

GUARANTEE CARD

ITEM:	MODEL:	ITEM NO.:
DATE OF PURCHASE:		
CLIENT NAME:		
CONTACT ADDRESS:		
CONTACT TEL		

IMPORTANT NOTICE

1. Please fill out the Guarantee Card strictly according to the facts;
2. Only will this Guarantee Card be valid when sealed by our franchisers;
3. We provide 1 year warranty to the product. If product fails to work properly under warranty period, our factory will help repair it free of charge;
4. This limited warranty does not apply to:
 - (1). Damage to a product that is out of warranty;
 - (2). Cosmetic damage, such as scratches, nicks and dents;
 - (3). Damage caused by accident, abuse, misuse, water, flood, fire, or other acts of nature;
 - (4). Damage caused by service performed by anyone who is not an authorized service provider;
 - (5). Damage to a product that has been modified or altered without permission;
 - (6). Damage to a product that has been used in damp, high/low temperature or any other harsh environments;
 - (7). Any other damages that are not caused by our factory.
5. Please keep the Guarantee Card properly. We reserve the right

H40/H80 series

H.264 4 CH HDD mobile DVR

User Manual

4TB



The instruction applies to H40/H80 series products. Please read it carefully before using the products!

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Mouse Operation

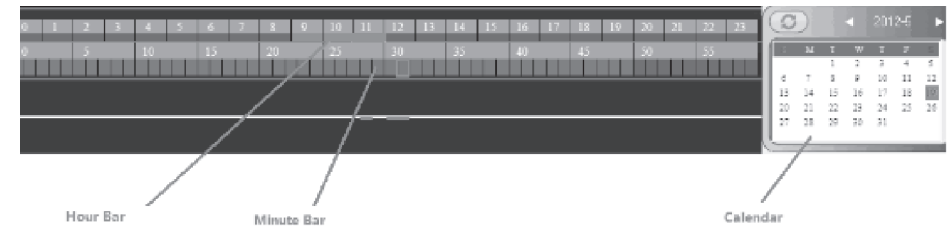
Quality guarantee..... Back cover

D.Google Map Zone



If the "Open Navigation" is selected, you will be able to see the vehicle position, while playing video.

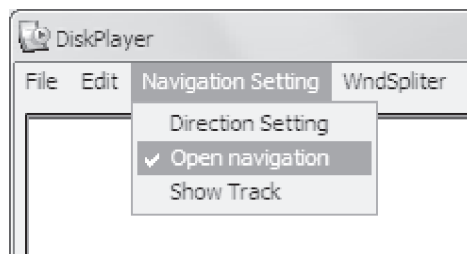
E.Calendar/Hour Bar/Minute Bar



Double click the number in Calendar, the Hour bar and the Minute Bar will change correspondingly.

1. Red numbers in Calendar means there was recording during the corresponding day;
2. Green in Hour Bar means there was recording during the corresponding hours;
3. Blue in Minute Bar means there was recording during the corresponding minute.

Navigation Setting



Select "Open Navigation", you will see Google Map at the bottom right showing the position of the vehicle.

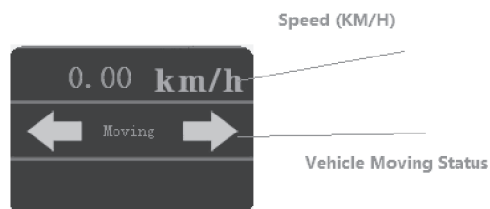
B.Control Button



Please refer to the form for function of each button;

Button	Fuction	Button	Fuction
	Slow x1/x2/x3/x4		No Use
	Fast x1/x2/x3/x4		Play Frame by Frame
	Play		Pause
	Stop		

C.Speed Display Bar



Attentions

1. Make sure all parts are connected correctly before you turn on the Unit
2. Turn off the power whenever you need to connect or remove a SD card
3. Keep the unit away from water or any other kinds of liquid
4. Do not rudely strike, drop, or hit the unit for avoiding damage of DVR or SD card
5. Read the manual carefully before you start operating the unit

Features

H40/H80 is a professional, rugged, solid state DVR designed for in-vehicle recording. H40/H80 records up to 4/8 channels Video and Audio, location data from built-in GPS (optional), supports dual SD cards up to 256GB and one HDD up to 4TB for memory storage, Supports extensible functions including GPS, Wi-Fi, 3G, 4G. H40/H80 can work with all CCD/CMOS cameras, and can power 4/8 cameras directly, it is a new in-vehicle recording system that you can rely on.

- [01]. H.264 main profile Video compression format;
- [02]. Can work with power supply ranging from DC8V to DC36V;
- [03]. Supports Manual Record, Alarm record, and scheduled Record;
- [04]. Video resolution: D1/HD1/CIF/QCIF select-able for each channel; frame rate: 1-25fps(PAL) or 1-30fps (NTSC) for each Channel;
- [05]. Supports 4 channels or 8 channels "Video & Audio" recording and playback Simultaneously;
- [06]. Supports 6 channels "alarm input" and 2 channel "alarm output";
- [07]. Video clips can be saved onto dual SD cards both up to 128GB and one HDD up to 4TB
- [08]. Video file can be backed up in H.264 or AVI format; and can be played back with specialized player on PC
- [09]. With "Power-off delay" function to guarantee the DVR would shut down normally to keep recorded files safe when an emergency occurs;
- [10]. Support DC12V, 3A (4ch model) or 6A (8ch model) power out, can power 4 cameras or 8 cameras directly.
- [11]. Support 2 PTZ control interface(only for 4ch model)
- [12]. Support GPS, Wi-Fi, 3G/4G



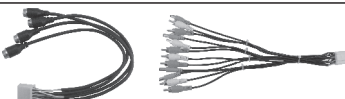


Applications

1. Private car, taxi, bus, ship, boat, or any other vehicles;
2. Any other places where surveillance is needed.

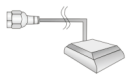

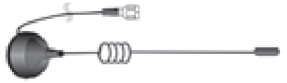



Packing List

Standard accessories:

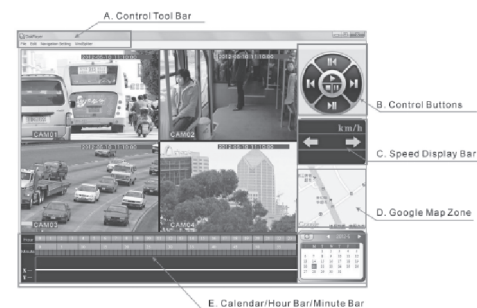
Serial No.	Descriptions	Serial No.	Descriptions
1	One DVR 	5	One power cable with fuse 
	1pcs(H40) or 2pcs(H80) AV input cable with aviation connector or RCA connector 		6
3	One TV out cable 	7	
	One Combined Alarm in/output Cable 		

Optional accessories(need to purchase separately)

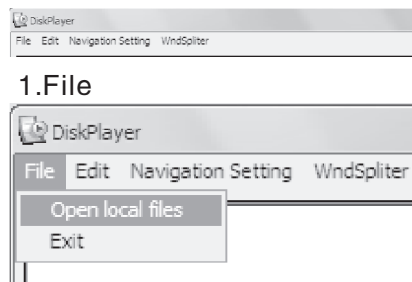
1	* GPS function and one antenna 	4	* Printed user manual 
	* 3G/4G function and antenna 		5
3	* WI-FI function and WI-FI antenna 		

★ **Notice:** *starred accessories is optional(need to buy separately), according to user's needed to choose these accessories

DiskPlayer

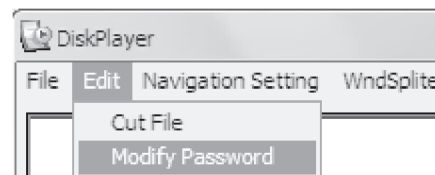


A.Control Tool Bar



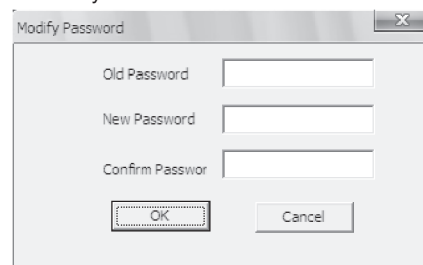
a.Open local files

2.Edit



a.Cut file

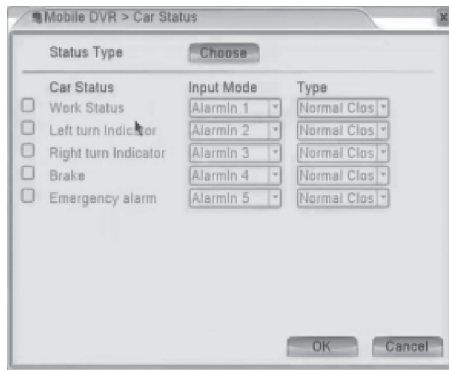
b.Modify Password



b.Exit Exit DiskPlayer.

