

TECHNICAL SPECIFICATIONS

Call 01255 555200 Email info@durite.co.uk Visit www.durite.co.uk



Image for illustration purpose. Actual product might differ slightly.

O-775-54 CCTV 9" 6CH HD DVR Monitor with touch screen and SSD

Durite 9" 6CH HD DVR Monitor with touch screen and 480GB SSD (Additional Storage Support 2 x SD card)

Support 1080P/720P/CCD/CMOS camera - Six 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)



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 WITHINTHIS EQUIPMENT. RISK OF ELECTRIC SHOCK, DO NOT RE-MOVE COVER

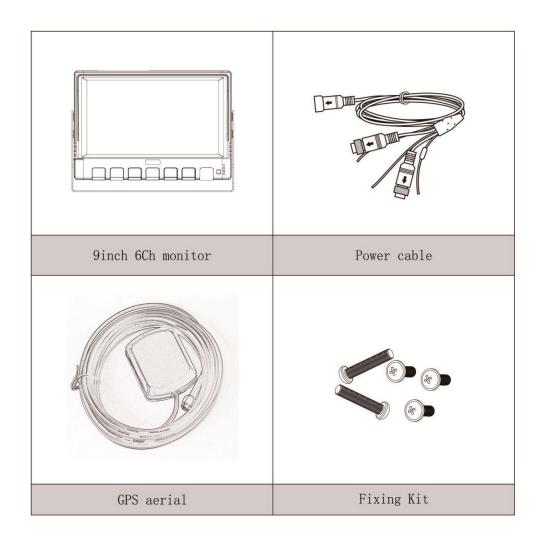
The vehicle safety vision system is designed to be used with, not instead of other viewing aids in your vehicle.

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 hazardsand 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 monitorbracket must also be electrically isolated from the vehicle chassis. If interference 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.

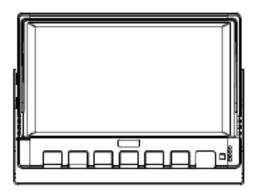
PACKAGE CONTENTS

- 1. 9" Monitor
- 2. Power Cable Main Harness
- 3. GPS Aerial
- 4. Fixing Kit



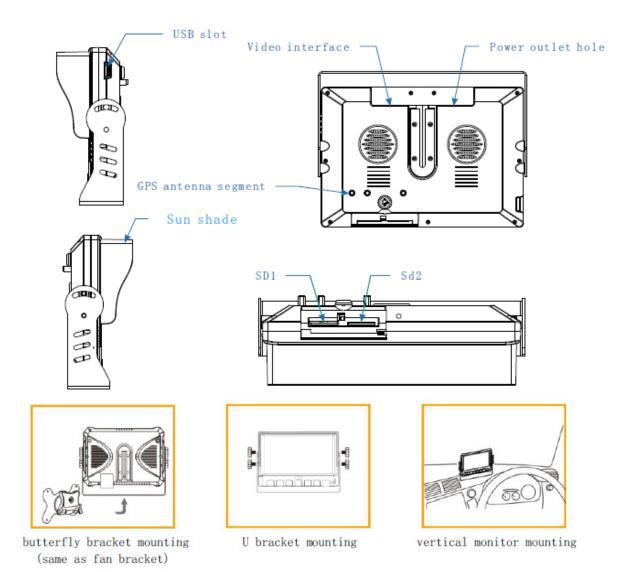
INSTALLATION

Host diagram as follows:



External expansion port description:

- 1. USB Slot
- 2. Video Interface. AV Input
- 3. Power Outlet Hole. Wired connection support only.
- 4. GPS Antenna
- 5. SD Card Slot x 2



FUNCTION DESCRIPTION



Button Instruction:

From left to right are POWER, CH1/CH2/CH3, CH4/CH5/CH6, SPLIT and QUAD Images.

- 1. POWER: Indicator light is RED to confirm power supply.
- 2. CH1/CH2/CH3. If a trigger is applied it will maximise the relevant channel
- 3. CH4/CH5/CH6. If a trigger is applied it will maximise the relevant channel
- 4. Split Screen. Two channels are displayed simultaneously 1/2, 3/4, 5/6
- 5. Quad. Four channels are displayed simultaneously 1/2/3/4, 3/4/5/6
- 6. Six divided. All six channels are shown.
- 7. HOME. Jump directly to the main interface.

