change passwords and user accounts.*

2.8 Live preview



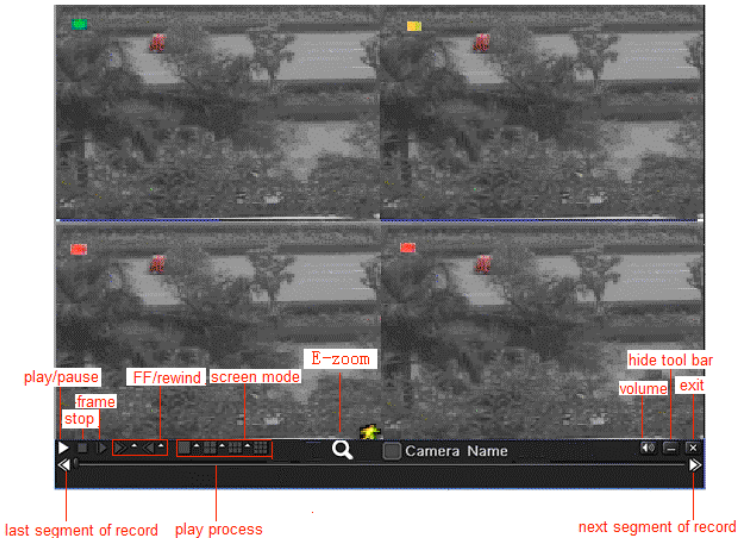
A coloured box is displayed for each camera during live preview corresponding to the following record states:

Colour	meaning	Colour	meaning
Green	Manual override record	Red	Alarm sensor record
Yellow	Motion detected record	Blue	Scheduled record

Guide to colour indicator boxes on live view

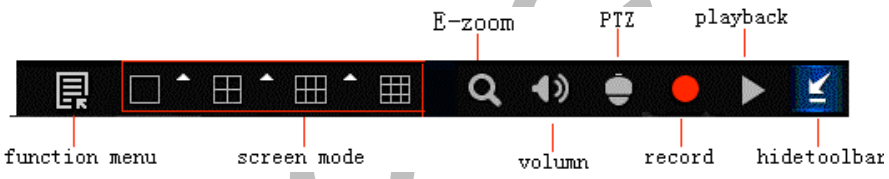
2.8.1 Live playback

Click the play button for an instant replay. On screen commands are as shown below:

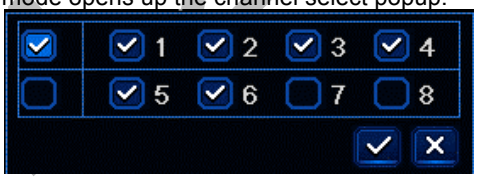


3 Main menu setup guide

Right click the mouse or press “ESC” on the front of the DVR to show the Menu control bar

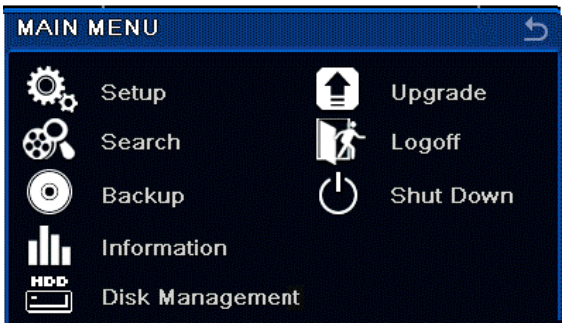


Clicking the icon beside the screen mode opens up the channel select popup:



This allows you to select which cameras are displayed. Check the box relating to an individual camera, then click button to confirm the setting.

Clicking the icon opens up the main menu screen. Pressing “MENU” button on the front panel or remote controller also opens the main menu screen.



Clicking the Setup icon displays the Setup menu:

3.1 Basic configuration

Basic configuration has three sub menus: “System”, “Date& Time” and “DST”.

3.1.1 System

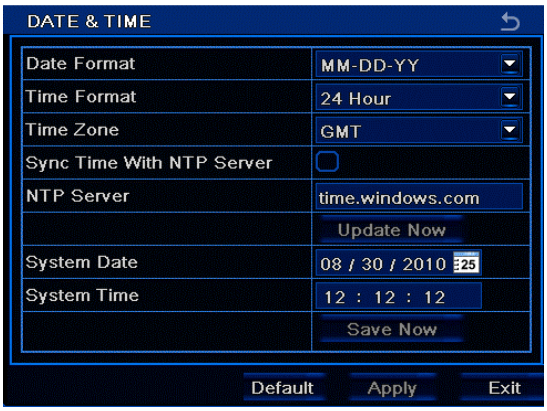
Enter system configuration via Setup, then→”Basic” then→”System”

In this interface user can setup the DVR name, DVR ID number, video format (NTSC, PAL), maximum number of online users, Video Output (VGA, BNC), language, screensaver and so on.

Device name: The name you give your DVR. This can be used to identify the DVR when remote accessing it.
Video format: There are 2 options: PAL and NTSC selected dependant on geographic location and camera type. Default is PAL
Password check: Allows you to select whether or not you have to log in to the DVR using a password. Default is checked .
Show system time: Displays the time in live view. Default is checked.
Startup wizard: Determines whether the startup wizard opens when powering up the DVR. If we Supply the DVR with hard drive installed this is defaulted to “off”
Max online uses: Sets the maximum number of users allowed when network connected
Video output: Sets the master live display and VGA resolution. VGA Options are: 800x600, 1024x768 & 1280x1024. CVBS (composite video, blanking & sync) sends master output to the BNC “Video Output”.
Language: Setup the menu language.
Note: After changing the language and video settings it is necessary to log back into the DVR.
Auto logout: User selectable between 30 seconds, 1, 3 and 5 minutes or “never”. If there is no operation within the selected time period, the device will auto logout and it will be necessary to log back in before use.

3.1.2 Time & date

Enter “Time & Date configuration via “Setup” then→”Basic” then→ ”Time & Date”

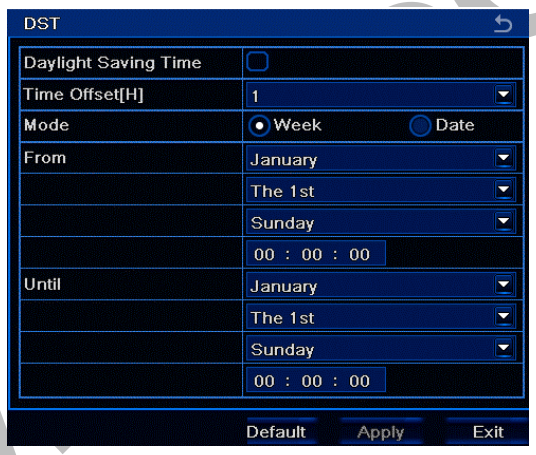


Set the Date format, time format and time zone using the drop down menu. Date and Time are set using the respective pop up keyboards.

The “Default” button restores the settings to factory default, Not as it was shipped by CCTV42 (assuming we installed the hard drive and configured the DVR. Click “Apply after any settings changes, Exit closes the screen.

3.1.3 DST (Daylight saving time) or British Summertime

Enter DST configuration via→”Basic” then→”DST”



The DST menu allows you to set a time offset for DST or British Summertime. Enable by checking the Daylight Saving Time box. Select whether the time change occurs on a specific week or a specific date each year using the drop down menu boxes. You can also select at what time of day the change takes place. Click “Apply once you are happy with the settings.

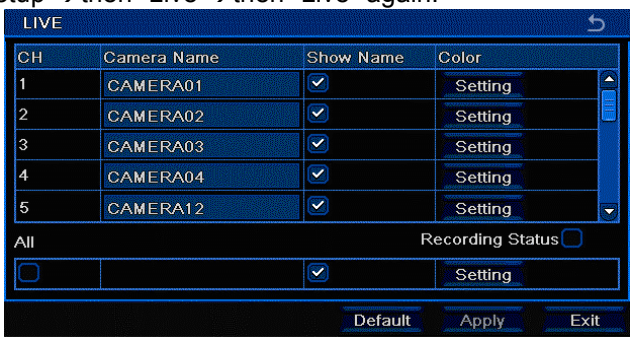
The “Default” button resets the DVR to factory settings, not the setting it was supplied with if configured for you by CCTV42.

3.2 Live configuration

Live configuration consists of four submenus: live, Main monitor, spot and mask.

3.2.1 Live

This menu allows you to select a camera name and adjust colour settings for individual channels.
Enter the “Live” menu via “Setup”→then “Live”→then “Live” again.



To display a name left click the “Show name” box. To enter a name left click the “Camera Name” box and the pop up keyboard appears. Once entered click “Enter” then “Apply” To change a camera’s colour settings left click “Setting” and the pop up shows

Individual parameters are changed by left clicking and dragging the slider for each element. Once you are happy click “OK”. Default returns the DVR to a factory setting, not the setting as supplied by CCTV42 if it was supplied with a hard drive installed.

The “Recording Status” tick box enables or disables the coloured recording status box during live viewing as shown in section 2.8 “*Live Preview*”

3.2.2 Main Monitor

From this menu you can select how the cameras are displayed on the main monitor screen. In the drop down box select how many cameras you want to see. You can then select which camera you want in each respective place, again using the drop down number menu.
Finally in this menu you can select the dwell time between screen changes (if there are any).
It is actually easier to choose your display options from the main menu bar (right click whilst viewing live footage). You also turn auto screen change on and off from here, (top row far left icon).

3.2.3 Spot monitor

From this menu you can select how cameras are displayed on the Spot monitor. The spot monitor is designed as a customer facing display. Enter the “Spot monitor” menu via “Setup”→then “Live”→then “Spot”

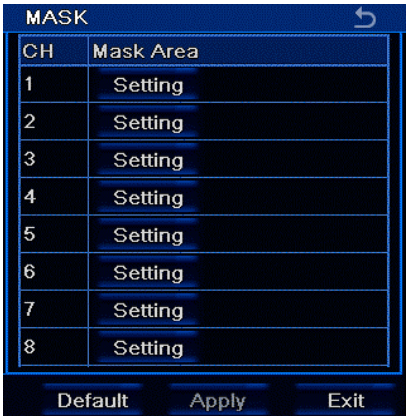
The spot monitor is only designed to display a single camera at a time. Select the camera from the drop down menu.
If you wish to scroll through several cameras press the  icon to create another page and select the camera. Keep doing this until you have listed all the cameras you wish to display. To review or change your settings you can go back through the pages by pressing the  icon.

Select the dwell time between screens from the drop down menu.
Once you are happy with your choices click “Apply”

The “Default” button returns the DVR to factory settings, not necessarily those as supplied by CCTV42.

3.2.4 Mask

This allows you to set up a total of up to 3 masked privacy areas per camera where no recording the live display takes place. Enter the “Mask” menu via “Setup”→then “Live”→then “Mask”



To setup a mask area: Left click “Setting”. The screen will then show the live image from that camera. Starting at the top left of the area you wish to mask Left click and hold, then drag the mouse down and to the right. To remove an area double left click it. Once you are happy right click to return to the “Mask” sub menu and click “Apply”

How a masked area is shown during Live view or playback

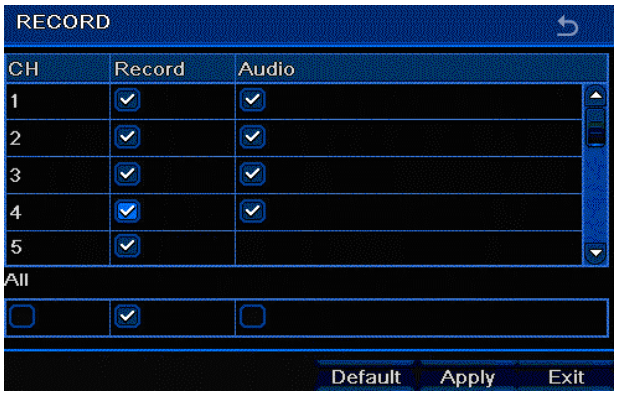
3.3 Record configuration Setup

The record menu comprises 6 sub menus: Record, Record Bitrate, Time, Stamp, Recycle Record and Snap

3.3.1 Record

This menu allows you to select whether specific cameras or audio inputs are operational. Enter the “Record” menu via “Setup”→then “Record”→then “Record”

To enable recording or audio simply check the box with a left click of the mouse. Clicking the “Default” button enables all channels.



3.3.2 Record Bit rate

From this menu you can select recording resolution, frame rate and quality . / maximum data per frame, for individual cameras. Enter the “Record Bitrate” menu via “Setup”→then “Record”→then “Record Bitrate”.

Individual settings are selected by left clicking the chosen parameter then selecting from the drop down menu. If your chosen selection exceeds available resources then the DVR will automatically adjust as appropriate.

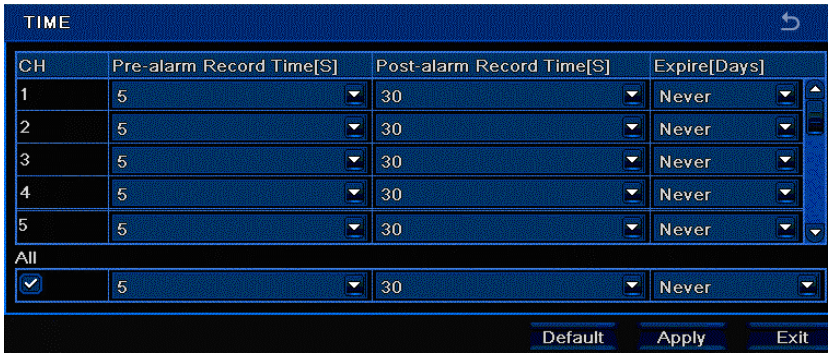
Definitions and descriptions of bitrate information

Parameter	Options and explanation
Resolution	CIF (352x288 pixels) or D1 (704x576 pixels)
FPS	Frames per second. Maximum 25 FPS (PAL), 30 FPS (NTSC)
Encode	Select CBR (constant bitrate), or VBR (variable bitrate). Selecting VBR enables the “Quality” column
Quality	The quality of recorded images. The higher the setting the more hard drive space is used which reduces the number of days images are stored.
Max Bitrate	This caps the maximum file size of each individual frame.

At CCTV42 we suggest the following as a good initial setting: Resolution “D1”, FSP “3”, Encode “CBR”, Quality “Higher”, Max Bitrate “1024”. This will give you a good point to work from and balances quality of recording with the number of days footage is stored.

3.3.3 Time

In this menu you can set the time before and after an alarm trigger (such as motion detection) that footage is recorded. Enter the “Time” menu via “Setup”→then “Record”→then “Time”.



Pre-alarm record time and Post-alarm record: Left click the respective box then select from the drop down menu. Time is in seconds.
Expire [Days] : The number of days events are stored. Be aware: If the hard drive fills up and records over it’s self before the expiry time is up events will still be lost. This setting should be viewed as “X number of days or until the hard drive records over it’s self, whichever comes first.”
All: Checking the “All” box (left click) and making selections copies those settings to every camera.
Clicking the “Default” button returns the DVR to factory settings, not those as configured by CCTV42 prior to dispatch

3.3.4 Stamp

In this menu you can choose whether to display the camera name and/or time stamp. You can also alter their positions on screen. Enter the “Stamp” menu via “Setup”→then “Record”→then “Stamp”.