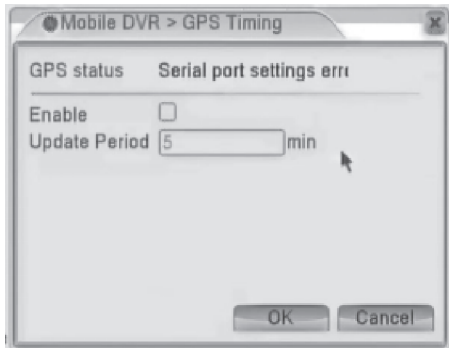
★ **Note:** here you can back up video to your computer, select "Start Time", "End Time", "Channel", and a path for saving files.

Car Status



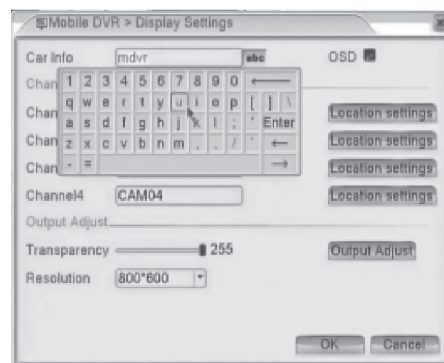
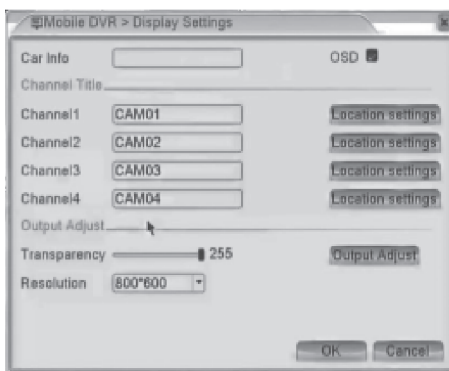
These car status can work with alarm input function. And trigger the related function in alarm input menu.

GPS Timing



The GPS system can update the time automatically, can set the update period (interval)

Display Settings.



Display Settings:Set Car info on OSD(car license number), channel title, Transparency, Resolution, etc.

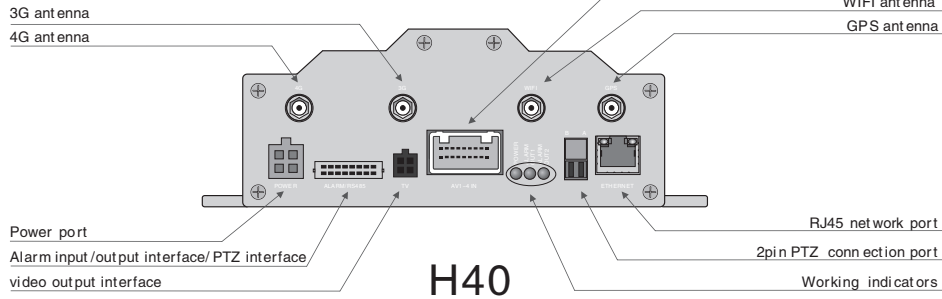
Technical Parameters

Specifications	
Model	H40/H80 Series
CPU	Hi silicon
Basic Functions	REC、PLAYBACK、ALARM、USB、IR、HDD、SD、TV-OUT,etc.
Optional Functions	GPS Wi-Fi 3G/4G
Power Supply	Car battery (For mobile monitoring) /Power adapter (For other applications)
Powe input	DC12V~DC36V(Standard power input:DC12V OR DC24V,ultimate power input:DC8V ~ DC38V)
Working Current	250~380 ± 10mA(the reference voltage is:DC24V)
Power output	4CH DC12V/3A 8CH DC12V/6A (Provide power for cameras,with built in re-settable fuses.)
Working temperature	-10℃ ~ +50℃ (ultimate working temperature:-20℃ ~ +60℃)
Video Technology	H.264(Data encryption,need to use the playback software to play the videos)
Storage interface	SATA Standard HDD interface, SD/SDHC Card
Storage Capacity	256GB SD/SDHC Card (two 128GB SD Card, suggest to use the SD Card @ Class10 or above), support to connect 2.5" SATA 4TB HDD
Storage mode	Stop when full or cycle recording
Camera	Any CCD or CMOS
Video Standard	PAL system or NTSC system
Video Input	Standard:input frequency:Vp-p=1.0V,input impedance:75Ω
Resolution	4ch full D1 or 8ch full D1 ull real time synchronized recording,also support playback and upload in the process of recording.
Total Frame rate	4CH PAL (1 ~ 100FPS optional) and NTSC (1 ~ 120FPS optional) 8CH PAL (1 ~ 200FPS optional) and NTSC (1 ~ 240FPS optional)
Video quality	Main stream/Extra Stream mufti-grade adjustable
Output signal	4CH CVBS (4ch video + 4ch audio,only support 1ch audio output at a same time) 8CH CVBS(8ch video + 8ch audio only support 1ch audio output at a same time)
Ethernet Port	One 10M/100M Ethernet port (Rj45), Support 1ch IPC input in special circumstances
Alarm input	6ch independent alarm input port(with isolating function)
Alarm output	2ch independent relay alarm output(4ch model has two red alarm indicators)
USB Standard	2 USB 2.0 port (support USB mouse/keyboard operation)
Delay power off	Delay duration : 1minutes (default), we can OEM the delay duration.
3G/4G	Support 4CH D1 real time video and audio transmission, including GPS info.
Other Technology	RS485(for PIZ connection), 2.4G WIFI , GPS(NMEA-0183) Timing and position
Mainframe Size	146 (Length) *138 (Width) *40 (Height) mm
Mainframe Weight	About 500g

