



Image for illustration purpose. Actual product might differ slightly.

## O-774-10 CCTV 7"4CH HD DVR Monitor with touch screen and SSD

Durite 7" 4CH HD DVR Monitor with touch screen and 480GB SSD (Additional Storage Support 1 x SD card) Support 1080P/720P/CCD/CMOS camera - Four channels

GPS tracking: Records speed, location and exact driving route

G-sensor: Recognizes sudden movements. Can trigger certain recorded footage as events to be overwrite protected

Touch screen

Waterproof IP65

Password protection (default "456789")

Delayed power off

Sunshade, Anti Fog

Robust Construction (6G Anti Vibration)



**THE TRUSTED QUALITY BRAND FOR PROFESSIONALS**

## WARNINGS

Before using this unit please read these instructions carefully. Take special care to follow the warnings indicated on the unit itself as well as the safety suggestions listed below. Keep these instructions for future reference

**HIGH VOLTAGES WITHIN THIS EQUIPMENT. RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER**

The vehicle safety vision system is designed to be used with, not instead of other viewing aids in your vehicle.

The manufacturer shall not be held liable for any accidents which occur while operating this system.

**\*Please ensure you are familiar and comply with local traffic and driving regulations.**

**\*Power Source - The monitor should be connected to a 12 - 24 volt dc powersupply only.**

**\*Water and Moisture - Do not use the monitor where it may be subject to wateringress or excessive moisture. Do not use outside the vehicle unprotected.**

**\*Heat - Do not install the monitor or camera near a direct heat sources.**

**\*Ventilation - The monitor should be situated to allow free circulation of air.**

**\*Foreign Material - Care should be taken so that objects do not fall onto or into, and that liquids are not spilled on the monitor.**

**\*Mounting Surface - The monitor should be mounted to a strong secure surface.**

**\*Replacement Parts - Use only manufacturers replacement specified parts. Unauthorised substitutions may result in fire risk, electric shock or other hazards and will void the warranty.**

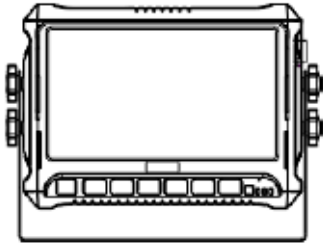



**\*Service - The user should not attempt to service this units beyond that described in the operating instructions. There are no user-serviceable parts within the unit.**

**\*Isolation - When fitting to an isolated earth vehicle the camera and monitor bracket must also be electrically isolated from the vehicle chassis. If interference is experienced on earthed chassis vehicles electrically isolating the camera from the chassis should eliminate the interference.**

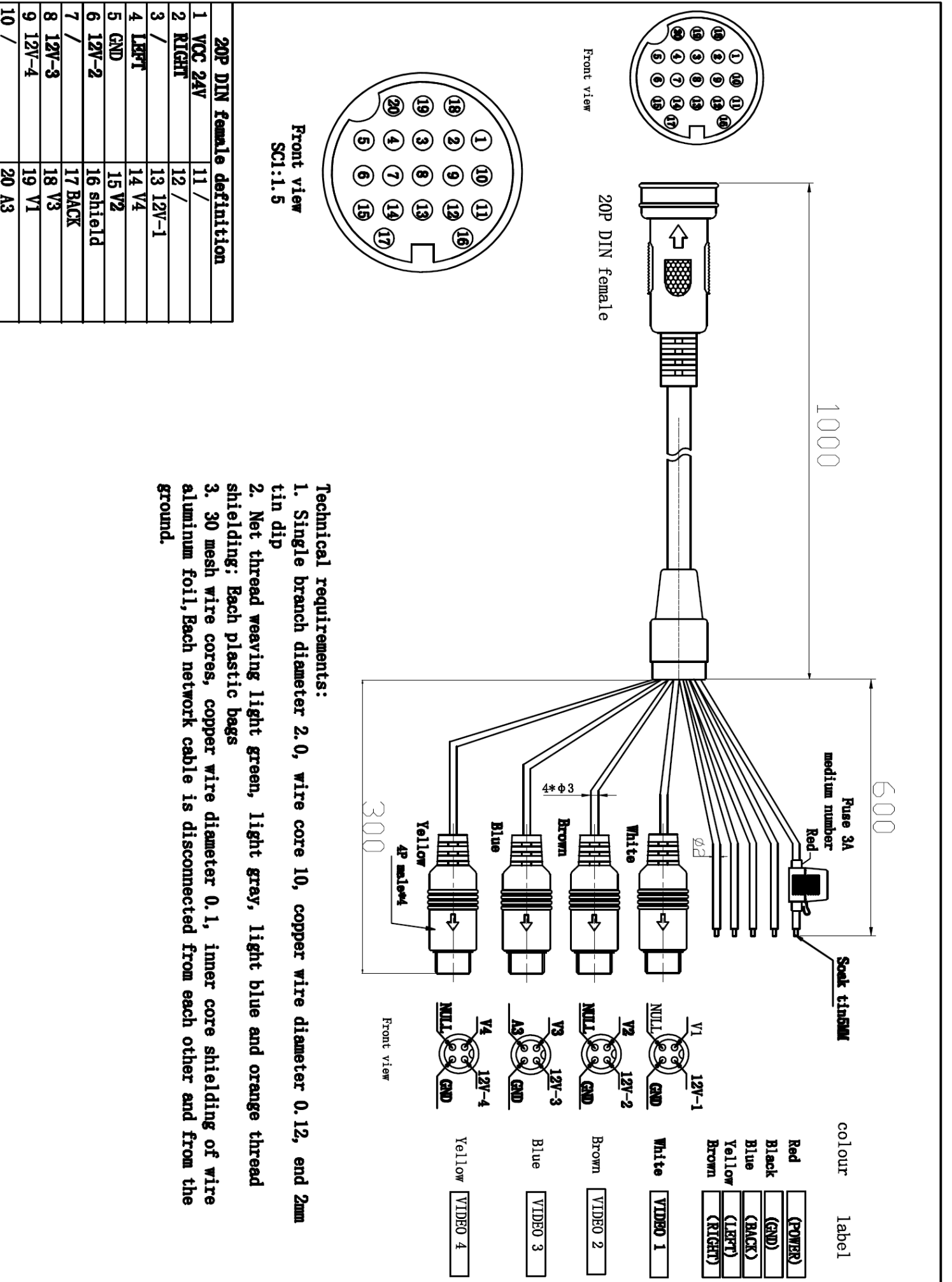
**\*Screen Protective Film - Remove the LCD screen protective plastic cover before use.**

## PACKAGE CONTENTS

1. 7" Monitor
2. Power Cable Main Harness
3. GPS Aerial
4. Fixing Kit

	
Monitor with sunshade	Power cable
	
GPS aerial	Fixing Kit

# MAIN HARNESS SCHEMATIC

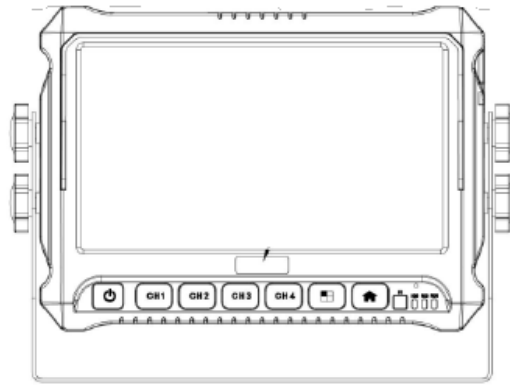


**Technical requirements:**

1. Single branch diameter 2.0, wire core 10, copper wire diameter 0.12, end 2mm tin dip
2. Net thread weaving light green, light gray, light blue and orange thread shielding; Each plastic bags
3. 30 mesh wire cores, copper wire diameter 0.1, inner core shielding of wire aluminum foil, Each network cable is disconnected from each other and from the ground.

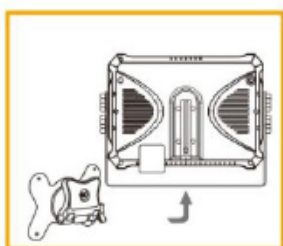
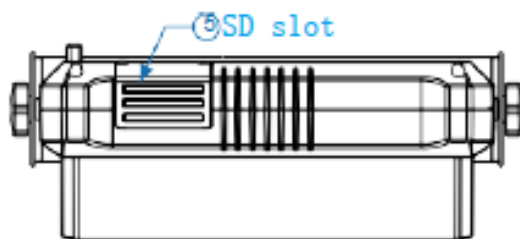
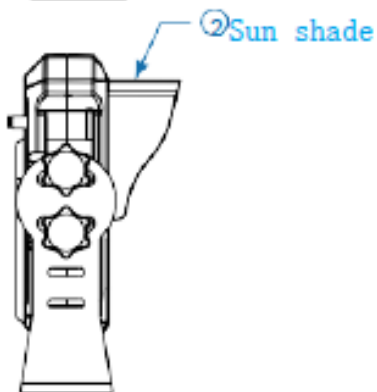
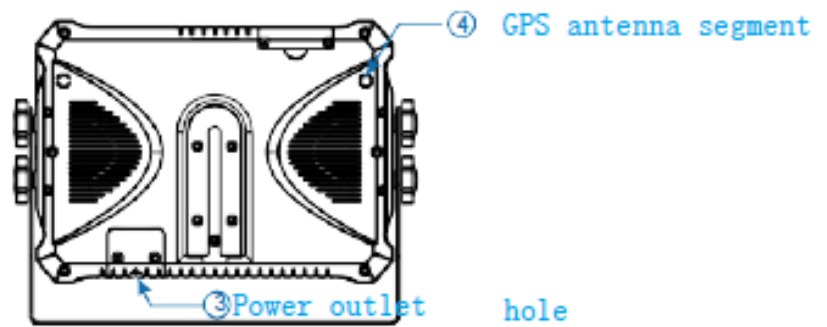
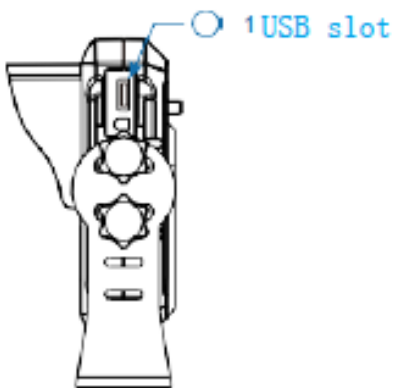
# INSTALLATION

Host diagram as follows:



External expansion port description:

1. USB Slot
2. Sun Shade
3. Power Outlet Hole. Wired connection support only.
4. GPS Antenna
5. SD Card Slot x 1



butterfly bracket mounting  
(same as fan bracket)

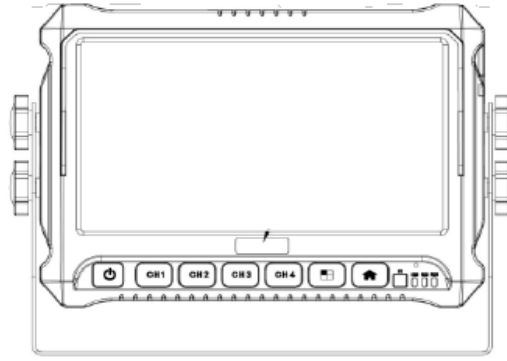


U bracket mounting



vertical monitor mounting

## FUNCTION DESCRIPTION



### Button Instruction:

From left to right are POWER, CH1, CH2, CH3, CH4, SPLIT and Home Images.