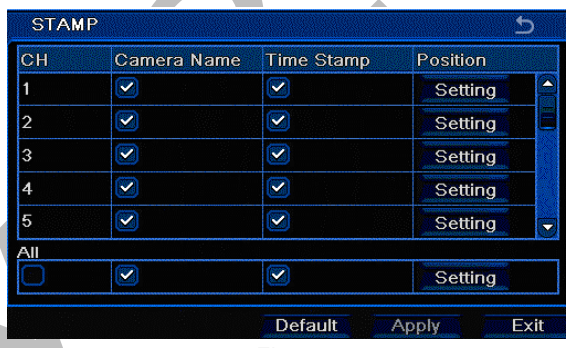
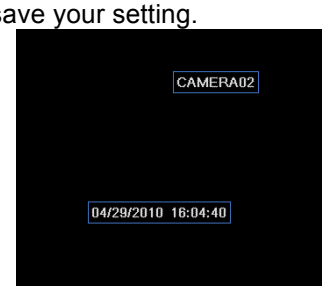


Fig 4-

Step2: To add or remove Camera Name or Time Stamp simply left click the respective tick boxes. To change the position left click the “Setting” button. This will show the live display for that camera. You can then left click and drag either the Name or Time Stamp to your chosen position. Once you are happy right click to exit the live screen and return to the Stamp menu. Click “Apply” to save your setting.

Before dragging



After dragging

Left clicking the “All” box and changing the respective settings (including the “Position” setting) implements the changes to all camera channels once the “Apply” button has been clicked.

Clicking the “Default” button restores the DVR to factory settings, not those as configured by CCTV42

3.3.5 Recycle record

This menu allows you to select whether the hard drive records over it's self once full or not. Enter the "Recycle Record" menu via "Setup"→then "Record"→then "Recycle Record".

Left click the check box to enable Recycle Record. We strongly advise against un-checking this box as the recorder will stop recording once the drive fills up.

3.3.6 Snap

This menu allows you to change the resolution and settings for emailed snapshot images following a motion trigger. Enter the "Snap" menu via "Setup"→then "Record"→then "Snap".

Left click the respective setting and select from the drop down menu. Snap Number is the number of images per trigger and Snap Time Interval(s) is the gap in seconds between each image. We recommend Resolution "CIF" (default), Quality "Highest", Snap number and time interval set to suit.

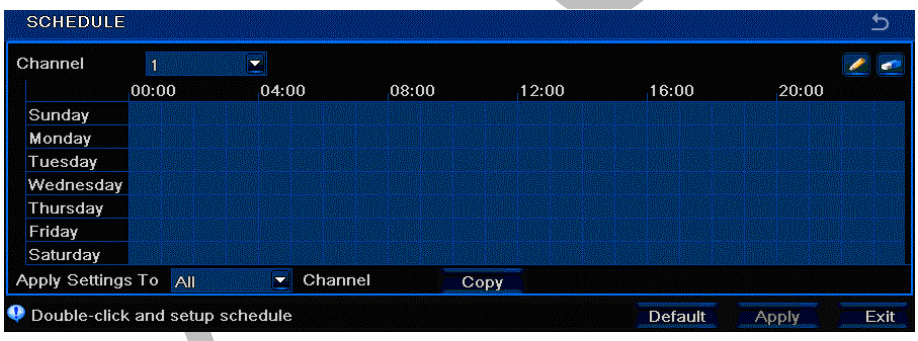
3.4 Schedule configuration

In this Menu group you can choose when certain types of recording take place. There are three sub menus: Schedule (Normal recordings), Motion (Motion triggered recordings) and Sensor (alarm sensor triggered recordings).

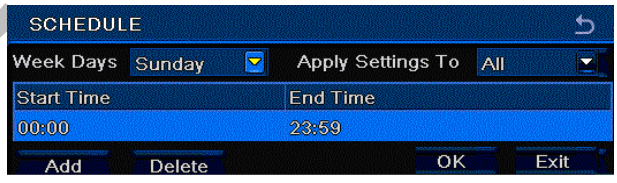
3.4.1 Schedule

In this menu you set when "Normal" recording takes place. Enter the "Schedule" menu via "Setup"→then "Schedule"→then "Schedule".

Programming is done via a grid which displays a full week, midnight to midnight. A blue area denotes recording, a black area denotes no recording at that particular time. To stop recording at a particular time left click the rubber icon then left click the relevant time on the grid. To add recording left click the pencil icon and then click the relevant time on the grid.



You can also program the schedule by specific times. Double left click anywhere on the row for a particular day to show the time input display

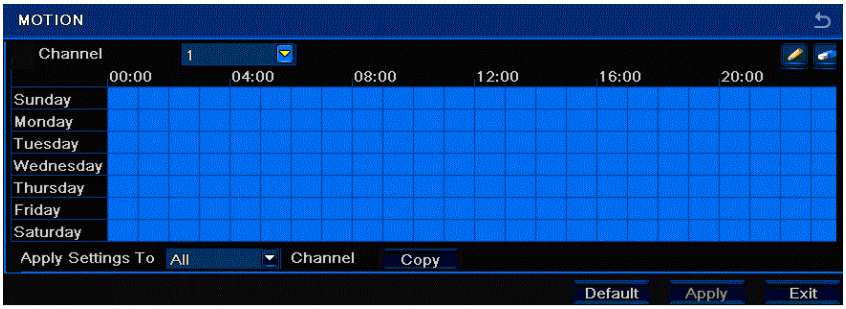


Click the "add" button and select start time and end time from the drop down menus under "Hour" and Minute". Once you are happy left click the tick and then left click the "OK" button. If you want to copy the setting to other cameras you can select an individual camera or all the cameras from the "Apply Settings To" dropdown box. Left click the "copy" button to apply your settings.

Left clicking the "Default" button in this section turns all the recording to OFF.

3.4.2 Motion

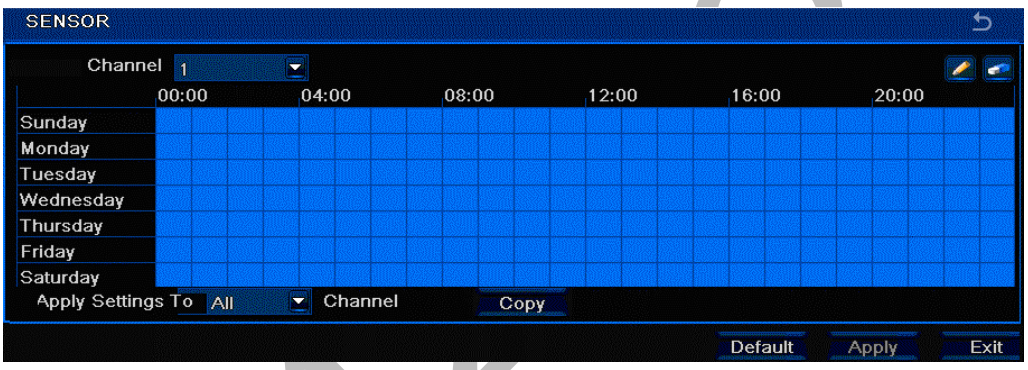
In this menu you can schedule when Motion triggered recording takes place, you will still need to switch motion detection on for the particular camera as per section **3.5.2.** Enter the “Motion” menu via “Setup”→then “Schedule”→then “Motion”.



Setting up the schedule is identical to section **3.4.1** “Schedule”. Left clicking the default button in this section turns all the recording to ON.

3.4.3 Sensor

In this menu you can schedule when alarm sensed recording takes place, you will still need to switch alarm sensor recording on for the particular camera as per section **3.5.1**. Enter the “Sensor” menu via “Setup”→then “Schedule”→then “Sensor”.



Setting up the schedule is identical to section **3.4.1** “Schedule”. Left clicking the default button in this section turns all the recording to ON.

3.5 Alarm configuration

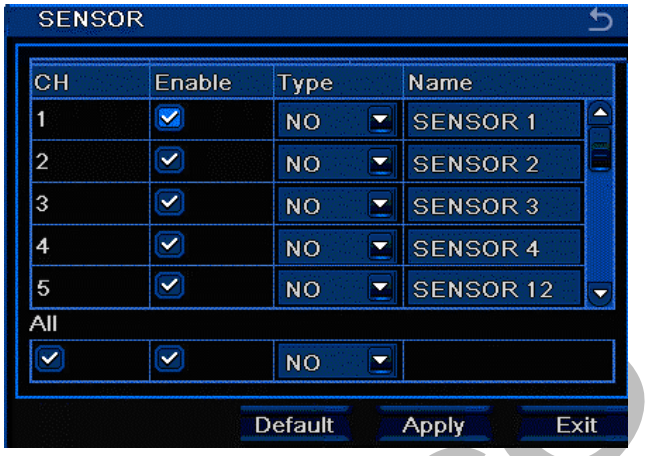
In this menu you can determine how the DVR reacts to certain triggers as well as enabling things like motion detected recording. The alarm Menu includes five sub menus: Sensor, Motion, Video Loss, Other Alarm and Alarm Out. Enter the Alarm menu via Main menu→Setup→Alarm

3.5.1 Sensor

The Sensor menu includes three sub menus: Sensor, Alarm handling and Schedule.

Sensor

In this menu you can configure any external alarm sensors attached to the DVR. Enter the Sensor menu via Main menu→Setup→Alarm→sensor→sensor



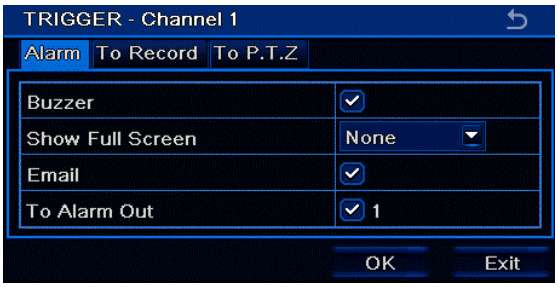
Left click tick box to enable an external alarm trigger on that particular camera channel. Under the “Type” column you can select whether the trigger is normally open, “NO”, or normally closed, “NC” in it’s resting state. There is the option to set all triggers to the same type by left clicking the “All” tick box and then clicking the “Type” drop down box to “NO” or NC”

The “default” button sets all the triggers to normally open. Left click “apply once you are happy with your settings choices..

3.5.2 Alarm handling

This menu allows you to control what the DVR does in the event of an external alarm sensor trigger. Enter the Alarm Handling menu via Main menu→Setup→Alarm→sensor→Alarm Handling

Left click to select the hold time in seconds, the time a trigger stays on for. Left click the “Trigger” button and a menu box will open.



Alarm:
Buzzer : Left click tick box to enable the DVRs internal buzzer to sound when there is a trigger.

Full screen alarm: Select which camera if any will be display full screen when alarm triggers. Left click to select from drop menu.

Email: Left click the check box to enable. When an alarm trigged occurs, a notification email will be sent to user’s designed email box with the following information. Time, Snap Picture(s), Alarm name, Camera ID and name.

To alarm out: Left click the check box to enable. The DVR will send a trigger via the alarm out port.
Snap: Select which camera(s) is/are used to provide the emailed snap image(s)

To record: Left click the check box(es) to select which camera(s) is/are recorded following an alarm trigger.

To P.T.Z: The PTZ camera can be given instructions following an alarm trigger.

- Type: Left click from the dropdown menu to select whether the PTZ camera is sent to a preset point, asked to follow a preset cruise (tour) or asked to track between points following an alarm trigger.
- No: Left click from the drop down menu to select which preset pointthe PTZ camera is sent to

Remember to left click “OK” once you are satisfied with your selections.

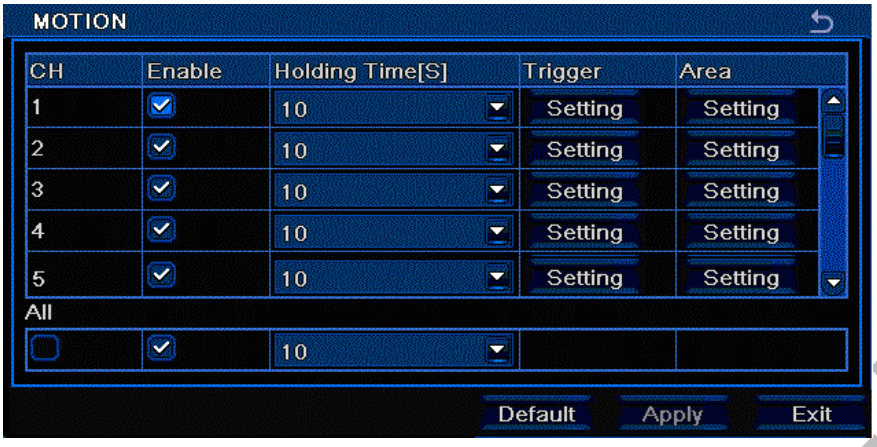
3.5.3 Schedule

This is an identical operation to the one described in section **3.4.1**

3.5.4 Motion

In this menu you can enable and configure motion triggered recording. Enter Motion menu via Main menu→

Setup→ Alarm→ Motion→ Motion

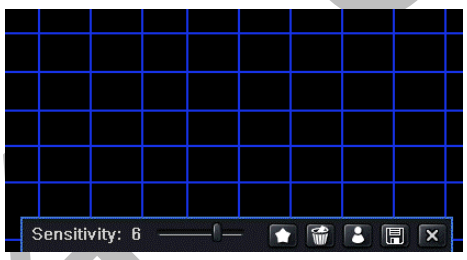


Enable: Left click the check box to enable motion triggered recording on a particular camera Channel. Remember you also have to schedule motion triggered recoding as per section **3.4.2**

Holding Time: Left click and select holding time, in seconds, the time the motion trigger latches for.

Trigger: Choose what the DVR does when a motion triggered event takes place. *Identical set up to "Alarm" in section **3.5.2***

Area: Select on screen trigger patch or patches within which motion is detected. Left click the "Setting" button to switch the screen to that camera's live view. You can now select which areas on screen are used to detect motion. It is essential to only use a small part of the screen if false triggers are to be avoided.
You will notice there is a small menu bar at the bottom of the screen:



Left clicking the  icon enables motion detection on the whole screen. You will see a blue grid across the screen. Left clicking the  clears the grid so no motion detection takes place anywhere on screen. This is a good screen to start with. Decide where on screen you want to detect motion and move the cursor to the top left hand corner of that area. Left click and hold, then drag the mouse down and to the right. You will see a blue grid is formed. Detection will take place in this area.

To de-select an area move the cursor to the lower right hand corner of the area, left click and hold then move the mouse upwards and to the left. You will see the grid disappear.

Left clicking the  icon allows you to test the motion trigger area. A small icon will appear in the upper left hand area of the screen when motion is detected. To adjust sensitivity left click and hold the Sensitivity slider and drag it left to decrease sensitivity, right to increase it.

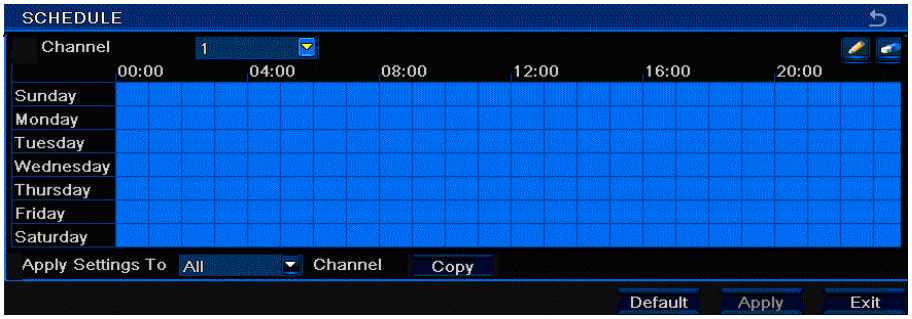
Left click the  icon, to save your settings. Left click the  icon to exit and return to the Motion menu

Left click the "Apply" button once you are happy with the settings. Left clicking the "All" button then "Apply" to apply settings to all cameras. Motion detection areas are not repeated to all the cameras.

Schedule

This determines when motion detected recording takes place. You must enable motion detection in the schedule

as well as activating it on each camera.

