4CH 2.4GHz Digital Wireless H.264 DVR System with Network function

USER MANUAL

(PLEASE READ BEFORE USE)

Thank you for purchasing our product, we will provide you the best service.
The specification maybe concludes the insufficient point on technology or the function is not the same with its operation, the wrong spelling word. We sincerely hope you can reflect your advice or opinion to us, we will make the improvement on the product according to your valued advices.
The contents of this Manual are subject to change without notice.

CAUTION!
RISK OF ELECTRIC SHOCK. PLEASE DO NOT REMOVE COVER WHEN POWER CONNECTED. NO USER SERVICEABLE PARTS INSIDE.

WARNING
TO PREVENT FIRE OR ELECTRIC SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

NOTE: This equipment has been tested and found to comply with R&TTE standards or Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications.

FCC Caution:
To assure continued compliance, use only shielded interface cables when connecting to computer or peripheral devices. Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the device.
This device of which operation is subject to the following two conditions

(1) This device may not cause harmful interference.
(2)This device must accept any interference received, including interference that may cause undesired operation.

The Federal Communication Commission Radio Frequency Interference Statement includes the following paragraph:
The equipment has been tested and found to comply with the limits for a Class B Digital Device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction, may cause harmful interference to radio communication. However, there is no grantee that interference will not occur in a particular installation. If this equipment dose cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on , the user is encouraged to try to correct the interference by one or more of the following measures:
--Reorient or relocate the receiving antenna.
--Increase the separation between the equipment and receiver.
--Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
--Consult the dealer or an experienced radio/TV technician for help.
The user should not modify or change this equipment without written approval Form JESMAY ELECTRONICS CO., LTD..Modification could void authority to use this equipment.

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1 INTRODUCTION

1.1 Limitation of Liability

- This users' manual is supplied 'as is', with no warranties, be it expressed or implied, including, but not limited to, the implied warranties of merchantability, suitability for any exact purpose, or non-infringement of any third party's rights.

- This publication may include technical inaccuracies or typos. The manufacturer holds the right to introduce any changes to the information contained herein, for any purpose, including but not limited to, improvements of the publications and/or related to the product, at any time, without prior notice.

1.2 Disclaimer of Warranty

The supplier shall not be liable to any party or any person, except for replacement or reasonable maintenance of this product, for the cases, included but not limited to the following:

- Any damage or loss, including but not limited to: direct/indirect, consequential, special, exemplary use arising out of or related to the product;

- Inappropriate use or negligence of the user in operation of the product, resulting in personal injury or any damage;

- Unauthorized disassembly, repair or modification of the product by the user;

- Any problems or consequential inconvenience, loss or damage, caused by connecting this product to devices of the third parties;

- Any claim or action for damages, brought by any photogenic subject, be it a person or organization, due to violation of privacy whereby the surveillance picture and/or saved data becomes public or is used for the purpose other than surveillance.

1.3 Safety Instructions

- To reduce risk of electric shock, do not disassemble this device.
- Use only the supplied power supplies.
- Defective parts must be replaced by original spare parts only.
- If you spill liquid on it, unplug the device from the AC outlet to prevent possible fire or shock hazard and consult authorized service personnel.
- When cleaning the device, turn it off first, use a clean soft cloth moistened with a little bit of water to clean it.
- Do not apply pressure to it or drop it.

- If does not work correctly, return it to the dealer where it was purchased. Do not dismantle it by yourself.
- Do not use the device close to heater, refrigerator or stove.
- When device is in use, do not direct the lens toward any bright light.

  Power cord operated equipment or accessories connected to the device should bear the CE certification mark and should not be modified in any way that might defeat the safety features, the device meets all European standards for EMC, safety and radio Frequency, however interference form other RF Transmitters may occur .the range of the device is at least 100meters in an open air situation, however indoor the range is highly influenced by construction materials applied within the house.

- **Handle hard disk drives with care.**

  It is possible to damage hard drives if they are moved while their motors are still running. To allow the hard drive to spin down and park its heads, wait at least 10 seconds after disconnecting power before moving the unit.

  To avoid shock and vibration damage to the internal hard drive, do not move the unit while it is plugged in.

  Protect hard disk drives from static electricity.

  Do not stack hard disk drives or keep them upright.

  Do not use an electric or magnetic screwdriver to fix hard disk drives.

- Do not place the unit in an enclosed area where the cooling vents are blocked or impede the flow of air through the ventilation openings.
- Protect the power cord from being stepped on or pinched particularly at plugs and the points where they exit from the apparatus.
- Do not drop metallic parts through slots. This could permanently damage the appliance. Turn the power off immediately and contact qualified service personnel for service.
- Handle the appliance with care. Do not drop or shake, as this may damage the device.
- Do not expose the appliance to water or moisture, nor try to operate it in wet areas. Do not install the unit in an area where condensation occurs. Do not operate with wet hands. Take immediate action if the appliance becomes wet. Turn the power off and refer servicing to qualified service personnel. Moisture may damage the appliance and also cause electric shock.
- Do not use strong or abrasive detergents when cleaning the appliance body. When the dirt is hard to remove, use a mild detergent and wipe gently.

- Do not overload outlets and extension cords as this may result in a risk of fire or electric shock.
- Please unplug power cord from its power source if the device will not be used for a long time.
- Please make a note of your settings and save them. This will help when you are required to change the system configuration, or when an unexpected failure or trouble occurs.
- Distributing, copying, disassembling, reverse compiling, reverse engineering, and also exporting in violation of export laws of the software provided with this product, is expressly prohibited.

CARING FOR THE ENVIRONMENT BY RECYCLING

When you see this symbol on a product, do not dispose of the product with residential or commercial waste.

Recycling your Electrical Equipment

Please do not dispose of this product with your residential or commercial waste. Some countries or regions, such as the European Union, have set up systems to collect and recycle electrical and electronic waste items. Contact your local authorities for information about practices established for your region

1.4 Copyright Statement

All rights reserved. No part of this publication may be reproduced in any form or by any means, transcribed, translated into any language or computer language, transformed in any other way, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, recording, photocopying or otherwise, without the prior written permission of the owner.

1.5 Main Feature

This kit is a complete 2.4GHz digital wireless H.264 DVR security system that contains a multi-channel network DVR and a number of cameras. It uses an advanced digital modulation design, and its wireless camera is with 24 IR sensors for day and night use. The kit was designed to be compatible with wired and wireless camera to use. It's an ideal do-it-yourself (DIY) protection and security solution for your home, business office, stores, retail operations, wherever security is a concern, this all-in-one system offers a 300-foot operating range(in open site), can be installed easily in minutes, and requires no monitoring services or fees. This DVR system also uses graphical interface, easy to use and supports 3G mobile phone surveillance and E-mail function. Its continuous recording time can up to 40 days with 1TB HD @ 25fps and backup file supports windows media player.

1.6 Product Features

- ✧ 4 channel system16QAM/QPSK/BPSK digital modulation,
- ✧ 4 channels wireless or 2 channels wired optional H.264 DVR system with network function
- ✧ Graphical interface, easy to use
- ✧ Long recording time up to 40 days with 1TB HD @ 25fps
- ✧ Built in removable HDD rack
- ✧ Remote control or manual or USB mouse operating
- ✧ Camera has 24 IR LEDs for night vision
- ✧ Support dual coding stream
- ✧ Support network file share function
- ✧ Support Four channel simultaneous playback
- ✧ Support 3G mobile phone surveillance and E-mail function.
- ✧ Transmission distance up to 100m (line of sight)

1.7 Product Specification Parameters

Item		DVR Receiver
System	Language	Multi－language
	GUI	OSD Menu
	password	user password, administrator password

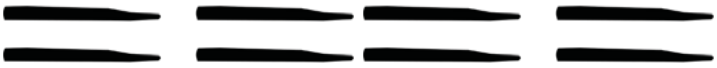
Video	Video input	CH1~CH4 Antenna Receiver Wireless Camera, CH2 and CH4 input cable or wireless switch select.
	Video output	1 BNC composite video output 1.0Vp-p, impedance 75Ω, 1 VGA output
	Video display	1, 4, PIP(1*1), PIP(1*2)
	Video standard	PAL: 25f/s, CCIR625line, 50scene NTSC: 30f/s, CCIR525line, 60scene
Picture proceeding and store	Video Format	H.264 compression
	Picture resolution	CIF/HD1/D1
	Video code rate	CIF: 100fps/4ch;HD1:100fps/4ch;D1:50fps/4ch;
	Data storage	One SATA HDD storage, up to 1.0TB
Wireless DVR	Receiver Frequency	2.400GHz~2.4835GHz
	Transmission	channels auto selection
	Receiver sensitivity	-80dBm Min.
	Video Output Level	1±0.2Vp-p @75 ohm
	Video Format	MPEG 4 compression
	Video bit rate	up to 12 Mbps
	Random ID code	up to 4 million sets
	Antenna	Omni-directional
	Operational range	Up to 100 meters (line of sight)
Alarm	Alarm input	4 alarm inputs
Connector	Alarm output	1 alarm output
	Serial interface	Supports 1 RS485
	Network interface	RJ45，10M/100M
Software	Support USB firmware upgrade	
others	voltage input	AC:110~240V
	Voltage output	DC: 12V/5A
	Dimensions (mm)	315(W) x 224 (D) x 52 (H) mm
	Working temperature	-10℃ to 50℃

ITEM	Transmitter
Transmit Frequency	2.400 ~ 2.4835GHz
Video bit rate	up to 12 Mbps

Random ID code	up to 4 million sets
Output power (max)	1W/FCC or100mW /CE
Antenna input port Type	Re-SMA(M) jack
Antenna	Omni-directional
Effective Night Vision Range	7 meter (24 IR LED on)
Image sensor (Optional)	1/3″ Color CCD or 1/4″ Color CMOS
Camera Resolution(Optional)	420 TV Line or 480 TV Line or 520 TV Line or 380 TV Line
Picture element	512*582 (PAL), 512*492 (NTSC)
Min. illumination	0 LUX at night(LED ON)
Operational range	Up to 100 meters (line of sight)
Digital Modulation	16QAM/QPSK/BPSK
Wireless Video Format	MPEG 4 compression
Video bit rate	up to 12 Mbps
Video resolution	720 x 480 @ 30 fps (NTSC) or 768 x 576 @ 25 fps (PAL)
Video Format	NTSC / PAL optional
Power supply	12VDC/1A (Transmitter)
Dimensions (mm)	Length 155 * Width 70 * High 60 (Transmitter)

2 PACKAGING and ACCESSORIES

2.1 Package Contents

- Wireless DVR 1PC
- Wireless Camera 4PCS
- 2.4GHz Antenna 8PCS 
- Adapter 5PCS
- Driver CD w/user manual 1PC
- Remote control 1PC
- Power cord 1PC
- Mouse 1PC

Note: Hard disk drive (optional, depends on the model) (if you would like to use your own Hard disk drive, please see **Appendix 3** for the list of compatible HDDs)