1. **POWER:** Indicator light is RED to confirm power supply.
2. **CH1/CH2/CH3/CH4 .** If a trigger is applied it will maximize the relevant channel
3. **Split Screen.** Quad Image, Single Image, Split Image.
4. **HOME.** Jump directly to the main interface.

Indicator LED (From Left to Right) - HDD (Hard Disk Drive), REC (Recording), RUN (Disk Run).

Operating Mode: Touch, Buttons, Remote Control, Mouse

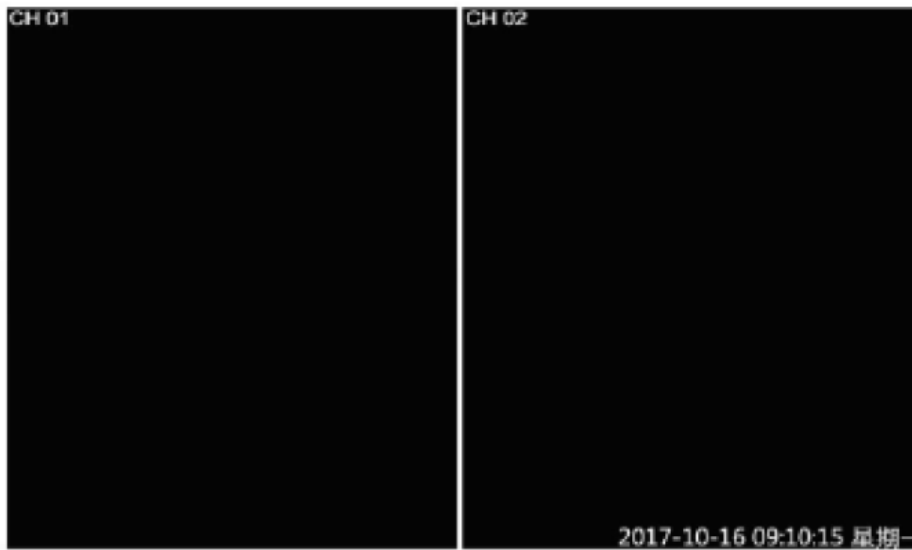
## SYSTEM PERFORMANCE

After the system boots up normally the interface is as follows below:

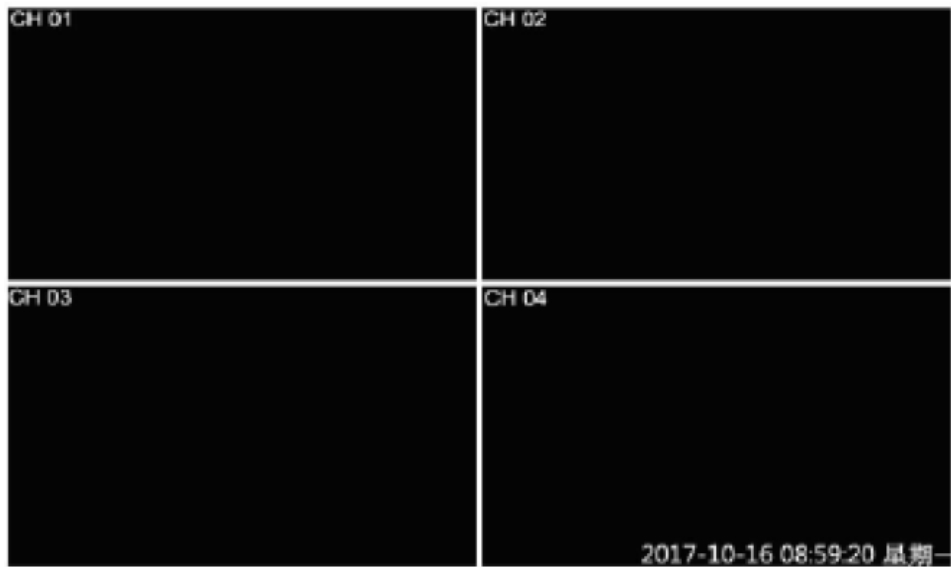
1 Channel



**Split Video displayed as shown below:**



**Quad Video displayed as shown below:**



## FUNCTION OPERATION

Use the lower section of the touch screen to trigger the menu's



The figure above is the trigger shortcut menu to the following:

- Video Playback
- Event Recording
- Output Adjustment
- Main Menu

All shortcuts are accessible from the main menu.

Main Menu:

Enter the user name (ADMIN). The password will need to be setup and is left blank at default:

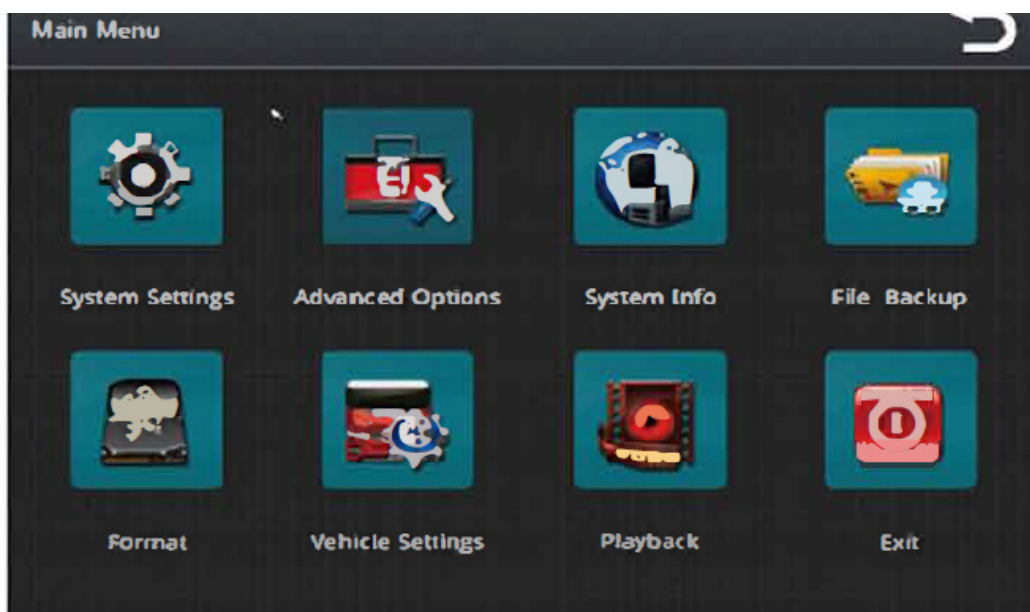




Use the popup keyboard to set the User Name and Password:

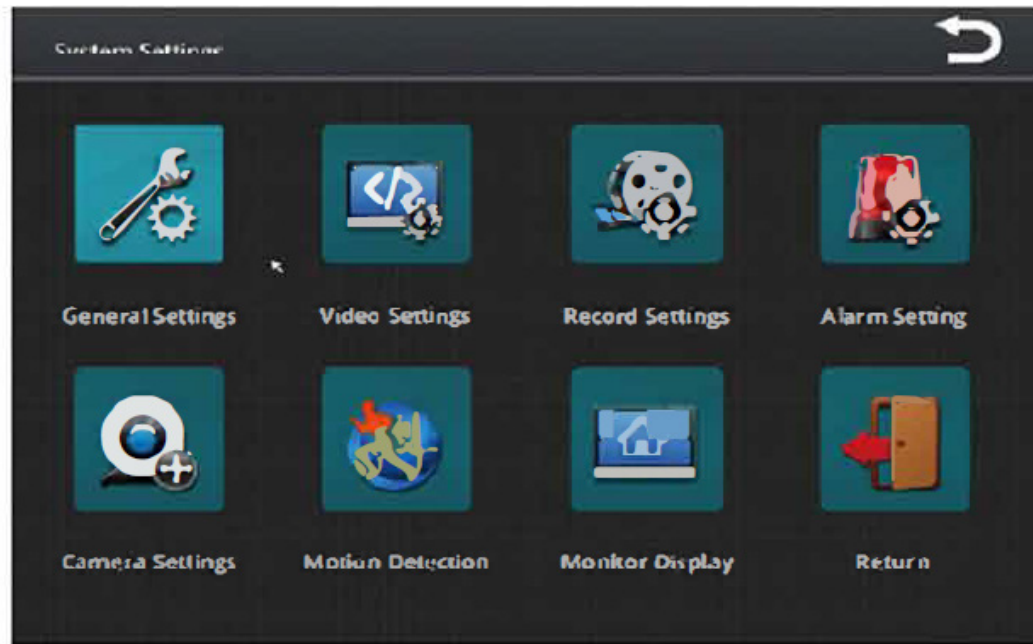


Once logged in enter the main menu as shown below:

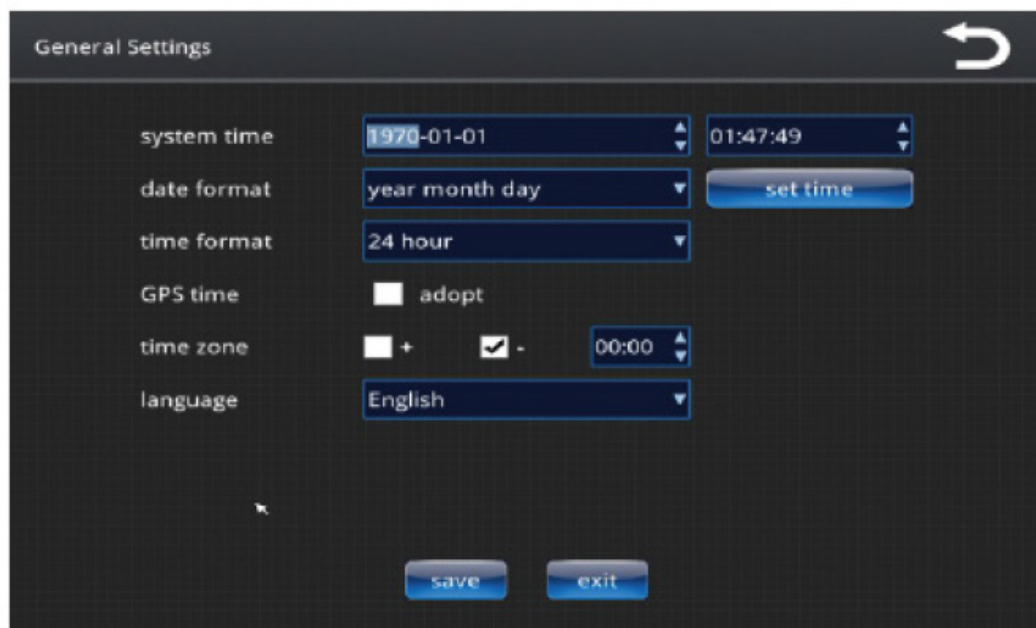


**Main Menu System Settings:**

- Commonly used settings
- Time
- Language
- Video
- Interface Display
- System settings interface as shown over the page