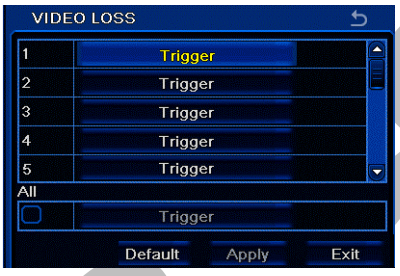


Programming is an identical operation to the one described in section **3.4.1**

3.5.5 Video loss

This allows you to decide what the DVR does in the event of a video loss occurring. Enter the Video Loss menu via Main menu→ Setup→ Alarm→ Video Loss

Left click the "Trigger" button to open the menu. Programming is the same as section **3.5.2**



3.5.6 Other alarm

In this menu you can determine what the DVR does in the event of another type of warning message such as "Disc Full" (Remember from section **3.3.5** we recommend that you always set the hard drive to recycle so it never fills and stops recording). Enter the Other Alarm menu via Main menu→ Setup→ Alarm→ Other Alarm

Left click the Alarm Type" drop down box to show

Disk Full. From the "Disk Shortage" drop down box you can select the minimum remaining storage space before the disk full alarm is triggered. From the respective check boxes you can ask the DVR to sound the buzzer, email an alert or operate the alarm out port. In section **3.3.5** we recommend that you always set the hard drive to recycle so it never fills and stops recording.

IP conflict . If there is an IP address conflict within the same network you can ask the DVR to sound the buzzer or trigger the alarm out port by left clicking the respective check boxes.

Disconnect: If the disconnection occurs you can have the DVR sound the buzzer or trigger the alarm out port by left clicking the respective check boxes.

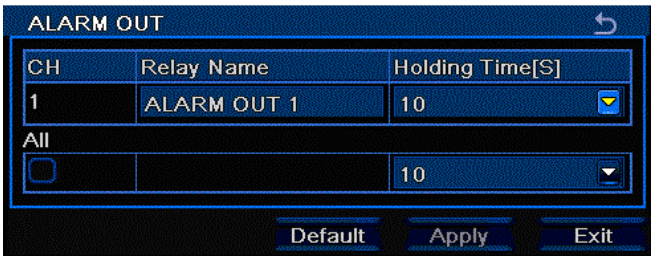
3.5.7 Alarm out

In this menu you can configure the Buzzer on the DVR as well as the alarm out port. Enter the Alarm out menu via Main menu→ Setup→ Alarm→ Alarm out

Alarm out. From this menu you can allocate a name to the alarm out port. Left click in the text box and the keyboard drop down appears. Left click individual letters then left click the "Enter" button. Left click "ESC" to

close the keyboard drop down.

You can also set the holding time for the alarm out port in seconds by left clicking the Holding Time drop down. This is the gap between 2 adjacent alarms. Once you are happy with your settings left click the “Apply” button.



Schedule. From here you can determine when the alarm out functions. This is an identical operation to the one described in section **3.4.1**

Buzzer. Left click the buzzer check box to enable the buzzer on the DVR. Left clicking the Buzzer hold time allows you to select how long the buzzer sounds for in seconds. Once you are happy with your choice left click the “Apply” button

3.6 Network configuration

This is where you configure the DVR’s network settings to allow it to communicate with a local network or be viewed over the internet. It is also where you configure email settings to allow the DVR to email out snap images or other alerts. Enter the Network menu via Main menu→Setup→Network. There are 4 sub menus, Network, Sub-stream, email and Other Settings.

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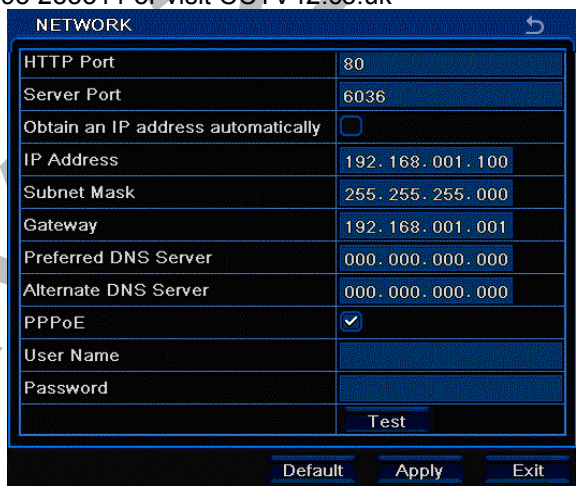
3.6.1 Network

In this menu you determine settings for how the DVR communicates with your local network. In most cases this will be your internet router. Your router will also usually be what your local network is based around. You will need some IT knowledge in order to configure the settings to view your DVR over the internet. At CCTV42 we offer a remote set up service if you feel unable to configure your DVR or router using a screen sharing session with our boffins! Call us on 01895 233311 or visit CCTV42.co.uk



HTTP port: This is the port on your router through which the DVR sends information over the internet. The default value is 80, if you change it you will need to add the new port number when typing the DVR’s IP address into the address bar in Internet Explorer. If you set the HTTP port to 82 then an internal IP address: http://192.168.0.1 would need to be entered as : http://192.168.0.1:82 We do not recommend that you change this setting.

Server port: This is the port which the DVR uses to communicate data including the video stream. The default is 6036

Obtain an IP address automatically: If we supply a DVR with a hard drive installed and configure the DVR for you then we will tick this box. It means the DVR communicates with the router using DHCP and obtains an internal IP address from the network automatically. Left click the check box to enable or disable.
To manually change any of the settings in the IP Address, Subnet mask, Gateway, Preferred DNS Server or Alternate DNS server left click the relevant area on the table end enter your chosen value using the drop down

keypad. Left click “OK” once you are happy with your choice.

PPPOE: Leave unchecked.

Definitions and descriptions of network configuration:

Parameter	Meaning
HTTP port	The port number when accessing using Internet Explorer. The default port is 80
Server port	The Data port number. The default port is 6036
Static IP	
IP address	The IP address of the server
Subnet mask	The subnet mask of the server
Gateway	The gateway of the server
DDNS server	The address of DDNS server
PPPoE	
User name	User name of broad band dial-up
Password	Password of broad band dial-up

3.6.2 Sub stream

In this menu you can select resolution settings for the sub stream used when remote accessing your DVR over the internet. To reduce the resource strain on bandwidth the DVR uses a reduced sub stream compared to it’s live display. When remote accessing the DVR you have the option to view the more efficient sub stream or the higher resolution master stream. This is covered in section **6.2**

To make an alteration left click the chosen parameter and make your selection from the drop down menu the left click the “Apply” button. You can change all the camera channels by checking the “All” tick box using a left click of the mouse, make your selections from the menu drop down boxes then click the “Apply” button.

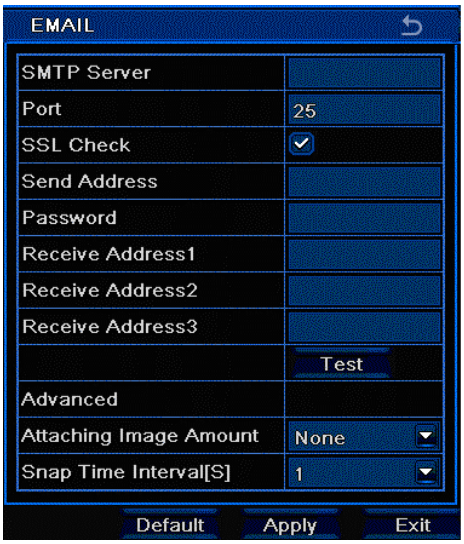
Explanation of the Sub stream menu options

Parameter	Explanation
FPS	Frames per second. Range from: 1-25 we recommend 3-6 frames
Resolution	The sub stream is set at CIF to lower resource on the server
Quality	VBR must be selected for this option to function.
Encode	VBR (Variable bit rate) and CBR (constant bit rate)
Max bit rate	Limits the maximum file size of each frame

3.6.3 Email

In this menu you can make settings changes for the email account you want the DVR to send snap images and alerts to. As with section **3.6.1** “Network” if you are not familiar with the world of IT or feel unable to make these

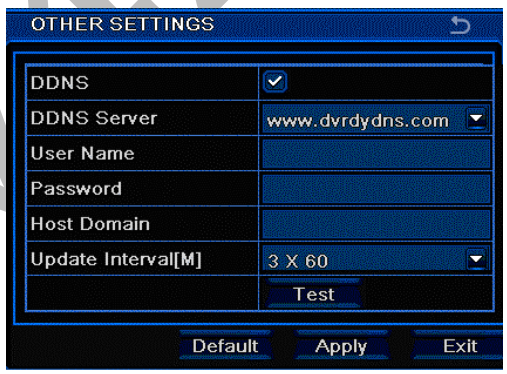
settings yourself they are included in our remote set up service in which we do all the technical stuff remotely for you using a screen sharing session with one of our well groomed and highly intelligent CCTV42 network boffins. Call us on 01895 233311 or visit cctv42.co.uk



SMTP Server: The address of your SMTP outbound email server
Port: The port number of your SMTP server.
SSL Check: Some mail servers require a secure connection. Tick to enable if necessary
Send address: The email address you are sending from
Password: The password of the email account you are sending from
Receive address: The recipient email address (you can enter up to 3 separate addresses).
Test: Use this to check your settings
Attaching image amount: Allows snap images to be attached
Snap Time Interval(s): This is dealt with in section **3.3.6**

3.6.4 Other settings

In this menu you can configure the DVR to refresh a DDNS re-route service such as DYNDNS. This gets round the problem of constantly changing dynamic IP addresses (as opposed to a fixed IP address).



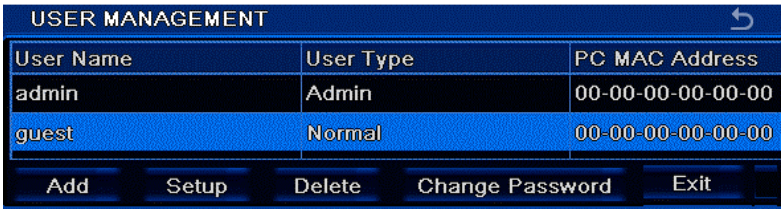
DDNS: Enables the DDNS update feature on your DVR
DDNS Server: Select which service you want to use from the dropdown list provided
User Name: The user name given to you by your DDNS service provider
Password: The password given to you by your DDNS service provider
Host Domain: The web address created for you by your DDNS service provider : *yourname.dyndns.org* for example
DDENS Update [Hours]: Select how often (in hours) the DVR updates your DDNS service

Note: Having chosen your DDNS server from the dropdown list you will need to log on and register with the service to obtain your Domain address, user name and password.

3.7 Users

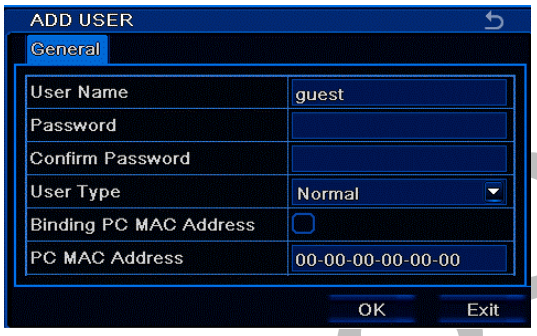
In the User Management menu you can decide who has access to your DVR / CCTV system and determine which features are available to them. For instance you may want to allow someone to view footage, but not

make setting changes to the DVR. Enter the User Management menu via Main menu→Setup→Users.



To change a user's password either double left click the user name or left click to highlight the user and left click the "Change Password" button. You will then have to enter the old password, enter the new password and confirm the new password. Left click the input boxes to reveal the dropdown keyboards. Highlighting a user and left clicking the "Setup" button allows you to change their settings as per "Adding a user below. You can't change settings for the admin user other than to change a password.

Adding a user: Left click the "Add" button to open the Add user menu.



Input the user name by left clicking in the name field to open the dropdown keyboard. Once satisfied click the ENTER button. Click ESC to close the keyboard. Left click the input box to enter a password, confirm the password in the "confirm password" box.

User type: Choosing "Advanced user" as the user type automatically enables file and disk management rights in the "Authority" menu.

Binding MAC Address : This gives you the option of limiting a user's access to a single computer or device over the internet or your local network. Left click the check box and then "ok". To input the MAC address left click the MAC address box and the keyboard drop down appears. Left click "backspace" to delete the zeros. Input your address then click "Enter". To close the keyboard down left click "Esc". Click "OK" once you are happy with your choices.

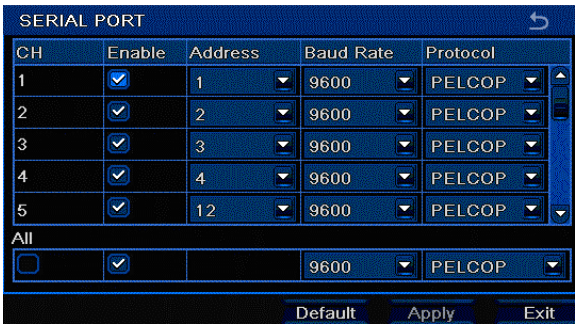
To remove a user left click to highlight the left click the "Delete" button.

In total you can have 64 different users.

3.8 P.T.Z configuration

Your CCTV42 System2 DVR is capable of controlling the movement of a PTZ camera, either from the DVR it's self using the mouse or remotely over a local network, the internet or even via a mobile phone. There are 2 sub menus in the PTZ menu: Serial Port and Advanced. Enter the User Management menu via Main menu→Setup→P.T.Z It's worth mentioning that there are times when certain cameras only have limited functionality when controlled via a System2 DVR. This is not unique to the System2 DVR range or DVRs supplied by CCTV42 but a function of the electronics on the cameras and the fact they are using generic protocols.

Serial Port: In this menu you make all the necessary setting which allow a PTZ camera to be controlled using The RS485 serial port input on the back of the System2 DVR unit.



Enable: left click the check box to enable PTZ camera control on that particular camera channel.

Address: This is the number you assign to the PTZ camera unit it's self, range 1-255. Left click the number box to open the drop down slider menu. Left click to move the slider to your desired number then left click "Apply" to save.

Baud rate: This is the rate as specified on your PTZ camera. Left click the number to open the drop down box listing available baud rates. Left click on the number your need then left click "Apply" to save your choice.

Protocol: This is the protocol language as specified on your PTX camera. Left click the name to open the drop down slider box which shows available languages. Click on your choice then click "Apply"

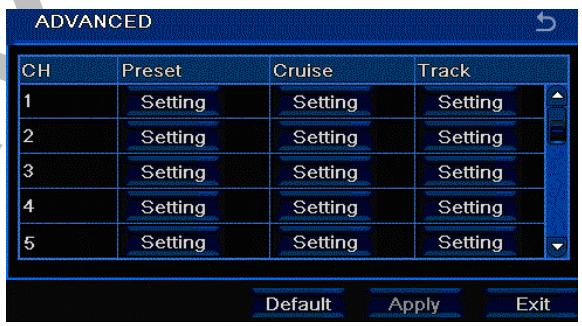
Using the "All" check button you can select baud rate and protocol language for all the cameras. Click the check box, select the Baud rate and protocol then left click "Apply"

Explanation of PTZ menu settings

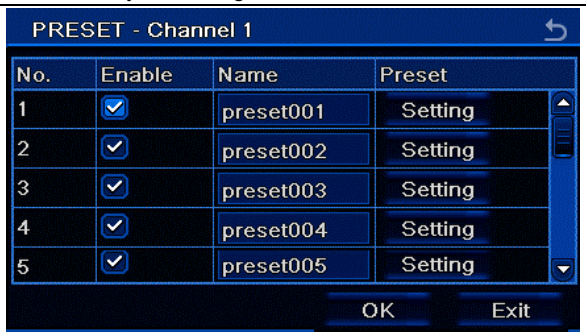
Parameter	Meaning
Address	The number of the PTZ camera (not the camera channel on the DVR
Baud rate	Baud rate of the PTZ camera. Range from: 110 bps to 921600 bps. Most cameras will use 2400 to 9600, see camera details for exact number.
Protocol	Communication protocol of the PTZ device. Options are: PELCO P, PELCO D, LILIN, MINKING, NEON, STAR, VIDO, SAMSUNG, RM110, HY, N-CONTROL

Advance:

In this menu you can select and program preset points as well as Cruises or tours between the pre-set points.



Preset: Left click on the "Setting" button to open the Preset sub-menu.



