Contents

Chapter one Product Description

1.1 General Description

This equipment is designed specifically for the field of a number of digital security surveillance products, which uses an Embedded Processor Init (MPU) and operating systems, combined with the field of the latest IT technologies, such as video and audio encode/decode, high-capacity hard disk recorder, TCP / IP network technology,code in FLASH, making system operation more stable. This equipment, with digital video and audio recorder (DVR) and digital video and audio server (DVS) features at the same time, can works not only in local independently,but also be networked to form a powerful security monitoring network. It applies to bank, telecommunications, electric power, justice, transportation,residential area,factory,warehouses,water conservancy facilities and other areas and departments of the safety precautions

1.2 Technical Parametres

Model	4 channel DVR	8 channel DVR	16 channel DVR
Operation system	Embedded Linux operation system		
System resource	4/8ch support 4/8ch D1, 16ch support 2ch D1+14 IF real-time video and network-wide transmission		
Operation interface	Graphical user interface (GUI), mouse,front button, remote control operation		
Video standard	PAL、NTSC		
Image compression	H.264		
Audio compression	ADPCM		
Recoding mode	Manual, timing, alarm, motion detection		
Video Search	Time search, event search, channel search, log search		
Backup	network backup, USB backup		
Video input	4BNC	8BNC	16BNC
Video output	1BNC,1VGA,HDMI	1BNC,1VGA, HDMI	1BNC,1VGA, HDMI
Audio input	2channel	2channel	2channel
Audio output	1channel	1channel	1channel
Monitoring quality	PAL：720x576（D1）；NTSC：720x480（D1）		
Playback quality	PAL：352x288（CIF）；NTSC：352x240（CIF）		

Motion Detection	each channel of the detection area (16 × 16), multi-level sensitivity can be set		
Image display	1,4	1,4,9	1,4,9,16
Video Speed	PAL: 25 frames / sec (adjustable) NTSC: 30 frames / sec (adjustable)		
Video Save	hard drive, network		
Local playback	4 ch D1	8 ch D1	2ch D1+14 ch CIF
Alarm Input	4 ch (optional)	4 ch (optional)	4 ch (optional)
Alarm Output	1ch (optional)	1ch (optional)	1ch (optional)
PTZ	RS485		
HardDisk Interface	1 SATA	2 SATA	2 SATA
Network interface	RJ45 10M/100M self-adaptive Ethernet		
USB Interface	2USB2.0 high-speed interface		
Power	12V		

1.3 Open Case And Connect Cables

1.3.1 open-case inspection

First of all, plz check if there is apperant damage of the packing as soon as you received the products.

the material can protect from the damage very well in the transportation.

Secondly, take out the product, take away the protection film from the DVR to check if there is damage.

Thirdly,open case,check if there is any loose of data cable of front panel,power cable,connection between fan power and mother board

1. pront panel and rear panel

There are instructions of how to use keys on the front panel and the interfaces on rear panel

plz check the model no. with the one you ordered.

As for the lables on the panel, plz take good care of them, which is very important to our after-sale service.

you need to offer the model no. and serail no. during the after-sale service.

2.After open case,need to check

Besides checking obvious damage,also need to check if there is any loose of front panel data cable,connect between power and mother board

1.3.2 HDD Installation
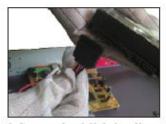
make sure to install the HDD when u first use it.

1.Tear down the fixed screws of the device top cover .

2.Connect hard disk data line.

3.Connect hard disk power line

4.Put the hard disk in the corresponding place in machine.
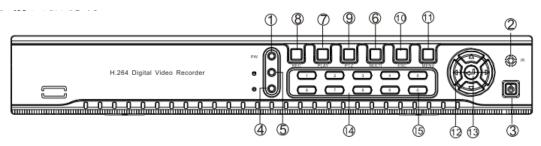
5.Fix the screws of the hard disk.

6.Fix the screws of the top cover .