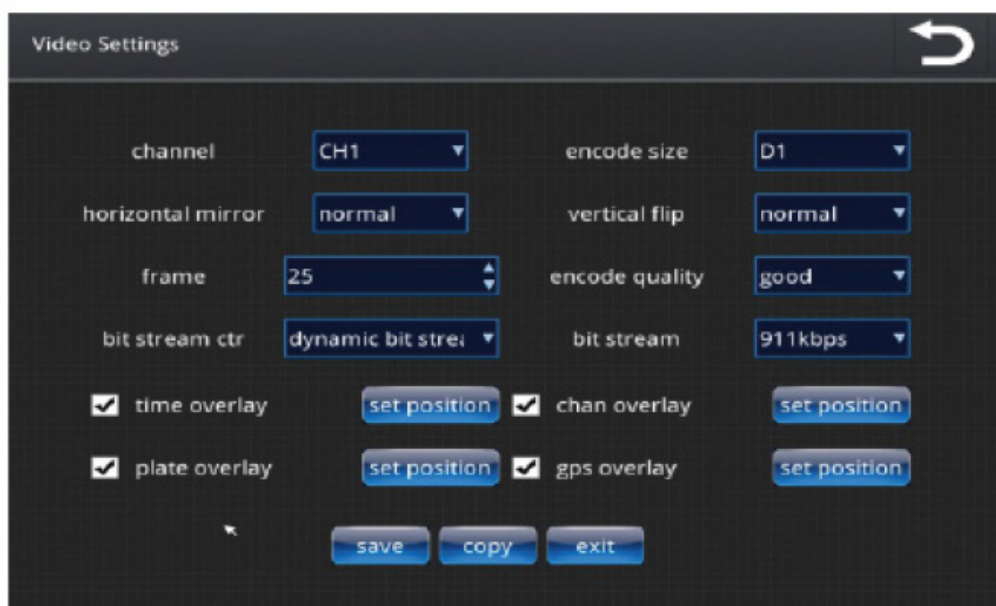


General Settings as shown below:



- Time Zone: Set accordingly to correct time zone. UK is GMT.
- Time Format: 24HR or 12HR Clock.
- System Time: Year, Month, Date, Hour, Minute, Second.
- GPS Time: Depends on GPS Zone
- Language: Selectable. UK, Chinese.
- Date Format: Year and Date / Month, Date, Year / Date, Month, Year

Encoding settings are as shown below:



- Coding settings: Save format quality for each channel of video

- Encoding size: From small to large, CIF, Half D1, D1, 960h, 720p, 1080p. Coding from left to right. The lowest quality is CIF with the best being 1080p.

- Stream Control: Fixed Stream (CBR Constant Bit Rate) / Dynamic Stream (VBR Variable Bit Rate).

- Mirror: Normal vs. Mirror the image, per channel.

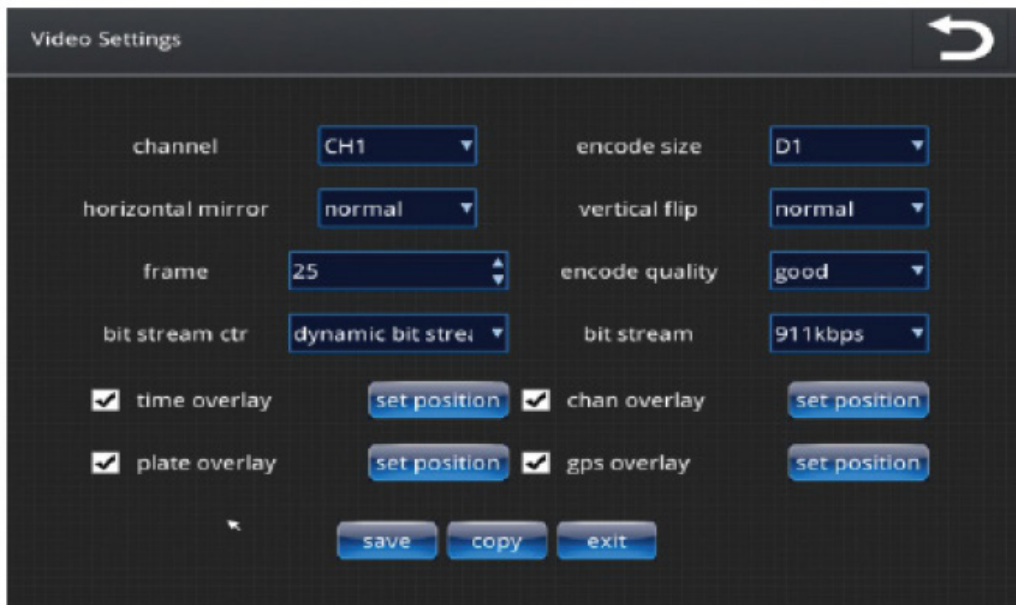
- Coding Quality: best / very good / good / medium / poor / worst. The quality can be changed to increase quality, this will reduce storage space. If quality is decreased it will increase disk space.

- Bit Rate: 303 / 456 / 607 / 911 / 1214 / 1518kbps. The bit rate can be further fine tuned to increase quality and / or disk space.

- OSD: On Screen Display. Time, Character, License Plate and GPS Overlay. The following information can be embedded to files and displayed upon playback.

- System Keys: Choose COPY to copy all setting from one channel to all channels to save repeating the process for each if the settings will be the same for all channels.

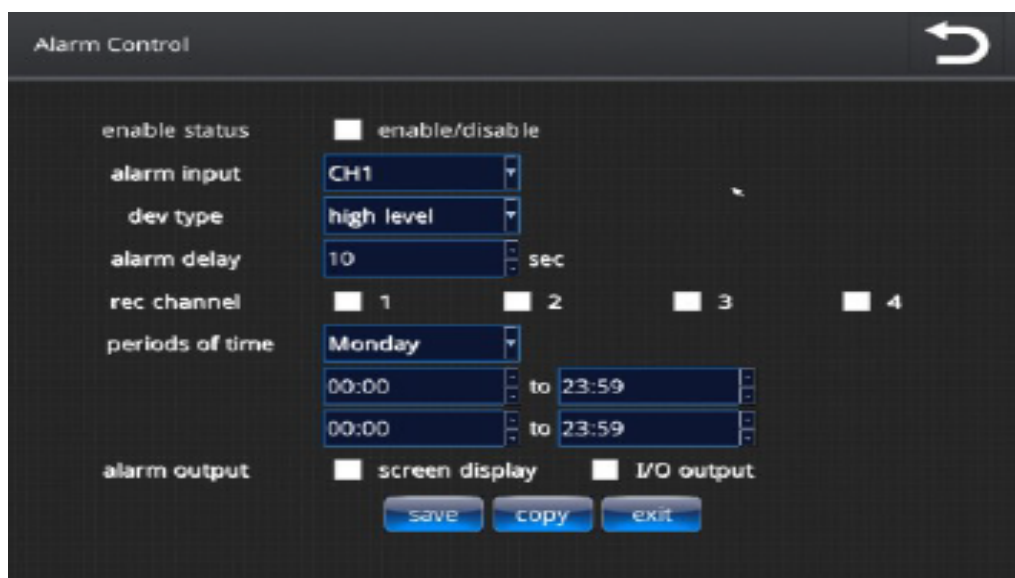
Video settings are as shown below:



Set channel configuration information:

- **Auto Coverage:** ON/OFF, YES/NO set this to YES if you wish to overwrite the disk once full. This loop record function is designed to ensure you can continue recording indefinitely. Please be aware files that are not locked will be over written.
- **Video Duration:** 1-60 Minutes
- **Video Format:** PAL or NTSC.
- **Video Control:** Choose when to record. If MANUAL recording is selected the DVR will record when prompted and within time parametres. If AUTOMATIC recording is selected the DVR will always record regardless of prompt / time parametres.

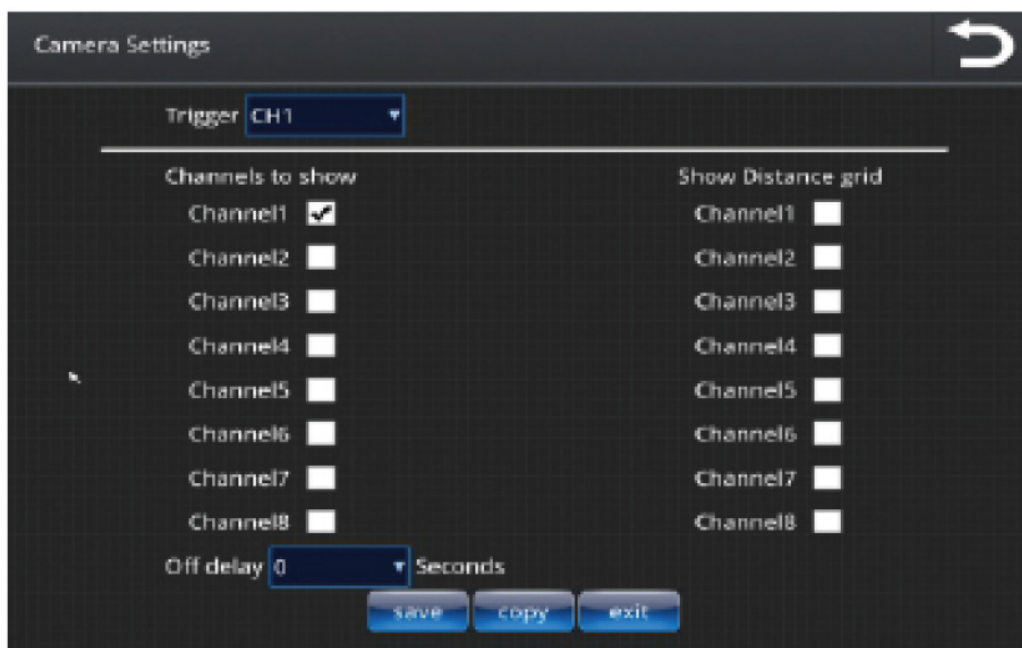
Video settings are as shown below:



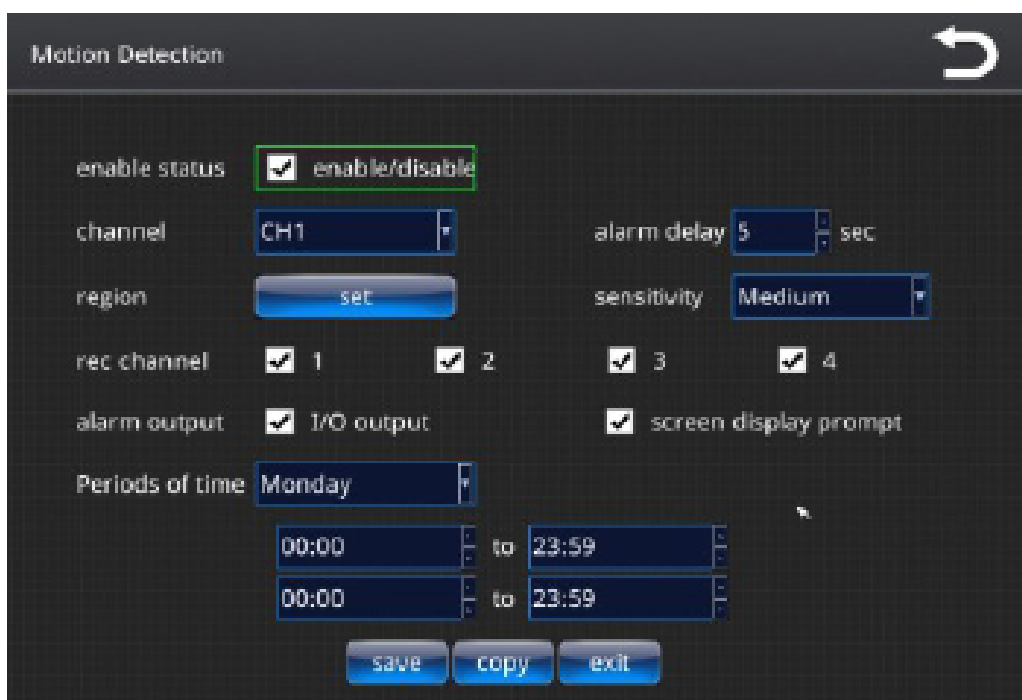
- Alarm Control: Set the main switch for all alarms
- Enabled Status: When enabled, the current settings are optional an an alarm occurs.
- Alarm Input: Alarm channel.
- Set Type: Set to HIGH or LOW level alarm.
- Alarm Delay: Default is 10 seconds. This is adjustable.
- Video Channel: Can be several choices, if the alarm occurs it will begin recording.
- Time Period: Set the alarm time period
- Alarm Output: Screen prompts / I/O Output. The screen output is the interface display alarm, I/O Output and voice prompt alarm.

### Camera Settings:

Alternative triggers can be set for each channel. So can delay time and distance grid reverse lines.



### Motion detection as shown below:

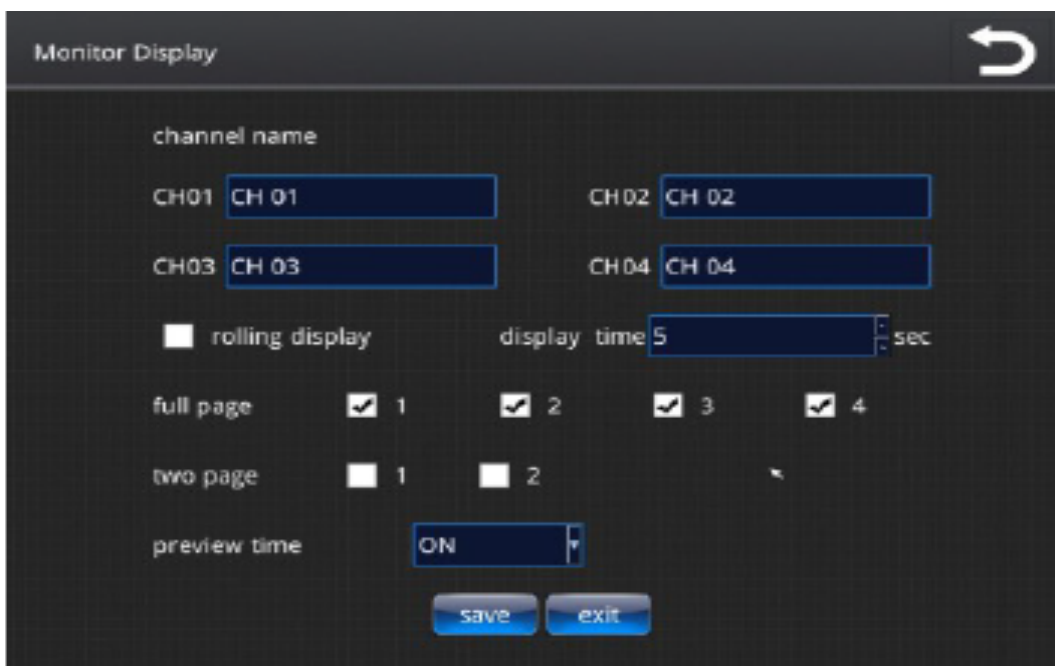


- **Motion Detection:** Alarm will occur when motion is detected.
- **Enabled:** Motion Detection begins
- **Channel:** The current channel that can be selected to be set
- **Alarm Delay:** Detection of motion detection delay X seconds after the start of the alarm prompt and video.
- **Area:** Choose the area of the screen to be scanned for motion detection.
- **Video Channel:** Select the channel that is required to detect the alarm video.

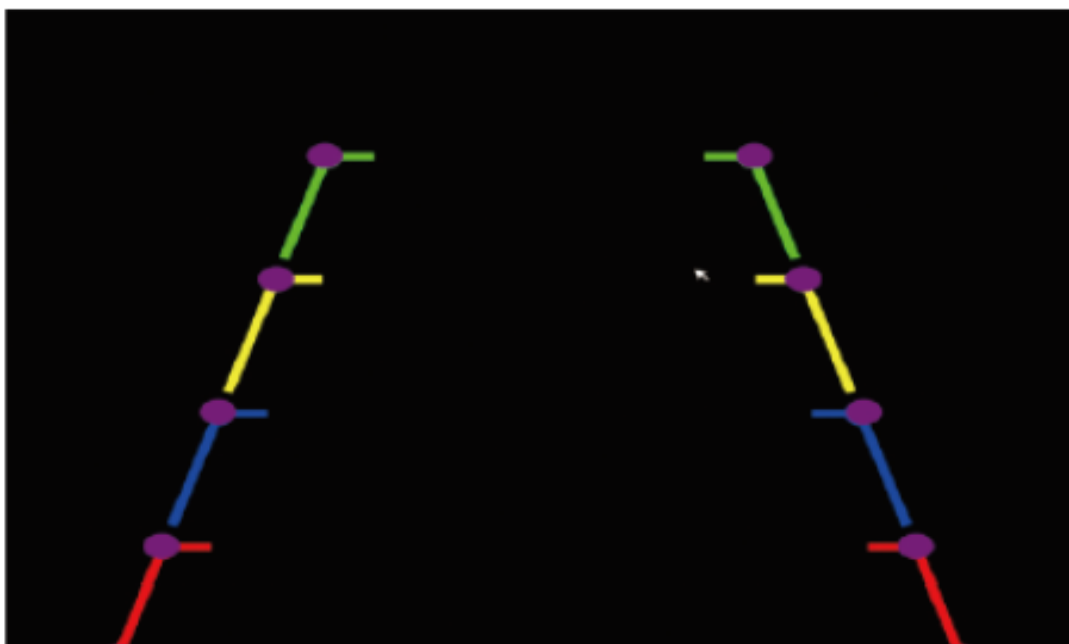
**Local Display:** Set the way the interface displays channels. Channel name setting, change the name of the channel suitable to its location. E.g. Reverse Camera.

**Tour Shows:** Select the interface that shows dynamic switching

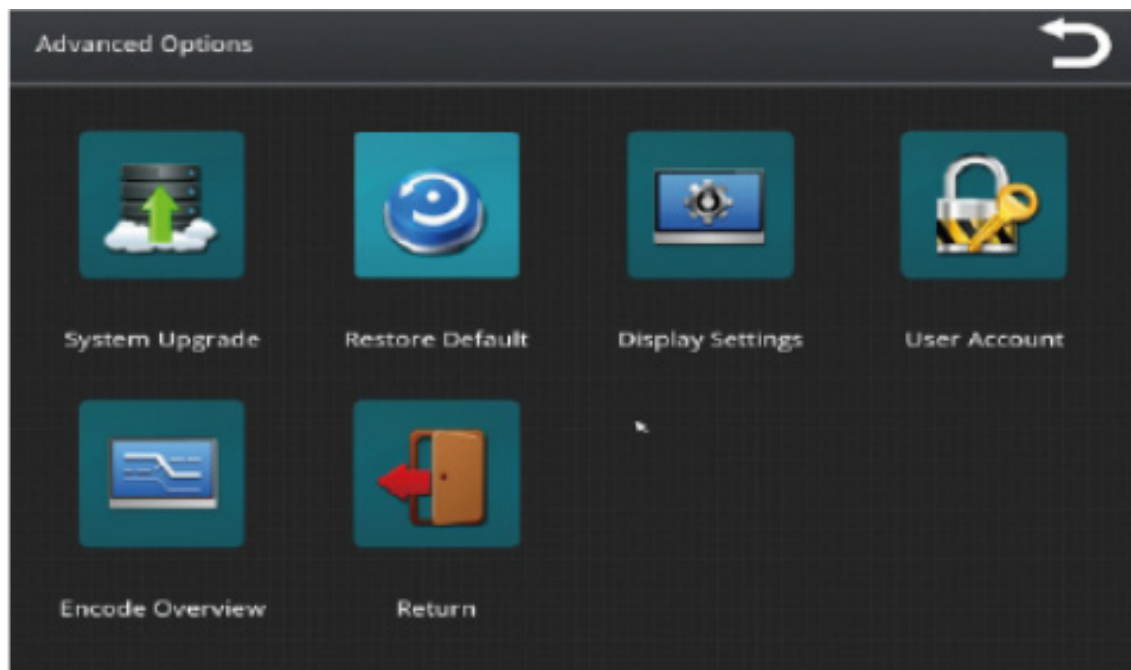
**Show Time:** The length of the video time.