Enable: Left click the check box to enable specific preset points (1-128). There is no need to uncheck points which are unused.

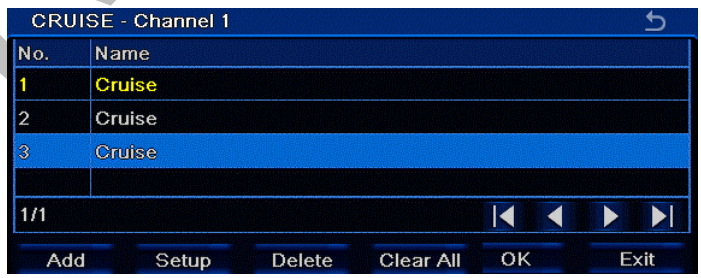
Name: you can give each point a name if required. Left click in the current box for that preset ("Preset007" for instance) and the dropdown keypad will appear. Left click "Backspace" to clear the field then left click the key pad to enter your chosen name. Click "Enter once you are happy. "Esc" closes the keyboard. Left click "OK" to save your setting.

Preset: Left click the "setting" button. The display will now change to the live camera view from that camera together with a menu bar in the lower part of the screen:

If you need to change cameras left click the camera number just above the menu bar.

To set a preset point left click the "No" drop down menu and select the preset number you wish to alter (up to 128 preset points can be set). If there is already a preset point for that number then the camera will move to it. To move the camera left click the direction on the round movement button to the left of the menu bar. Speed of movement can be altered by left clicking and holding the Speed slider and dragging left (to slow movement) or right (to speed movement). The camera can be zoomed in by clicking the zoom "+" button, zoomed out by clicking the zoom "-" button. Once you are happy with the position left click the "save" button. To program another preset point select the number from the "No" dropdown menu and so on.

Cruise: Left click the "Cruise" button for the camera channel you wish to control in order to access the cruise sub menu.

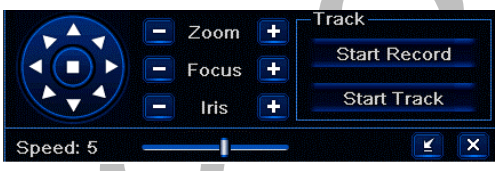


Left click the "Add" button to create a cruise or tour itinerary. Once highlighted left click the "Setup" button to open the cruise preset sub menu. You can create up to 8 pre-set cruises. To remove a cruise left click either the name or number, then left click the "Delete" button. Left Clicking the "Clear All" button removes all the cruises for that camera channel.

To add a preset point to your cruise left click the button. This will open a pop up box which allows you to select which preset point you wish to use, the speed of movement and the duration (in seconds) that you wait at that point. Once you are happy with the settings for each step left click the Tick button.

Once you have created some points in your cruise you can highlight them by left clicking anywhere in the Preset, Speed or Time column for the point you wish to select. It will now be highlighted. To remove that point left click the point, to modify it lft click the button. You can also use the buttons to select which preset point you wish to modify or remove. Once happy left click the “OK” button to save your changes. Left click the “Preview” button to view the live feed for the camera and have a preview of your programmed cruise or tour. You can have up to 16 preset points on a cruise.

Track: Left click the “setting” button in the track column for the camera you wish to create a track on. This means the camera travels between just 2 pre-set points. You could also do this using a simple 2 point cruise. Once clicked the screen will show that camera’s live feed with the track sub-menu in the lower part.



Left click the direction compass rose to move the camera to your desired starting point and adjust the speed using the virtual slider (left click & drag). Left click the “Start Record” button. Move the camera to your chosen finish point and left click the “Stop Record” button. Note – the Start Record button changes to a Stop record button once pressed and visa versa. Left click the “Start Track” button to make the camera track between your chosen points. Left click the “Stop Track” button. Note – the Start track button becomes the Stop Track button once pressed and visa versa.

Left click the icon to hide the tool bar, right click anywhere to bring it back on screen. Left click the icon to exit the sub menu.

3.9 Advanced Setup

Enter the Advance setup menu via Main menu→Setup→Advanced.

Reset: Left click to return the DVR to factory settings. Be aware this will not be as shipped by cctv42 (assuming you purchased a DVR and hard drive together & we configured the DVR for you. Left click the “OK” button to confirm or “Cancel” to escape back to the Advanced setup root menu. The DVR will re-boot. Note * this is not an operation we recommend as all settings will be altered including any network settings you have entered. You will lose remote access to your DVR until the settings are re-configured.

Import / Export: This menu is disabled

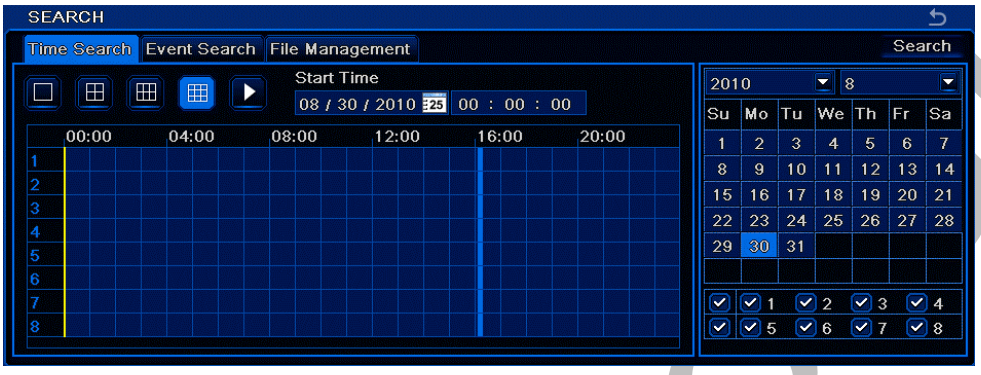
Block allow list: In this menu you can exclude specific IP addresses from accessing your DVR recorder. This can be either an external or internal to your network IP address. You can also choose to exclude a block of IP addresses. Left click the section of the IP address and the drop down keypad will appear. Enter the numbers using the keypad, “C” deletes a number and “OK” confirms your choice. Once you have entered your IP address left click the “Apply” button. Reset all settings, the device will reboot.

4 Search & playback

The Search menu consists of 4 sections. Time search, Event search, File Management and Image. In this menu you can search through stored footage on the DVR. Enter the Search menu via Main menu→Search

4.1 Time search

Entering the Search menu you will be greeted with the following screen, to open the diary on the right left click the tall thin left arrow button on the far right middle of the screen.

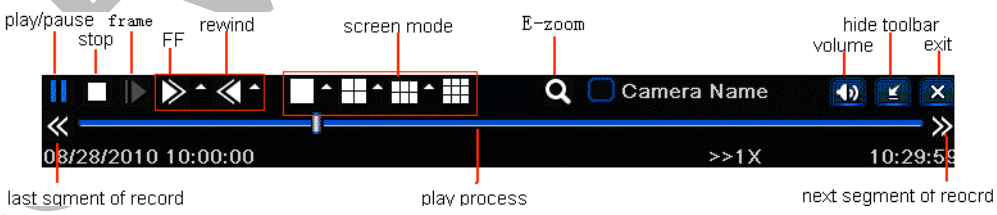


You will note “Time Search” is highlighted in the tab on the top left of the screen. The diary box allows you to see which days have recorded footage present. This is indicated by a blue surround to that particular date. Different months and years can be selected by left clicking the respective drop down tabs. Select a day by left clicking and then left click the “Search” button.

You will now see a grid showing each camera on the left axis, the 24 hour clock on the top axis. 16 camera DVRs have a second page. Us the arrows in the bottom right corner to select. Cameras with footage will be shown as a bright blue square, cameras without footage will show as a dark blue square. You can select a time by either entering it in the Start time box (date and time) or else by simply clicking the time on the grid.

The Grid boxes on the upper left of the screen allow you to view either multiple cameras or a single camera. Where you opt to view fewer than all cameras a pop up click box appears so you can select which specific cameras you wish to view.

Left click the play button to playback footage. This will reveal the following control buttons and a 30 minute time line.



Playback buttons

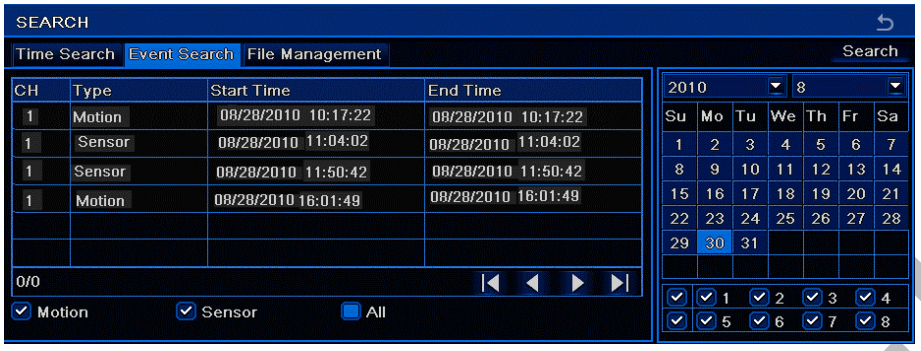
During playback it is possible fast forward, rewind, pause and single frame advance (this option becomes available when you pause the footage) by left clicking the respective button. You can also change the number of cameras being displayed by left the different screen mode buttons.

Left clicking the E-zoom button zooms in. Click and hold the left button on the mouse then drag the screen around to your chosen area. Right click anywhere on the screen to return to a normal view.

The Hide toolbar button hides the toolbar, right click anywhere on the screen to show it again. You can also left click & hold on the cross move button, top right of the control panel, to drag the panel around the screen.

4.2 Event search

Left clicking the Event Search tab opens the event search menu. Left click the tall thin left arrow button on the far right middle of the screen to open the diary box.



Select a date and search as per **4.1** “Time search” You will see all available events from that day. Left clicking the arrows on the bottom right of the dialogue box allow you to scroll through the pages of information.
Double left click an event to play it as described in **4.1** above.

You can check or uncheck the tick boxes for Motion or Sensor by left clicking. This includes or excludes them from results.

4.3 File management

In this menu you can delete or permanently keep individual file blocks. This is a useful facility if you want to safeguard a specific incident. Left click the tall thin left arrow button on the far right middle of the screen to open the diary box.

Search a particular day as per the instructions in section **4.1** Time search. Once you left click the “search” button the grid will populate with all available file blocks for that day. The blocks are arranged by camera (shown in the “CH” column), in time descending order. To scroll through the various pages use the left and right arrows in the bottom right corner of the grid. The arrow pointing to a vertical line takes you to the first or last page.

To delete a file block left click it’s tick box then left click the “Delete” button. A confirmation box will appear. Left click “OK” to delete, “cancel” to stop the delete and return to the file Management menu.

To Permanently keep a file block left click it’s tick box and left click the “Lock” button. A confirmation box will appear. Left click the “OK” button. Files that are permanently stored will show “Locked” in the Status column.

To un-lock a file block left click it’s tick box and left click the “Lock” button. A confirmation box will show, left click the “OK” button. The file block will now be auto deleted in the normal way as the hard drive writes over it’s self.

Double left clicking any of the file blocks will play them back.

4.4 Image

In this menu you can deal with the Snap images generated automatically as a result of motion triggers or alarm triggers and stored on your cctv42 system2 DVR. Left clicking the Image tab opens the Image menu. Left click the tall thin left arrow button on the far right middle of the screen to open the diary box.

Select a date and search as per **4.1** “Time search” You will see all available events from that day. Left clicking the arrows on the bottom right of the dialogue box allows you to scroll through the images.

Left click the “Delete” button to delete an image. This will reveal a pop up confirmation window, left click “OK” to delete.

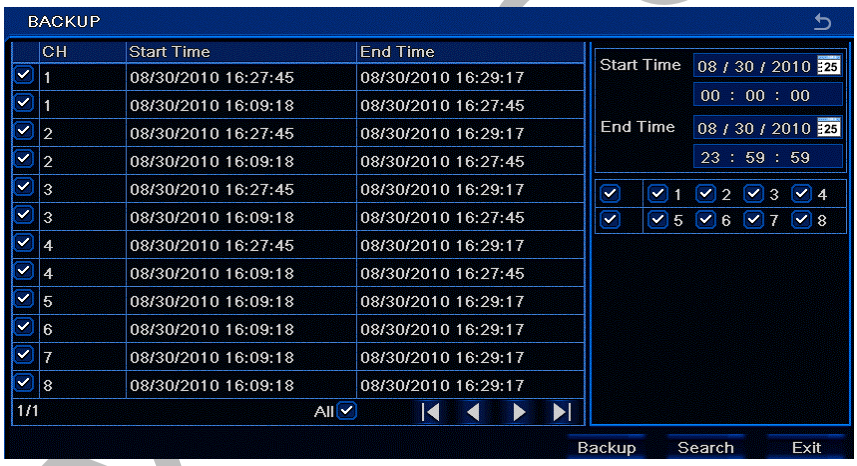
To stop an image being deleted left click the “Lock” button. The padlock symbol will appear in the corner of the image and it will not be deleted. The “Lock” button now becomes an “Unlock” button for that image. Left click the “Unlock” button to return it to normal status where it will be recorded over as the hard drive fills up.

To save an image insert a USB memory device into the USB port on the front of the DVR recorder and left click the “Save” or “Save All” button depending whether you wish to save a single image of all the images.

4.5 Backup

Your cctv42 System2 DVR allows you to make back-up copies of important footage using the USB port on the front of the DVR, (flick down the panel in the middle of the 16 camera DVR to reveal the USB port). You can also make back-up copies remotely using Internet Explorer see section **6.3.2**. Enter the Backup menu via Main menu→Backup

Search for the event you wish to backup as per section **4.1** Time search. All available file blocks will be shown. You can scroll through pages using the left and right arrows. By default the “All” tick box is checked. We recommend un-checking this box so as not to overload your memory device. It is best to reduce the size of your backed up footage as much as possible using the Start and End time selection. Double clicking a file block will play it.



Once you are happy with the file block ensure you have inserted a storage device (memory stick) left click it’s tick box remembering to uncheck the “All” tickbox first if it is checked, and then left click the “Backup” button.

Having checked the information is correct left click the “Start” button to initiate backup of your chosen file.

5 DVR Information

In this menu you can review settings and general information about your cctv42 System2 DVR. Enter the Information menu via Main menu→Information

5.1.1 System information

This displays the basic information about your DVR such as it's name, hardware version, firmware version and so on.

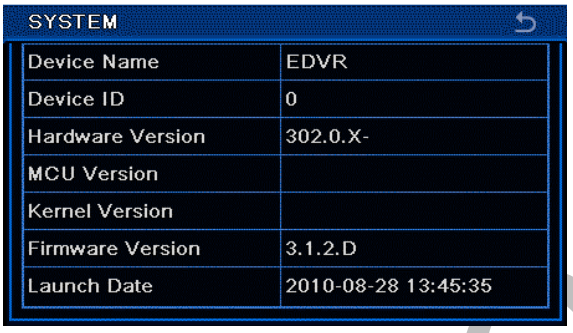


Fig 6-1 system information

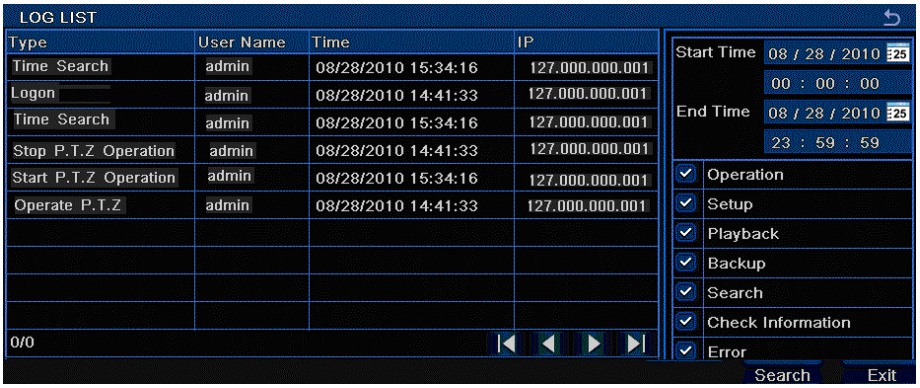
5.1.2 Event information

In this menu you can check through event lists. Select a date as per section **4.1** Time search. Check or uncheck the Motion, Sensor (alarm) or Video Loss tick boxes by left clicking to view the particular event type you are looking for. Scroll through pages using the left and right arrows. The Export log is disabled.