Chapter Two: Structure Appearance Description

2.1 Panel Description

4 channel DVR Front Panel Description：

1．PWR：Power States LED   9 PTZ：PTZ control

2．Ir Receiver   10. ESC：Exit

3 Power   On/0ff   11.Menu   Key

 4．State   LED   12. ▲▼   ：Direction Key

5．HDD State LED FN：Reserved   13. ⬅ ：Confirm key

6．Multi-Screen Switch   14．CH1~CH4：Single-Screen Switch

7. PLAY：Record Playback Key   15. 0: number key

8 REC：Manual Recording Switch

8channel DVR   Front Panel Description:

1．PWR：Power States LED   9 PTZ：PTZ control

2．Ir Receiver   10. ESC：Exit

3 Power   On/0ff   11.Menu   Key

 4．State   LED   12. ▲▼   ：Direction Key

5．HDD State LED FN：Reserved   13. ⏎ ：Confirm key

6．Multi-Screen Switch   14．CH1~CH8：Single-Screen Switch

7. PLAY：Record Playback Key   15. 0: number key

8 REC：Manual Recording Switch

16 channel DVR   Front Panel Description:

1．PWR：Power States LED   9 PTZ：PTZ control

2．Ir Receiver   10. ESC：Exit

3 Power   On/0ff   11.Menu   Key

 4．State   LED   12. ▲▼   ：Direction Key

5．HDD State LED FN：Reserved   13. ⏎ ：Confirm key

6．Multi-Screen Switch   14．CH1~CH8：Single-Screen Switch

7. PLAY：Record Playback Key   15. 0: number key

8 REC：Manual Recording Switch

2.2 Product Interface Description

4 channel DVR Rear Panel Description：

1、Video in:1-4ch in   2.Video out

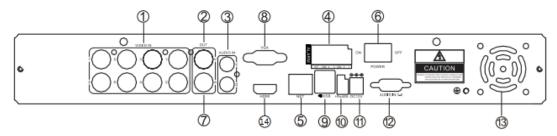3.Audio out   4. Audio in:1-2
5.Alarm   6.Power
7.Audio in:3-8   8.VGA
9.HDMI   10. Network interface: RJ45
11.USB Interface   12.RS-485
13. DC12V：12V(DC)   14. Fan

8 channel DVR Rear Panel Description：

1.Video in:1-4ch in   2.Video out
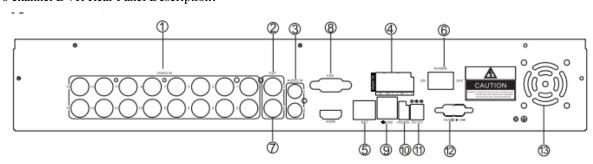3.Audio out   4.Alarm
5.Power   6.Audio in:3-8
7.VGA   8. Audio in:1-2
9. Network interface: RJ45   10.USB Interface
11.RS-485   12. DC12V：12V(DC)
13.Fan   14. HDMI

16 channel DVR Rear Panel Description：

1.Video in:1-4ch in   2.Video out
3.Audio out   4.Alarm
5.Power   6.Audio in:3-8
7.VGA   8. Audio in:1-2
9. Network interface: RJ45   10.USB Interface
11.RS-485   12. DC12V：12V(DC)
13.Fan   14. HDMI

POWER	Power switch
DEV	Device button：after press" DEV", input the same number as device number and press "ENTER" to save the setting. Then DVR can operated by remoter
0-9	Number button
MENU	Menu button; eliminate all the areas when set up motion detection area
ESC	Exit
▲	In menu mode: upwards；in PTZ mode: control the PTZ camera revolve upwards
▼	In menu mode: downwards ;in PTZ mode: control the PTZ camera revolve downwards
◀	In menu mode: left；in PTZ mode，control the PTZ camera revolve left
▶	In menu mode: right；in PTZ mode，control the PTZ camera revolve right
ENTER	Select key
PLAY	Video playback
FN	Subsidiary key
REC	Recording key
VIEW	Multi-screen key
◀◀	Fast rewind key
▶▶	Fast Forward key
■	Pause key

Note: If many devices in same place, remote control should select a device according to device number. So each device needs a unique device number, unless remote control may effect to multi devices with the same number.