**Grid Lines:** The grid lines are adjustable by dragging the purple points. Right click to save.



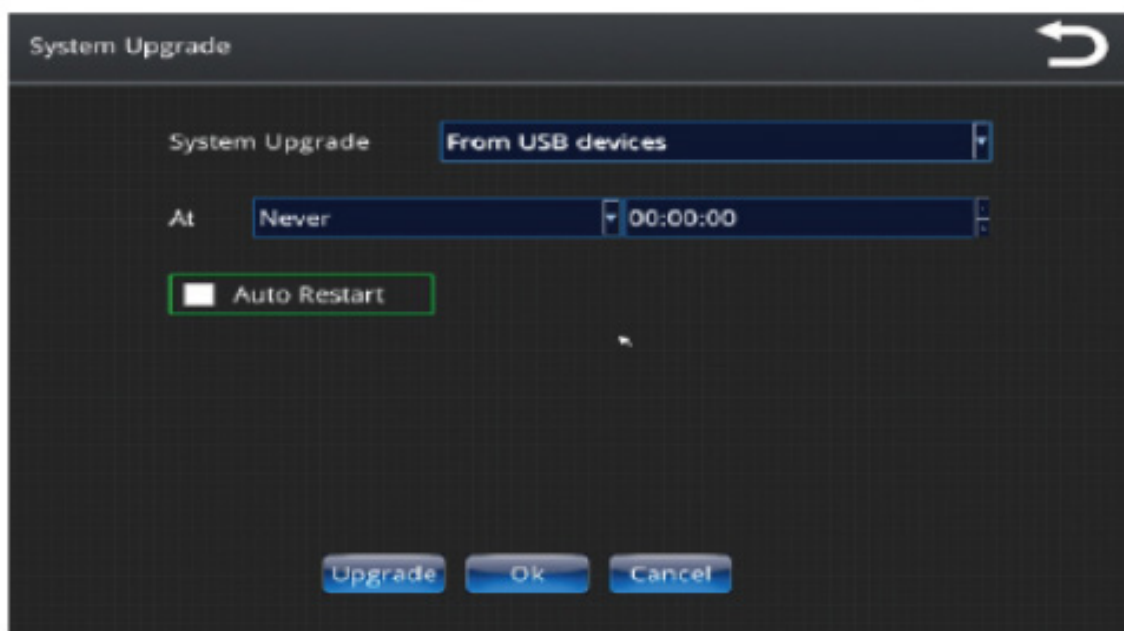
**Main Menu > System Settings, the main settings are system upgrades, default information and display information. They are shown as below:**



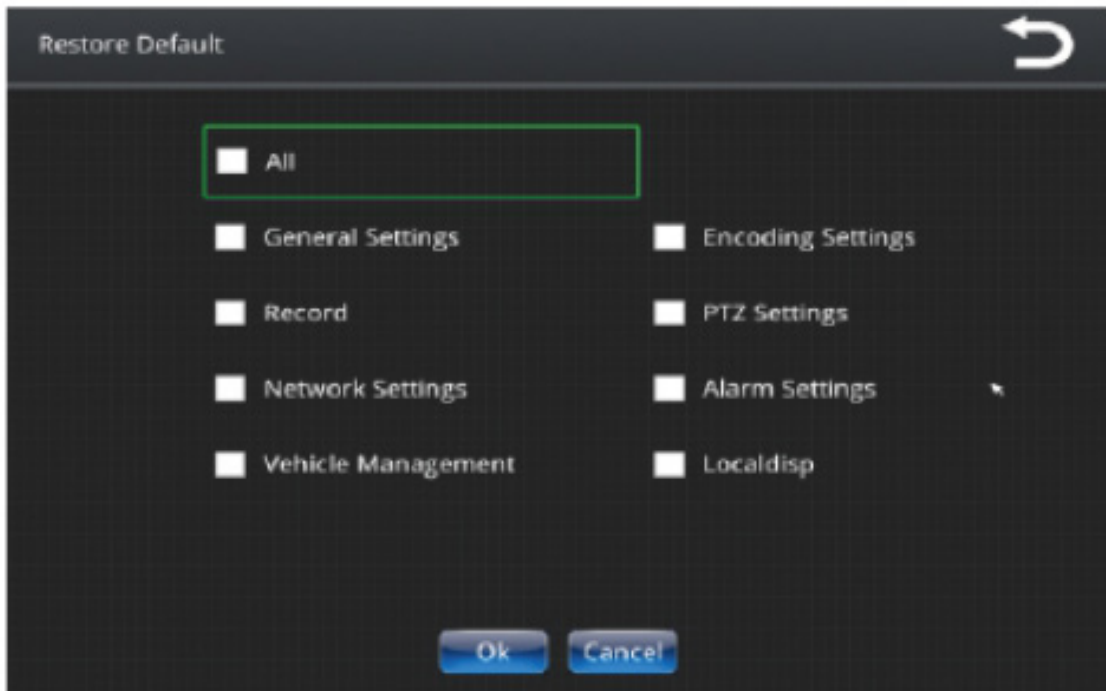
**System Upgrade, Set the interface as follows.**

**System Upgrade: the default setting can only be upgraded via USB. You must restart the DVR after any update.**

**Coding Overview: View Coding Information:**



Restore the default setting: by selecting this the DVR will initiate its original default settings.



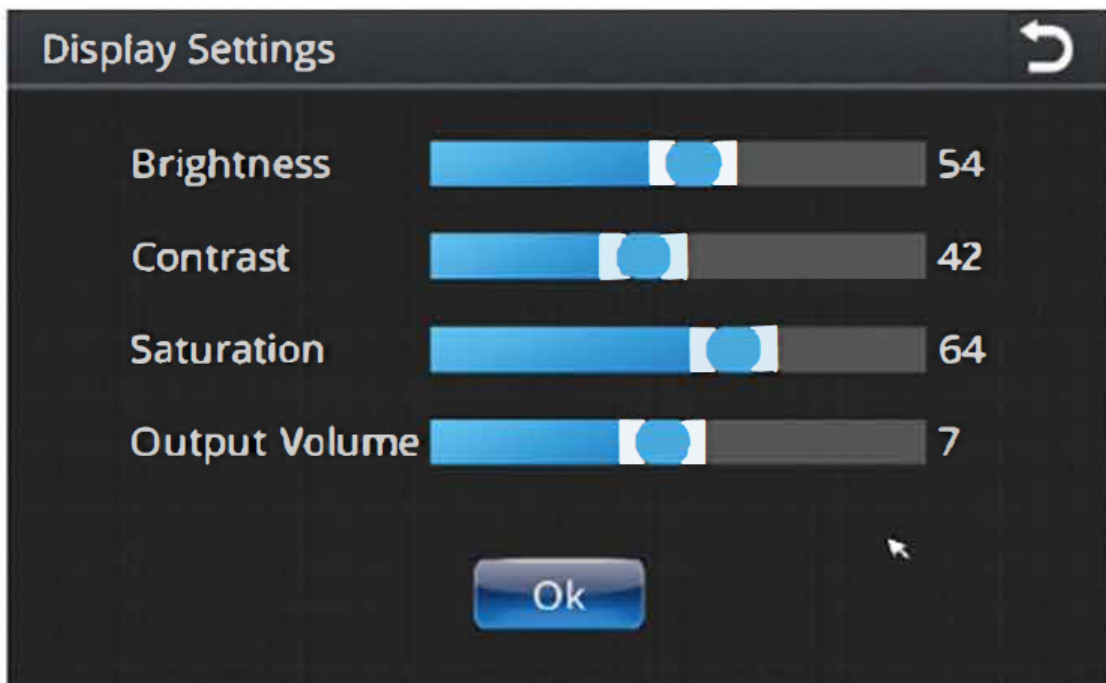
Output Adjustment. This is used to to adjust the screen settings:

Brightness: Range 0-100

Contrast: Range 0-100

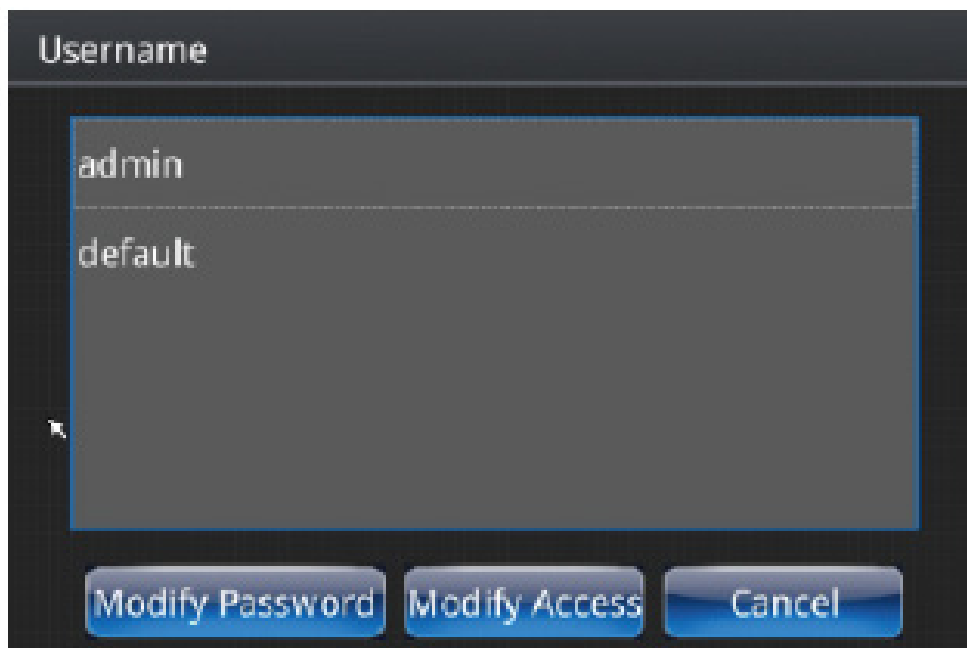
Saturation: Range 0-100

Output Volume: 0-15

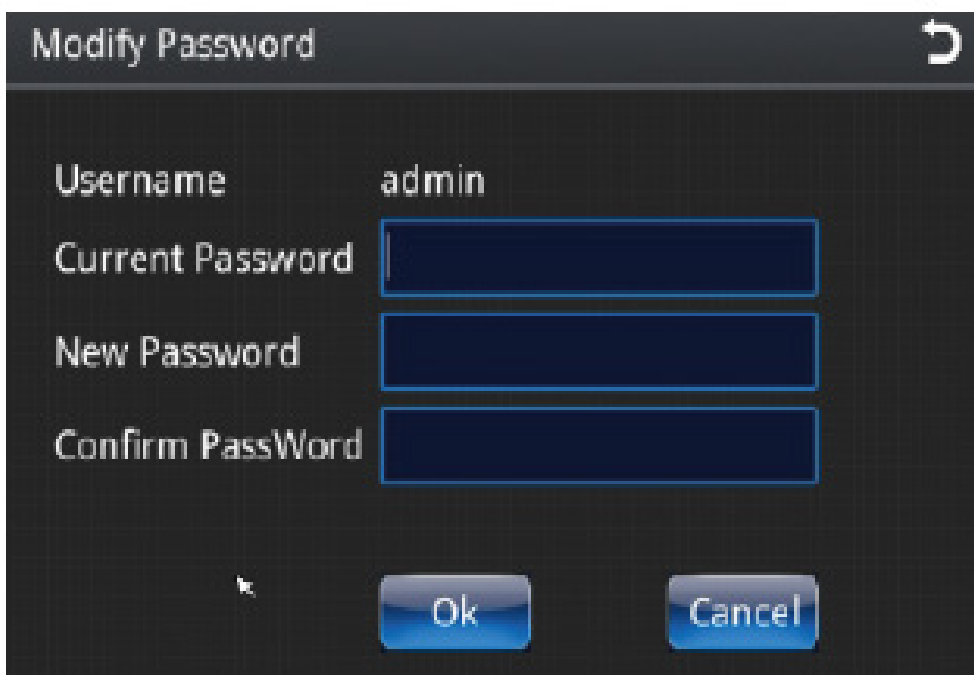




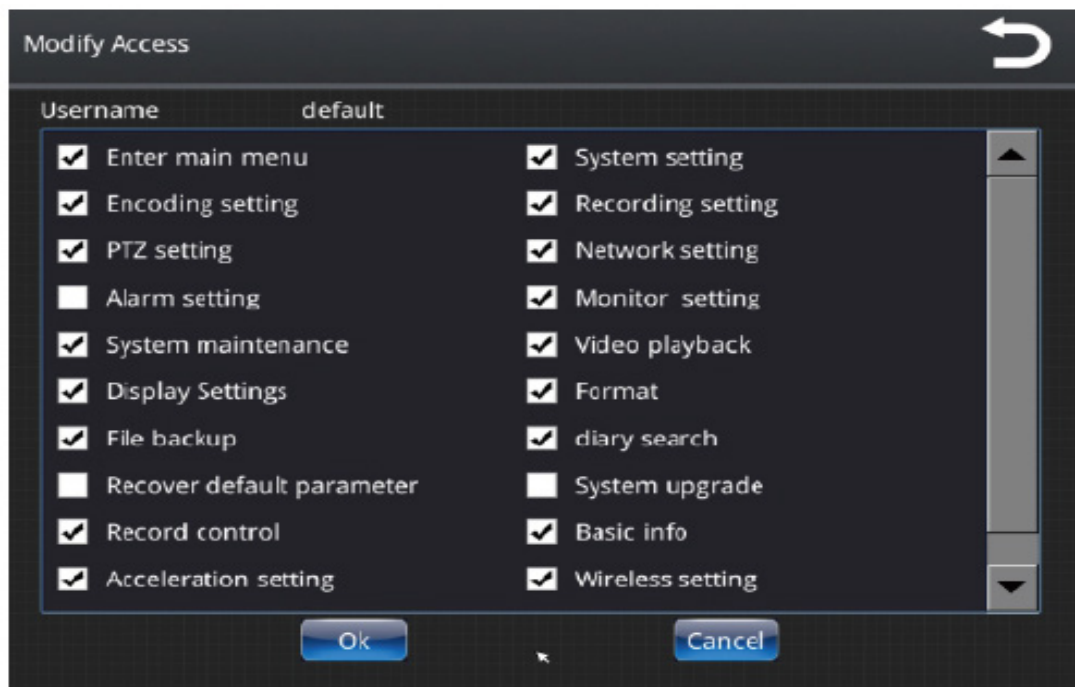
User Accounts, administrative user rights and password settings. Admin super user has maximum permissions. Only admin can change the password. Default user password can be modified as can user permissions. Default password is 456789



To change the password: Enter the current password 456789, confirm the identity, enter the new password and confirm. If the new passwords do not match upon confirmation the password change function is canceled.



Modify Access, configure user rights. DVR all permissions can be selected as shown on the next page.

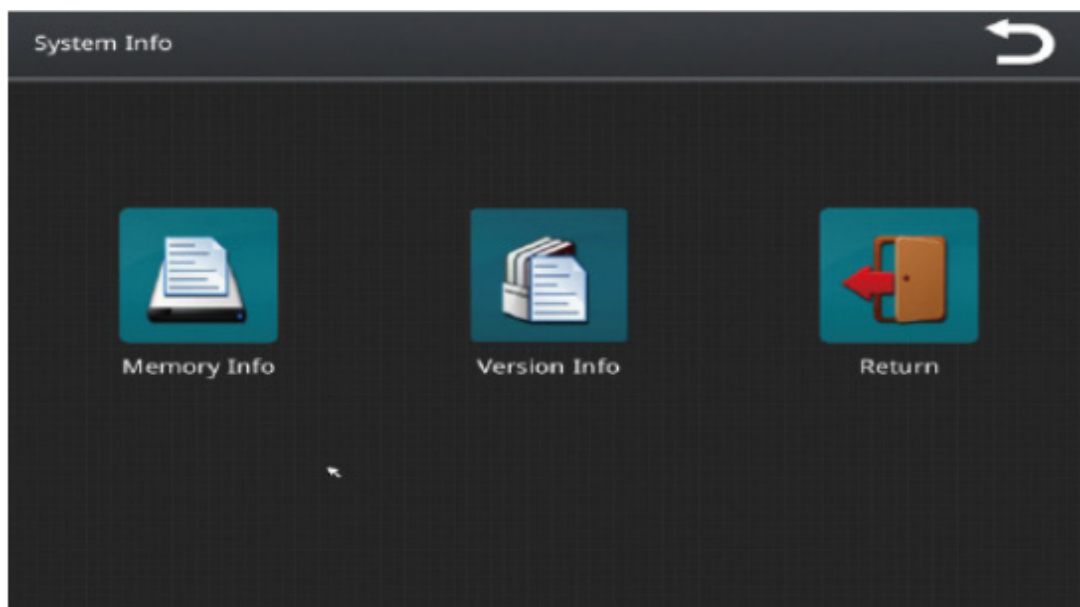


### Coding overview:

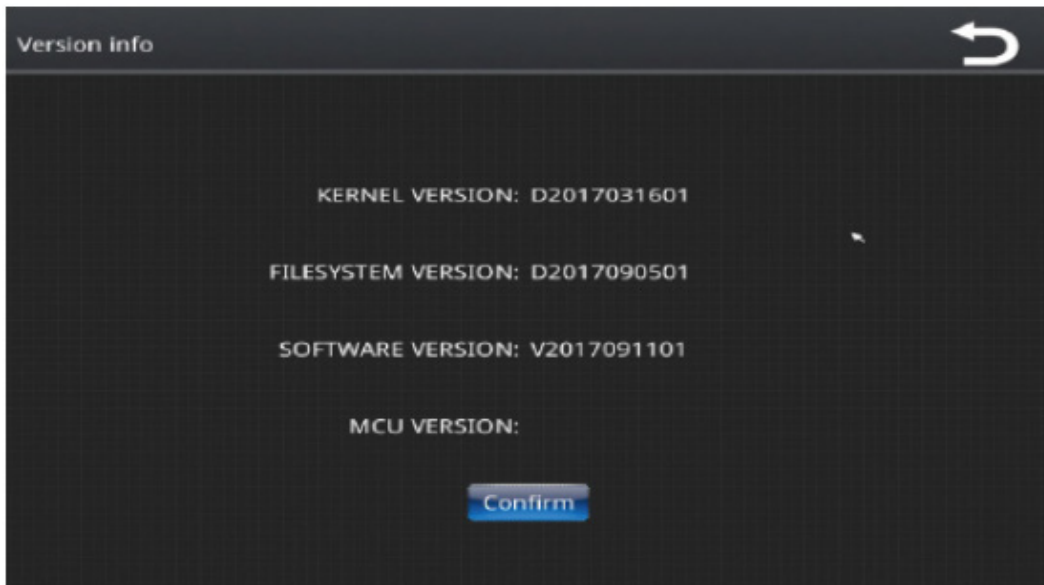
Encode Overview

Channel	Camera	Resolution	Frame fps	Bit kbps	Size GB/h
CH1	connect	D1	30	911	0.38 GB
CH2	connect	960H	30	1214	0.51 GB
CH3	disconnect	D1	30	911	0
CH4	disconnect	D1	30	911	0
CH5	disconnect	D1	25	911	0
CH6	disconnect	D1	25	911	0
CH7	disconnect	D1	25	911	0
CH8	disconnect	D1	25	911	0
Total					0.89 GB

edit exit



Viewing hard disk information similar to the version information, for example, the version information, the display kernel version, the file system version and the software version number are as follows:



Main Menu > File Backup, the main function is to backup video files to the USB and SD Card.

**1. Detect, remove and stop peripheral operations.**

**Detection:** Detection of the current machine plug in peripherals, USB and SD Card mounted device, partition, capacity and free space.

**Remove:** Remove the current peripheral, the machine does not operate this device.

**Stop:** Click this to stop testing.

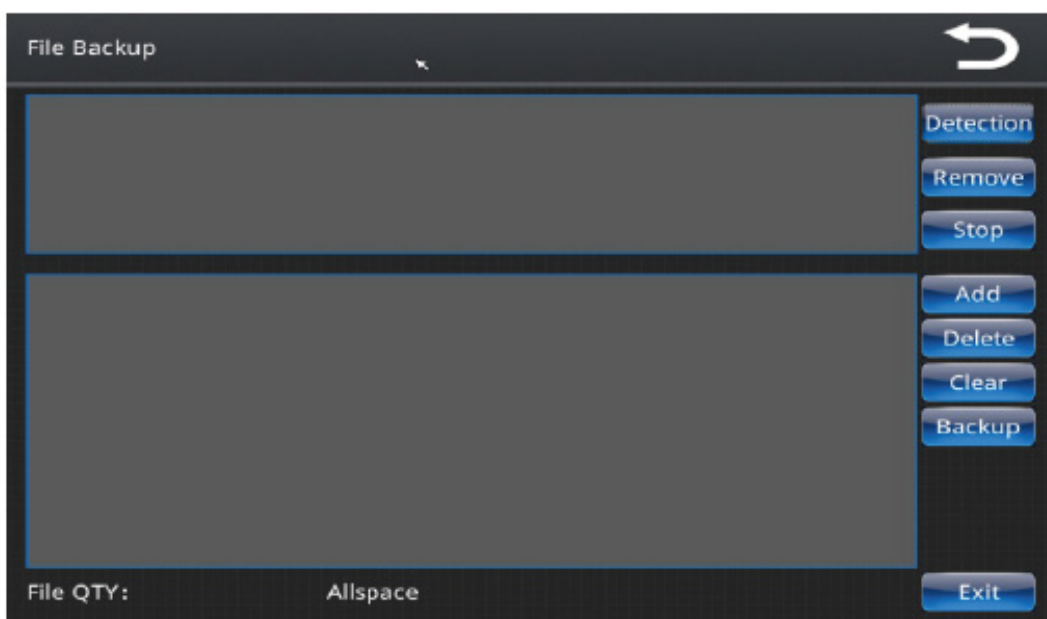
**2. Add, delete, clear and backup stored video image operation.**

**Add:** Click the operation box to retrieve the video to be backed up.

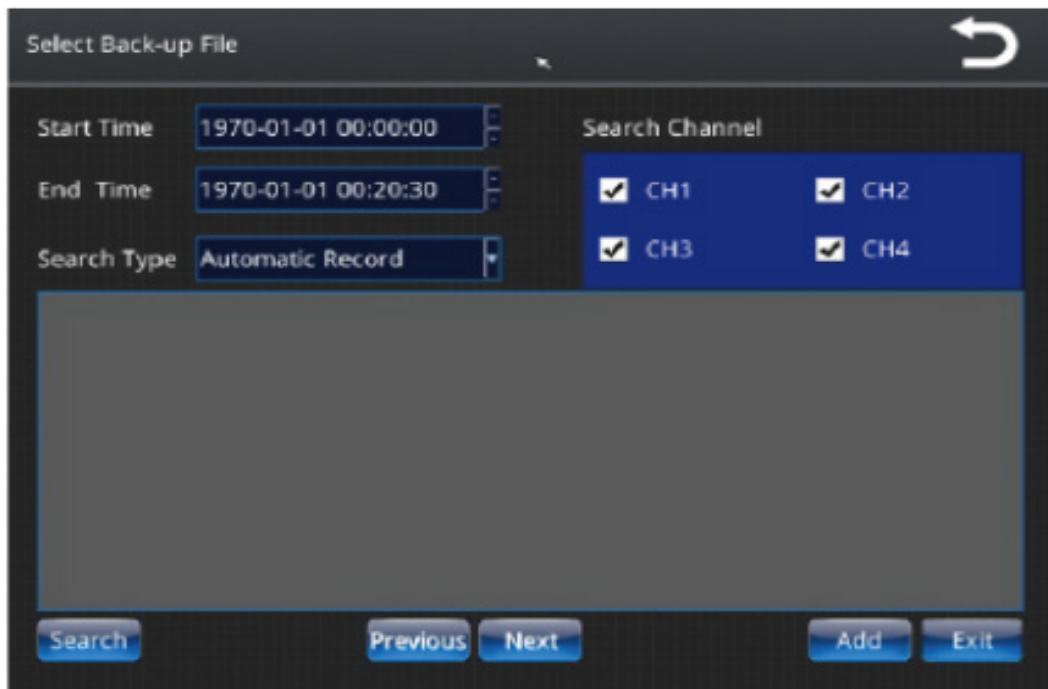
**Delete:** Deletes the selected video.