5.1.3 Log information

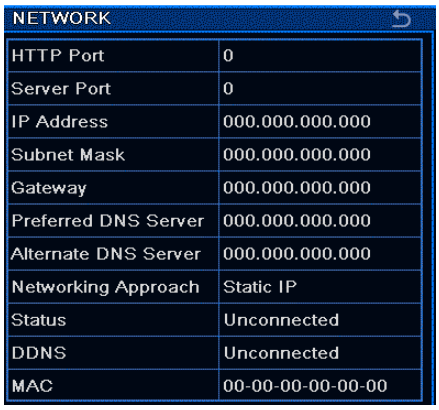
In this menu you can review activities by individual users. Select the start and finish time for your search s per section **4.1** Time search, then check or uncheck the Operation type tick boxes by left clicking them to select the type of information you are searching for.

The Export function is for diagnostic purposes and allows a copy log to be saved and forwarded on. Having searched for and acquired a list of events ensure a memory stick is inserted into the USB port on the front of the DVR and left click the "Export" button. Then left click the "OK" button. A file will be saved on your memory stick which has the date and time as it's file name.



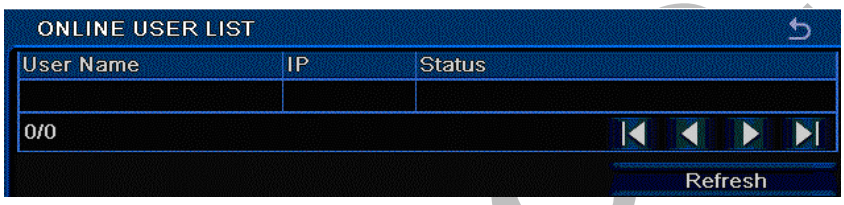
5.1.4 Network information

This menu displays your current network settings as per the graphic shown below.



5.1.5 Online information

This menu shows any users currently accessing the DVR over the internet or your local network.

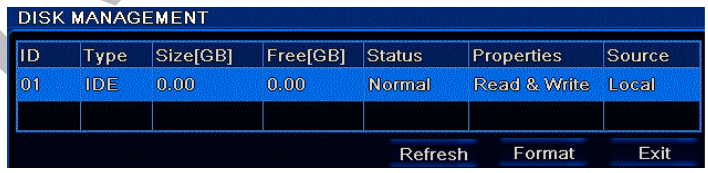


5.2 Manual Alarm

In this menu you can manually check the operation of any alarm outputs. Left click the “Trigger” check box and then left click the “Alarm” button. Left click the “Clear” button to stop.

5.3 Disk Management

This menu shows the current state of the hard drive(s) installed in your system2 DVR. Be very careful what you touch in here, you could lose all your recorded Data!



If you purchased hard drive(s) and DVR together cctv42 will already have installed and formatted the drive(s) so your DVR arrives plug and play. Left clicking the “Format” button will re-format the drive(s) and you will lose any information stored on it.

The basic display shows each hard drive’s capacity. Be aware this number will not be the exact “size” of the hard drive. A 1TB hard drive will not display 1,000GB for instance, it will show circa 930GB.

Left clicking the “Advanced” tab opens up a table showing the SMART (Self-Monitoring, Analysis and Reporting Technology) data for individual drives. This information is purely for diagnostic purposes.

5.4 Upgrade

Through this menu it is possible to load the latest firmware version as updates become available. Updates are available through cctv42. They need to be downloaded onto a USB memory stick which is then inserted into the USB port on the front of the DVR. Open the Upgrade menu via Main menu→Upgrade and a list of available files

will be displayed. Select the file and left click the “Upgrade” button. In the confirmation box left click “OK” and the firmware update will enable. Once completed the DVR will re-boot and all settings will revert to factory default.

5.5 Logoff

This menu allows a user to log off. Left click “Logoff”, a confirmation box appears. Left Click “OK” to log off. To log on again left click the menu  icon and enter your details as per section **2.7**

5.6 Shut down

In this menu you can perform a soft shut down of the DVR. Left click “Shut Down”. A confirmation box appears, left click “OK” The DVR now closes down.

6 Accessing the DVR remotely

6.1 Accessing DVR

To remote access your System2 DVR it must be connected to either a LAN (Local area Network) or the internet. This will usually mean plugging it into your internet router using the Network port on the rear of the DVR unit. You must then configure the network settings in the DVR. Refer to section **3.6** Network Configuration.

The System2 DVR recorders from cctv42 are designed to be remote accessed using a 32 bit version of Internet Explorer.

Don't forget that if you struggle with this section we offer a remote access set up service which is performed using a screen sharing session with one of our technicians. Contact cctv42 on 01895 233311

6.1.1 Via LAN (Local area network)

Enter the IP address of the DVR into the address bar of Internet Explorer pre-fixed with http:// for example http://192.168.1.17 Then click return. If it is the first time you have accessed the DVR you will have to install the ActiveX controller. This is done automatically, you may be asked to accept the download by your computer. The System2 DVR features a signed ActiveX controller which makes downloading much simpler.

***Notice**:* If you have changed the HTTP port from 80 on the DVR then you will need to add the port number after the IP address. For example if you had set HTTP port as 82 on the DVR, you would need to input the IP address in Internet Explorer as http://192.168.1.17:82

The user name and password when remote accessing are the same as on the DVR it's self. The default is admin and 123456.

6.1.2 Over the Internet

Connect your DVR to the router as though you were accessing it over your local network and set it up as per section **6.1.1** accessing over a local area network. It is important that you give the DVR a static internal IP address in order to perform the next task.

You now need to configure port forwarding (also known as port mapping) on your router. The default ports to forward are Ports 80 (HTTP port) and 6036 (Server port). This operation varies from router to router and so you will need to refer to your router information for more details.

If your internet connection uses a dynamic IP then you will need to set up a DDNS service. The cctv42 system2 DVR supports www.dns2p.com, www.88IP.net, www.meibu.com, www.dyndns.com and www,no-ip.com.

Once you have created your DDNS account you need to update the DVR network settings as per section **3.6.4** This will allow the DVR's inbuilt DDNS update client to inform your DDNS service of its current IP address.

You can now access your CCTV system remotely over the internet as per section **6.1.1** replacing the IP address with your newly created DDNS host name (ie: http://mycctvsystem.no-ip.org).

Once again if you struggle to access your DVR over the internet we offer a remote set up service which handles everything for you. Call cctv42 on 01895 233311

If you cannot download and install ActiveX, please refer to Appendix A FAQ Q7.

6.2 The Internet Explorer remote access control panel

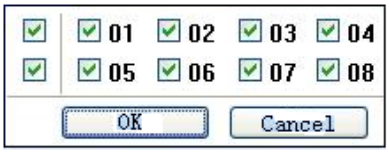
Fig 6.2

Control panel functions

1	Channel status indicator	2	Screen display mode. Click to alter screen view	3	Volume control
4	Click to take Snap picture	5	Manual record to override schedule on DVR	6	Local recording onto computer
7	Mike button to enable 2 way audio	8	Playback of locally recorded footage	9	Colour adjustment controls
10	PTZ control panel	11	Master / sub stream status		

Channel Status indicator: This indicates whether there are camera feeds present on that particular channel

Screen display mode: This changes the screen layout on the control panel. Clicking the ▼ icon beside the screen display mode opens the camera selection popup box. From here you can select which cameras are viewable in the display.



Within the display you can move cameras from segment to segment by left clicking, holding and then dragging to the target segment. Release the mouse button to drop the image into that segment.

Double clicking a segment makes that camera full screen. Double clicking again reverts back to the original view.

Clicking the volume button opens up a slider pop up to increase or decrease the volume (assuming your CCTV system has audio)

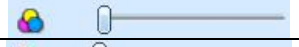
Click the “Snap” icon, the system will automatically capture still pictures and save them on your computer. Designate where on your computer the images are stored using the Configuration menu explained in section **6.4**

Clicking the manual record icon REC switches recording on or off on the DVR unit it’s self.

Clicking the local record icon (6) records footage directly onto your computer. Whilst recording is taking place

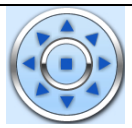
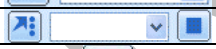
the loal recrding status indicators darken in colour. To replay press the play button (8). This opens the replay window which can be re-sized by clicking, holding and dragging the outer edges and section dividers. To replay a file double click it. The first time you go to use this feature it will be necessary to download the playback codec. This will be done automatically if you agree to the on screen prompt. Replaying footage stored locally is covered in section **6.3.1**

Colour adjustment: Drag the respective slide bars to adjust Brightness, Contrast, Hue, and Saturation. Click Default to reset them to original value.

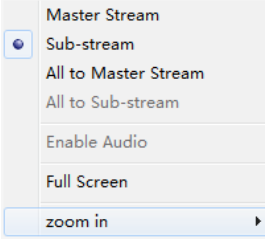
Buttons	Description
	Drag the scroll bar to adjust the brightness of channel
	Drag the scroll bar to adjust the contrast of channel
	Drag the scroll bar to adjust the saturation of channel
	Drag the scroll bar to adjust the hue of channel
	Click this button to recover the default value of brightness, contrast, saturation and hue.
	Save the adjustment

PTZ control: It will be necessary to first connect a suitable PTZ camera to the DVR recorder as per section **3.8**. Select that channel so it shows as full screen (double click it) then click the PTZ tab to open up the PTZ control panel. You can now move the camera manually and also use the various pre-set functions.

PTZ controls:

Buttons	Description
	move up. move up left. move up right move down. move down left. move down right. move left. move right. Some PTZ domes stop moving when you release your finger from the mouse. Other domes require you to press the stop button to stop movement.
	Drag the scroll bar to adjust movement speed of the dome.
	'Iris' button. Click button to increase brightness. Click button to decrease light of the dome. Most cameras function automatically
	'Zoom' button. Click button to zoom in on a subject. Click button to zoom out from a subject.
	'Focus' button. Click button to focus away from the camera. Click button to focus close to the camera. Most cameras will auto focus.
	Go to the Preset selected in the drop down menu
	Perform auto cruise (tour) from the drop down menu
	Track
	Auto scan

Right Click the mouse on the live screen, a drop-down menu will appear as below:



Sub-stream / master stream: The system2 DVR from cctv42 features dual streaming which allows you to compensate for lower bandwidth internet connection or make best use of higher bandwidth internet connection. By default the control panel displays the sub-stream (lower quality) feed. You can change the stream from this dropdown menu.

All to master/sub stream: set all channels to master stream or sub stream.

Enable audio: enable or disenable audio

Full screen: the live preview picture will display in full screen, the tool bar will be hidden. Double left click or right click the mouse to return to normal view.

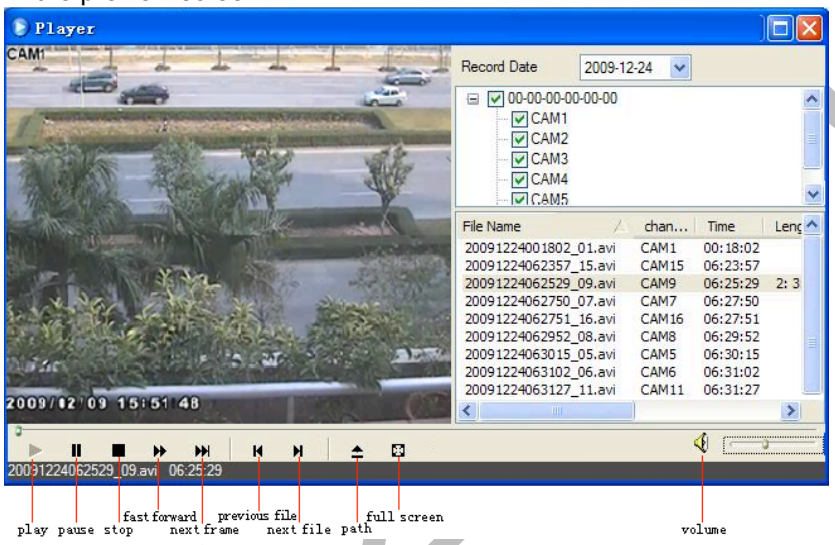
Zoom in: Select single channel view then click on the zoom in button. A side menu shows x1 or x4. Click x4 to zoom in. Left click and hold the mouse then drag to move the zoomed in section of the screen. Right click and select x1 to return to a normal view.

6.3 Remote playback & backup

6.3.1 Playing footage stored locally on the remote viewing computer

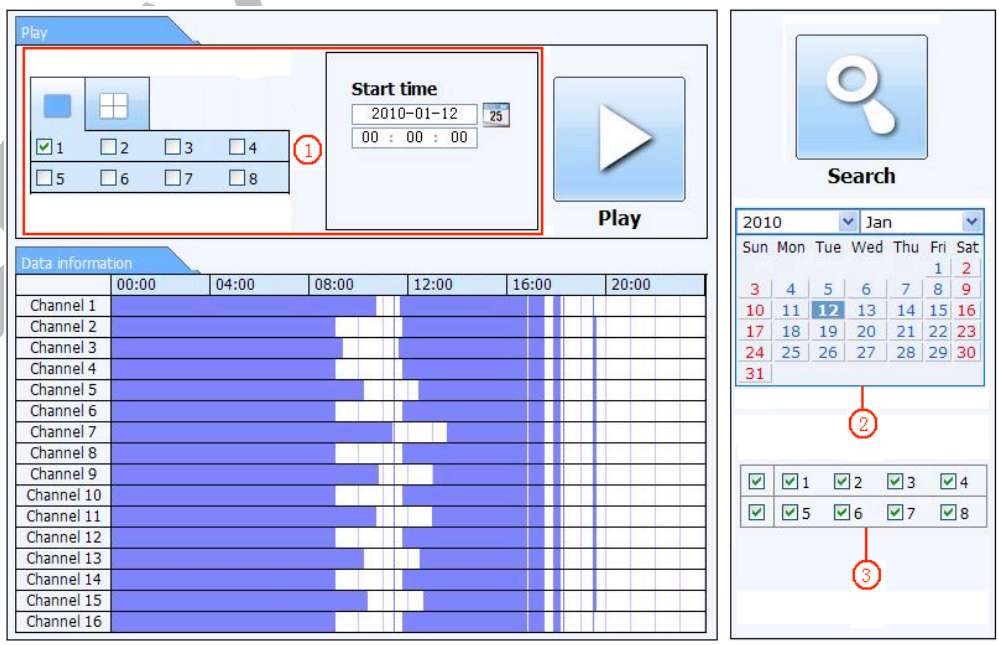
Click the playback  button to open the playback interface. The size of the interface can be altered by left clicking, holding and then dragging the edge of the box. You can also do the same with the file window divider.

Select a date from the drop down menu then choose a file based on camera number and time. Double click the file name to replay it in the preview screen.



Playback controls are shown above. If you choose to view in full screen by clicking the full screen button you can return to a normal view by right clicking anywhere on the image.

Searching stored footage on the DVR byTime:
Left click the Search tab at the top of the screen and the search box will be displayed. The “Time search” icon on the left of the screen will be highlighted by default.