Indicator LED (From UP to DOWN) - REC (Recording), SD (SD Card Present), PWR (Power On) Operating Mode: Touch, Buttons, Remote Control, Mouse

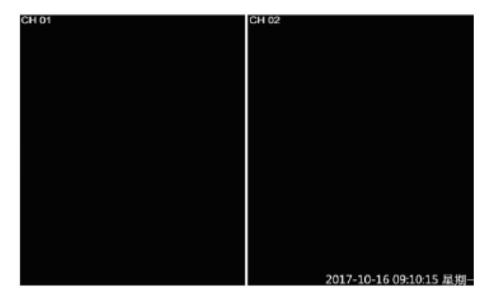
SYSTEM PERFORMANCE

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

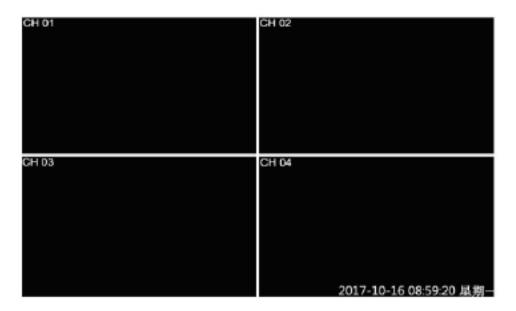
1 Channel



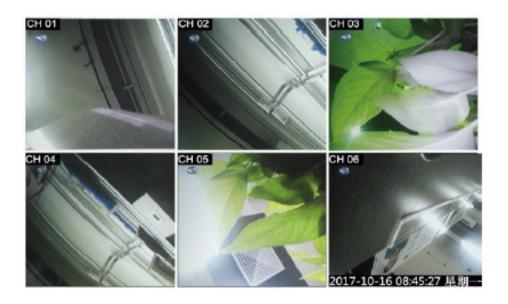
Split Video displayed as shown below:



Quad Video displayed as shown below:



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:

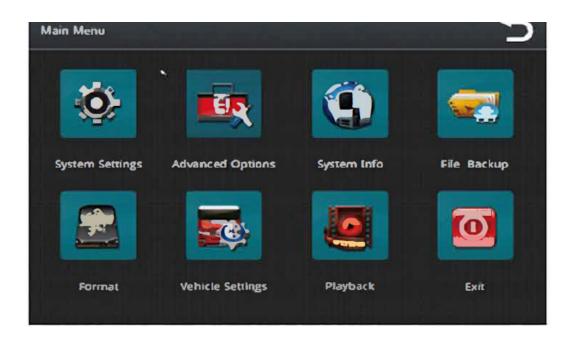
Enter the user name (ADMIN). The password will need to be setup and is left blank at default:



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

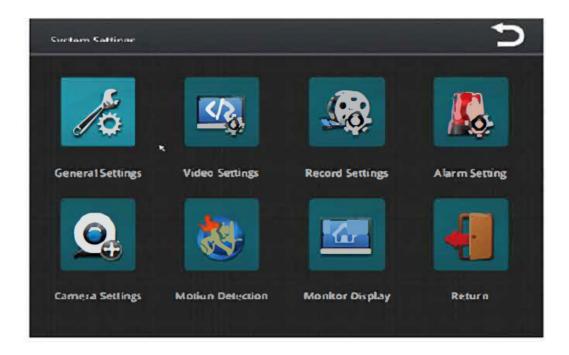


Once logged in enter the main menu as shown below:

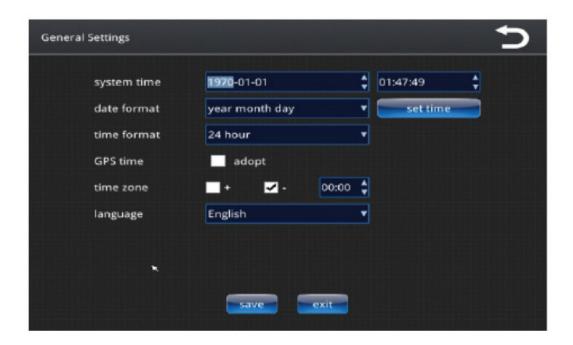


Main Menu System Settings:

- 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.

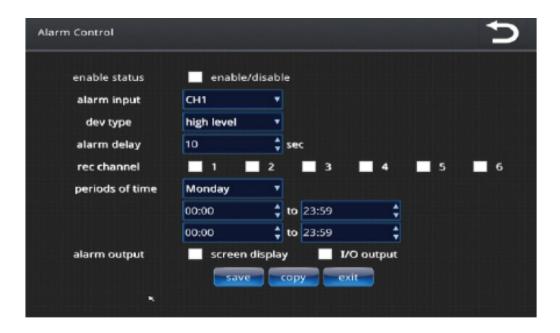
Video settings are as shown below:



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 indefinately. 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.