Interface explanation

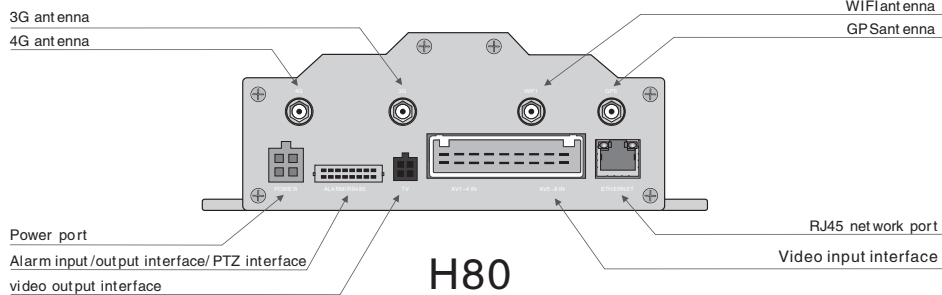
1. Interface

side plate 1



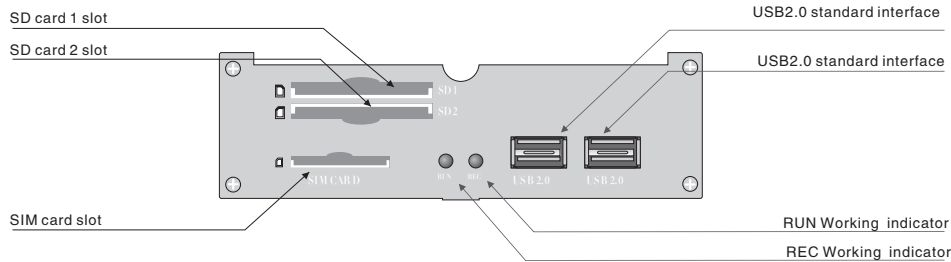
H40

side plate 1

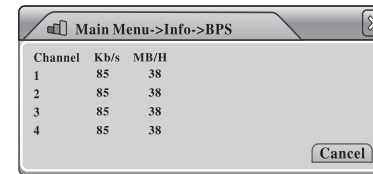


H80

side plate 2

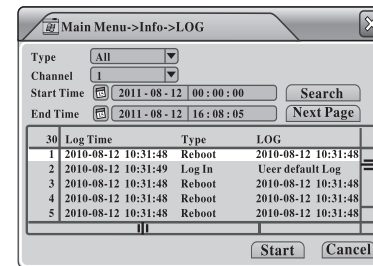


BPS



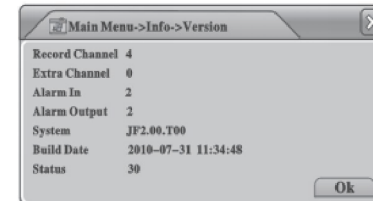
Here you can see real-time "Bit Stream" information (Kb/S) of each channel and "Memory Take-up Rate" (MB/H).

LOG



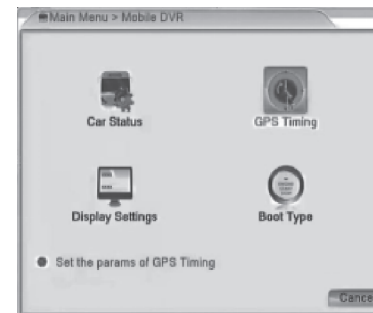
Here you can check all "Even Log Information" of this device, including "Log Time", "Log Type", and "Log Detailed Info".

Version



Here you can check Hardware and Firmware information of the Device.

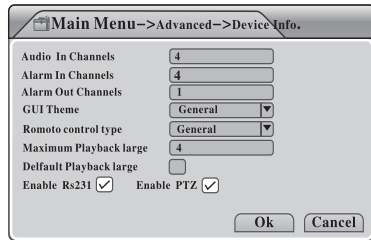
Mobile DVR



There are 4 sub menu items under "Mobile DVR": "Car Status", "GPS Timing", "Display Settings", "Boot Type"

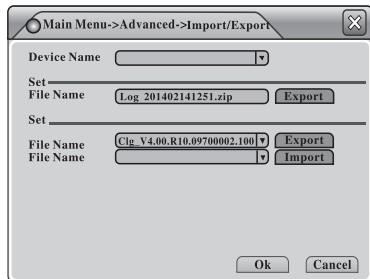
★ **Notice:** The SIM CARD slot will be empty if without 3G/4G function .

Device Info.



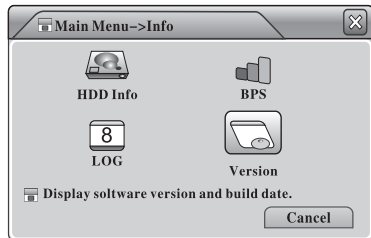
Here you can see the "Device information" of the DVR, including "Audio in Channels", "Alarm in Channels", "Alarm out Channels", "GUI Theme" and so on.

Import/Export



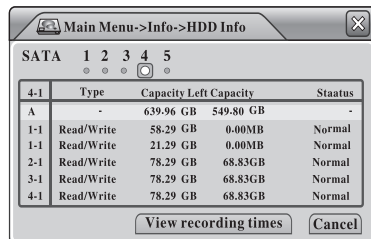
Here you can Import and export the configured parameters of this DVR, It will be a configure file, and export the system Logo

Info.



There are 4 sub menu items under "Info.": "HDD Info", "BPS", "LOG" and "Version", see

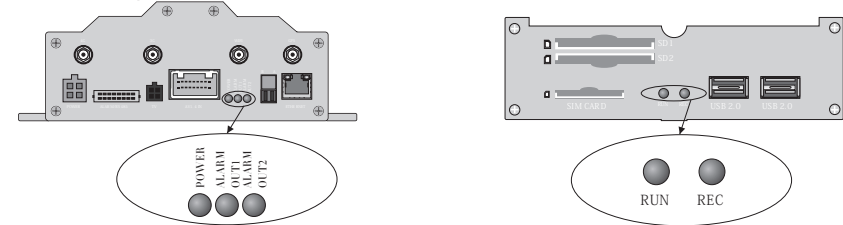
HDD Info



Here you can see information of all Storage Devices, including "Disk Type", "Capacity", "Left Capacity", and "Status".

★ **Note:** 1. If the disk is in good condition, a circle"O" will be shown on the top correspondingly; if something wrong with the disk, a wrong mark "X" will be shown; if no disk connected, then a dash mark "-".

Indicator light

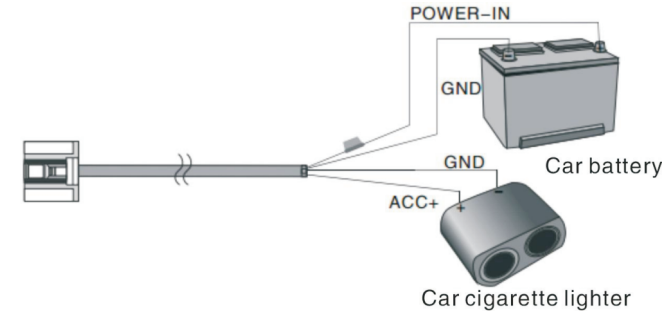


POWER: Power indicator
ALARM OUT1: the 1st channel's alarm output status indicator
ALARM OUT2: The 2nd channel's alarm output status indicator

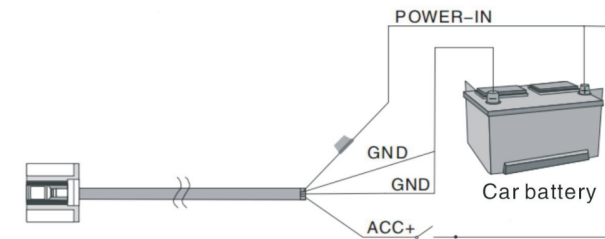
RUN: Running indicator
REC: Record indicator

Start up control mode (Power Cable Connection)

①. Auto switch on/off start up mode, applicable for vehicles.



②. Manually switch on/off control mode, applicable for the use in fixed places.