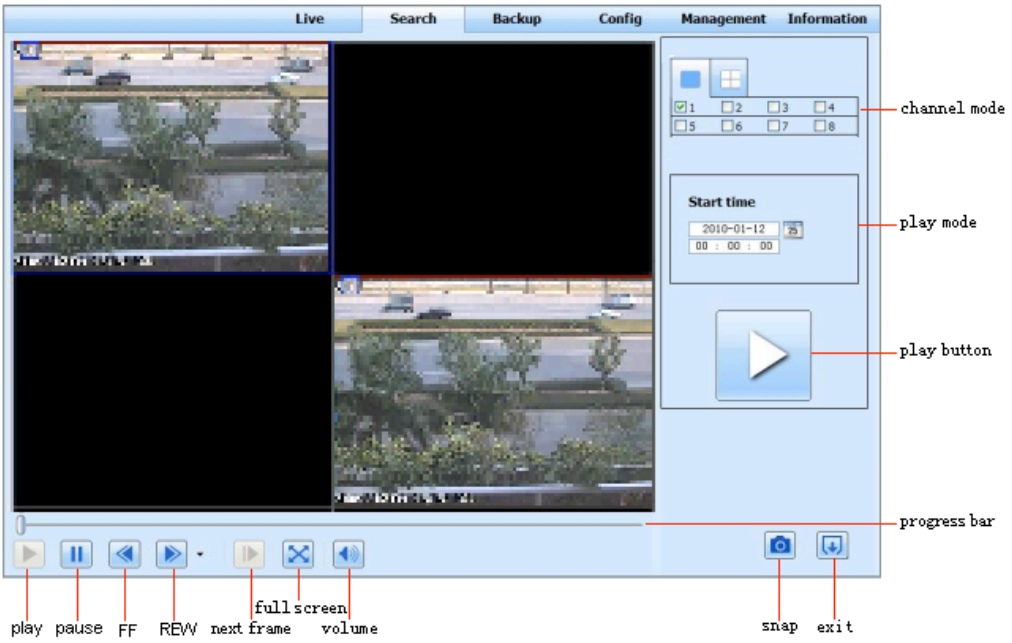


As with searching for and replaying footage on the DVR unit it’s self the idea is to select a day from area 2,

cameras from section 3 then click “search” to see if there is footage (indicated by dark blue in the camera / 24 hour timeline display grid). You can then select a time from the grid and click the play button to view footage.

You can also enter a specific date and start time in section 1, where you can also specify which cameras you want to view footage from. Once again when you are satisfied with your selection click the play button to view footage.

During replay you can fast forward, fast rewind, pause and frame advance (this button is displayed when you click pause). You can take a Snap shot image once paused to store on your remote viewing computer. Double clicking a camera makes it full screen



Searching stored footage on the DVR by Event:
To search by event click the Event search icon on the left of the screen. This opens the event search menu

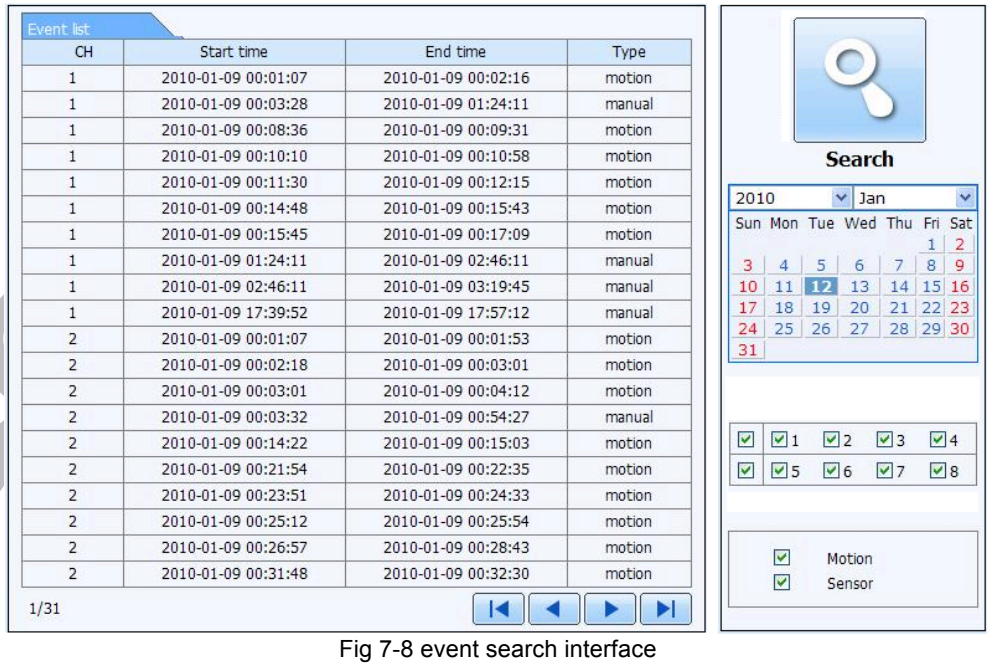


Fig 7-8 event search interface

Once again select a date and the cameras you are interested in viewing, together with the type of event you are searching for (Motion triggered or alarm sensed). Click the search button to reveal all available files for that day.

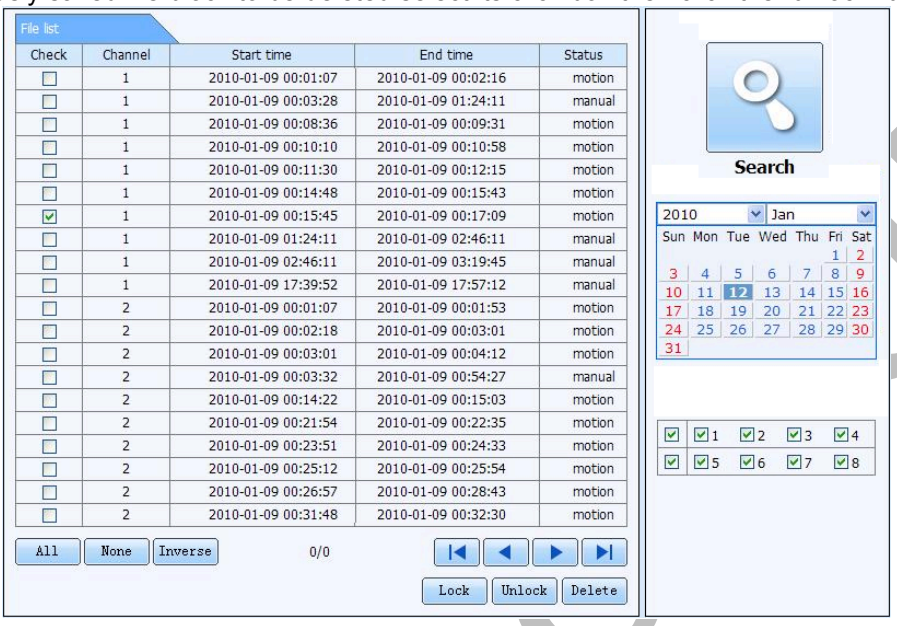
Double click the file to replay it as per replaying time searched footage above.

File Management

In this menu you can delete or permanently keep individual file blocks.

Select a date from the calendar click box as well as the camera or cameras you wish to see available file blocks for. Click search and all available file blocks will be displayed in the event list. Scroll through the pages using the left and right arrows in the bottom right hand corner of the event log.

To select a file block click its check box then either delete it by clicking the “delete” button and “OK” in the confirmation box, or keep it from being over written by clicking the “lock” button and “OK” in the confirmation box. To allow a previously saved file block to be deleted select its click box then click the “unlock” button



Click the “All” button selects all the file blocks, clicking the “Inverse” button toggles between all selected and all de-selected.

Backing up footage stored on the DVR to your computer

Click the Backup tab at the top of the screen to open the backup menu. Select a start date and time, an end date and time, the camera or cameras you are interested in and then click the search button. All available file blocks will be shown in the File List.

Select where on your computer you wish to store the footage either by direct entering a location in the “File Path” address bar or else click the “Browse” button and then select a location from the file directory map.

Once you are happy with the file selection click it’s Check box so it displays a tick then click the “Backup” button to initiate the backup process. Try to keep files relatively small and manageable. It is not good practice to backup large file blocks as they take a lot of time and can be unmanageable in terms of transferring from person to person.

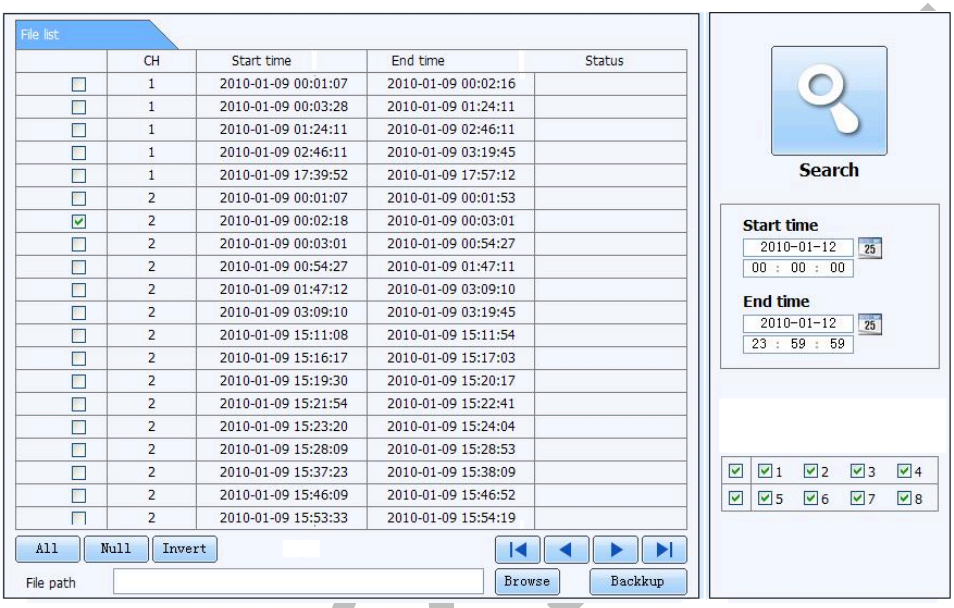
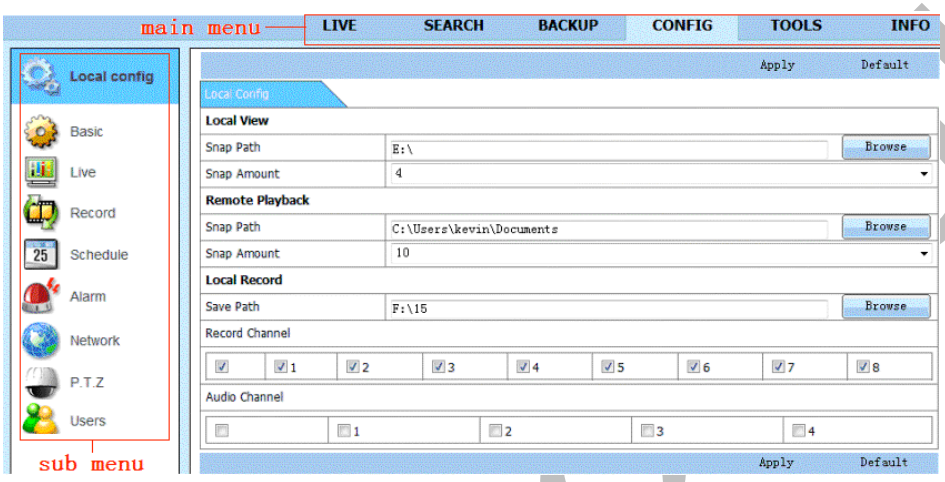


Fig 7-10 remote backup interface

Remote System configuration

A great feature of the cctv42 System2 DVR is the ability to make configuration and settings changes remotely. This is particularly useful when we are providing remote assistance as we can, with your permission, remotely check and alter settings on the DVR as though we were there in the room with you. This even extends to things like detection zones for motion triggered events.
The remote access is designed to be very similar to that experienced when changing settings directly on the DVR unit it's self using the supplied mouse. Left click the CONFIG tab on the top of the screen then select the parameter you wish to modify from the menu on the left of the screen and refer to Chapter 3 "Main Menu setup guide"

In the local Configuration menu you can select where on your remote computer Snap shots and local recordings are stored. Left click the browse button and select a file path on your computer.



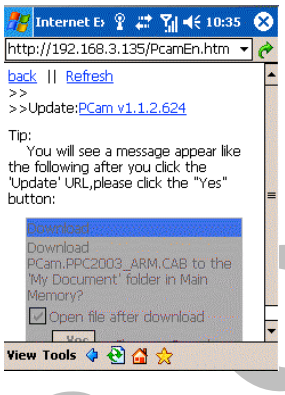
7 Accessing the DVR using a mobile phone

The cctv42 System2 DVR supports remote access using Iphone, Gphone, Blackberry or smart phones with Windows mobile and symbian operating systems.

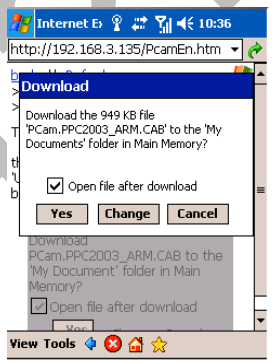
To access the DVR using a mobile device you will first need to configure the network settings on your DVR as per section **3.6** Network configuration. The follow guides show how to access a cctv42 System2 DVR on various mobile phones.

7.1 Phones with Windows mobile

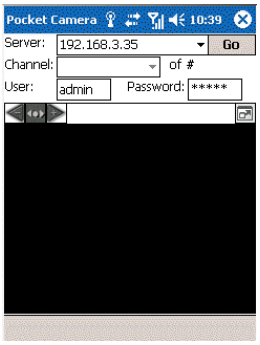
Firstly activate the network access on your mobile phone and then run “Internet Explorer”. Input the web address of your CCTV system (probably your DDNS host name) and the connection is established as shown below:



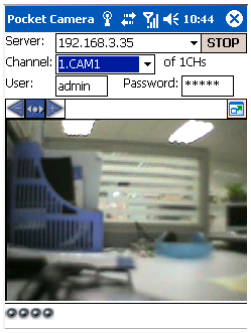
Click on the software name. A dialog box pops up:



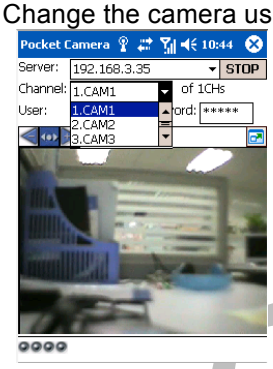
Click “Yes” to start downloading and installing. PCam will open automatically after the initial installation.



Input the web address of your CCTV system (probably your DDNS host name) in the “Server” box, the DVR unit’s User name in the “User” box (default admin) and the DVR unit’s password in the “password” box (default 123456). Click “Go” to log on to your CCTV system. You will be able to see a camera image from your system if you are successful.



Camera 1 is the default channel after login. Change the camera using the scroll down “Channel” menu.



7.2 Symbian mobile phones

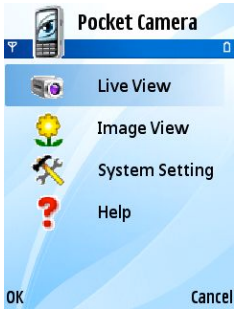
Please ensure the symbian version used on your mobile phone is supported by the DVR

Firstly enable the network access on your mobile phone. Then run the Web browser and input the CCTV system’s address into a newly built bookmark. Click this bookmark to connect to the DVR.

A welcome window will pop up suggesting a suitable software download package. Click the software name to download

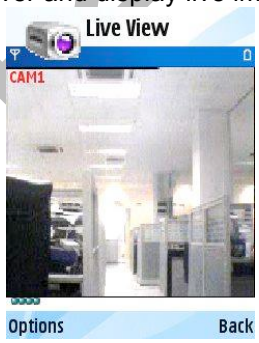
A security window will pop up after downloading. Click YES to install.

A shortcut icon appears on the system menu once downloaded. Click the icon to run the program, it will offer the following functions:
Live view: View live footage
Image view: View any Snap images taken whilst viewing live
System setting: Alter the login information
Help: Function identification and help



System setting click through menu. Input the server's address, the DVR username (default "admin") and password (default "123456"). Then save. The Access point will vary from country to country and service provider to service provider.