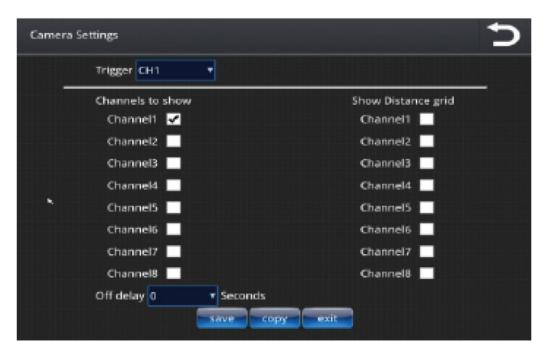
Video settings are as shown below:



- 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.

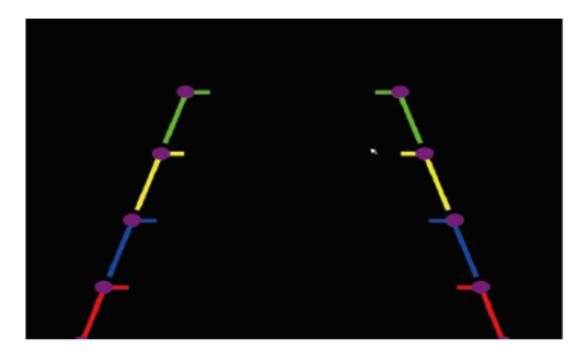
Local Display: Set the way the interface displays channels. Channel name setting, change the name of the channel suitable to its location. E.g. Reverse Camera.

Tour Shows: Select the interface that shows dynamic switching

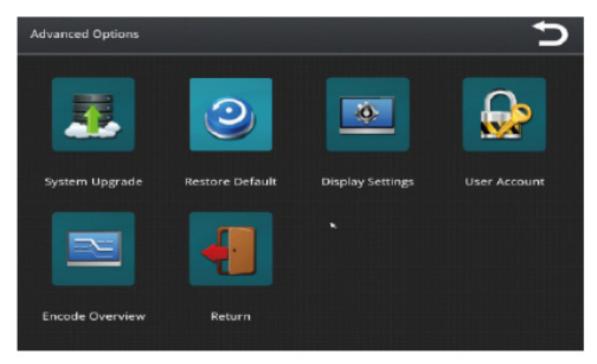
Show Time: The length of the video time.



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



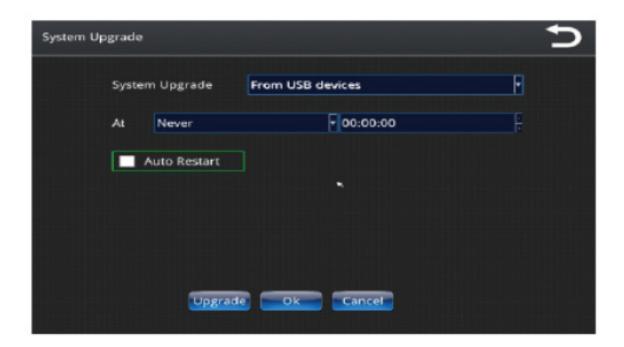
Main Menu > System Settings, the main settings are system upgrades, default information and display information. They are shown as below:



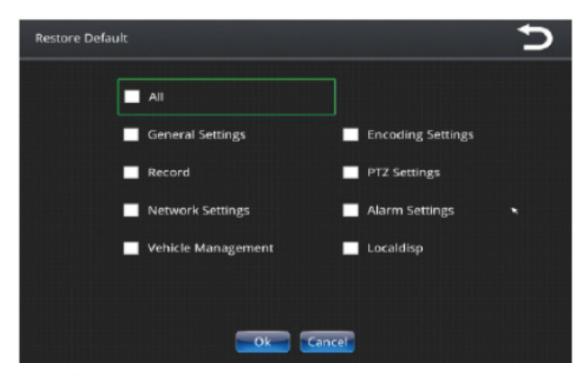
System Upgrade, Set the interface as follows.

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

Coding Overview: View Coding Information:

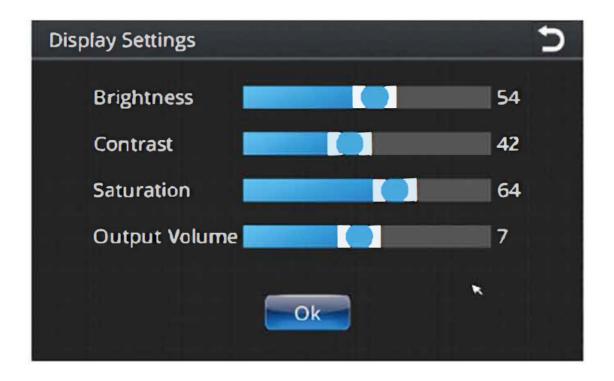


Restore the default setting: by selecting this the DVR will initiate its original default settings.