3 DEVICE OPERATION MANUAL

3.1 Product Overview

3.1.1 Wireless DVR (Receiver)

3.1.2 Front and Rear Panel

Front Panel

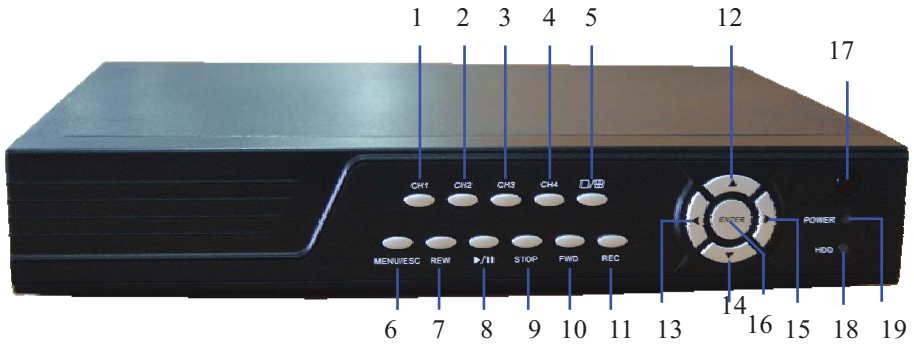


Fig. 2-1

No.	Key name 4ch	Operating instruction	No.	Key name	Operating instruction
1 2 3 4	CH1 CH2 CH3 CH4	Corresponding channel is magnified in full screen under preview state	6	MENU/ESC	Access tool bar / Hide tool bar / Exit menu / Exit sub menu
5	■/▪▪ ▪▪	4 Channels preview / switch control mode during PTZ control frame	7	REW	Rewind, 2×, 4× and 8× playback
12 13 14 15	【▲▼◄►】	Move selected item in menu	8	【►/‖】	Play/Pause
			9	STOP	Stop
			10	FWD	Fast playback, 2×, 4× and 8× playback
			11	REC	Start manual record/stop manual record
			17	IR	Infrared receiving window of the remote controller
16	ENTER	This button is used as the “enter” key in most circumstances and PTZ control on live view	18	POWER	Red LED is for record
			19	HDD	Green LED is for power

NOTE: On live view press the button ▪▪ or ■ ten times when there is no tool bar, this will switch the main menu from CVBS video output to VGA video output.

Rear Panel

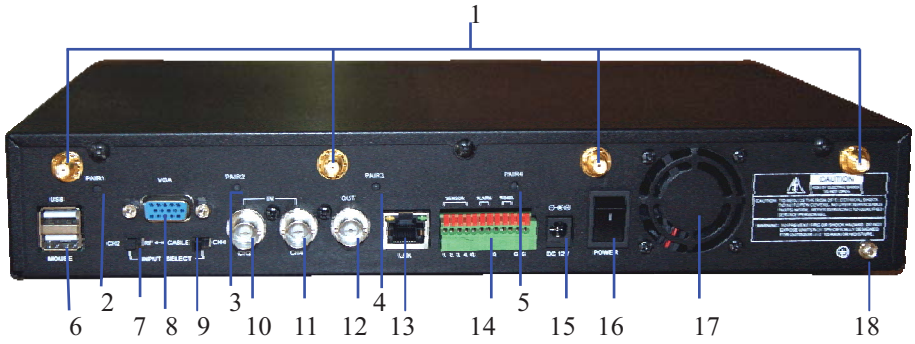


Fig. 2-2

Item	Physical connector	Connector description
1	Antenna SMA input Ports	Can be connected 4 pieces 2.4GHz Antennas
2	PAIR1	**CH1 Button for Transmitter and Receiver Link pairing.**
3	PAIR2	**CH2 Button for Transmitter and Receiver Link pairing.**
4	PAIR3	**CH3 Button for Transmitter and Receiver Link pairing.**
5	PAIR4	**CH4 Button for Transmitter and Receiver Link pairing.**
6	USB port	Backup video recordings and connect the mouse via the USB port
7	CH2 Input select Switch	**CH2 input can also be preset wired mode (cable) (normal use is wireless mode (RF)) by sliding** Input Select Switch **when CH2 input port was connected a wired camera.**
8	VGA output	For connecting a VGA monitor
9	CH4 Input Select Switch	**CH4 input can also be preset wired mode (cable) (normal use is wireless mode (RF)) by sliding** Input Select Switch **when CH4 input port was connected a wired camera.**
10	CH2 Input port	CH2 can be connected wired camera port (BNC)
11	CH4 Input port	CH4 can be connected wired camera port (BNC)
12	Video output Port	for connecting a TV or a monitor (BNC)
13	Network(RJ 45)	For connecting Ethernet cables
14	Sensor/Alarm/RS-485	Sensor/Alarm/RS-485 interface (see pin outs below)
15	Power jack	Connect power supply - DC 12V/5A
16	Power	Power switch
17	**Fan**	Cooling fan
18	Grounding	Connect the machine to GND

Sensor/Alarm/RS-485 port functions:

Pin 1-G：Sensor 1 input　　Pin 2-G: Sensor 2 input

Pin 3-G: Sensor 3 input　　Pin 4-G：Sensor 4 input

Pin NO-COM: Alarm Output (N.O)　　Pin A、Pin B: RS-485A、RS-485B

In device operation, the enter key on remote control or front panel has the same function as left click of the mouse.

3.2 Remote Control

Fig. 2-3

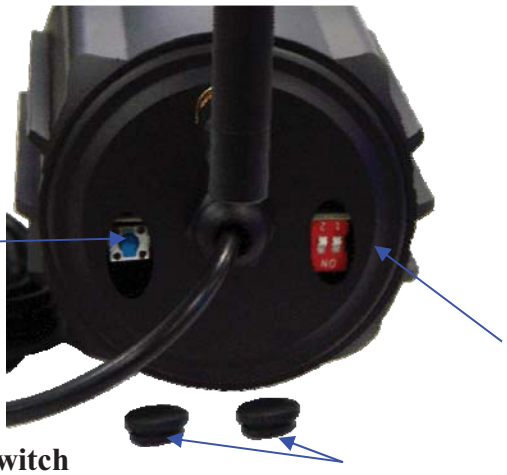
You can use the remote control instead of the buttons on the front panel. If nothing blocking the way between you and the video recorder, the range of the remote is up to 10 meters.

Number	Key Name	Operating instruction
1	【◄◄】	Rewind, 2×, 4× and 8× speed
2	【 / 】	Access tool bar / Hide tool bar / exit menu / exit sub menu
3 4 5 12	▲◄▼►	Move selected item in menu
6 7 13 14	4ch	Corresponding channel is magnified in full screen under preview state
8	►‖	Play/Pause
9	【■】	Stop
10	【►►】	Fast playback, 2×, 4× and 8× playback
11	【●】	Start manual record/Stop manual record
15		4 Channels preview/ switch control mode during PTZ control frame
16	【 】	This button is used as the “enter” key in most circumstances

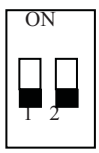
3.3 Wireless Camera (Transmitter)

1. Camera Mounting Bracket
2. Power connector DC 12V/1A
3. CDS control for day and night vision
4. 24 IR LEDs to provide infrared light for night vision
5. 1/3〃 CCD Color image sensor (optional)
6. Power indication LED
7. Rainproof solid aluminum housing
8. Rainproof solid aluminum housing
9. 2.4GHz Antenna

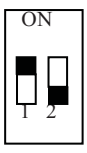
Rear



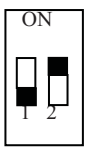
1. Remove the waterproof plastic cap
2. Preset channel by sliding manual DIP switch
3. Cover the waterproof plastic cap tightly



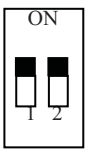
CH1 is selected.



CH2 is selected.



CH3 is selected.



CH4 is selected.

3.3.1 How to pair the wireless camera (transmitter) and wireless DVR (receiver)

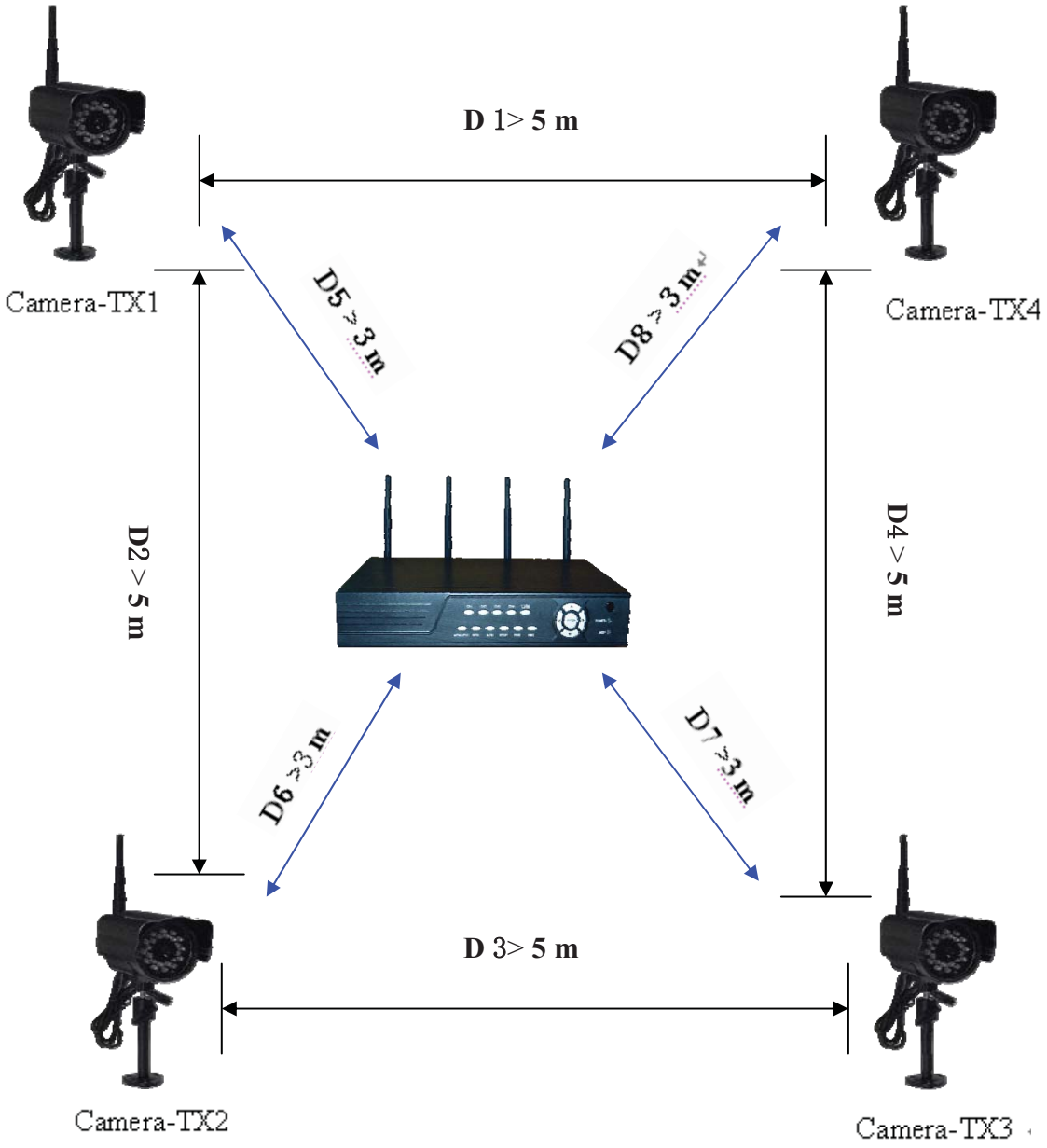
Before shipment of this product has been paring ID code, you can instantly use. If you want to re-pair your code, you have to comply with the following instructions to the paring code. Please see the follow pairing operation.