Enter Live View – this will connect to the server and display live images

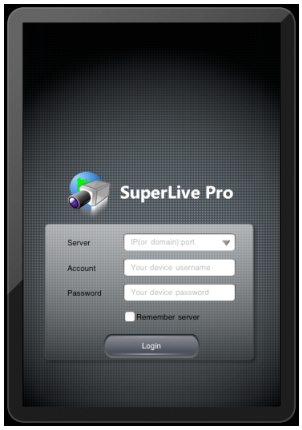


In Live View selecting "Options" allows you to change camera view, take Snap images, control PTZ cameras and so on.

7.3 Apple iPhone

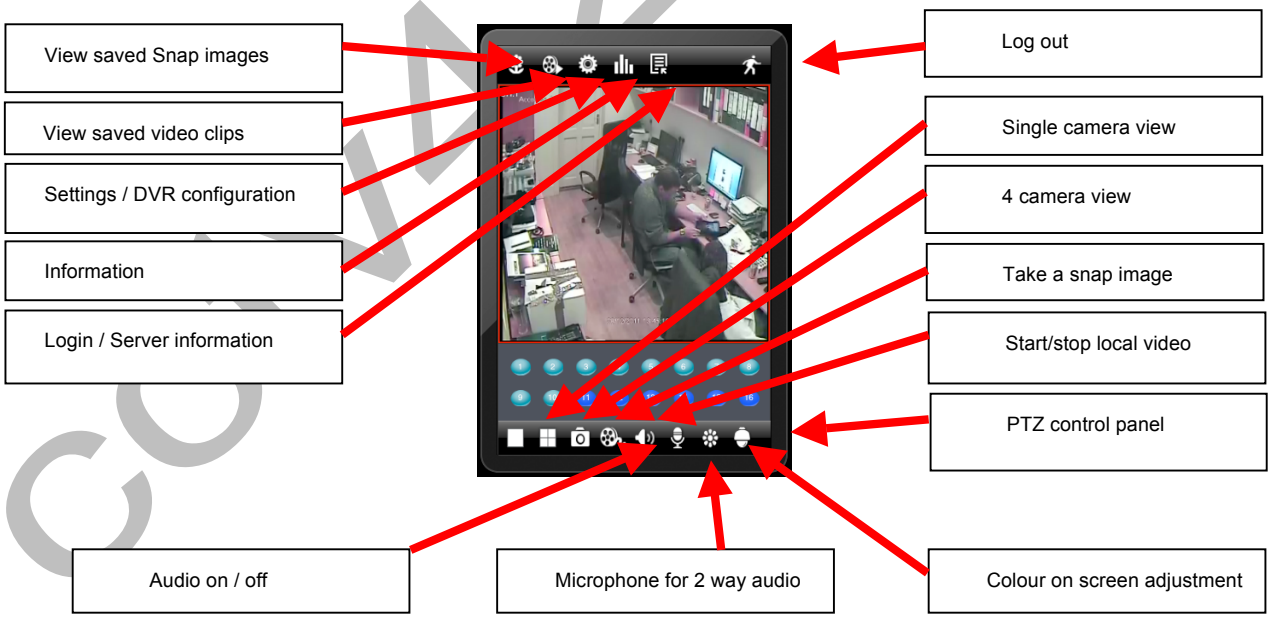
Download the “SuperLivePro” App from the App Store. This is a free App. Type “Superlivepro” into the search function and install as normal. Note – the screen shots are from the SuperCam App which is very similar – but the pro version is no longer free!

Once downloaded click on the SuperLivePro icon to open it up. You will be greeted by the login screen.



Input the web address of your CCTV system (probably your DDNS host name) in the “Server” box, the DVR login user name (default admin) into the “user” box and the DVR password (default 123456) into the “Password” box.

Click “Remember server” to save the settings. Clicking the button shows saved server address’ for quick access. Once logged in the following screen will be seen.



Live View Interface

Snap images: Clicking the “take a snap image” button stores a snapshot image of the screen on your iPhone. Click the “View saved Snap images” button to see a list of saved images and view them by clicking on the image file.

Local Video: Click the “Start stop local video” button to make an instant live recording of the current view on your iPhone. Clicking the “View saved video clips” button shows a list of files stored on the iPhone. Click a file to view.

Setting / DVR configuration: This opens a screen which lists all available settings which can be changed. This includes local settings on the iPhone as well as setting on the DVR unit its self. See chapter 3 “Main menu setup guide” for details on how to change specific settings.

Information: This gives information about the DVR hardware and firmware.

Login / Server information: From here you can edit details of stored login accounts or remove them completely.

Audio on/off: If your CCTV system has provision for a microphone you can turn listen to live audio or mute it out.

Microphone for 2 way audio: The cctv42 System2 DVR supports 2 way audio. You can talk to people who are being viewed on the cameras.

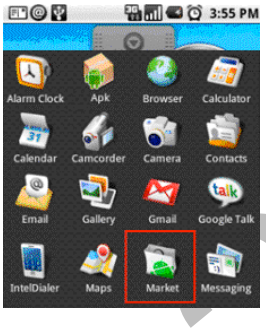
Colour adjustment: This allows you to alter brightness, hue, saturation and contrast settings on the iPhone display.

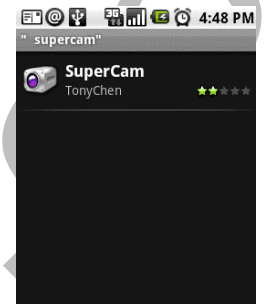
PTZ: This opens the PTZ camera control panel allowing control via the iPhone. Controls are as per section **6.2**

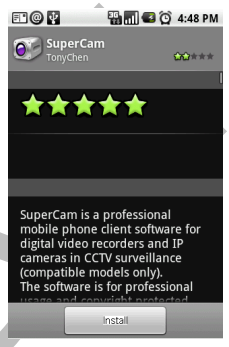
7.4 Android mobile phones

Software Installation

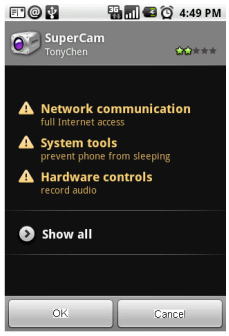
Run Google Market program and search ”SuperCam”



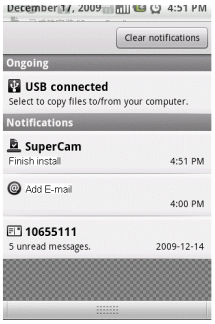




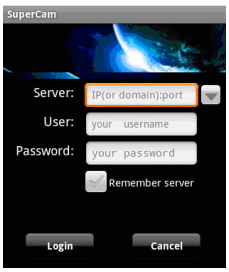
Press “Install” button



Click “OK” button



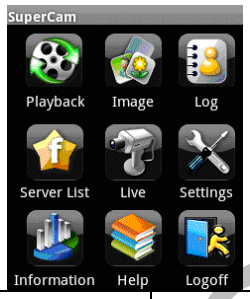
When the download has finished the software will install automatically. Click the SuperCam logo to open the app and reveal the login screen



Input the web address of your CCTV system (probably your DDNS host name) in the “Server” box, the DVR login user name (default admin) into the “user” box and the DVR password (default 123456) into the “Password” box.

Click “Remember server” to save the settings click the ▼ button to show previously used account details.

Main menu



Playback	playback recorded files	**Image**	View stored snap images	**Live**	live view
Log	View the log record	**Server List**	Edit or delete login accounts	**Settings**	View & change settings
Information	View DVR information	**Help**	Application help	**Logoff**	Log off

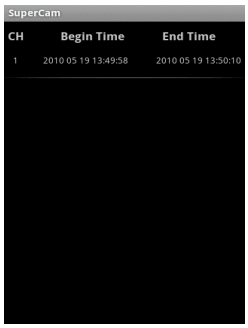
Live view

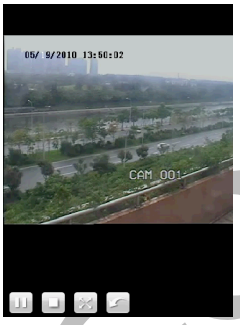
1	Current viewing channel	2	Shows available cameras
	Switch cameras		PTZ control panel open
	Snap		Record
	Microphone for 2 way audio		Live audio
	Full screen		Return
	Move PTZ up		Move PTZ down
	Move PTZ left		Move PTZ right
	Stop PTZ movement		Zoom In/Focus In/Iris open
	Zoom Out/Focus Out/Iris close	Preset	Select the preset point
Group	Set the PTZ cruise or tour		

Image view: looking at a previously stored Snap image

Previous
Next
Zoom in
Zoom out
Delete
Return to main menu

Record playback: Viewing previously recorded footage stored on the device

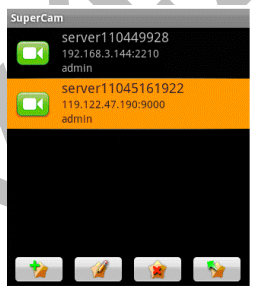




Click the record file name to playback

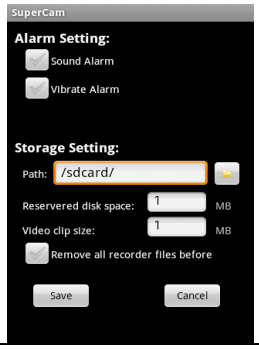
	Play/pause		stop
	Full screen		Return to record file interface

Server list: Remove or edit a login account



Add a sever list
Modify a sever list
Delete a server list
Return to main menu

Config interface: Change settings on the device

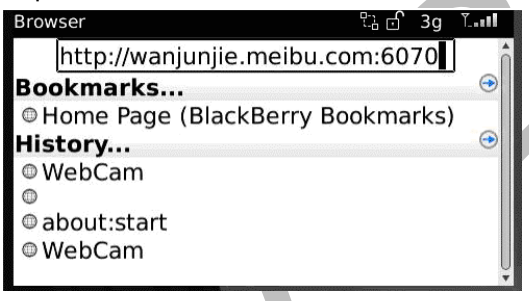


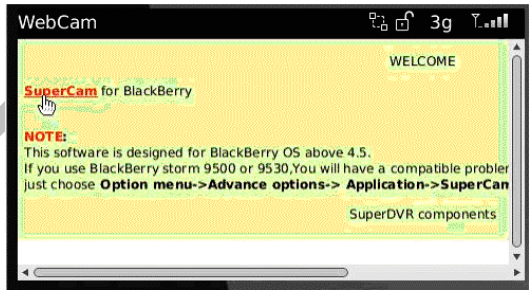
Alarm setting	Select Sound or vibrate Alarm when Video Loss / Motion sensed recording is activated.
Storage setting	Setup parameters for local video storage. This function may only be operational when an SD card is inserted.
Path	Select the location where video files are stored. The default is /SDCard/. Click button to change path.
Reserved disk space	Select minimum free SD Card disk space below which video will not take place.
Video clip size	Select the maximum file size for a single video clip
Remove all recorder files	Delete all current video files

7.5 BlackBerry Mobile phones

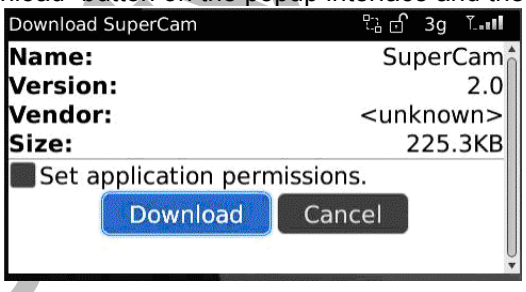
Open the browser of your BlackBerry phone and enter the web address of your CCTV system (probably your DDNS host name).

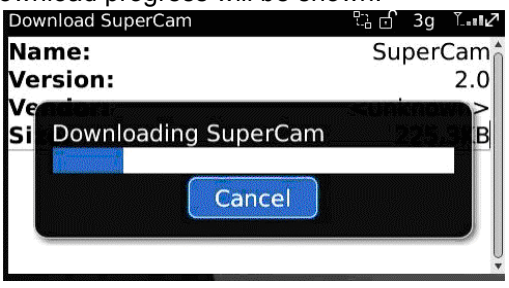
Click the “SuperCam” link



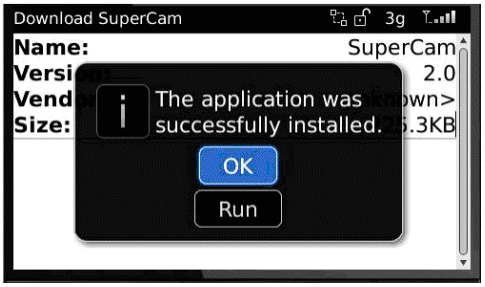


Click “Download” button on the popup interface and the download progress will be shown.





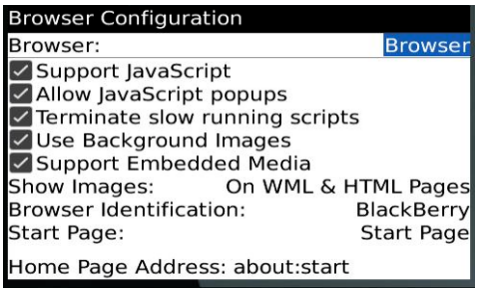
Once the download has finished click “OK” and the software will install automatically.



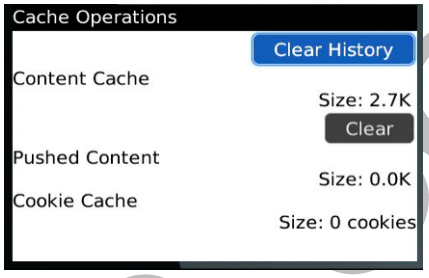
If the software fails to download, please check the following things:

1. Check that mobile phone is connected to a network and internet access is functioning normally
2. Check that the DVR is connected to the internet correctly and the network settings have been configured correctly
3. If you still fail to connect to the DVR configure the phone's Browser as follows:

Enter into Menu->Option->Browser Configuration and make the settings shown below

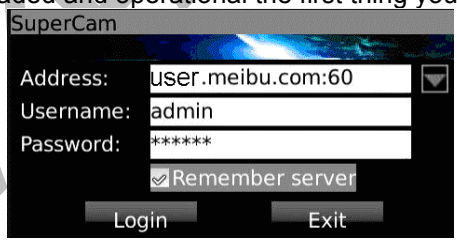


Enter into Menu->Option->Cache Operations then clear the browser cache.



Sometimes when using SuperCam in Blackberry phones equipped with a touch screen there can be compatibility issues. To counter this enter into Options Menu->Advance options->Applications->SuperCam and click "Disable Compatibility" button.

Once the program is successfully loaded and operational the first thing you will see is the login screen.



Input the web address of your CCTV system (probably your DDNS host name) in the "Address" box, the DVR login user name (default admin) into the "username" box and the DVR password (default 123456) into the "Password" box.

Click "Remember server" to save the setting. Clicking the ▼ button can shows any stored log in details for quick access.

Main interface

Playback	playback recorded files	**Image**	View stored snap images	**Live**	live view
Log	View the log record	**Server List**	Edit or delete login accounts	**Settings**	View & change settings
Information	View DVR information	**Help**	Application help	**Logoff**	Log off

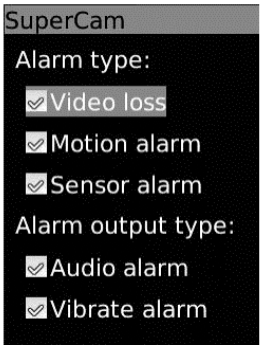
Server list: This shows any stored log in account details and allows you to modify or delete them.

【Add】 Add a server list

【Modify】 Modify a server list

【Delete】 】 delete a server list

Software configuration: This allows you to configure audio and vibration alarms when video loss, motion triggered and alarm sensed recordings take place.