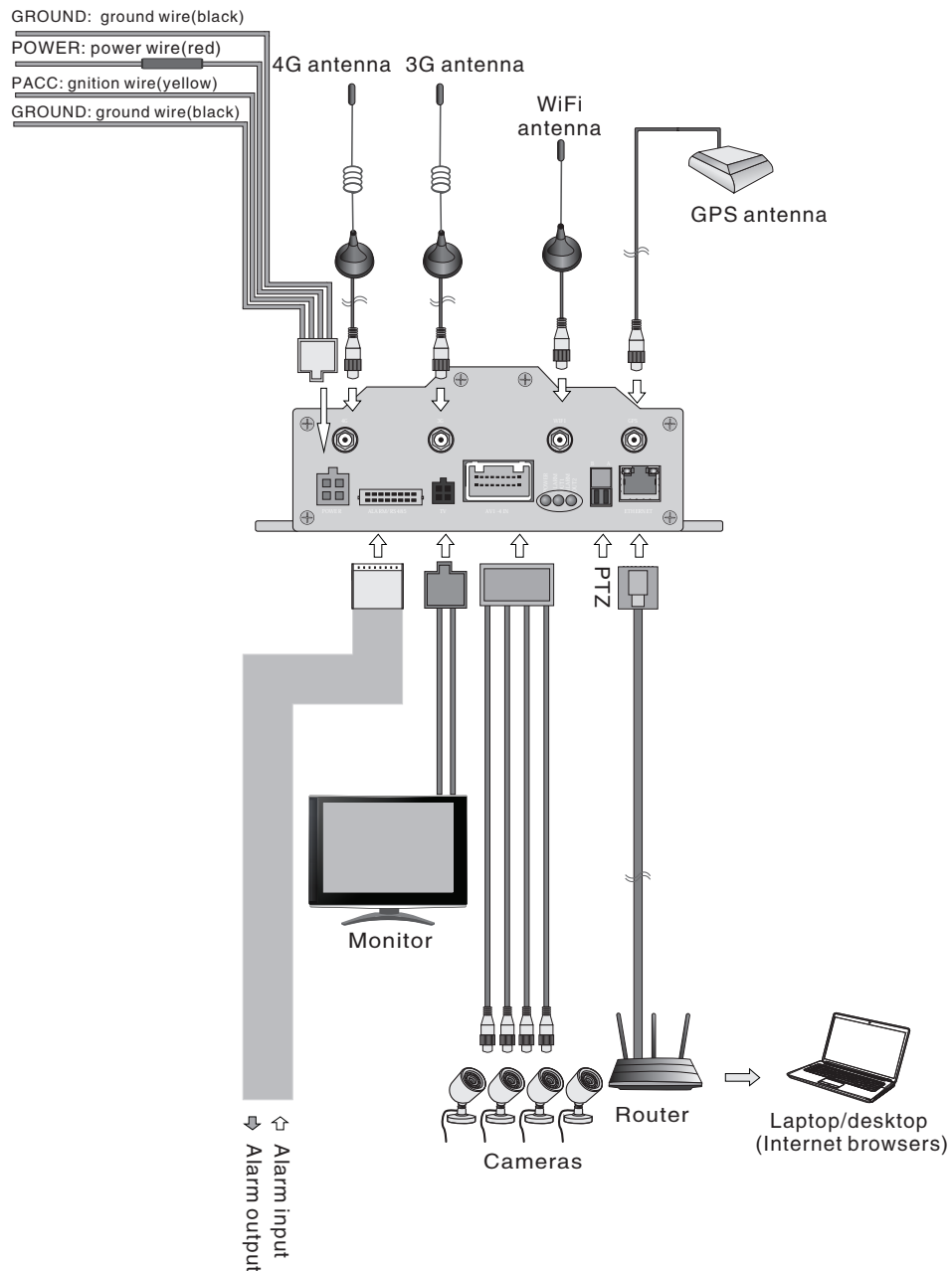
★ **Notice:** ACC+ Cable is the start up control wire, effective when triggered by high level, usually works with the car cigarette lighter.

Attentions:

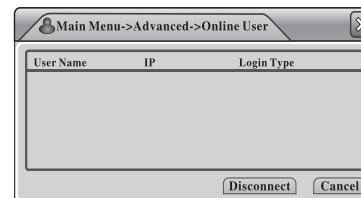
①. As there are many control ports for the DVR, so we do not use the special designed terminal for each port, Please use the insulating tape to bind up, in case the short circuit with other wires occurs.

②. After the DVR connecting power supply, the ACC+ also need to connect to the power, or the device can not start up.

Connecting diagram

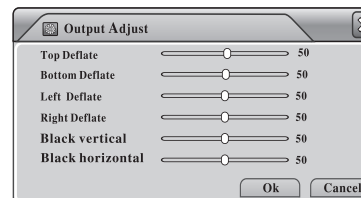


Online User



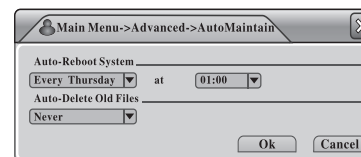
Here you can see all online network users who are visiting the DVR devices. Select one online user, click "Disconnect", the connection will be cu, and the user will be blocked until the device boot up next time.

Output Adjust



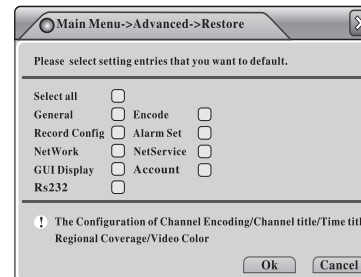
Please refer to 2.8 (Shortcut Menu>Output Adjust).

Auto Maintain



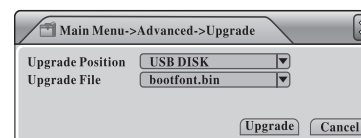
Here you can set "Auto Reboot" and "Auto Delete Files" time for the device.

Restore



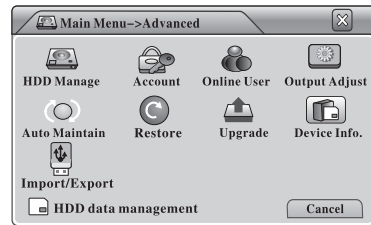
Here you can restore all settings to Factory Settings. Select the corresponding items, and click "OK" to execute.

Upgrade



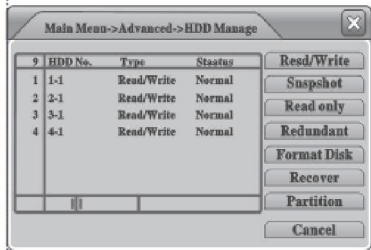
Plug in a USB disk with Upgrade Firmware, the DVR will detect the upgrade file automatically. Navigate to this page, and click "Upgrade" to execute. The DVR will reboot automatically when the "Upgrade" is done.

Advanced



There are 8 submenu items under "Advanced": "HDD Manage", "Account", "Online User", "Output Adjust", "Auto Maintain", "Restore", "Upgrade", "Device Info" and "Import /Export". see picture;

Storage

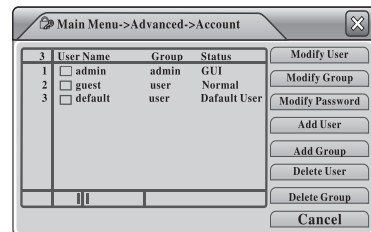


Here you can manage all Memory Storage Devices. All devices (HDD, USB Disk or SD card) information is shown in the form on the left, including "HDD No.", "Type", "Status", and so on.

You can define a disk as "Read & Write Disk", "Snapshot Disk", "Read only Disk", or "Redundant Disk", you can "Format" the Disk, "Recover" the Disk, or "Partition" the disk with those buttons on the right side.

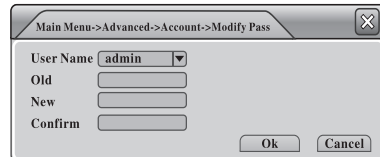
★Note: Make sure at least there is one "Read Write Di

Account

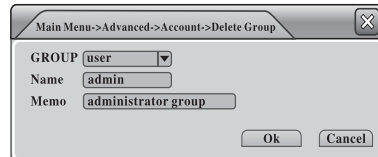


Here you can manage all User Accounts. All User Information is shown in the form on the left, including "User Name", "User Group", and "User Status".

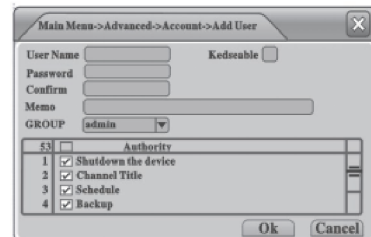
You can "Modify User", "Modify Goup", "Modify Password", "Add Group", "Delete User", "Delete Group", or "Update User" with those buttons on the right side.