After connecting the video output of the wireless DVR and the video input of TV or monitor with a video cable then the first remove two waterproof plastic caps on the rear of the wireless camera, and preset channel what you want by sliding manual DIP switch (see page 9), and then cover the waterproof plastic cap tightly. Turning on the power switch of wireless camera, wireless DVR and TV or monitor, and then you can press the PAIR button on the rear of the wireless DVR and not release until 3 seconds. The TV or monitor screen will show " Please press paring button of TX device ", and then countdown to 17 seconds, meaning that in 17 seconds, you have to press the paring button on the rear of the wireless camera (TX device), otherwise it will show " Pairing failed ". When you press the paring button on the rear of the wireless camera and not release until the Power indicating LED on the front of the wireless camera begins to flash then you can release the PAIR button, and then the wireless camera starts to enter the pairing state and automatically link ID code to the wireless DVR. When the paring is successful, The TV or monitor screen will show " Paring OK Save data ", and the Power indicating LED of the wireless DVR will be lit directly. That means they have completed the pairing of work, and you can watch the video was transmitted by the wireless camera on the TV or monitor screen, and then cover another waterproof plastic cap tightly.. When the wireless camera has not been paring ID code, the Power indicating LED should light up until the 60 seconds will automatically go out, and not paring code again unless re-paring once again.

Note:

1. **When you use a set the wireless camera and wireless DVR which has a pairing ID code, if you turn on the wireless camera and wireless DVR, you will find the Power indicating LED will light for 3 seconds, then off, and it will automatically start to link between the wireless camera and wireless DVR. If it has been paired, the Power indicating LED will be lighting, and then you will be able to watch the video on the TV or monitor screen. If it has not been paired and also not find the pairing object, it will show " Link failed " on the TV or monitor screen.**
2. **Because the use of the environment, here may be interference from many wireless devices, so when you find equipment not working properly, please turn the wireless camera and DVR on once again.**

3.3.2 Application Wiring Diagram



Note1: In order to get better reception results, keep the distance between the transmitter and receiver in at least 3 meters and the distance between the transmitter and the transmitter must be at least maintained in 5 meters.

Please refer to the above application wiring diagram.

Note 2: In order to avoid the transmission signal was blocked by the moving body and affect the signal quality, we suggest that customer try to put the product in a higher place.

3.4 Mouse Control

You can use a mouse to operate the DVR as well. The mouse operates just like a mouse on a Windows PC. Please connect the mouse to the USB connector in the back panel and please note that you can hot-plug the mouse.

Right clicking	In live display mode, right clicking will either display or hide the tool bar.
	In main menu or sub menu mode, right clicking will exit current menu. Note that the settings will not be saved after right clicking.
Left clicking	On menu unlock mode, in the tool bar left click on the SYSTEM SETTINGS icon to enter into the main menu.
	After entering main menu, left clicking will enter sub menus.
	On [detail files] menu mode, left clicking will playback one recording file.
	By left clicking you can select values in edit boxes or down-pull menus The system supports Chinese character inputs, special symbols, numbers and letters.
	On the playback interface left clicking can control the >> forward function, << reverse function, >>I Slow play function, I> frame play function, > Play function, and X exit function.
	You can left click to adjust color control bar, volume control bar and screen control bar.
	On the main menu, sub menu or playback view, you can left click “x” to exit the current menu.
	You can left click to change the status box of a check box in the motion detection area.
Double clicking left key	On the live view or playback video, double-clicking will maximize the screen.
Mouse drag	In the Motion Detection setting interface, you can left click to drag the frame to set the motion detection area.
	Use the mouse to select menu items.

3.5 Hardware Installation

It is recommended that the installations described below are carried out by qualified personnel.

3.5.1 Basic Connections

- **Cameras**
  Connect each of the cameras’ outputs to the video input socket in the rear panel of the DVR using appropriate cables. The video input interface is a standard BNC connector, 1Vp-p, 75 Ω. Please keep the video signal cable away from strong electromagnetic and

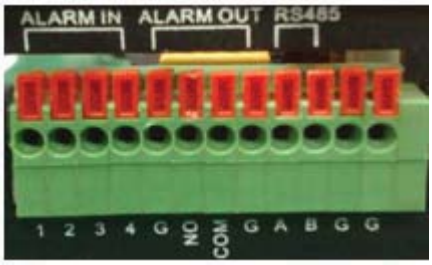
electric interference.

- **Monitor**
  Connect the main output connector to a monitor or a TV screen. Use a BNC-to-RCA converter, if needed, to work with the Audio/Video RCA cable.

- **Power**
  Please use the 12V DC adapter supplied for connecting your DVR device with the power source.

- **Alarm Input / Output----(optional)**
  Connect Alarm In 1-4 to N. O. (Normally Open) or N.C. (Normally Closed) alarm connectors and one Ground connection. Connect Alarm Out to the corresponding connections and Ground accordingly.
  For detailed description please see Section 5.6.1.2. I/O Alarm

4ch



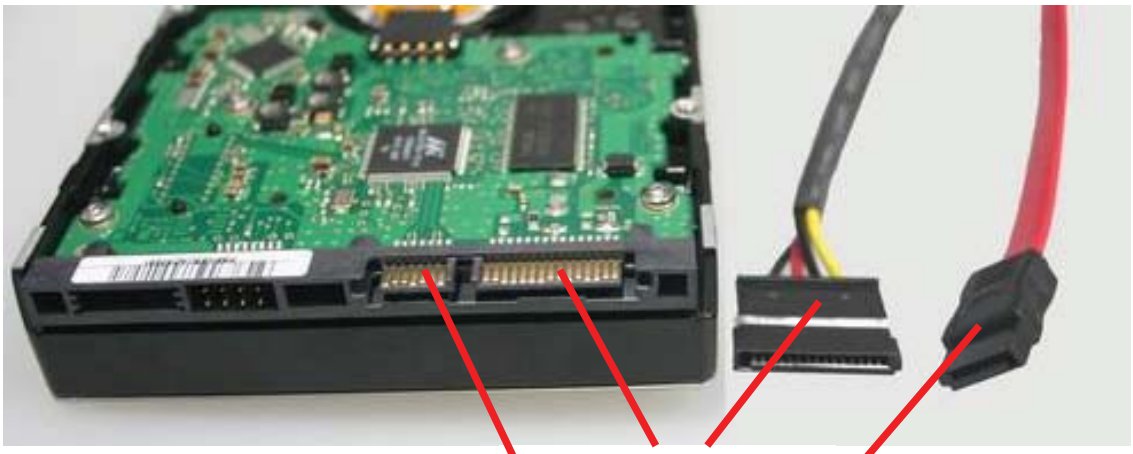
- **Ethernet**
  For remote access to the video images from your cameras via LAN or the Internet, please connect the standard RJ-45 twisted-pair Ethernet cable to the Ethernet connector.

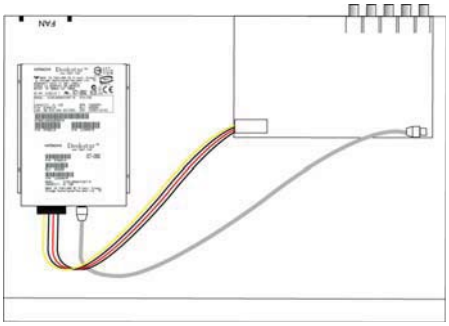
- **USB**
  For connecting the mouse, USB flash drive, USB portable HDD, USB portable DVD Recorder (for the list of compatible HDDs see **Appendix 2**, for the list of compatible DVD Recorders see **Appendix 3**). The USB mouse is hot pluggable.

NOTE: The device only supports FAT32 file system on the USB devices.

3.5.2 Installing Hard Disk Drive

Before you can record onto your HDD it should be formatted by the DVR system, because standard PC formatting is not compatible. It can be done in the Maintenance Tab of the Tool Bar Main Menu. Please refer to Section 5.4.5 HDD Manage for the detailed description of this process. Depending on the size of your HDD, the format process can take several minutes.



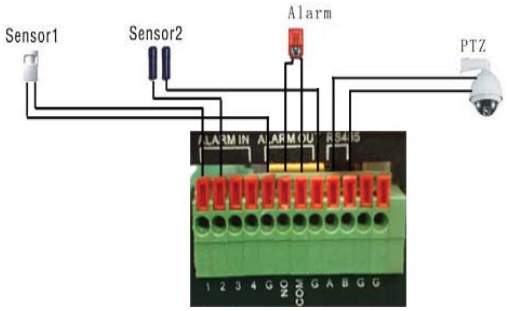


Your HDD should be installed inside the DVR. Please connect the HDD in the standard way, screwing the HDD into the HDD brackets or DVR base. All necessary cables are delivered with the DVR. Use instructions that came together with the hard drive for exact wiring and installation. Please connect the power cable to the appropriate socket, and the data cables to their corresponding connectors.

For the list of HDD drives tested for compatibility please see **Appendix 2**.

3.5.3 PTZ Control Connections----(Optional)

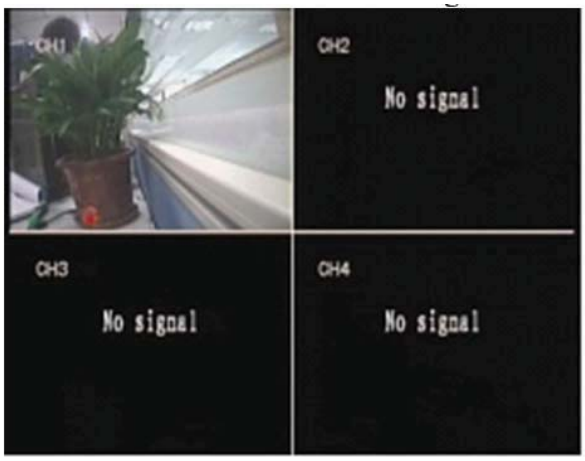
Connect the PTZ control jacks to the corresponding RS485 A and B interfaces on the rear panel.



For detailed description of PTZ protocols, baud rates and IDs please refer to the setup section in the PTZ manual.

4. GETTING STARTED AND THE MAIN SCREEN

1) Switch on your DVR and wait for the system program to load. If you have not yet installed a hard disk drive into the device, or the device didn't read the HDD, or a new HDD didn't be formatted, or there is no space of the HDD to record, it will display an icon " " in the video preview interface. You must format the HDD in the DVR before first using. The steps as follows: System settings > SYSTEM > HDD management > format. After formatting for the first time, the system will restart. If the HDD is already installed, then the default setting is for the DVR to start recording and a red dot on the screen will indicate that.



4.1 The Main Screen

The standard layout is four (nine or sixteen, depending on the device) windows evenly distributed over the screen. From the main screen you can access menu options and switch among channel views, displaying either all channel feeds simultaneously or bringing forth a full-screen view of a selected channel.