Chapter Three: Description of Operation System

3.1 Turn on / off

Confirm that AC voltage accessible matches with DVR .Ensure that the DVR power outlet connect with a good middle ground grounding. After switching power, the device started, 【POWER】light is on. Turn into system, if the panel status light flashing, it's normal conditions.

3.2 Preview

After device start, preview interface can be seen immediately. In the preview interface you can see the system date, time, channel name. Press corresponding number key of panel or click the left mouse button, user can preview the single channel; Press "QUAD" key in the panel or click the left mouse button, you can return to a multi-interface monitoring state.

3.3 Menu operation instructions

3.3.1 Menu

【MENU】,enter the device's main menu interface. 【PLAY】 shortcut keys for playback interface.

【REC】shortcut keys for manual recording.【PTZ】shortcut keys for PTZ control.

Noted:　Default password is empty, click "enter" can into menu directly.

3.3.2 Menu composition

Menu component units as following:

（1）Check box: two kinds of status available, "√" means valid, "□" means invalid , direction key:

【↑】【↓】【←】【--->】,enter key 【←┘】 . Also, click the left mouse button to choose.

For example:　"channel" and "video mode" check box in the video research.

（2）　Selection box: select the target content according to the drop-down box options. Use

【↑】,【↓】 key or click the left mouse button to select.

For example:　"channel" and "code stream" in the encode setup menu

（3）　List Box: Displays the research information in the list, you can try one option for operation

For example: Press 【←┘】 button in the video backup file. or the left mouse button.

（4）Edit box: Enter the name into edit box

For example: in the setup menu, you could input numbers, English letters, punctuation and so on in the "channel" edit box.

a) use panel key 【↑】【↓】【←】,【→】or move the mouse to edit box , press "←┘" key or click the left mouse button, then enter keyboard appears, select the desired input target

characters through the arrow keys or click the left mouse button.

b) After input the information, click 【OK】【CANCEL】 button or button【ESC】can safe or exit

（5） Button: used to implement a specific function or enter the next setup menu, click 【OK /←】 key and the left mouse button.

3.3.3ESC MENU

Press 【MENU】, 【ESC】 or the right mouse button to exit the menu mode

Click the right mouse button and return to the previous menu level.

3.4 Main Menu Introduction

Press MENU key or right mouse, it will pop-up the main menu. Main menu consists of the following three components
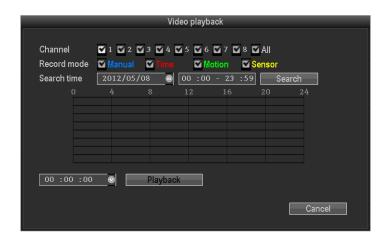

Preview mode: select corresponding preview mode in the menu column.

Shortcut menu: in menu column, there are: digital zoon, video playback, manual record, PTZ control, volume , setup ,shut down. User could enter the corresponding menu preview mode.

Setup menu: including video playback, video backup , system setup ,system tools ,system info, system logout.

3.5 Video Playback

Click "setup" menu and turn into "video playback" interface.

3.5.1 Video Search

Channel：to choose the target channel by clicking the check box. "☑" means selected, "□" means non-selected

Record mode：to choose the recode mode by clicking the check box."☑" means selected, "□" means non-selected

    Search time：input the Starting and finishing time into edit box

    Search：After setup the above search condition, click "search" to begin the corresponding video file searching and show the files. Red means time recording, green means MD recording, yellow means sensor recording.

    Playback:chose playback and turn into playback interface. In the search list box, choose the time bucket according up , down, left ,right key or move the mouse. Click 【◀━】 or left mouse to enter "video playback "Interface

    Cancel：back to previous menu .

3.5.2 Playback toolbar

Select the playback file or time playback file, it will turn into video playback interface.

Playback toolbar : it will show below the playback interface. Each channel can magnify or narrow by clicking the left mouse .

Stop play：click [Cancel] to stop the video and turn back to playback interface.

Pause/play:click [II] can pause the playback video, click [▶] can continue the playback video.

Fast forward ：click [▶▶] can fast forward the video, also times fast forward the video by click the button again.

Exit playback：click "ESC"or [□] can exit the playback video; or exit until all file have been played.