**Clear:** Clear all the videos in the current backup box.

**Back Up:** Backs up all videos to the device selected in the peripherals box.

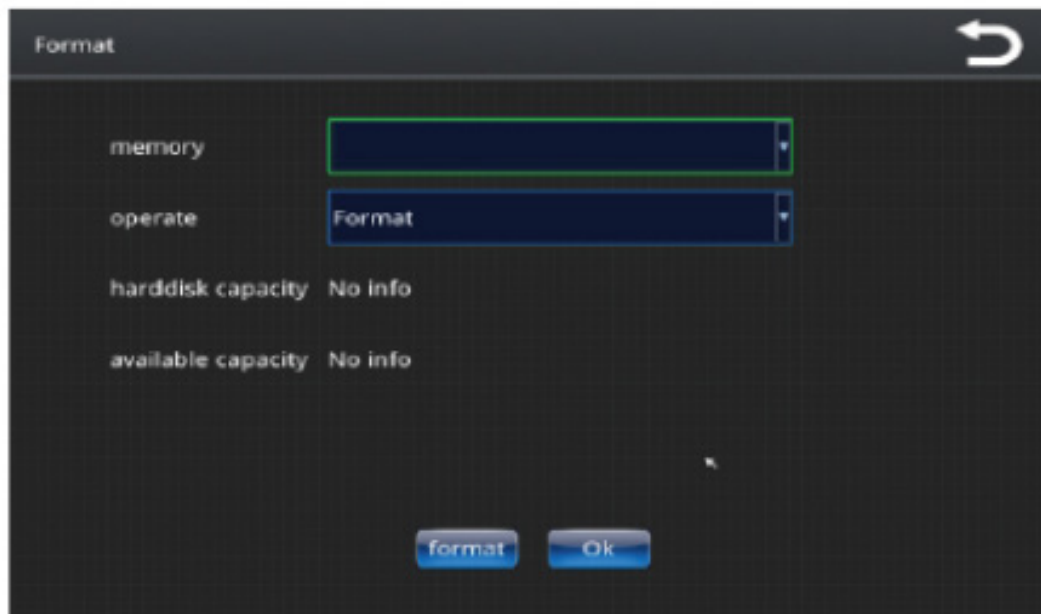


Press the button to jump to the following page: Back up video, retrieve it by time, type or channel. Then click the search button in the lower left corner. Videos that are located successfully will appear in the grey box. Click Add to display the backed up video.



**Main Menu > HDD Management: HDD and SD Card viewing and formatting.**

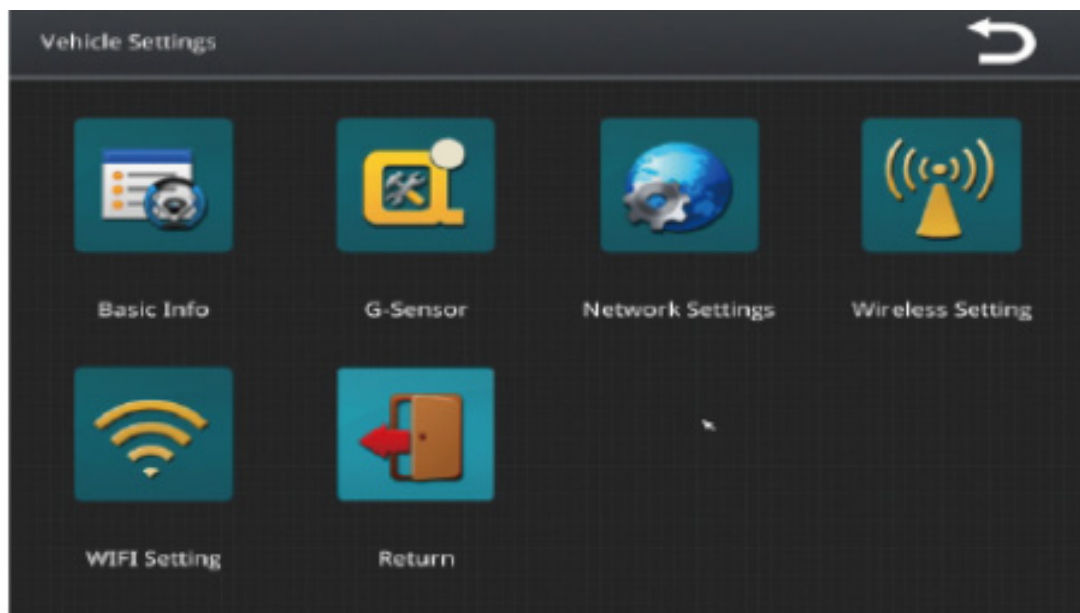
**If there is no hard disk or SD Card, there is no information about the hard disk capacity as shown below.**



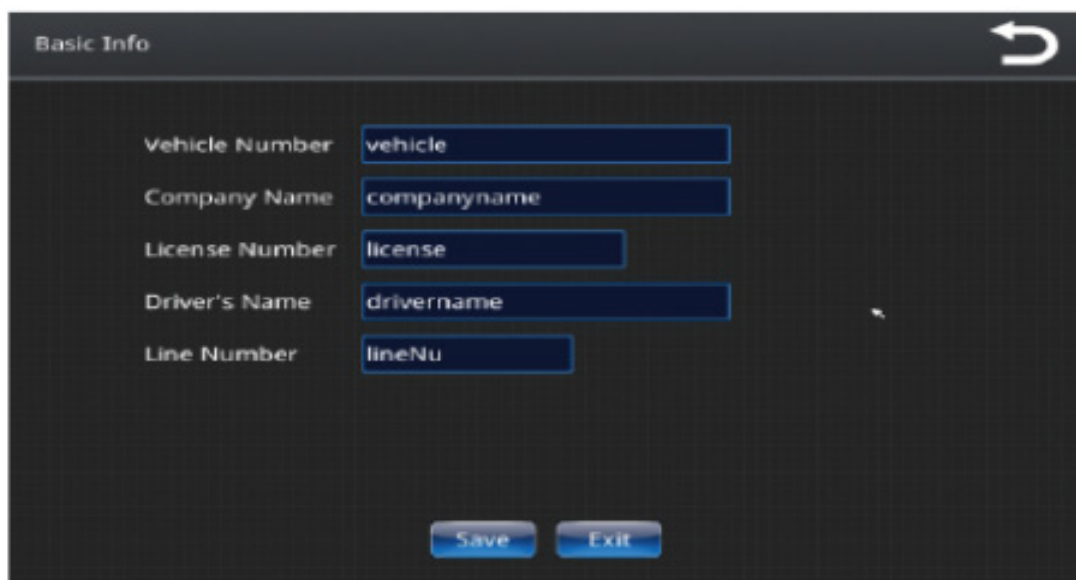
**If there is a hard disk drive of SD Card the usable and free values will be displayed. It is also possible to format the disks in this menu.**

**Main Menu > Vehicle Management, management of the current installation of the machines vehicle information.**

**Vehicle information. The basic information, acceleration, network settings, wireless settings and WiFi settings of the vehicle are shown below:**



**Basic information, vehicle number plate, company name, etc. as shown below:**

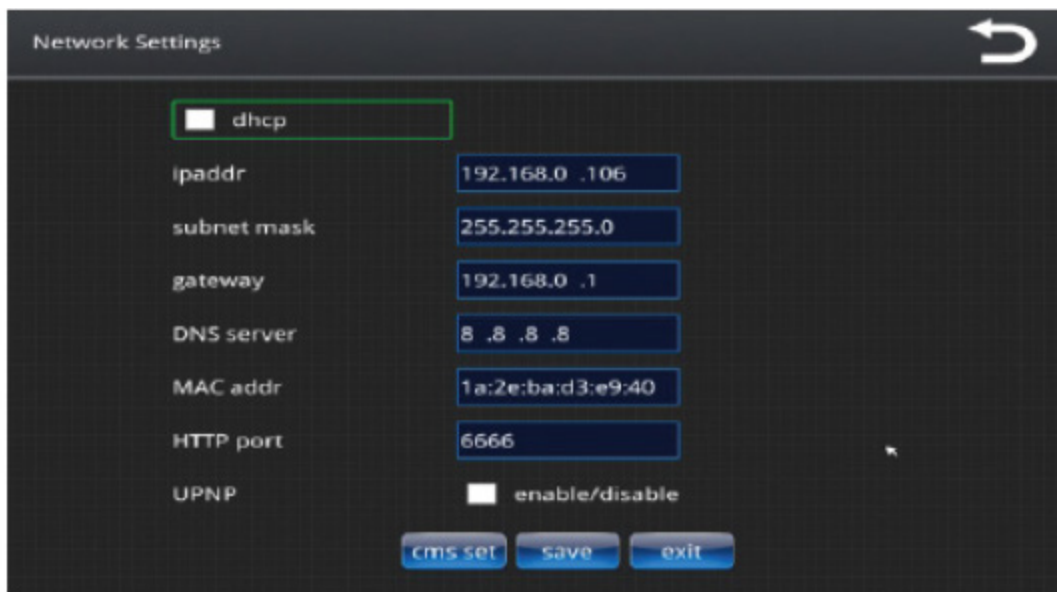


The screenshot shows a 'Basic Info' form with a dark background and a white back arrow in the top right corner. The form contains five text input fields, each with a label to its left and a blue border. The labels and their corresponding values are: 'Vehicle Number' with 'vehicle', 'Company Name' with 'companyname', 'License Number' with 'license', 'Driver's Name' with 'drivername', and 'Line Number' with 'lineNu'. At the bottom of the form, there are two blue buttons labeled 'Save' and 'Exit'.