4.1.1 Displaying A Single Channel

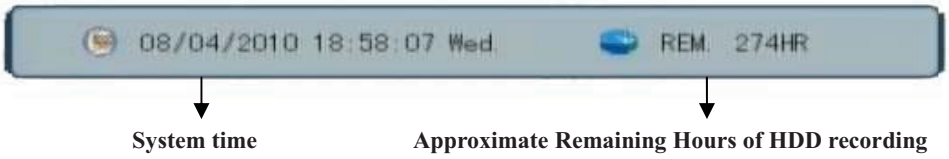
In the multiple screen view, you can make a particular window active by left-clicking on it once with a mouse, or navigating to it using directional buttons. If an audio output device is connected to this channel, you can monitor both audio and video feeds.

To full screen display a single channel you can press the corresponding numerical or positional buttons on the remote (channel number is displayed in the top left corner of each window); alternatively you can do so by left double-clicking on the desired window.

In order to return to the multi-screen view you could either double-click on the screen again or press the single/multiple view button either on the remote control or the front panel.
You can choose to display the Status Bar, Tool Bar or neither of them by single right-clicking on the screen. These three options alternate in sequence.

4.1.2 Status Bar

Located at the bottom of the screen, the Status Bar may be called up by pressing the **Menu** button or right-clicking anywhere in the screen.



4.1.3 Login DVR

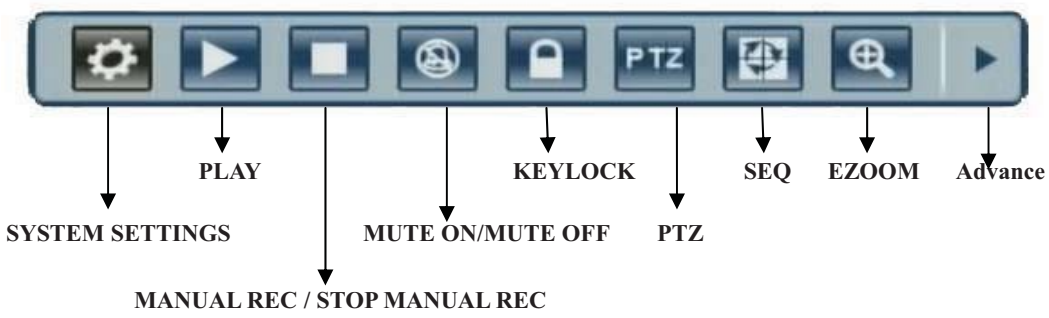
In live view, press the button " " twice or double-click right key of mouse on live view to display tool bar, it will appear the login window if the password is enabled.

You can login from the LOGIN window as shown as previous fig. Select user name and user password via numeric key-board. You can access the main menu by pressing [ ] if the password is enabled.

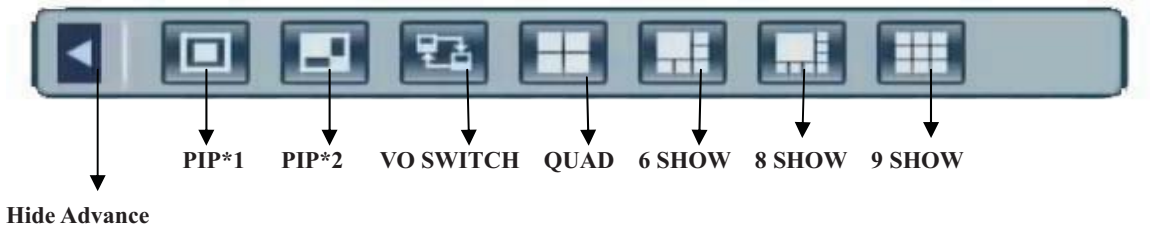
1. The default password for Admin is "888888" and the default password for user1is "666666". For your convenience and system safety, you can change password of admin and add other username.
2. The Auto ID is used for connecting the IE interface. For detail operation please reference appendix 6.

4.1.4 Tool Bar(Please Take Actual Machine Model As Quasi)

After logging in system, double click the right mouse, it will display the following tool bar.



Click the "ADVANCE" button and the screen will display the following figure:



The functions of the buttons present in the Tool Bar are as follows:

System configuration

Search, playback and backup of recorded files

MANUAL REC/STOP MANUAL REC: Click the [MANUAL REC] button to start manual recording. Click [STOP MANUAL REC] menu or press [■] button to stop manual recording.

KEYLOCK: If the password is enabled, click "KEYLCK" to logout the system.

PTZ: Enters PTZ control.

/ / / / : Switching split mode between quad view, six, eight, nine and sixteen windows (Depending on devise).

AUTO SEQUENCE: Click "AUTO SEQUENCE" on the tool bar to enable auto sequencing, the channels with images will be in sequence: channel 1-channel 2-channel 3-channel 4-channel 1…… (4-CH DVR) Channels without images won't display. To interrupt auto sequencing, press any button or click the mouse while in auto sequence mode.

EZOOM: Click "EZOOM" to enter into zoom mode, and then click left key and drag to select the area that you want to magnify. Right click to exit.

PIP 1*1: This feature displays a small picture in a full screen.

PIP 1*2: This feature displays two small pictures in a full screen.

VO SWITCH: Press the button [ ]、 [ ] or numerical button[ ] ten times when there is no tool tar or click the button "VO SWITCH" on the tool bar, this will switch the main menu between CVBS video output and VGA video output.

See the following subsections for a detailed description of each of these functionalities.

4.2 Tool Bar Menu Options

4.2.1 System Configuration

Pressing this button will bring up a screen for setting up all system configurations. You can adjust such settings as **Record**, **Video, System**, **Network**, **Alarm** and **PTZ (optional)**. Please refer to **Section 5. DVR Settings** for the detailed description of these settings.

Note: In order to validate the sub-menu setting, you must press " ". It will not be effective if you do not press and exit directly. This DVR has a special feature: explanation and information will be shown automatically when you move the cursor over the Menu.

4.2.2 Manual Recording

There are three ways of recording live video/audio feed from your cameras: **manual recording**, **scheduled recording** and **time recording**.

If the recording schedule is in conflict with manual recording, the manual recording will be processed first until stopped.

For detailed description of time recording see Section 5.3.8 Record Mode. Description of the manual recording function follows.

In order to record a video/audio feed, please select the Manual Record button in the Tool Menu. Alternatively you can use the REC button on the remote or the front panel. Pressing this button again will stop the recording process.

4.2.3 Video Playback

Move the cursor to 【►】 (the icon will be highlighted when selected) and left click to enter into the setting interface; Or press the [►‖] button to enter into the setting interface. There are three methods of searching for recordings.

Method 1: playback by date
Date input: Adjust the checking date and time, and press【Enter】to input the number directly to adjust the year, month, date. Next, input the time in the next box, click "play" and then choose playback channel as shown in right Fig, then click "play". If you choose one channel it will playback that channel in full screen mode. If you choose two or more channels there will be the same channels to playback simultaneously on four frames.

Method 2: playback by recording status:
Input the date, click【search】and you can see the recording status on this date.

Instruction:
CHN: There are five channel options: CH1, CH2, CH3, CH4 and ALL. Press【Enter】and you can change the channel to be displayed on file listing.

MONTH: It will show all the recordings in this month. Green means normal recording, Red means alarm recording, and Gray means no recording. Click any date in this frame to search the recording status of that day, and the search results will be showed in the date frame.

DATE: Date will show all the recordings and their statuses on this day, you can playback the recorded files in any period clicking the corresponding period.

Method 3: playback by file list:
Input the searching date and click "SERACH" to view the recording status. Click an exact day and then click "FILE LISTING" to see the interface of "FILE LISTING".

TYPE: There are three options: all, normal and alarm. Press【Enter】and the content will be displayed in a list.

Instruction:

1. 【FILE LIST】: "CHN" shows which channel the file was recorded under, "TIME" shows the recording time, and "SIZE" is the displaying size of this file (Unit: MB), red list indicates this recording file is alarm recording file and black list indicates this file is normal recording file. Pressing the "SELECT" button will export the selected files to USB storage.

2. After moving the cursor up or down and selecting the files, left click to enter into playback interface. It will playback a single channel in full screen.
3. If the [RECORD TIME] section is marked as "ON" under the [VIDEO DISPLAY]section, it will show the date/time when playing back recorded file；If it is marked as "OFF," it will not display the time.
4. During playback, press【►►▌】to play slowly; press【►►】or【◄◄】to fast forward and rewind; press【▌►】to pause and frame-by-frame play；press【⊠】to exit from playback and return to the former menu;
5. When playback files finish, it will return to the file list interface.

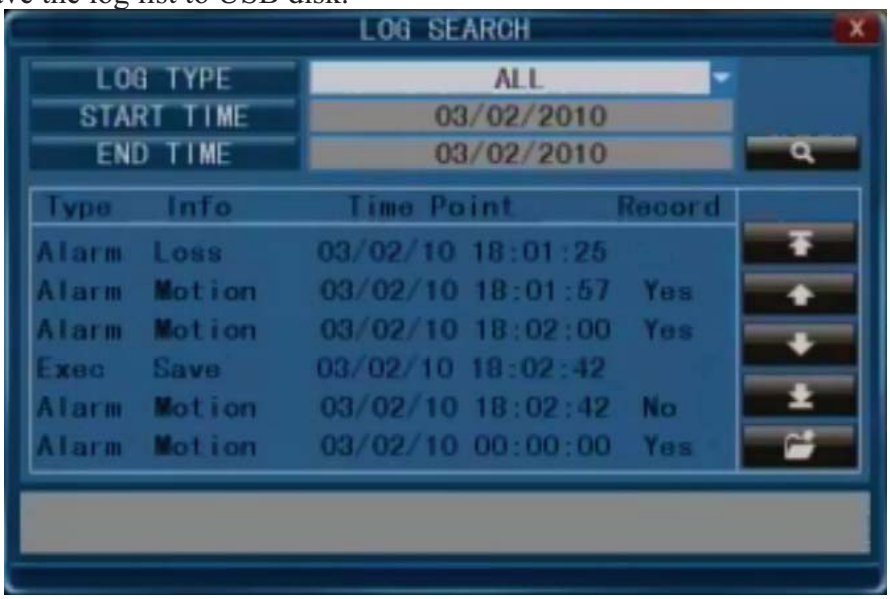
LOG SEARCH

Move the cursor to【►】(the icon will be highlighted when selected) and left click to enter into the [REC. SEARCH] setting interface or press the button [►/‖] to enter into the setting interface, move the cursor to option "LOG" and press the [ENTER] button or left click to access the Log Search(as shown in the figure below).

Display the system log for the convenience of alarm and operation.

[LOG TYPE]: Choose between the following options: [All]、[ALARM] and [OPERATION].
[STARTING TIME]: Set the starting time of log search.
[END TIME]: Set terminal time of log search.

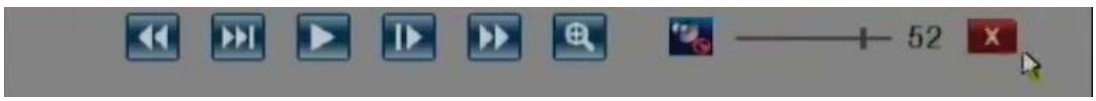
Push “Search” button after the setting of log time and type, and the system will display the required log in the list. Click [ ] 、[ ] 、[ ] and [ ] to switch page, and click [ ] to save the log list to USB disk.



Playback Control

In the playback mode you can see the playback control panel as well as the date and time of the played file.