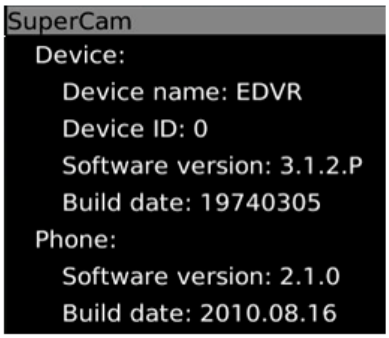
Alarm type: Setup the type of background alarm

(Video Loss/Sensor/Motion)

Alarm output type: Setup prompt type of backgound

Alarm (sound alarm/ bibrate alarm)

Information view: This displays Device and software data.



Device ID: the current connection device ID

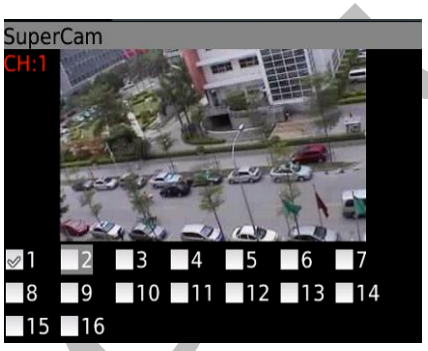
Software version: the current connection device software version

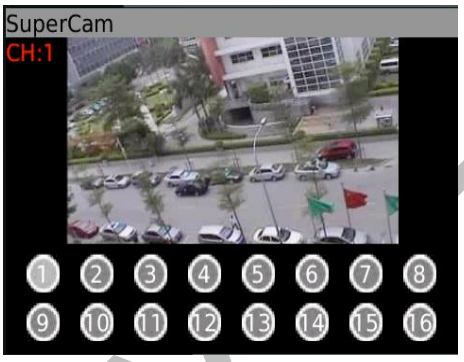
Build date: the current connection device build date

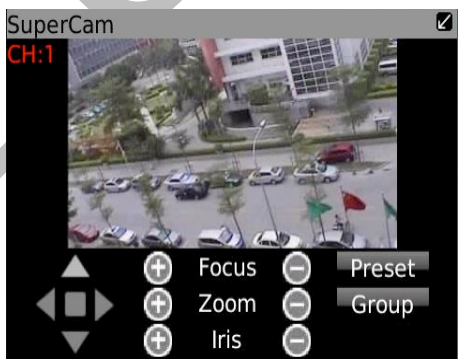
Software version: the software version of mobile phone in use

Software build date: the software build date of mobile phone in use

Live view







1	Current channel being viewed	2	Camera availability
	Switch camera channels		Click to open PTZ interface
	Take Snap image of live screen		Full screen
	Background alarm		Stop rotating the PTZ
	Move PTZ camera up		Move PTZ camera down
	Move PTZ camera left		Move PTZ camera right
	Zoom In/Focus In/Iris open		Zoom Out/Focus Out/Iris close
Preset	Select the preset point	Group	Set the cruise or tour

Appendix A FAQ

Q1. DVR will not turn on or the hard drive will not initialise

a. Make sure the power adaptor has not been damaged and the light is illuminated. Ensure mains cable is fully inserted into transformer and mains power is switched on.
b. Make sure the power adaptor is the one supplied with your DVR and correctly rated.
c. Ensure wiring into DVR is not damaged. Remove all wires going into DVR and re-start
d. Possible hardware failure. No user service parts inside, contact cctv42.

Q2. There is no menu output, the monitor only shows live image display

a. Ensure your monitor is connected to either the VGA or main output (not the spot output).
b. The main output may be set to either VGA or BNC (which ever one you are not plugged in to. Press and hold the ESC key to switch main output between VGA and BNC.

Q3. The indicator lights on the DVR are illuminated but there is no video output.

a. Make sure the power transformer is the one supplied with the DVR and of sufficient power rating.
b. The video format of the DVR is different from that of your monitor. All our cctv42 system2 DVR recorders leave us in PAL format
c. Ensure all connections are secure and correct.
d. Make sure your monitor / TV input is set correctly.

Q4. There are no images displayed on parts or all of the channels of the DVR

a. Make sure all connections are secure. Try gently turning camera input connections to ensure they are secure.
b. Camera problem. Please check the cameras and ensure they are powered up properly.
c. The video format of the DVR is different from that of the cameras. All cctv42 equipment is supplied in PAL format

Q5. The DVR cannot find the HDD (hard drive)

a. Check the power transformer. Ensure it is the one supplied with your DVR and sufficiently powerful.
b. Ensure secure fitting of power and data cables to the hard drive.
c. Make sure there is a hard drive fitted. All DVR recorders are supplied bare, the hard drive must be ordered separately.
d. The HDD (hard drive) may be damaged. Replace.

Q6. The DVR can't record

a. Ensure hard drive(s) has/have been formatted. This must be done before recording can take place.
b. The record function has not been enable or it has been configured incorrectly. Refer to sections **3 & 4**
c. The HDD may be full and you have not enabled the recycle function. Please refer to section **3.3.5**
d. Ensure the hard drive (HDD) is fitted and not damaged.

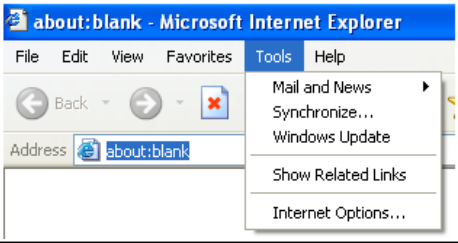
Q7. The mouse won't work.

a. Make sure mouse is plugged in to the USB socket on the rear of the DVR. Wait 1-2 minutes after the mouse is connected.
b. If the mouse is not detected try removing it and re-connecting to the USB on the rear of the DVR
c. The mouse may be incompatible. Ensure the mouse is the one supplied with your DVR or a cctv42 accessory.

Q8. Cannot download ActiveX control.

Internet Explore can block ActiveX programs if the security settings are incorrect. Try the following steps:

Open Internet Explorer. Click "Tools", then "Internet Options"



Select “Security”, “Custom Level” Refer to Fig 8-1
Enable all the sub options under “ActiveX controls and plug-ins” refer to Fig 8-2 If you wish you can set these to “prompt” but it will mean you have to click “ok” when prompted during the installation process.
Then click “ok” to finish setup.

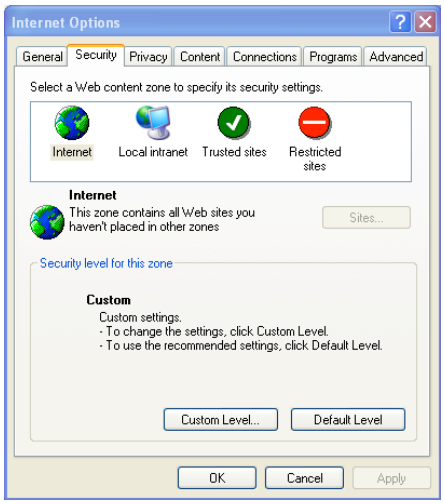


Fig8-1

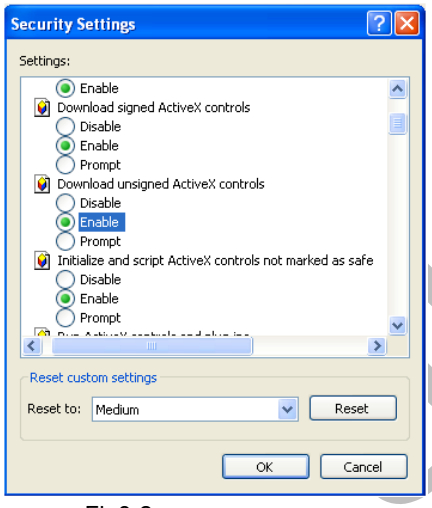


Fig8-2

Other plug-ins or anti-virus software could block ActiveX programs. Please uninstall or close them before attempting to download the DVR virtual control panel

Q9 At start up the DVR displays “please wait…”all the time

a. The hard-drive (HDD) power or data cable may not be properly connected. Also make sure the power supply is the one supplied with the DVR and of sufficient power.

b. The hard drive (HDD) may have a defective track. Try re-formatting the hard drive and if that fails try a replacement hard drive.

Q10: The DVR keeps displaying a LOGIN box

When first used and whenever the DVR is turned off (or there is a power cut) you will need to log in to review footage or make any changes. As supplied your cctv42 System2 DVR has a default User Name of “admin” and a password of “123456”

To enter them into the DVR when you see the LOGIN prompt use the mouse to left click either the Username or Password boxes and a drop down keyboard appears. Click the necessary letters or numbers then click “Enter” once both fields are entered click the “Login” button. Notice that the User Name box is pre-populated with “admin” so you don’t need to type it in again.

Q11: How do I upgrade my DVR when revised software becomes available?

Contact cctv42 on 01895 233311 to obtain the latest firmware version. After downloading the upgraded software from cctv42 copy it onto a memory stick, insert it into the USB port on the front of the DVR. From the main menu select “*upgrade*” and follow the instructions in section **5.4**

If upgrading the kernel procedure insert the U disk into the DVR and input “adwsws” in the password of system login. The system will start the upgrade kernel procedure automatically. Once finished restart the DVR to archive.
Notice: Do not power off in the system upgrading process! Otherwise, it may cause irreparable damage.

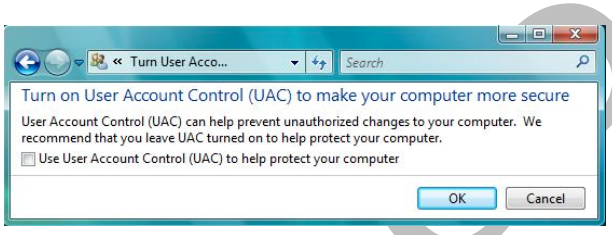
Q12: What are the minimum requirements of a PC for remote accessing this DVR?

PC Module	Parameters
CPU	Intel Celeron 2.4G
Motherboard	Intel 845
HDD	80G
RAM	512MB
VGA	NVIDIA GeForce MX440/FX5200; ATIRADEON 7500/X300
OS	Windows 2000(SP4 above) /Windows XP(SP2 above) /VISTA
DirectX	9.0

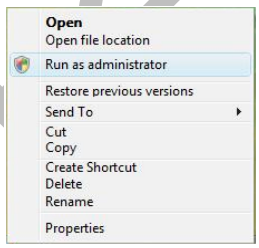
Q13: Windows 7 or Windows Vista is blocking the Codec install

There are 2 solutions to solve this problem

1.Enter Control Panel→User Account and Family Safety → User Account Control (refer to below picture); Turn User Account slider to off, or disable the “Use User Account Control (UAC) to help protect your computer” option.



2 Right click IE browser (refer to Fig 14-2), select Run as administrator to run browser.



Appendix B Calculate Recording Capacity

Users can calculate the size of hard disk required using the table below. At cctv42 we recommend allowing 250GB per camera as a sensible guide.

Video Format	Resolution	Frames / second	Video Quality	Bitrate (kbps)	Used Space(MB/h)
NTSC	CIF	30	Highest	1M	465
			Higher	768k	297
			Medium	512k	230
	D1	6	Low	384k	173
			Lower	256k	115
			Lowest	128k	56
PAL	CIF	25	Highest	1M	466
			Higher	768k	295
			Medium	512k	235
	D1	6	Low	384k	175
			Lower	256k	112
			Lowest	128k	56.4

Total Recording capacity = Used space per hour (MB/h) × recording time (hours) × channel numbers

Example: PAL DVR Recording in CIF with the video quality set to Lowest, frame rate to 25 fps, with 4 cameras recording 24 hours a day for 1 month:

Total Recoding capacity =56.4 (MB/h) X 24(hours/day) X30(days) X4(channels) 162432(MB) =160 (GB)
However the image quality would not be good. A more realistic scenario might be:

D1 resolution, 3 frames per second, 24 hours a day, Highest resolution for 30 days = 670GB

D1 resolution, 3 frames per second at a maximum bitrate of 1280kbs or 1536kbs for clearer results recording for 30 days
Would require approximately 860GB and 1,000GB respectively. Hence our recommendation of 250GB per camera.

Compatible USB memory Devices

The following compatible USB drives have been tested but should not be seen as an exhaustive list, other devices will function correctly.

Brand	Capacity
SSK	512MB, 1G, 2GB
Netac	4GB
Kingston	2GB
Aigo	2GB
Smatter vider	1GB
SanDisk	4GB, 8GB, 16GB

Appendix C 4-CH Specifications

Compression format	Standard H.264 Baseline
Video output	Composite□1.0V p-p/75Ω BNC×2 , VGAX1
Video input	Composite□1.0V p-p/75Ω BNC×4
VGA Resolution	1280x1024 /1024x768/ 800x600
Record Resolution (CIF/D1)	352x288 / 704x576 (PAL), 352x240 / 704x480(NTSC)
Max Record Frame Rate	100FPS (PAL), 120FPS (NTSC)
Audio input	-8dB~ 22k, RCA X4
Audio output	-8Db~92dB, RCA X1
Alarm input	NO or NC 4CH
Alarm output:	1CH
Record Mode	Manual / Sensor /Timer / Motion detection
Maximum operation	Pentaplex
Network Interface	RJ45 (LAN, Internet)
PTZ control	Yes, via RS485
Communication interface	RS485, USB2.0 x 2(1 for backup, 1 for USB mouse)
Disk info	SATA x 1 max 2TB
Remote controller	YES
Wired Mouse	YES (wireless optional)
Power supply	12V 3A
Operating Temperature	0-50 degrees centigrade
Max Humidity	10%-90%
Average Operating Power □Excl HDD□	≤30W

Appendix D 8-CH Specifications

Compression format	Standard H.264 Baseline
Video output	Composite□1.0V p-p/75Ω BNC×2 , VGAX1
Video input	Composite□1.0V p-p/75Ω BNC×8
VGA Resolution	1280x1024 /1024x768/ 800x600
Record Resolution (CIF / D1)	352x288 / 704x576 (PAL), 352x240 / 704x480 (NTSC)
Record Frame Rate	200FPS (PAL), 240FPS (NTSC)
Audio input	-8dB~ 22k, RCA X4
Audio output	-8Db~92dB, RCA X1
Alarm input	NO or NC 8CH
Alarm output:	1CH
Record Mode	Manual / Sensor /Timer / Motion detection
Maximum operations	Pentaplex
Network Interface	RJ45 (LAN, Internet)
PTZ control	Yes, via RS485
Communication interface	RS485, USB2.0 x 2 (1 for backup, 1 for USB mouse)
Disk info	SATA x 1 max 2TB
Remote controller	YES
Wired Mouse	YES (wireless optional)
Power supply	12V 3A
Operating Temperature	0-50 degrees Centigrade
Max Humidity	10%-90%
Average Operating Power □Excl HDD□	≤30W

Appendix E 16-CH Specifications

Compression format	Standard H.264 Baseline
Video output	Composite□1.0V p-p/75Ω BNC×2 , VGAX1
Video input	Composite□1.0V p-p/75Ω BNC×16
VGA Resolution	1280x1024 /1024x768/ 800x600
Record Resolution (CIF / D1)	352x288 / 704x576 (PAL), 352x240 / 704x480 (NTSC)
Record Frame Rate	400FPS (PAL), 480FPS (NTSC)
Audio input	-8dB~ 22k, RCA X4
Audio output	-8Db~92dB, RCA X1
Alarm input	NO or NC 16CH
Alarm output:	1CH
Record Mode	Manual / Sensor /Timer / Motion detection
Maximum operations	Pentaplex
Network Interface	RJ45 (LAN, Internet)
PTZ control	Yes, via RS485
Communication interface	RS485, USB2.0 x 2 (1 for backup, 1 for USB mouse)
Disk info	SATA x 2 max 2TB per drive
Remote controller	YES
Wired Mouse	YES (wireless optional)
Power supply	12V 3A
Operating Temperature	0-50 degrees Centigrade
Max Humidity	10%-90%
Average Operating Power □Excl HDD□	≤30W