3.6Manual record

In the shortcut menu, click manual record or click 【REC】 to enter the setup the manual record interface.

Manual record menu illustration

Manual record menu include several parts:

Channel：☑'means open；"□"means close.

All on：start all the channel.

All off：close all the channel.

OK：confirm and exit

Cancel：click cancel can exit the manual record interface and back to main menu.

Remarks: the video which start by manual must be turned off by manual, otherwise the recording will

be always continue.

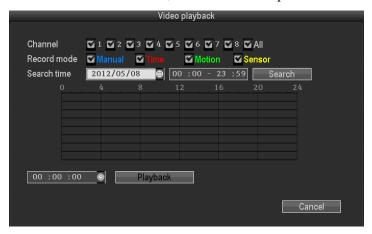3.7PTZ control

　　　Choose the "PTZ control" from shortcut menu .

　　　PTZ control menu including: direction control; auto pan scan；zoom; focus ;Iris; speed.
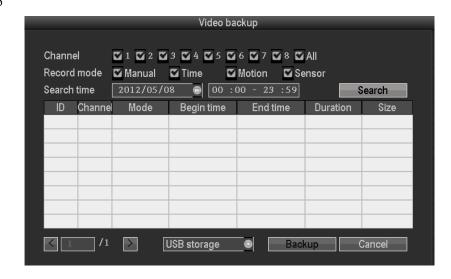
3.8 Setup

　Click "Setup" in the shortcut menu, the first class menu including: video playback , video backup ,system setup ,system tools ,system info, system logout.

3.8.1video playback

　That is the playback interface in shortcut menu;Pls ref.**3.5** for the operation

3.8.2Video back up

Choose the channel, and record mode; setup the search time, then begin search the file. After choosing the needed file from list box, click backup and ok, wait for process bar until 100% and show backup success.

Note：USB driver pen must be FAT32 format when backup the file.

3.8.3 System setup

In the setup menu, Choose "system setup" and turn into it's sub menu. It includes: General setup, Encode setup, Record setup, Network setup, Screen setup, Video detection, PTZ setup, Sensor setup.

3.8.3.1 General setup

Choose the "General setup" and turn into it's setup interface.

Time：DVR preview time. Click"refresh" after setting, it will pop out " the recording will stop once

　　　you modify the time", and save the setting.

Date Format: Y/M/D"、"D/M/Y"、"M/D/Y"

Auto Logout: DVR will log off if there is no operation within 10 minutes, it needs login again.

Key Buzzer：　Enable:there is sound with the controller or pressing key on front panel;
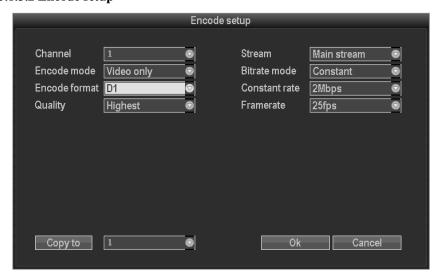
　　　　Disable:without sound.

Language：There is multiple choice according to users, Chinese and English and so on.

Video Standard：PAL and NTSC are all available.

DVR ID：**user can use this ID to control the DVR by remoter** controller. The remote controller

　　　should be correspond with the ID so that it can work. (Please refer to the instruction in

　　　2.3)

After setting finished, click "ok", the information will be saved.　Click "cancel" to exit without

　　　saving.

3.8.3.2 Encode setup

Select "encond setup" in system setup.

Channel ：choose the right CH you need by clicking the select box

Stream：choose the right stream you need : "main stream" or "sub stream "

Encode mode：choose the right encode model you need : "video only "means only encoding for

video ; "AV combined" means encoding for both video and audio.

Bitrate mode ：choose the right bitrate mode you need : "constant　bitrate " means system encoding

video as user-defined bitrate and and frame rate. "variable　bitrate" means system

encoding according to user-defined image quality and video frame rate , but bit rate is

automatically adjusted by the system depending on the video sceen. "average birtrate "

means system automatically adjusted fluctuation as user- defined bitrate.