Options for the playback control panel are described below:



Fast rewind, the available speeds are 2x, 4x, 8x, 16x, 32x and 64x.

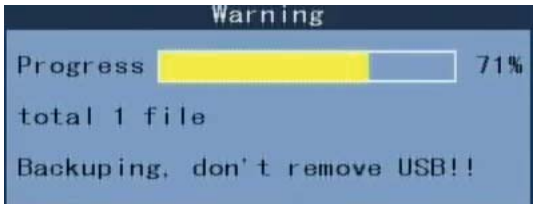
Slow forward, the available speeds are 1/2x, 1/4x and 1/8x,.

Play

Pause/Frame-by-frame view

Fast forward, the available speeds are 2x, 4x, 8x, 16x, 32x and 64x.

Ezoom: When it is play normally, click this icon to enter into zoom mode, and then click left key and drag to select the area that you want to magnify. Right click to exit.



4.2.4 Video Backup

Back up can be initiated from the same dialog window as the playback function.

You can use USB for backup by inserting USB device into the USB2.0 port before backing up files. The device also supports USB OTG.
On the "FILE LISTING" menu you can select the recording file by using the direction keys. Press【Enter】to confirm your selection. A checkmark "√" will appear at the end of the filename after you make your selection. Press【Enter】again, and the "√"will disappear, thus cancelling your selection. You can start exporting the selected recording files by pressing【Backup】.

Note:

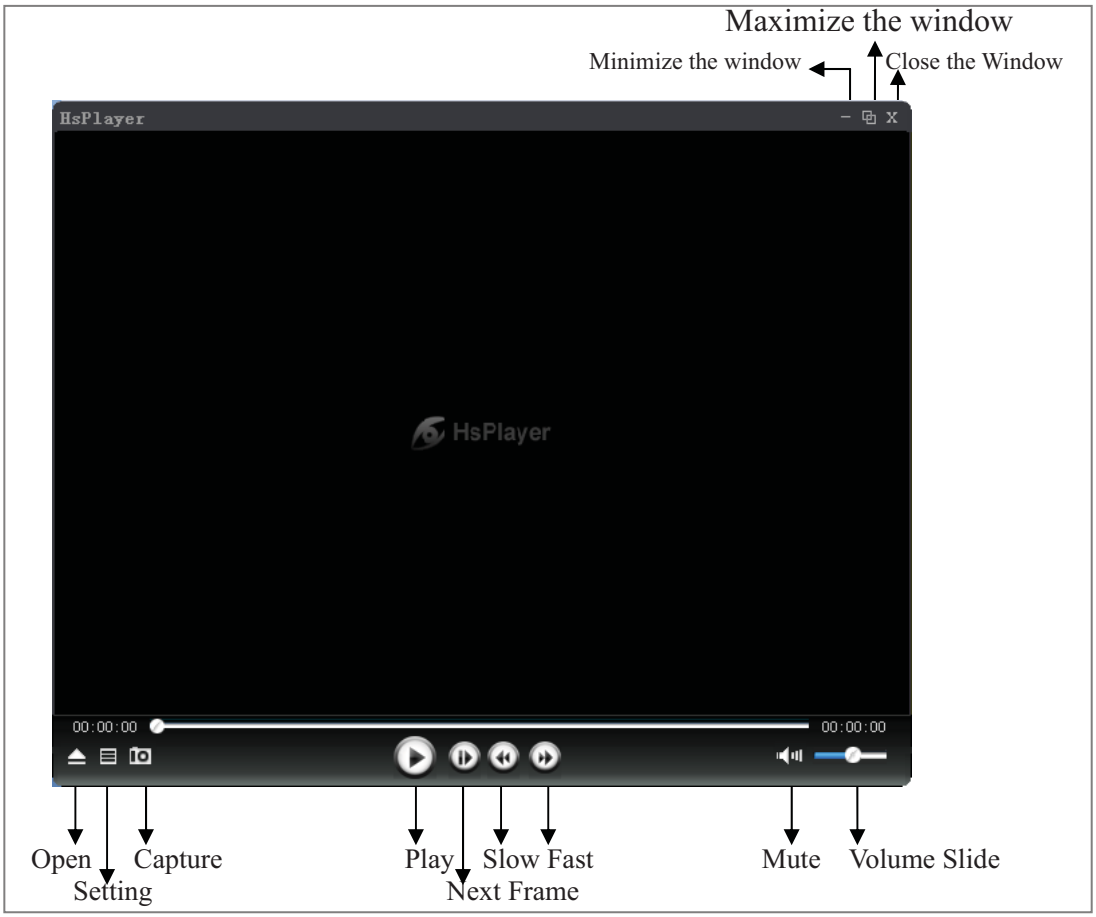
1. When the backup device does not have enough free space to download the file, the system will prompt you with "Space not enough".
2. You can remove USB device directly when backup is finished.
3. If the system cannot recognize the connected devices or none are connected, you will see a warning message "No USB DISK!"
4. If you use USB disk to back up file, the format of file is AVI, you can use Windows Media Player to play it directly. If you use DVD to back up file, the format of file is NVR, you had to change its suffix from NVR to 264, then use "Hsplayer.exe" player to play it.

Currently you can connect such external media as USB flash drives, portable USB HDDs and USB DVD recorders. For the list of DVD burners tested for compatibility, see **Appendix 3**.

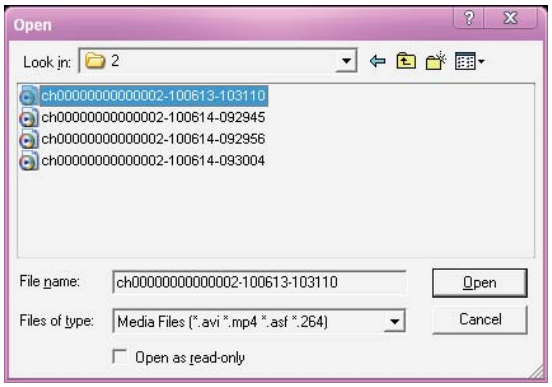
The system only supports the FAT32 file system for USB flash drives and HDDs

4.2.5 Playing backed up video on your PC

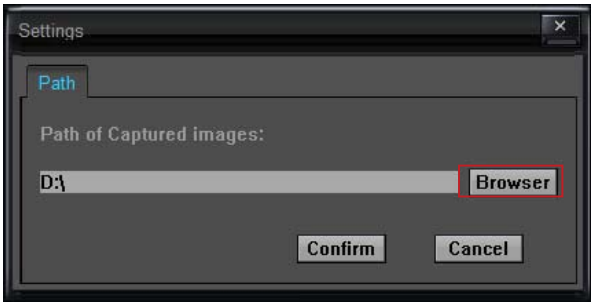
1) Copy the program "Hsplayer.exe" from the installation CD to your PC. Double click the icon " HsPlayer.exe HsPlayer Pro " to run the program directly.

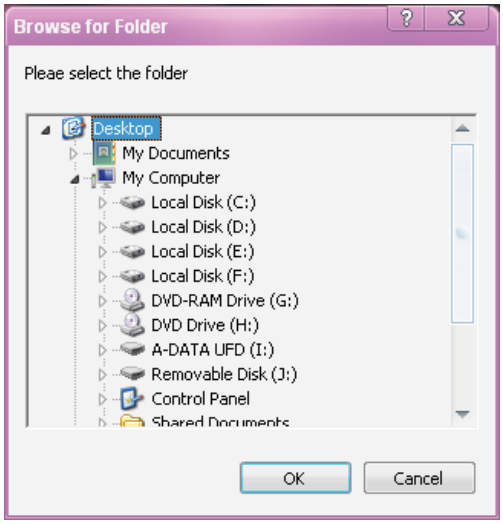


2) Click "⏏" to open the video recorder in "*.avi" or "*.264" format. Select a file and click 【Open】to play the file.

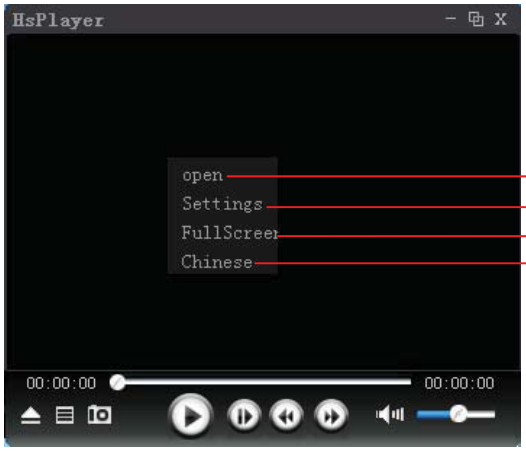


3) Click "" to capture a still picture. Click "" to enter into the "Settings" menu interface to set up the path for saving captured images. Click [Browser] to change the path for captured images. For example, select the folder "Desktop" and click [OK] to save the path.





4）Right click to open the shortcut menu window.



open the video recorder in "*.avi" or "*.264" format
to set up the path for saving captured images
Full Screen
Change language

Note: If you back up file by USB disk, you can play them by Windows Media Player directly. If you back up file by DVD burners, you should change its suffix from **NVR** to **264**, for example: if the backed file is named "ch00000000000004-101021-161117-161151-01p10002000000400.nvr", you have to change its suffix as" ch00000000000004-101021-161117-161151-01p10002000000400.264"

4.2.6 PTZ Control---(Optional)

Chapter 5.7 PTZ talks about setting up PTZ parameters, here we will discuss how to operate the PTZ control.

A. Connection

1) Connect the control line of the speed dome camera to the RS-485 interface of the DVR. Make sure that A and B are matching.
2) Connect the video line of the speed dome camera to video input of DVR.
3) Activate the speed dome camera.

B. Preparation

1) Set the control address of the speed dome camera and choose relevant control protocol.
2) Switch the current frame to the corresponding display channel.

C. Operation

Double-click the right mouse button to enter tool bar menu under real-time monitoring frame, and choose “PTZ” or push “ENTER” key to enter the control frame.

Under PTZ control frame press the quad [■] button or right click and an icon “ ” will appear at the top right corner of the screen.

[PTZ Direction Control] Under PTZ control frame, move the mouse to the upper, lower, left and right locations of the current frame, and this time, left click and hold the mouse. Enter the control area of the corresponding location.

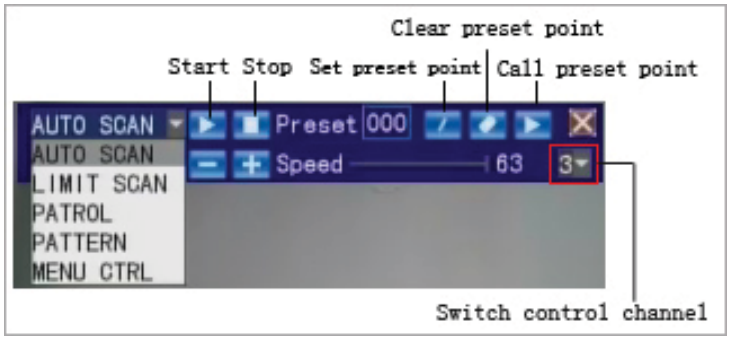
In “ ” mode, use the mouse or the [▲] [▼] [◄] [►] buttons on the remote control front panel to control detection. You can also use Rewind Button ◄◄and Fast Forward Button ►► to change magnification.