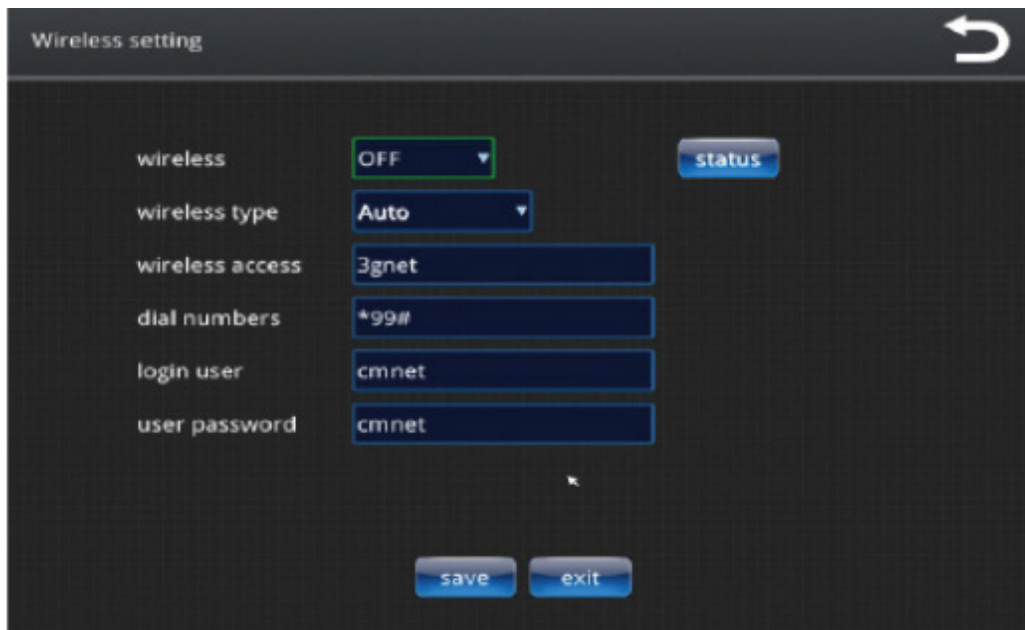
Acceleration, mainly used to calculate the acceleration of the current equipment. Measured from the X-Axis, Y-Axis and Z-Axis three directions. Alarms can be functional in breach of the G Sensor set parameters. The DVR will begin to record if these applied settings are breached.



Network Settings: Automatically obtain an IP Address. Alternatively, manually set the IP Address, as shown below:



**Wireless settings: Wireless settings switch, auto connect to wireless or manual settings as below:**

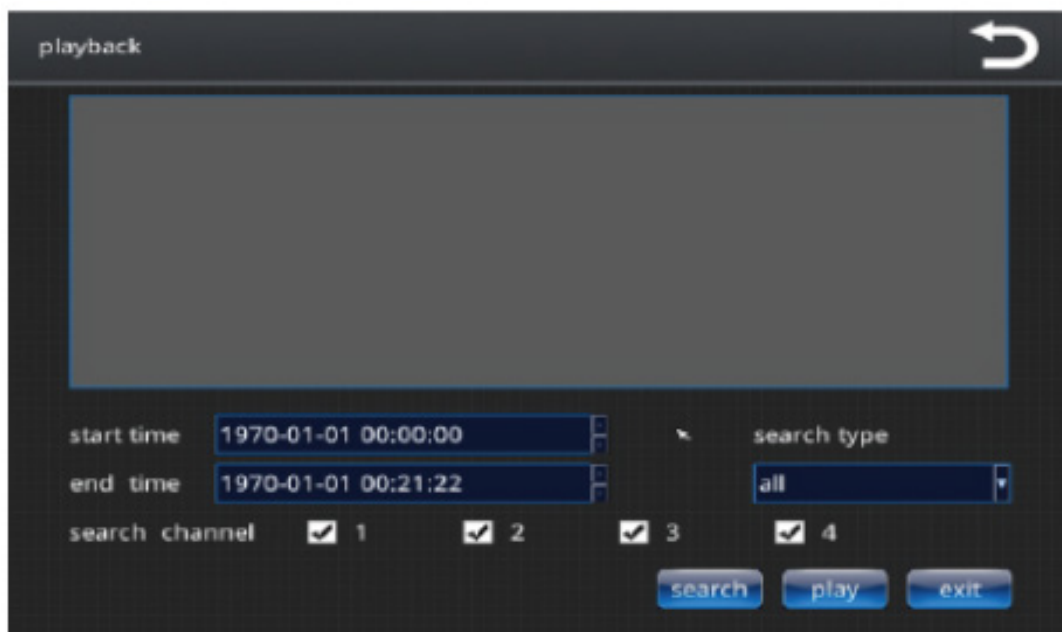


**WiFi Settings: Search for WiFi, view status, connect to hotspots, set IP, as shown below:**



**Main Menu > Video Playback:** Play recorded files, as shown below. You can choose the start time, end time, search or by selecting the channel and recording type to search for the video in the playback interface.

After the search is completed, it will be displayed in the video playback box. Select video and click the lower right corner of video playback.



**Play video interface as shown below:**

The video displayed on the interface can be adjusted according to the progress bar. The function keys from left to right are: PAUSE, START, STOP, REWIND, NORMAL, FAST FORWARD, VOICE ADJUSTMENT, ENTER INTERFACE, CHANNEL DISPLAY, FOUR CHANNELS DISPLAY, PROGRESS HIDDEN and RETURN TO MAIN MENU.







**If you need to adjust the video click on the the lower part of the menu bar as shown above.**

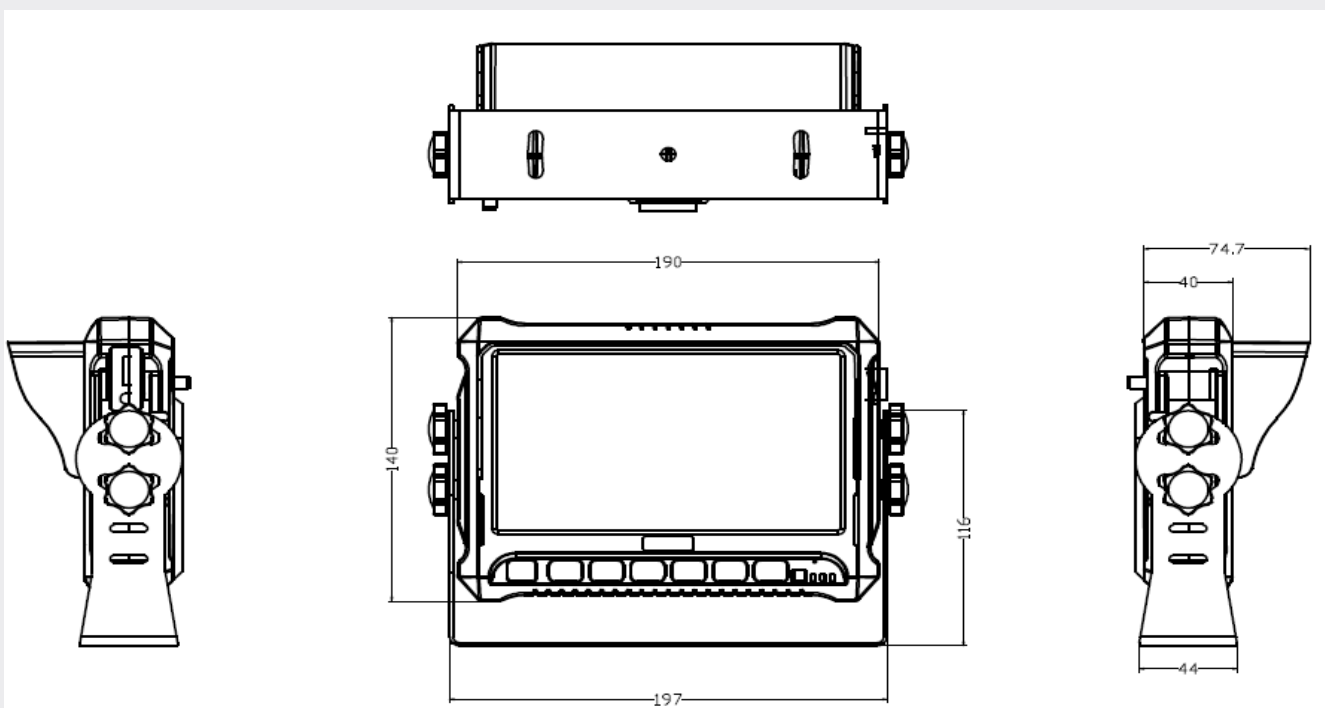
## TECHNICAL SPECIFICATIONS

- Built-in Circuit protection chip from overvoltage & reversing voltage
- Professional In-Vehicle power design, 6-36V DC Wide Voltage Range

### Specification of monitor:

Panel Size	7" LED Digital Panel
Video System	NTSC / PAL Automatic detection
Resolution	1,024 x (RGB) 600 Pixels
Brightness	450 cd/m <sup>2</sup>
Screen Mode	16 : 9 Wide Screen
Field of View	Top 85° / Bottom 85° / Left 85° / Right 85°
Camera Input	4CH
Dimmer	Automatic by CDS sensor or Manual Adjustment
Audio Output	0.5W speaker
Impact Rating	6G
Camera Connector	4 Pin aircraft
Power Input	DC6-36V / Automatic Power On/Off by ACC
Operating Temp.	-20°C ~ +75°C / -4F° ~ +167F°
Storing Temp.	-30°C ~ +85°C / -22F° ~ +185F°
Weight	550g

## TECHNICAL DRAWING



Technical parameter:			
Item	Device parameter	Performance	
System	Main processor	Hi3520DV300	
	Operating system	Embedded Linux OS	
	Operating language	English	
	Operating interface	Touch screen/ support mouse	
	Password security	User password/Admin password	
Audio & Video	Video standard	PAL/NTSC	
	Video compression	H.264	
	Image resolution	1080N/720P/960H/D1/CIF	
	Playback quality	1080N/720P/960H/D1/CIF	
	Compound mode	A variety of ways	
	Image display	Single/split/QUAD/2ch display optional	
	Audio Compression	G.711A	
	Audio recording	Audio & Video synchronized recording	
	Recording & Playback	Recording mode	Manual/Alarm/Auto
		Video bit rate	Full frame 4096Mbps, 6 classes image quality optional
Audio bit rate		8KB/s	
Storage media		SD card + SSD storage	
Video inquiry		Inquiry by channel/Recording type	
Local playback		Playback by file	
Firmware upgrading	Upgrading mode	Manual/Automatical	
	Upgrading method	USB disk	
Interface	AV input	4ch aviation interface	
	SSD	1SSD	
	SD card	1 SDXC High speed card (up to 256GB)	
	USB interface	1 USB 2.0 (support U disk/mouse/download)	
	Ignition input	1 ACC signal	
	UART	1 LVTTTL Level	
	Disk lock	1	