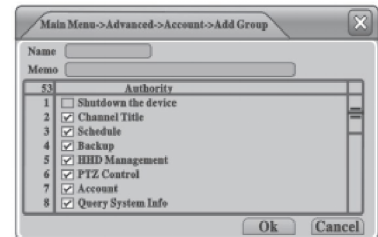
[Modify Password]



[Delete Group]



[Add User]



[Add Group]

Storage device installation

Attentions before installation:

- ① Disconnect power of DVR before installing and removing SD Cards.
- ② To prevent the SD Cards from damaging by static electricity, You can use the electrostatic ring or touch grounded objects/Metal objects before touching SD cards, such as metal faucets.



Notes:

- ① For newly installed SD Cards, the DVR will format them automatically. If the storage device can not support recording, please enter into the menu and set the installed storage device as "Read/Write" disc. If user wants to save the snapshot triggered by alarm, please set the storage device as "snapshot" disc. If user wants to use the redundant back up function, please set the storage device as "redundant" Disc.
- ② If user needs to use SD Card or USB device to save the recordings, please tick "SD Card record" and "USB record" in the sub menu "Record Config", and then restart the system.
- ③ If user wants to use USB device to back up the video files, please cancel the "USB record" option in menu firstly, or the system will regard the USB as storage device and will format it after DVR starting.

Memory occupancy calculation

When you install the 4ch/8ch dual SD card mobile DVR for the first time, please check if any SD Cards are installed. And make sure the write protect switch is off, Or the SD Card can not support video recording properly.

Maximum capacity of the SD Cards:

H40/H80 Series support SATA support two 128GB high capacity SD Cards, Maximum capacity up to 256GB, Users can choose the appropriate memory storage as their request:

How to choose SD Card's capacity?

Formula for Storage space occupation:

Total storage capacity (M) = numbers of channels (CH) * required recording time (H) * occupied capacity per hour (M/H)

Formula for recording time(H):

Recording time (H) = Total storage capacity (M) / [numbers of channels (CH) * occupied capacity per hour (M/H)]

Please notes: S204/S208 series adopt H.264 compression technology, with comparatively wide dynamic range, and different video input devices will affect the bit stream statistics obviously. So when users calculate the parameters above, please refer to all channels bit stream info in menu, to make sure the calculation as accurate as possible. It will assist users to choose more appropriate storage devices.

For instance:

Using a 64GB/C6 standard SD Card, If DVR record 4ch full D1@25FPS real time videos, the SD Cards will record for around 50 hours, each single channel will takes around 300MB capacity per hour, the recording time for 4CH real time recording will be: 64GB / (300 M/B * 4CH) ≈ 50H

ALARM/RS485 Port

PIN	9	10	11	12	13	14	15	16
Function	AL-IN8	AL-IN7	AL-IN6	AL-IN5	AL-IN4	AL-IN3	AL-IN2	AL-IN 1
PIN	8	7	6	5	4	3	2	1
function	AL-OUT1_A	AL-OUT1_B	GND	AL-OUT 2_A	AL-OUT 2_B	GND	RS485A	RS485B

Definitions and descriptions of ports:

◆AL-IN1 ~ AL-IN8: 8ch alarm signal input ports. Need to set the related functions in the system menu, support NO/NC switch control signal and high/low level control signal (DC 0.7V < high level <DC 12V, low level< DC 0.6V)

◆AL-OUT1?AL-OUT2: Alarm output ports. The default setting is: A pair of normal open control contacts of relay, need to set the related function in the system menu, It only can bear the control signal below 1A.

◆RS485A and RS485B are PTZ control port.

◆GND: Ground wire.

Mouse Operation

S204/S208 supports Mouse Operation, here is the operation instruction.

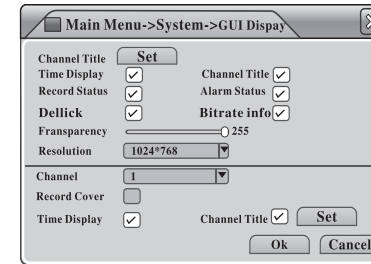
Operation	Function
Double Click	Double click one item to play in the files list.
	Double click one channel to show in full screen or 1/4 screen
Left Click	Select one item
Right Click	Pop out Shortcut Menu
Roll the wheel	Tour from one image to another at Preview Page

Preview Page



1		Record Icon	2		Audio output Icon
3		Motion Detect Icon	4		Snapshot Icon
5		Channel ID	6		Video Loss Icon
7		Date/ Time Stamp			

GUI Display



Here you can configure the settings for OSD Items, Transparency, Resolution, and so on.

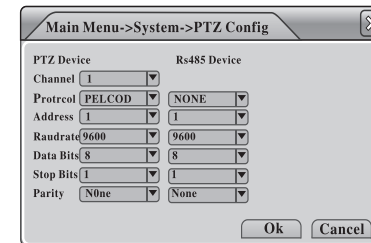
Car Info: Enter an ID for the Device;

Channel Title: Enter a title name for each channel; [Choose OSD items] Click the square on the right to show/ hide the corresponding item, such as "Time Display", "Channel Title", "Record Status", "Alarm Status" and so on;

Transparency: Move the horizontal scroll bar to adjust the transparency of the Menu interface;

Resolution: Set video output resolution;

PTZ Config



Channel: Select the video channel which is connected to PTZ device;

Protocol: Set the "Protocol" of the PTZ device;

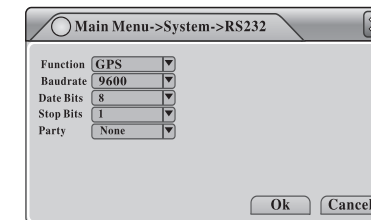
Address: Enter the "Address" of the PTZ device

Baudrate: Select the "Baudrate" used by the the PTZ device; **Data Bits:** Select "Data bits" for the PTZ device;

Stop Bits: Set "Stop Bits" for the PTZ device;

Parity: Set "Parity" for the PTZ device, "Odd", "Even", "Mark", "Space" or "None".

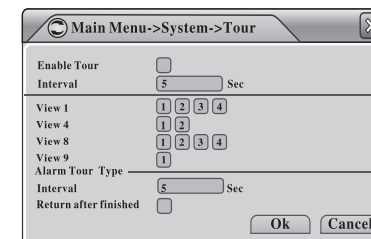
RS232



In general, we use "RS232" interface for GPS function only. Select "GPS" at the first item, enter Baudrate "9600", Data Bits "8", Stop Bits "1" and Select Parity "None", the GPS will work.

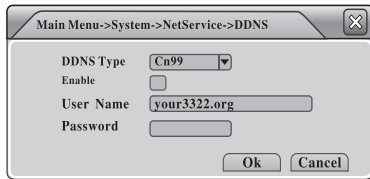
★**Note:** the setting is only valid for the models which support GPS function.

Tour



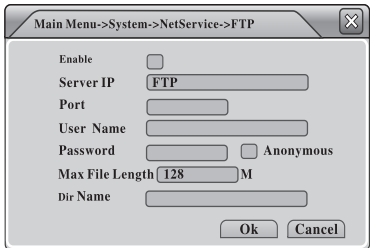
Here you can configure the "Tour" settings, for example, if interval is set "5" seconds, CH1, CH2, CH3 are selected, then the image would cycle among the 3 channels, tour from one to another every 5 seconds; and you can also set ?Interval? for "Alarm Tour" Here.

D. DDNS



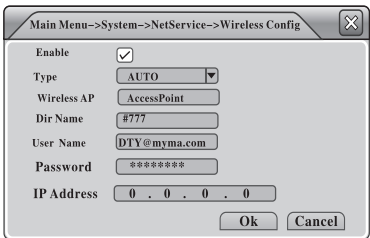
DDNS is short for "Dynamic Domain Name Server". If "DDNS" setting is successfully configured, you can visit the Device via the Domain Name with the IE Browser;
DDNS Type: Select DDNS Type; Domain Name: Enter the DDNS domain name;
User Name/ Password: Enter the DDNS Use Name and Password

E. FTP



FTP is for uploading video files or snapshot to the appointed FTP Server when alarms happen, or recording, snapshot triggered by alarms.
Server IP: Enter the IP address of FTP Server;
Port: Enter the Domain port of FTP Server;
User Name: Enter User Name;
Password: Enter User Password;
Max File Length: Set Max File Length for unloading;
DirName: File Directory for uploading.