Encode format: which also called the image resolution: （QCIF）176*144、 （CIF）352*288

(HD1)576*288 （D1）704*576, users can choose what they need.

Bitrate：users select the encoding bitrate as needed. The higher bitrate ,the better image but with
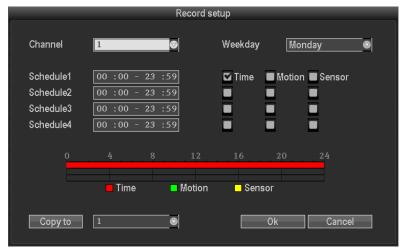
large disk space

Image quality：image quality fluctuations , user identified.

Frame rate ：users select the video frame rate as needed. The higher frame rate ,the better image but

with large disk space

Copy to ：select the target channel on the right of "copy to "button ,click "copy to" & "ok " then

system will set the current channel setup informations to other target video channel.

Click button "cancel", the setup informations will not saved and exit.

3.8.3.3 Recode setup

Select "recond setup" in system setup.

Channel ：chose the target channel by clicking the select box

Weekday : chose the correspond day as user's need, "ALL" means record all date.

Recording mode and time ：**in the t**ime edit box,user can set different time with different recoding

mode . "Time " : in red color , "Motion": in green color , "Sensor": in yellow color ; "☑' means

selected, "□" means invalid. There is times status display which 0~24 hours for whole schedule.

Copy to ： select the target channel on the right of "copy to "button ,click "copy to" & "ok " then
system will set the current channel setup informations to other target video channel. Click button
"cancel", the setup informations is non-saved but to exit.

3.8.3.4 Network setup

Select "network setup" from "system setup" menu.

MAC address：device's MAC address

DHCP：select DHCP to get IP automatically. "☑'means works ；"□" means non-work

IP address ： the IP address must be unique and can not be in conflict with the host or work station

which on the same network segment

Subnet Mask ： use for distinguish the network segment.

Gateway：need to set the gateway address to achieve communication between the different network

segments.

DNS address ： after accessing network by connecting with PPPOE protocol, it can gain a dynamic

IP address .

Web port ：**this** port number is used for IE browser visit ;default port is "80".

Data port : this port number is used for device and mobile visit ; suggest to set the port above 2000.

ESee： after connecting internet , click"☑Esee" and save the setting, user will get an Esee ID. You can remote DVR with this ID by www.dvrskype.com. It's free DDNS, no need to apply the domain name from any server.

PPPOE configuration :

Start using ： "☑PPPOE"means to start up dial-up by PPPOE protocol . "□" means stop it.

PPPOE user： input the user name of ISP into edit box

PPPOE password ： input the password of ISP into edit box

After the page setup is completed, click '''OK '' to save the changes and exit ; click ''cancel '', to exit the setting.
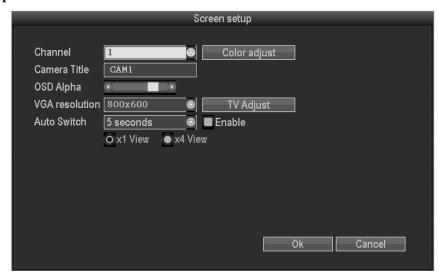
DDNS : The automatic analytic function of dynamic domain name, it could supported 3322 and DYNDNS.ect

In the "network setup" menu,   click " DDNS " to enter it's setup interface

Start using ： "☑"means DDNS service start using ;"□"means stop using.

Select the corresponding network server and input user name, password and domain name （pls refer to 3.3.2(4)）

3.8.3.5 Screen setup

Select "screen setup" from "system setup" menu

Channel： chose the target channel by clicking select box.

Camera title ： **user can** edit the channel title from the edit box. "☑" means display channel title, "□"means non-display.

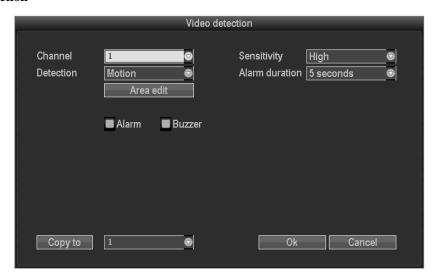**OSD Alpha: user can** adjusted the OSD menu transparency as needed.