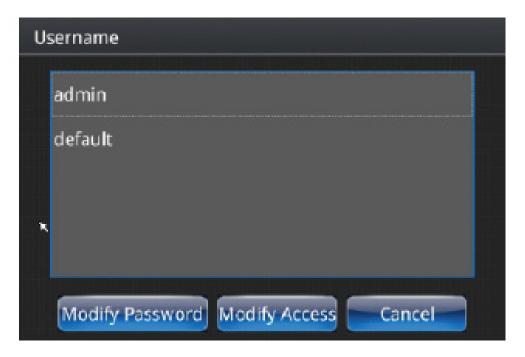


Output Adjustment. This is used to to adjust the screen settings:

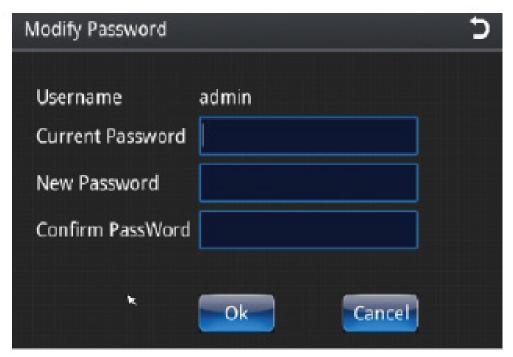
Brightness: Range 0-100 Contrast: Range 0-100 Saturation: Range 0-100 Output Volume: 0-15



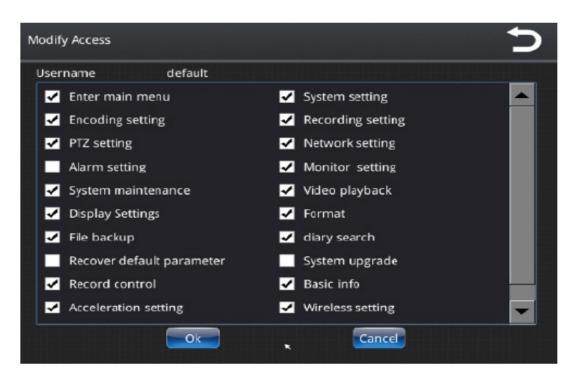
User Accounts, administrative user rights and password settings. Admin super user has maximum permissions. Only admin can change the password. Default user password can be modi-fied as can user permissions. Default password is 456789



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 us canceled.



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



Coding overview:





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 fucntion 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: Cick 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.

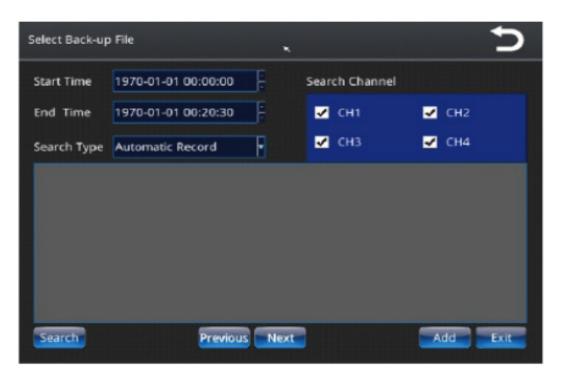
Delete: Deletes the selected video.

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

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

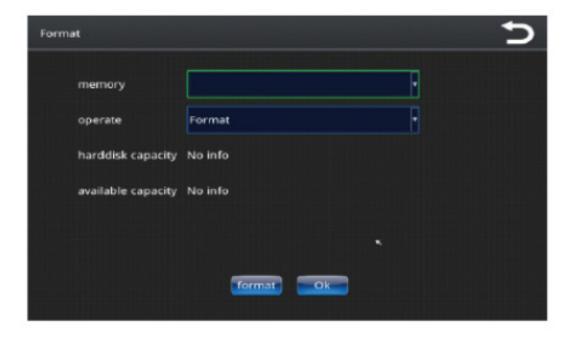


Press the button to jump to the following page: Back up video, retrieve it by time, type or channel. Then click the search button in the lower left corner. Videos that are located successfully will appear in the grey box. Click Add to display the backed up video.