F. Wireless Config

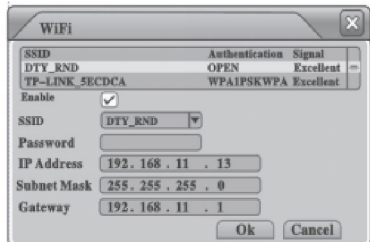


The DVR supports remote monitoring via 3G network, here you can configure the 3G Settings;
Type: Select 3G "Dial Mode";
Wireless AP: Enter 3G AccessPoint;
Dial Number: Enter 3G Dial Number;
User Name: Enter 3G User Name;
Password: Enter 3G User Password.

★Note:

1. Make sure there is a 3G module built-in the DVR;
2. Please ask your 3G Service Provider for the parameters above; for example, the settings for China Unicom are as follows;
 Wireless AP: 3gnet
 Dial Number: *99#
 User Name: no
 Password: no

G. Wifi



The DVR supports "remote monitoring" via Wifi network, here you can configure the ?Wifi? Settings;
Search: Search Wireless Network in local area, and then double click to choose one of them;
Password: Enter the "Password" of the Wireless Router;
IP Address: Enter the IP address of the Device;
Subnet: Enter the Subnet Mask of the Device;
Gateway: Enter the Gateway of the Device.

★Note: Please make sure there is a Wifi Module built-in the DVR before you use this function.

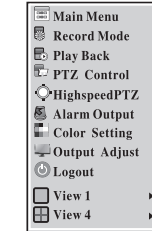
Menu Instructions

System Login



You will be required to enter the Password while trying to access the setup menu. Initially, there are three users from three groups: "admin", "guess", and "default", and all three users have no passwords. The supper user "admin" is able to add, modify or delete groups or other user accounts, change the passwords, and even define the "Authority" of other users in the setup menu.

Shortcut Menu



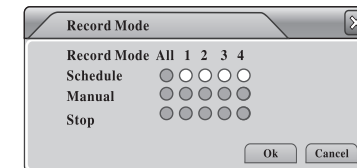
Right click the mouse after you enter "Preview Mode", a shortcut menu will pop out as shown; from here you can go to Main Menu, Record Mode, Play Back, PTZ Control, High -Speed PTZ, Alarm Output, Color Setting, Output Adjust, or Logout setup pages.

Main Menu



Click **Main Menu** in shortcut menu and go to "Main Menu" directly as shown;

Record Mode



Click **Record Mode** in shortcut menu and go to "Record Mode" setup page as shown;
 Schedule: Start recording according to configuration;
 Manual: Start recording regardless of configuration;
 Stop: Stop recording.
Note: the small circle would turn white when selected.

Playback

Click in shortcut menu and go to "Playback" interface as shown;

1. files list

2. file information

3. search

4. back up

5. control buttons

Button	Function	Button	Function	Button	Function
	play/pause		backward		stop
	slow play		fast play		previous frame
	next frame		previous file		next file
	circulation		full screen		

File Searching

Click , the "Search Condition" dialog box will pop out; set the search conditions and start to search.

File Backup

Connect a storage device (USB Disc or SD card) to the DVR, click and then "Detect"; choose the target device, and click "Backup" To go to the next step.

Network

Here you can configure "Wired Network" settings if you need to use the internet function;
 Net Card: Wire Netcard;
DHCP Enable: Automatically Attain IP Address (Not recommended);
 ★ **Note:** please make sure the DHCP Server is built in advance if you need to use this function.
IP Address: set IP address for the device;
Media Port: Set "TCP Port" for the device;
HTTP Port: Set HTTP Port for the device;
HS Download: High Speed Download via the Internet;
Transfer Policy: Transfer Priority; Quality Preferred, Fluency Preferred or Adaptive;

Net Service

Here you can configure Advanced Network Settings for the device. Double click each item and the corresponding dialog box would pop out.

A. PPPoE

Enter the User Name and Password provided by ISP (Internet Service Provider), reboot the DVR, it will build the connection to the Internet via PPPoE and attain the IP address automatically

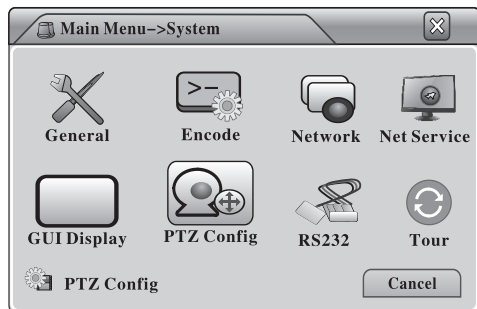
B. EMAIL

Enter the email information here, and the DVR will be able to send emails with alarm information or snapshot to the appointed receivers (maximum 3 email addresses) when alarms happen.

C. IP FILTER

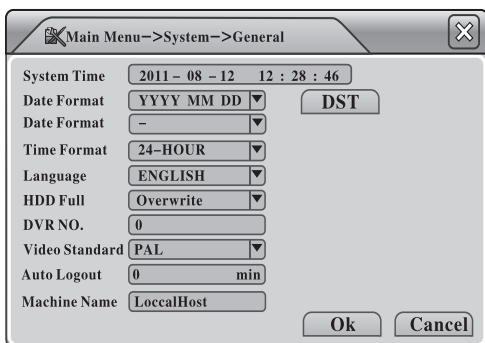
You can put IP addresses in the ?Blacklist? or ?White list?. IP Addresses in the White List? are able to access the device; on the contrary, IP Addresses in the Black List will be blocked; you can set maximum 64 IP Addresses.

System



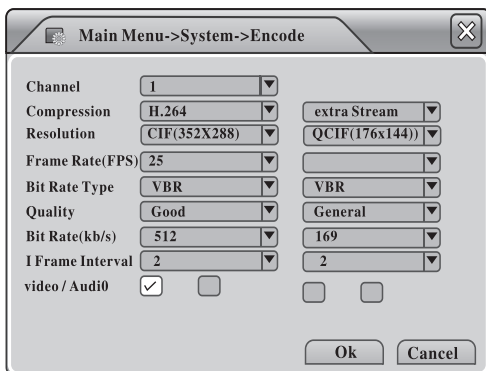
There are 8 submenu items under "System": "General", "Encode", "Network", "Net Service" and "GUI Display", "PTZ Config.", "RS232" and "Tour", see picture;

General



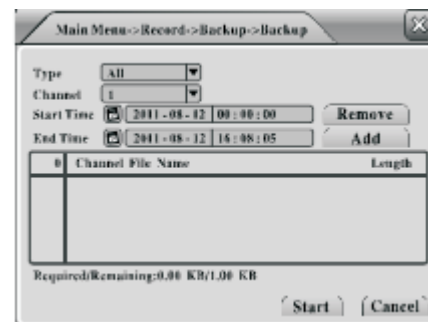
Here you can configure "General Settings" for the DVR system;
Menu Language: 14 languages optional, English, French, Portugueses, Russian, Italian, S-Chinese, T-Chinese, Spanish, Thai, Greek, Japanese, German, and Polish;
HDD Full: Memory Storage Modes; "Stop When Full" or "Overwrite When Full";
Video Standard: PAL or NTSC;
Auto Logout: Set menu auto log out time; "0" means "never logout automatically".