[SPEED] Regulate the rotating step length of the PTZ by using the slide bar. This function is mainly for the controlling direction operation. The bigger the value is, the faster the rotational speed is, with values ranging from 0~63.

[IRIS －、IRIS +] Regulate the diaphragm.

[FOCUS －、FOCUS+] Bring objects into focus finely.

[ZOOM －、ZOOM+] Zooms the Lens in and out. Magnification can be changed by using the mouse wheel under the current frame.



[MODE]

<Auto scan> controls the automatic scanning of the speed dome camera from left to right boundary after starting.

<Limit Scan> controls the limit scanning of the high speed dome after starting.

<Patrol> runs the patrol scanning of the high speed dome after starting.

<Pattern> runs the pattern scanning of the high speed dome after starting.

<Menu CTRL> calls the menu of the high-speed dome after starting. After entering into the menu of high-speed dome, use [IRIS+] to confirm and use [IRIS-] to cancel. Left click to move

the cursor up or down.

Note: Operating functions need to be supported by head end equipment and matched with the protocol.

[PRESET] Adjust the direction and angle of the camera, and input corresponding presetting point numbers and then click " " button to preset the point number of the menu.

Input the presetting point number, and click " " button, to automatically switch the camera to the corresponding location of presetting point.

Functions of these menu options may vary depending on the make and model of the PTZ camera you are using. For detailed description of the available options please refer to the manual of your PTZ camera.

4.3 Channel Status Display

The top right corner of each channel image features the following status icons:

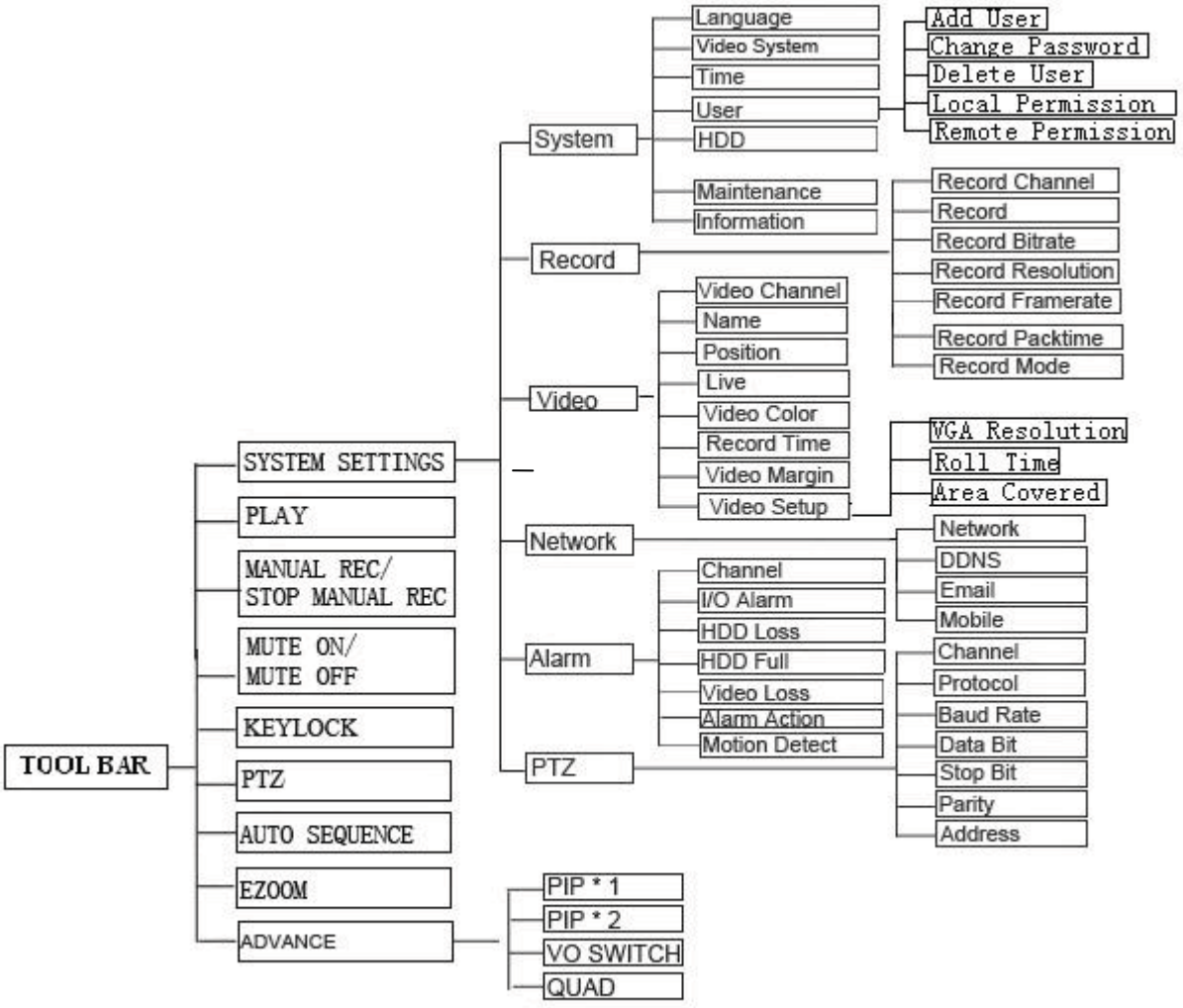
Icon indicates that the channel has detected motion in the motion detection mode.

Icon indicates that the channel has detected sensor alarm in the alarm mode.

Red dot indicates that the channel is running in the mode of recording.

5. DVR

5.1 Menu Tree



5.1.1 Menu Options

In order to modify/adjust system configuration, you need to enter the System Menu by pressing the Setting Page button in the Tool Menu.

You will see the dialog window with settings for all systems and options available in your DVR. The settings are subdivided into 5 subsections, each with its own tab: **Record**, **Video, System**, **Network**, **Alarm** and **PTZ (optional)**. Below is the detailed description of these settings.

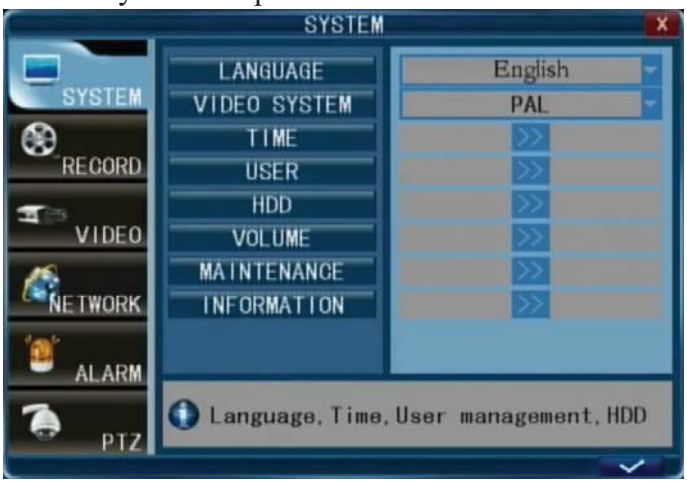
The following tab provides general system settings for operating your DVR. Titles of the menu list items are located on the left, and the corresponding changeable or non-changeable values are represented in the fields to the right. You can:
(a) Select the values from the list (toggling the preset data by pressing the arrows on each side of the field);
(b) Input the required data after entering a customized window by pressing the [>>] button in some of the fields;
(c) Familiarize yourself with the existing non-changeable settings.

When entering the fields using the remote control directional keys or the DVR front panel, as well as when positioning the mouse over them, a short description of the setting in question will appear at the bottom of the window.

Several tabs have options that are positioned on more than one window, and you can navigate between them by pressing the "" button.

5.2 System

Move the cursor to select "SYSTEM" (the icon will be highlighted when selected) and press 【ENTER】to enter into the system setup interface.



5.2.1 Language

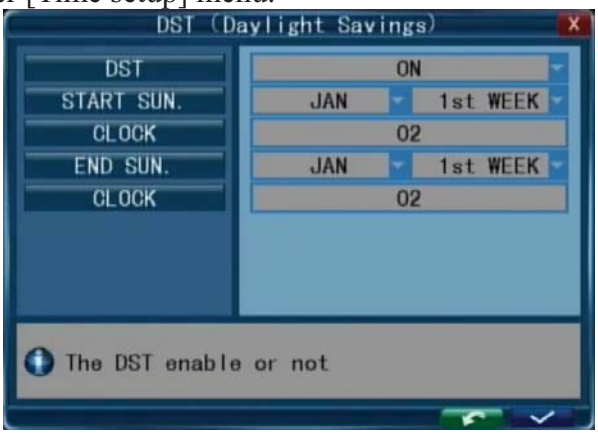
Use this option to change the language of the DVR menu text and the On-Screen Display.

5.2.2 Video System

Adjust system output to be consistent with camera input, including PAL or NTSC.
Note: The device will restart when you modify the camera mode.

5.2.3 Time Setup

Click [System settings →System → Time] to enter [Time setup] menu.



DATE: Set up system date using the number keypad.

DATE FORMAT: Press ENTER to switch the date patterns, from YY-MM-DD to MM/DD/YY and vice versa.

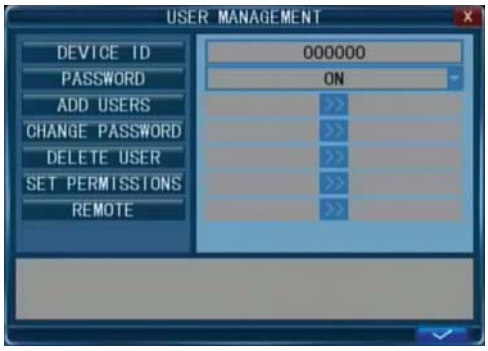
TIME FORMAT: Press ENTER to switch the time format from 12 HOURS to 24 HOURS and vice versa.

TIME: Set up the system time using number keypad.

DST: Daylight saving time. “On” means DST is enabled. You can setup the start time and end time of DST. For example in left FIG, the start time is at 10:00:00 from Sunday of the first week on January and end time is at 20:00:00 from Sunday of the second week on February.

Note: You must press to save after you modify the time and date, your modifications will not be saved if you exit directly.

5.2.4 User Management



Click [System settings →System → User Management] to enter [User Management] menu.

This option allows user to set the device ID for the DVR and to switch system password. After turning on password and clicking the [ ] button, you should exit to login system to manage users.

DEVICE ID: Set Number to identify device. The default name is “000000”

PASSWORD: Switch of password.

All of the following setting can be set by admin merely.

ADD USERS: Add new User. You can write down new user’s name and password. Password should be written twice to confirm and password can’t exceed 6 digits.

CHANGE PASSWORD: You can select the name you want to change password and write a new password. Before set new password, you should fill in old right password.

DELETE USER: In this interface. You can select the user you want to delete and click the [ ] button.

SET PERMISSION: It is a very important function to set user different permission, such as PTZ control, Manual REC, Playback/Back up, Setting, Ezoom, Mute/Mute Off, PIP, Auto sequence, Update/Reboot/Maintenance/Format/Default.

REMOTE PERMISSION: It is a very important function for remote operation. Administrator can set every user's remote permission, such as: PTZ Control, Record/Capture, Playback/Download, Setting, Mute On/Mute Off.

After the password verification is set up (marked with "ON") you can setup seven user password as well as an administrator password. If password function is enabled, you have to input password before logging in.