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

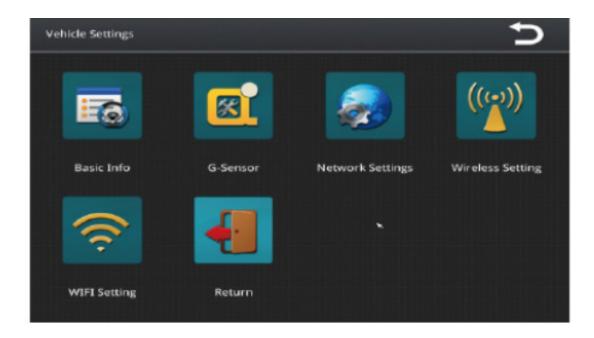
If there is no hard disk or SD Card, there is no information about the hard disk capacity as shown below.



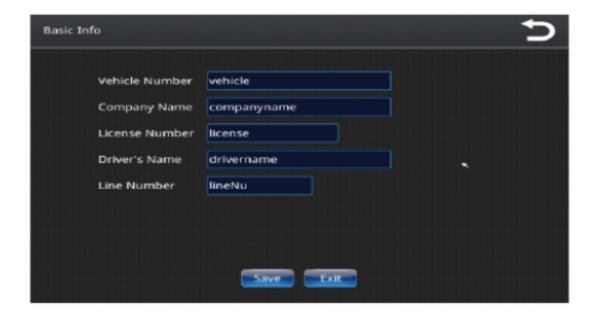
If there is a hard disk drive of SD Card the usable and free values will be displayed. It is also possible to format the disks in this menu.

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

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



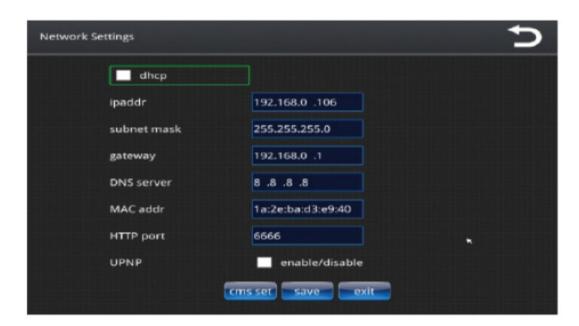
Basic information, vehicle number plate, company name, etc. as shown below:



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 parametres. 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:

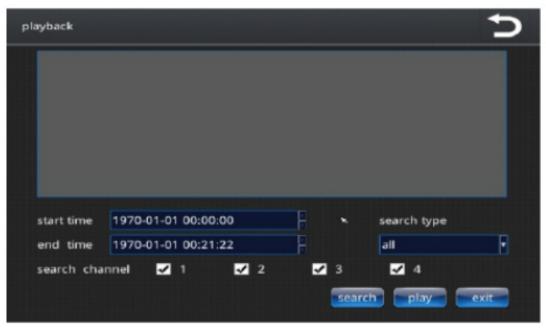


WiFi Settings: Search for WiFi, view status, connect to hotspots, set IP, as shown below:



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 fucntion 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.

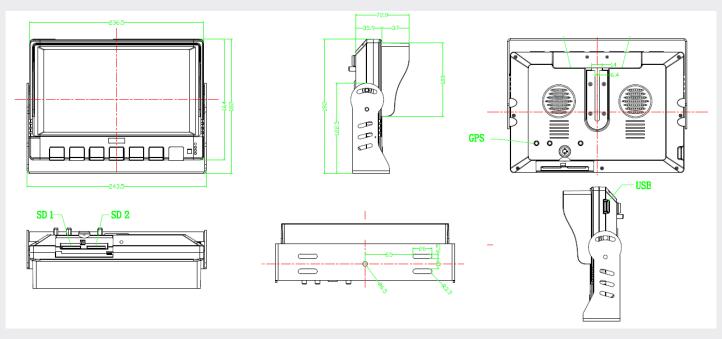




TECHNICAL SPECIFICATIONS

Panel Size	9" LED Digital Panel
Video System	NTSC / PAL Automatic detection
Resolution	1,280 x (RGB) 720 Pixels
Brightness	450 cd/m²
Screen Mode	16 : 9 Wide Screen
Field of View	Top 85° / Bottom 85° / Left 85° / Right 85°
Camera Input	6CH
Dimmer	Automatic by CDS sensor or Manual
	Adjustment
Audio Output	0.5W speaker
Impact Rating	6G
Camera Connector	4 Pin aircraft
Power Input	DC9-36V / Automatic Power On/Off by ACC
Operating Temp.	-20°C ~ +75°C / -4F° ~ +167F°
Storing Temp.	-30°C ~ +85°C / -22F° ~+185F°
Weight	600g

TECHNICAL DRAWING



The information contained in this document is correct to the best of our knowledge and subject to change at any time without notice.

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 & 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	6ch aviation interface
	SSD	1SSD
	SD card	2 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 LVTTL Level
	Disk lock	1