Encode



Here you can set video/ audio"Encode" parameters. There are 2 groups of "Encode"Settings; Generally speaking, the first group is for high quality local video storage and the other group called "Extra Stream" is for remote video transmission which is relatively low quality so as to ensure the fluency of the video stream;
Channel: Select 1 channel or all 4 channels for "Encode"Settings;
Compression: Compression format; the default format is H.264;
Resolution: Video resolution, D1/ HD1/ CIF/ QCIF adjustable;

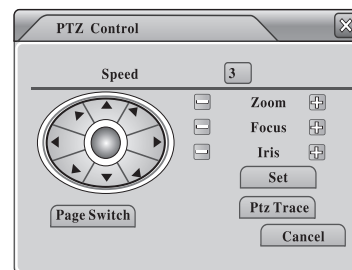
Frame Rate: Adjustable; Maximum Frame Rate: 25FPS (NTSC) or 30FPS (PAL);
Bit Rate Type: VBR (Variable Bit Rate) or CBR (Constant Bit Rate) selectable;
Quality: Video Quality, 6 levels adjustable;
Bit Rate: select a bit rate value once "CBR"Bit Rate Type is selected; D1 (512~2560kbps)/ HD1 (384~2048kbps)/ CIF (64~1024kbps)/ QCIF (64~512kbps);
Video/ Audio: Record "Video" or "Audio", or both.



Choose File Type, Channel, Start Time, End Time, Backup Format, and then click "Start".

PTZ Control

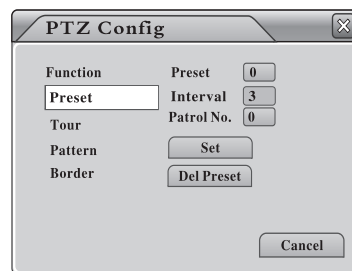
Click in shortcut menu and go to "PTZ Control" page as shown;



Here you can adjust "Speed", "Zoom", "Focus", "Iris", Change the direction, Check "PTZ Trace" or do more by clicking to go to other pages.

Note: please make sure the PTZ has been correctly connected, and all parameters properly set in PTZ Config (see page x) in advance.

Click , you will go to "PTZ Config" page as shown;



Here you can modify the settings of "Preset", "Tour", "Patter", and "Border".

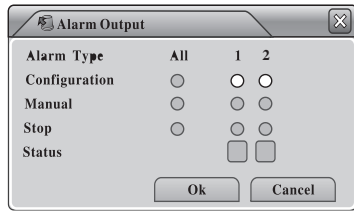
High Speed PTZ

Click in shortcut menu, the camera which has been connected to PTZ will be shown in full screen; you can change the direction of the PTZ by clicking the mouse or zoom in/out the image by rotating the mouse.

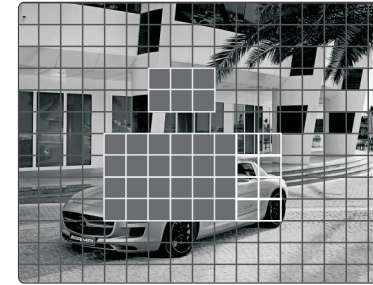
Note: Please make sure the PTZ connected supports high-speed operation.

Alarm output

Click in shortcut menu and go to "Alarm Output" setup page as shown;



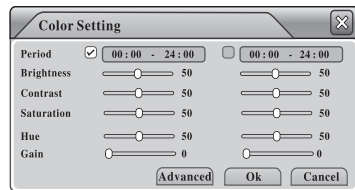
Configuration: Alarm on according to configuration;
Manual: Open Alarm output regardless of configuration;
Stop: Close Alarm output.
Note: the small circle would turn white when selected.



Record Delay: Set "Record Delay Time" after alarm ends;
Show Message: When Video is blind, the alarm dialog box would pop out;
Send Email: When Video is blind, the DVR would send an email to the user.
Buzzer: open the buzzer when Video is blind.

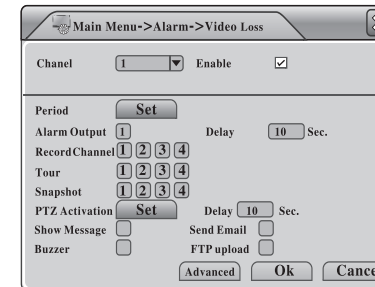
Color Setting

Click in shortcut menu and go to "Color Setting" page as shown;



Here you can adjust the Brightness, Contract, Saturation, Hue, and Gain of the image. You can set two different groups of settings for different time period.

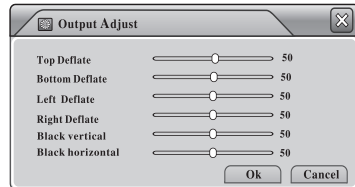
Video Loss



Here you can configure "Video Loss" alarm settings; when the video input signal is lost on the selected channel (s), the alarm would be activated. For settings of linkage options, please refer to 3.2.1 "Video Blind";

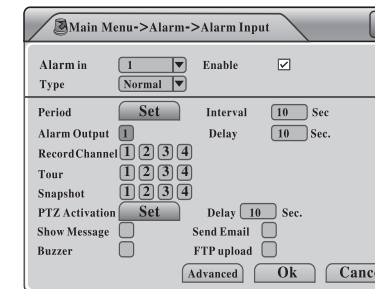
Output Adjust

Click in shortcut menu and go to "Output Adjust" page as shown;



Move the Horizontal Scroll Bars to adjust the "Top Deflate", "Bottom Deflate", "Left Deflate" and "Right Deflate" of video output.

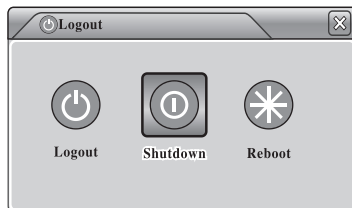
Alarm Input



The DVR supports 4 alarm inputs, here you can configure the linkage options and tell the DVR what to do when alarm input signal detected. For settings of linkage options, please refer to 3.2.1. "Video Blind",

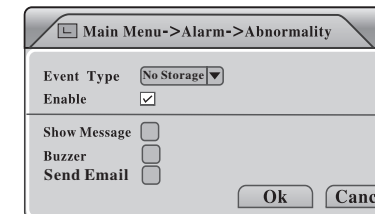
Logout

Click in shortcut menu, the "Logout" dialog box will pop out as shown;



Logout: exit "Logout" menu; Shutdown: Turn off the DVR; Reboot: Restart the DVR.

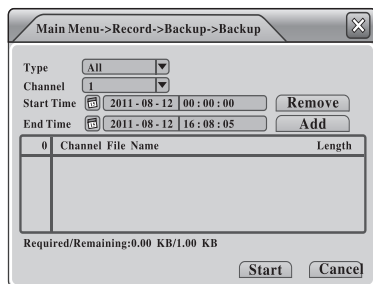
Abnormality



When it is set in this option, the DVR will analyze the hardware and software and react to the abnormal phenomena, show the alarm dialog box or open the buzzer

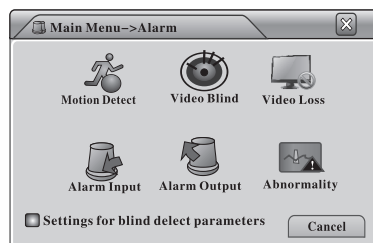
Main Menu

Click in shortcut menu or press "Menu" on IR remote control; there are six submenu items: Record, Alarm, System, Advanced, Info and Logout; see menu navigation as follows;



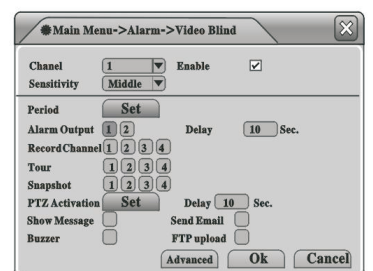
Click "**Backup**" to go to the next page to Choose "**File Type**", "**Channel**", "**Start Time**", "**End Time**", "**Backup Format**" as shown, and then click "**Start**" to back up files.

Alarm



There are 6 submenu items under "**Alarm**": "**Motion Detect**", "**Video Blind**", "**Video Loss**" and "**Alarm Input**", "**Alarm Output**" and "**Abnormality**"

Video Blind



Here you can configure "Video Blind" Alarm Settings; when the image is influenced by the environment or by human behavior, the alarm would be activated. For settings of linkage options, please refer to the instructions as follows:

Channel: Select 1 channel or all 4 channels for configuration;
Enable: Enable/Disable "Video Blind" function;
Sensitivity: Select "Sensitivity" Level; there are 4 options
Region: Set "Video Blind" area.