Note: When password is enabled, you should login system as admin to manage user. And administrator's name can't be modified.

The default password for Admin is "888888" and the default password for User1 is "666666".
If forget your password, please make the jump J17 on main board short for about 5 seconds when machine works, user can access system menu.

5.2.5 HDD

Click [System settings →System → HDD] to enter [HDD management] menu.

STATE: There are three available statuses: OK, un-format, No Disk. If HDD cannot run normally（including unformatted and no HDD）, there will be a icon displayed on video live view. If a new HDD is used on the DVR for the first time, the system will restart after the HDD is formatted.

TOTAL/FREE: Indicates total space available and unused space available on the hard drive disk.

FREE TIME: Indicates remaining recording time of the HDD.
OVERWRITE：Includes "CLOSE、AUTO、1 HOUR、3 HOURS、1 DAY、2 DAYS、7 DAYS、

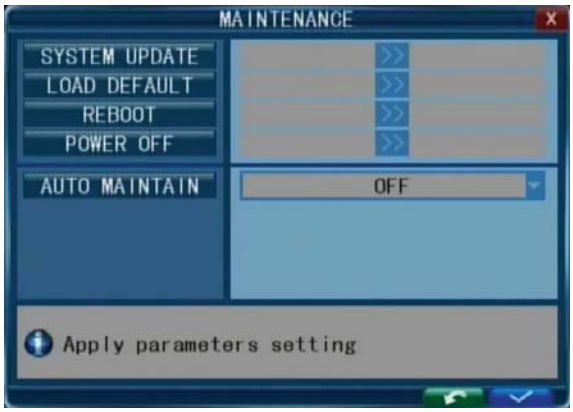
30 DAYS and 90 DAYS". If user chooses "CLOSE", the recording stops when the hard disk drive is full. It won't record until "overwrite" is enabled. If user chooses "AUTO", recording continues and overwrites previous recording when hard disk drive space is full. If user chooses "2 DAYS", the recording record on the hard disk for two days at most. After two days, the recording will be overwritten. The other options are similar to the "2 DAYS" option.

FORMAT HDD：Move the cursor to select your device and press【HDD】to start formatting.

FORMAT USB: This function allows you to directly format the USB device.

5.2.6 Maintenance

Click [System settings → System → Maintenance] to enter [Maintenance] menu.



SYSTEM UPDATE: Create a new root directory called "dvrupgrade" on a thumb driver, copy the update file to it, and then insert it into USB port. Press [Enter] to upgrade the firmware and it will display the process of the system upgrade.

The system upgrade will require more than two minutes. After completing the upgrade, the DVR will restart.

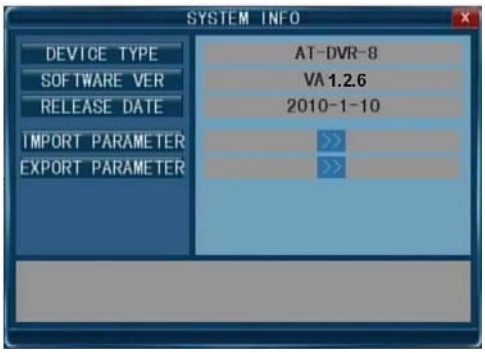
LOAD DEFAULT: Restores all the settings to factory settings.
REBOOT: Use this function to restart the device.

POWER OFF: Use this function to power off the device.

AUTO MAINTAIN: When AUTO MAINTAIN is on, you can setup the time for device to restart. The system will restart automatically according to the parameter chosen.

5.2.7 Information

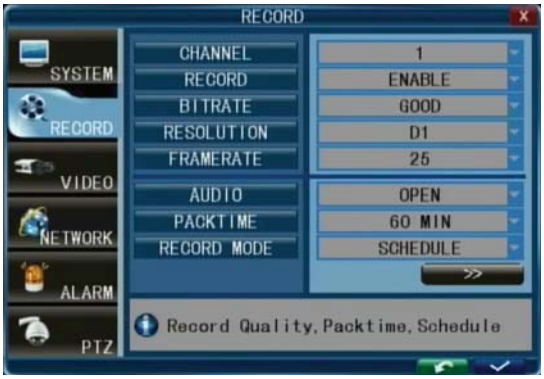
Click [System settings → System → Information] to enter [System INFO] menu. This interface includes: device type, software version, release date, import parameter and export parameter. You should export parameter into your USB disk before importing parameter from the USB disk, otherwise, you will be fail to import parameter.



5.3 Record

Move the cursor to【RECORD】(the icon will be highlighted when selected). Press【Enter】to

enter the setting interface. You can use the direction keys and cursor to change the options.



5.3.1 Record Channel

This option allows you to select the camera (channel) number whose settings you want to modify. If you want the changes to apply to all available channels, you need to select "**All**". Make the selection by pressing the arrow buttons; the options include CH1, CH2, CH3, CH4 and ALL.

5.3.2 Record

"ENABLE" indicates that the channel is enabled for recording.

5.3.3 Record Bit-rate

There are three options: GOOD, NORMAL and LOW, corresponding to HIGHEST, HIGH and NORMAL data stream standard. The bit rate of each channel for recording can be adjusted independently.

5.3.4 Record Resolution

It indicates the setup resolution and code rate for recording. There are three options: D1、HD1 and CIF resolution. The resolution of each channel for recording can be adjusted independently.

5.3.5 Record Frame Rate

In this section you can choose the recording frame rate (frames per second) for current channel. The higher the record frame rate, the more natural movement you will see in playback mode. Make your choice depending on the precision with which you want to follow the events unfolding before your cameras. It is possible to adjust each channel frame rate independently.

For PAL video output format, the default value of the system's resolution is CIF and the default value of the system's frame rate is **25** frames per second with each channel, which means the system, will record 100 frames per second with all channels. User can set frame rate from **1 to 25** frames per second for each channel. The maximum value of total frames per second with all channels is **200** frames with CIF resolution for 4ch or 8ch and 400 frames with CIF resolution for 16ch.

For NTSC video output format, the default value of the system's resolution is CIF and the default value of the system's frame rate is **30** frames per second for each channel, which means the system, will record 120 frames per second with all channels. User can set frame rate from **1 to 30** frames per second for each channel. The maximum value of total frames per second with all channels is **240** frames with CIF resolution with 4ch or 8ch and 480 frames with CIF resolution for 16ch.

5.3.6 Record Pack Time

There are four options: 15min, 30min, 45min, and 60minutes. It will pack as the mode you selected when alarm record is disabled.

5.3.7 Record Mode

Record mode includes two options: "ALWAYS" and "SCHEDULE".

ALWAYS: indicates that the device will start recording when it starts up.

SCHEDULE: This setup function allows you to create a schedule for recording tasks throughout the week, so that only certain selected events are actually recorded on the HDD. For example, you may set up the system to record non-stop throughout the business hours, making it an alarm-triggered recoding at lunch time (that means no recording will be performed unless an alarm event happens), night time being set to motion detection recording with certain hours made more secure with the combined alarm and motion detection triggered recording, finally making it more sophisticated by specifically setting a no-record time slot when you usually stay in the office alone at the wee hours of weekday mornings. You can setup schedule as you want.

Please note that manual recording overrides all record settings and will be carried on until stopped by the operator.
CHANNEL: You can select all channels or just one channel.

There are three modes for recording: MD, SENSOR, NORMAL and NO RECORD. Different colors signify different recording modes: Red means alarm record, green means normal record, grounding means no record, orange means MD record**.**

To set up weekly schedules, click on the box of the recording status you want (Alarm, Normal or No record) and then click on each box in the schedule time line that you want this method to apply to. Also you can left click to drag the frames on boxes in the schedule time line that you want to. You can use the [FROM-TO] pull-down menus and COPY button settings to repeat setting from one day to another day or all days.

After you complete the schedule you activate it by clicking the [ ] button.

When you select the option of alarm recording, in order for the actual recording to happen, it is necessary to set the motion detection sensitivity and area. Please refer to Section 5.6.7 Motion Detect for details. When alarm recording is selected, please set the alarm triggering settings beforehand.

Scroll to and press enter to restore to default settings.
Scroll to and press **ENTER t**o save the new settings.

5.4 Video

Move the cursor to [VIDEO] (the icon will be highlighted when selected). Press [Enter] to enter the setting interface. You can use the direction keys and cursor to change the options.

5.4.1 Video Channel

You can select one channel to set up.

5.4.2 Video Name

User can modify the name of the camera for each channel. Please note that the name of each channel supports up to nine character or four Chinese characters.

5.4.3 Video Position

Name location is optional. You can press [Enter] to switch from U-L, D-L, U-R, D-R and OFF.

5.4.4 Live

“ON” indicates that the channel is allowed to view the live mode; “OFF” means it is not.

5.4.5 Video Color

Click [System settings →Video → Color] to enter [Color setup] menu. You can adjust camera color attributes for the best image rendition. By default the values are set at **31** as the average value. Please make your adjustments depending on the actual conditions at the location where the camera is installed.

Press [►] / [◄] key or directly drag the cursor to setup colors. Clicking [DEFAULT] button to reset the color parameter values, press [ ] to save the parameters once the setup is completed.

5.4.6 Record Time

You can define which information will be recorded onto the video as the OSD (On-Screen Display) string.

5.4.7 Video Margin

Click [System settings →Video → Margin] to enter [Video margin setup] menu. You can move the entire video screen up, down, left and right using this option.

5.4.8 Video Setup

Click [System settings →Video → Video Setup] to enter [Video Setup] menu.

VGA resolution: Options include 1024*768（VGA）and 1280*1024（VGA）

Sequential Time (SEC): This refers to sequencing time when auto-sequence is enabled. Values can be set from 1~300 seconds.

Channel: Select one channel to set up area covered.

Area Covered: Set privacy area. This device can be set four pieces of privacy area for each channel.

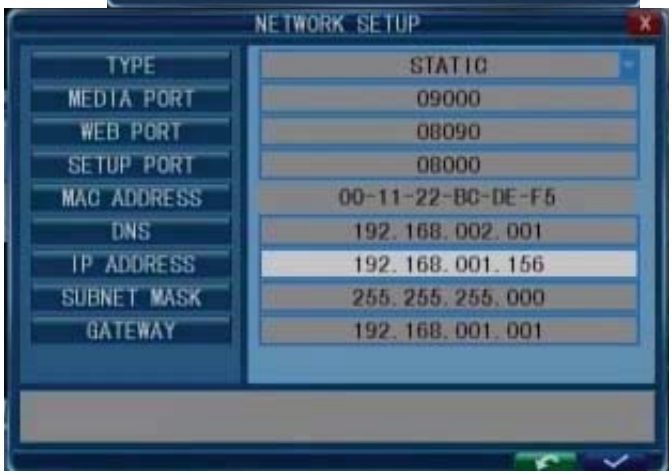
Note: The device will restart when you modify the VGA resolution.

5.5 Network

Move the cursor to [NETWORK] (the icon will be highlighted when selected), and press [Enter] to access setting interface. User can setup “network”, “DDNS”, “email” and “mobile” and “IP access”.

5.5.1 Network Setup

After selecting network mode - such as static、DHCP and PPPOE allocation and setup web port, you could visit DVR remotely via the internet.



1) When selecting static allocation, you need to set up an IP address, a subnet mask, a gateway and a web port.

MEDIA PORT: Transfers video data between client and device.

WEB PORT: Sets up the port of IE browser via HTTP.

The default number for the WEB port is 8090。But model dependent.

SETUP PORT: This port is fixed and you can't modify it, the value is 8000.

DNS: Press [Enter] and input numbers for the net mask.

IP ADDRESS: IP ADDRESS sets up the IP address press [Enter] and input numbers for the IP address.

SUBNET MASK: Press [Enter] and input numbers for the net mask.

GATEWAY: Press [Enter] and input numbers for the default gateway.

2) When selecting PPPOE, you need to input PPPOE USER and PASSWORD provided by ISP supplier.

MEDIA PORT: Port for private protocol of DVR and PC, default: 9000. If this port of computer is applied by other server, please change to other free port.

WEB PORT: Http port. Default: 8090. If admin change WEB port to: e.g. 8088, port No. should be added behind IP, http://192.168.15.145:8088 should input into IP of IE.

IP address: Fill in IP address according to the net of DVR.
PPPOE user and password: Enter the username and password provided by the internet service.
Click the button [ ] and the system will reboot automatically. After rebooting, the device will save it and set the PPPOE as default network type. The IP address will be automatically configure as dynamic IP of WAN.

3) When selecting DHCP, the server will allocate DVR IP address automatically.
NOTE: Save it when select DHCP and it will automatically connect with the server. Will allot IP address when connect ok and the address will showed on the interface.

5.5.2 DDNS Setup

Move the cursor to DDNS SETUP and press [Enter] to enter the interface.
DDNS: Options are "ON/OFF". If there is a DDNS server, select "ON".

SERVER: There are five options: 3322, dyndns, perfecteyes.

HOST NAME: Input the name of the host server.

USER NAME: Input the name of the user.

PASSWORD: Input the password.

5.5.3 Email Setup

Click the [Email setup] menu to enter into its sub menu.
On the [Email setup] mode, refer to its parameter setup shown as picture when setting email alarm to "on".

SSL: SSL is a security link transport protocol. You can encrypt your communication info (including your email) using SSL to prevent hackers from monitoring your email or communication info and even your password.

Interval: This indicates the interval for sending email, including 5s, 10s, 30s, 1minute and 3minutes.

SMTP Port: This indicates sender port of SMTP server. Generally the SMTP port value is 25, but there are exceptions, for example, SMTP port of G-mail server should be 465.

SMTP: This indicates server address you use.

Sender: Sender indicates sender's email address. The email address should be consistent with the server you use. That is to say, when you use email address – abc@gmail.com, the corresponding server should be smtp.gmail.com.

Receiver: This indicates the receiver's email address. The email address is used to receive image transmitted from motion detection alarm of DVR. Please clear the images you have received as soon as possible to avoid overloading your email account.
For detailed SMTP protocols settings refer to the above Fig.

5.5.4 Mobile Setup

Move the cursor to【MOBLE SETUP】(the icon will be highlighted when selected), and press

【Enter】to enter into the setting interface.

SERVER PORT: Mobile monitoring port. Input the correct mobile port and press [ ] to confirm. The setting range is between 1024 and 65535. The default value is 10510.

NETWORK TYPE: Select from different mobile network including 3G, 2.5G, 2.75G and WIFI; press [ ] to choose a new network.
Explanation: Please connect DVR to Internet before setting DVR port number and the server port is not equal to network menus.
Note: You can only see one channel at one time when viewing from a mobile phone. The speed of the display depends on the speed of the internet connection.

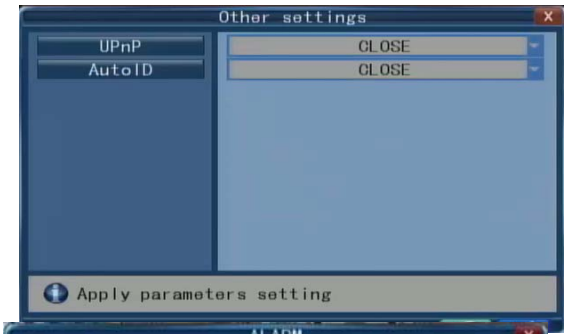
5.5.5 IP access setup

Move the cursor to [IP access setup](the icon will be highlighted when selected),and press [enter] to enter into the setting interface.
IP access: including disable, forbidden, allow access. Press [ ] to confirm

Note: You can only see one channel at one time when viewing from a mobile phone. The speed of the display depends on the speed of the internet connection.

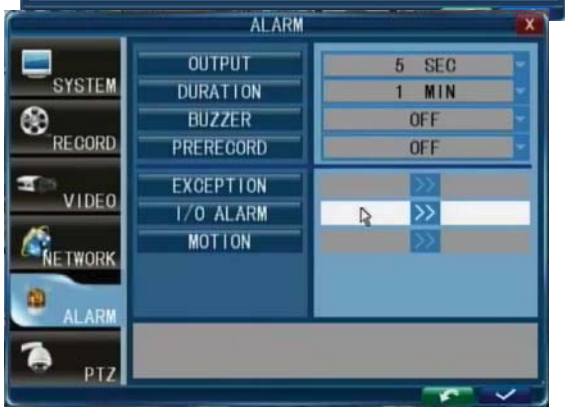
5.5.6 Other settings

Move the cursor to [other settings](the icon will be highlighted when selected) and press [Enter] to access setting interface.
Note: The Auto ID is used for connecting the IE interface. For detail operation please reference appendix 6.



5.6 Alarm

Move the cursor to【ALARM】(the icon will be highlighted when selected) and press【Enter】to access setting interface.



5.6.1 Output

This function sets the output time for I/O alarm

when an alarm is triggered. Options include “OFF”, “5s”, “10s”, “30s” and “60s”. If you choose “OFF”, the alarm will not be triggered in any case.

5.6.2 Duration

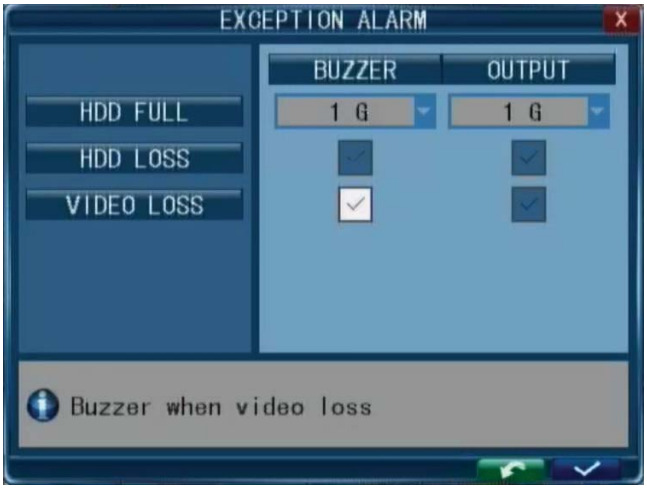
This function sets the duration of the recording time after alarm recording is activated. Options include “30s, 1min, 2min and 5min”.

5.6.3 Buzzer

This function sets the buzzer calling time when the alarm is triggered. Options include OFF, 5 seconds, 10 seconds, 30 seconds and 60 seconds. If you choose “OFF”, the buzzer will not be triggered whatever happens.

5.6.4 Prerecord

It sets the record time of duration before alarm is activated. Preview recording time setup: OFF and 5 seconds.



5.6.5 Exception

The Tool Bar → **System Setting → Alarm → Exception Alarm → [>>]** button will bring up the dialog window where you can set buzzer and I/O output for HDD Full, HDD Loss and Video Loss.

HDD FULL: You can set buzzer alarm and I/O output alarm when there is little space for HDD to recording. Options include “OFF”, “1G”, “5G” ,“10G”, “1 hour”, “5 hours” ,“10 hours” and “20 hours” .

HDD LOSS: “ON” indicates that the relevant alarm will go on if there is no HDD and an icon “ ” will be displayed on the left bottom of channel 1 in the live view.

VIDEO LOSS: “ON” indicates that the relevant alarm will go on when one channel has no video input.

Note； If the buzzer alarm in section 5.6.2.1 or I/O alarm in section 5.6.2.3 had turned off, they will not be triggered in any case.

5.6.6 I/O Alarm

The Tool Bar → **System Setting → Alarm → I/O Alarm → [>>]** button will bring up the dialog window where you can set I/O Alarm, Output, Record, Buzzer, Prerecord and Email.

CHANNEL: select the channel you need to setup.

I/O ALARM: Each channel corresponds to an I/O status, which means when an alarm is triggered, it will activate the corresponding channel to start alarm recording.

N.O.: Normally open type. It means that in the normal state, the sensor device is kept under constant low voltage. If output voltage changes from low to high, then the alarm is triggered.
N.C.: Normally closed type (also – "normally connected"). The normal state of the sensor device is under constant high voltage. If output voltage changes from high to low, then the alarm is triggered.
OFF: Set to "Off" if you are not going to use external sensor alarms.

OUTPUT: **"**ON" indicates that an alarm will go on if it had been triggered by sensor.

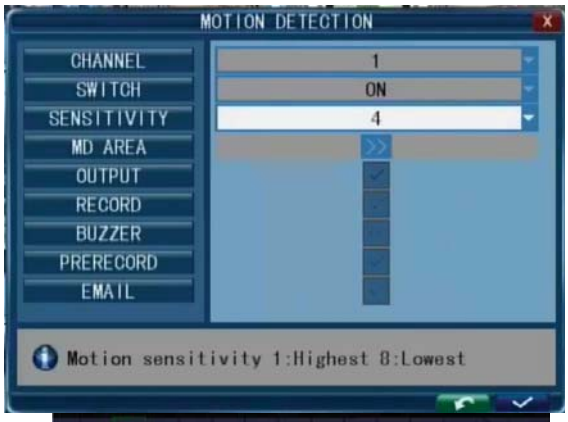
RECORD: **"**ON" indicates that the relevant channel will record if it had been triggered by sensor.

BUZZER: **"**ON" indicates that the buzzer will turn on if it had been triggered by sensor.

Prerecord: **"**ON" indicates that the relevant channel will prerecord 5 seconds if it had been triggered by sensor.

Email: **"**ON" indicates that the picture of relevant channel will be send to mail if it had been triggered by sensor.

Note; If the output time, record, buzzer, prerecord and Email had been turned off, the relevant option will not be triggered in any case.



5.6.7 Motion Detection

The Tool Bar → **System Setting** → **Alarm** → **Motion** → **[>>]** button will bring up the dialog window where you can set Sensitivity, MD Detection, Output, Record, Buzzer, Prerecord, Email.

CHANNEL: Select the channel you need to setup.

SWITCH: Each channel has a corresponding channel switch, press [Enter] to turn on or turn off the motion detection for each channel.

SENSITIVITY: Each channel has a corresponding sensitivity setting; including eight standards and "1" indicates highest sensitivity, press【Enter】to switch.

MD AREA: Sometimes you need to have some regions in your camera view with the enabled motion detection feature, while other regions in the same view should be free of this functionality. This may be handy when, for example, the camera covers the road and an adjoining territory. While you would like to have the motion detection working on the area near the entrance to the building, you most likely would not like to see it triggered every time a car or truck passes on the nearby road.
Each channel has a corresponding regional motion detecting setting, move the cursor to