Period: Set "Video Blind" schedules.
Period: Set "Motion Detect" schedules; you can set maximum 4 schedules for everyday, 4 periods a day.
Interval: Set "Video Blind Interval"; only one motion can be detected during the set interval;
Alarm output: Start the external alarm equipment which is connected to Alarm output once motions are detected;
Alarm Delay: Set "Alarm" signal duration;
Record Channel: The selected channel (s) would start recording when Video is blind,
Tour: The selected channel (s) will be shown in full

screen in turn, when Video is blind, refers to Main Menu>System>Tour for tour interval setting;
Snapshot: The selected channel (s) would take snapshots when Video is blind.
PTZ Activation: Activate the PTZ equipment when video is blind the PTZ equipment would work as set.

Record	Record Conf.	Record configuration, record type, record time section
	SnapShot Conf.	Snapshot configuration, Snapshot type, Snapshot section
	Play back	file search, video play back, save files
	Back up	Detect back up device, Format back up device, back up chosen files
Alarm	Video Blind	Set Video blind alarm channels, Sensitivity, and linkage parameters: Period, Alarm out, show messages on screen, Record channel, PTZ, tour, etc.
	Video Loss	Set Video Loss alarm channels, and linkage parameters: Period, Alarm out, show messages on screen, Record channel, PTZ, tour, etc.
	Alarm input	Set alarm input channel, device type, and set linkage parameters: Period, Alarm out, show messages on screen, Record channel, PTZ, tour, etc.
	Alarm output	Set alarm mode: Configuration, Manual, Stop.
	Abnormality	No storage device, Storage Error, Storage No Space, Net Disconnection, IP Conflict.
System	General	Set Time Zone, System Time, Date Format, Time Format, Language, Storage Full, DVR No., Video Standard, Auto Log out, Machine name, Daylight saving time
	Encode	Set each channel' s main stream and extra stream parameters: Compression format, Resolution, Frame rate, bit Rate type, image quality, Bit Rate, I frame interval, enable and disable Audio/Video
	Network	Set basic network parameters, and DHCP, DNS, High speed download
	Net Service	PPPOE, NTP, Email, IP FILTER, Mobile Monitor, FTP, Wireless Config, WIFI, DAS, Cloud
	GUI Display	Set Channel title, OSD on/off, Transparency, Resolution, Region Cover, set superposition of time and channel title. PPPOE, NTP, Email, IP FILTER, Mobile Monitor, FTP, Wireless Config, WIFI, DAS, Cloud
	PTZ Config (Serial Port Configuration)	Set Channel, PTZ Protocol, Address, Baud rate, Data Bits, Stop Bits, Parity, RS232
	Tour	Set Tour mode and interval
	Storage management	Set the storage devices as read/write disk, Read only disk, Redundant, Format storage, Recover data etc,
	Account management	Modify User, Modify Group, Modify password, Add User, Add Group, Delete Group, Update
	Online User	Can disconnect the online user forcibly, and freeze the account after disconnect it, and it will activated after reboot the DVR.
Advanced	Output Adjust	Adjust the Top margin, Down margin, Left margin, Right margin
	Auto Maintain	Set Auto-Reboot System, Auto-Delete Old files
	Restore	Default settings for: General, Encode, Record Conf. Alarm Set, Network, Net Service, GUI Display, Serial Port (RS232), Account management.
	Update	Using external device (USB) to upgrade DVR
	Device info	Configure the alarm in/out channel, Audio/Video input channel, Rs232, Default playback parameters
	Import/Export	Import and export the configured parameters, Export the system Logo
	Mobile DVR	Car Status
GPS Timing		Using GPS system to revising time, can set the update period
Display Settings		Set Car info on OSD, channel title, Transparency, Resolution
System info	HDD info	Show HDD capacity, Recording time
	BPS	Show every channel' s bit stream info, we can refer to the data to calculate the occupied capacity of HDD
	Log	Including all the log of the DVR operation, we can search and clear the log.
Log out	Version	Show the version and related info
	Log out	Log out, Shutdown, Reboot

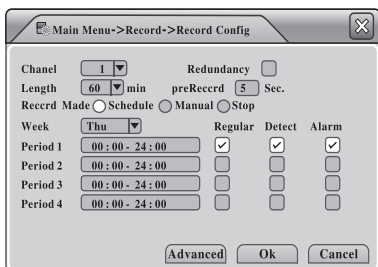
Record

There are 4 submenu items under "Record": "Record Conf.", "Snapshot Storage", "Playback" and "Backup"



Record Config

Here you can configure the recording setting for every channel. You can define "Video Clip Length", "Pre-Record Time", "Record Mode", and even set "Recording Schedule" for everyday, 4 periods a day



Channel: Select 1 channel or all 4 channels for configuration;
Redundancy: When two storage devices are installed, select "Redundancy", the vide files will be backed up to all two disks;
Length: Define length of video clip; the default value is 60 minutes;
Pre-Record: Define pre-recording time, 1-30 seconds selectable;
Record Mode: Define "Record Mode", there are 3 options;
A.Schedule: Start recording during the time periods set in the below schedules

Week	Thu	Regular	Detect	Alarm
Period 1	00:00 - 24:00	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Period 2	00:00 - 24:00	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Period 3	00:00 - 24:00	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Period 4	00:00 - 24:00	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

★Note:

Regular: Start regular recording during the preriod set; the video file type is "R";
 Detect: Start recording only when triggered by "Motion Detection", "Camera Mask", or "Video Loss" during the period set; the video file type is "M";
 Alarm: Start recording while triggered by external alarm signal during the period set; the video file type is "A".

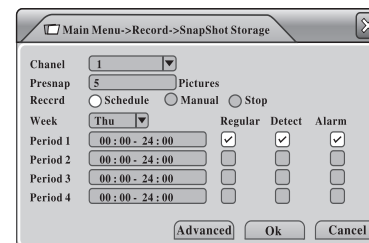
B.Manual: Start recording no matter how the schedule is set.

C.Stop: Stop recording.

★Note: the configuration is only valid to the selected channel(s).

Snapshot Storage

Here you can configure the "Snapshot Storage" setting for every channel. Please note that there should be at least one storage device set as "Snapshot Disk" if you want to store snapshots, please refer to "Storage".



Channel: Select 1 channel or all 4 channels for configuration;
Presnap: Set "Pre-snapshot Picture Number"; the DVR will take snapshots as set before recording happens;
Record: define Snapshot Modes; there are 3 options;
A. Schedule: Enable "Snapshop" function during the time periods set in the below schedules;

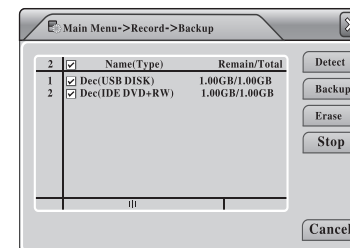
Week	Thu	Regular	Detect	Alarm
Period 1	00:00 - 24:00	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Period 2	00:00 - 24:00	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Period 3	00:00 - 24:00	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Period 4	00:00 - 24:00	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

★Note:

Regular: Store snapshots during the period set when "Regular" recording is happening;
Detect: Store snapshots during the period set when "Detect" recording is happening, which are triggered by "Motion Detect", "Camera Mask" or "Video Loss";
Alarm: Store snapshots during the period set when "Alarm" recording is happening, which are triggered by external alarm signal;
Manual: Enable "Snapshot" function in any cases;
Stop: Disable "Snapshot" function in any cases.

Backup

Here you can back up recorded video files to external storage device, either a SD card or a Hard Drive. Please make sure you have connected the storage devices to the DVR in advance.



Click "**Detect**" to search Storage Devices, Select one disk for video backup;