OSD time ："☑"display system time，"□" non- display;

Auto Switch：user can setup the time of auto switching for preview image, it switch in single screen

or 4 Channels screen.

Start using："☑"start using ，"□" stop using

After the setup is completed, click "'OK " to save the changes and exit; click "cancel " to exit the

setting.

3.8.3.6 Video detection

Select"video detection" from "system setup" menu

Channel：chose the target channel by clicking select box

Sensitivity: chose the sensitivity level of motion detection .

Detection：select detection type ： motion, video loss ,video cover

Alarm duration: the alarm duration for after chose the trigger video detection.

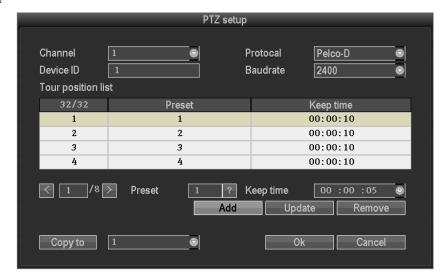**Area edit :** setup the motion detection area by dragging left of mouse.

Alarm："☑"means start ，"□"means stop.

Buzzer ："☑"means start ，"□"means stop.

E-Mail notice ："☑" means E-Mail valid，"□" means E-Mail invalid.

Copy to ： **select the channel** **and click "copy to" &**

"ok " to copy the same setting to other channel. Or user can choose copy to "all"
to make all channel in same stetting . Click button "cancel", the setup
informations will be non-saved but exit.

3.8.3.7 PTZ setup

Select "PTZ setup" from "system setup" menu

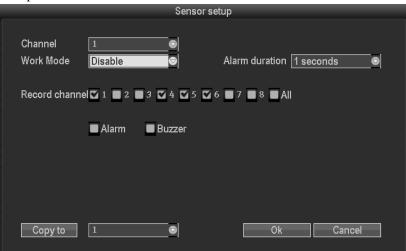**Channel**: chose the target channel by clicking select box

Protocol: support Pelco-D and Pelco-P. Select the same protocol as PTZ.

Device ID: choose the matched one of the PTZ

Parity check: choose the matched one of the PTZ

Copy to ： **select the channel** **and click "copy to" &**

"ok " to copy the same setting to other channel. Or user can choose copy to "all"

to make all channel in same stetting . Click button "cancel", the setup

informations will be non-saved but exit.

3.8.3 8 Sensor setup

In "system setup" menu , choose "PTZ setup" to enter it's setting interface.

Channel： chose the target channel by clicking select box.

Work mode: select disable or able to stop the alarm or start the alarm.

Alarm duration: set up alarm duration time.

Recording channel: select the target channel to make recording after alarm is triggered.

Alarm: "☑" enable alarm,　"□" close alarm
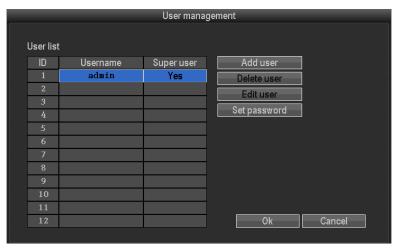
Buzzer: "☑'start buzzer, "□" close buzzer

Copy to ： select the channel **and click "copy to" & "ok " to copy the same setting to other channel. Or user can choose copy to "all" to make all channel in same stetting . Click button "cancel", the setup informations will be non-saved but exit.**

3.8.4 System tool

  In main menu, choose"system tool" and enter it's setting interface. it includes four setting: user management, HDD management, system maintenance and factory setting

3.8.4.1 user management

click" user management ".

Add user: input a new user name in the edit box and set up the operational authority. Choose in the right check box, "☑' means the users can use it, "□"   users can not use it. Click the "set password " to set the new password, or it can be the default password.

Delete user: delete the selected user(Note: except Admin, no user has the right to set up or delete other users)

Edit user:edit the selected user (Note: except Admin, no user has the right to edit other user permissions)

Set password : setup the user logging password.

After the setting, click "OK" to save and exit, or click t"cancle" to exit without saving
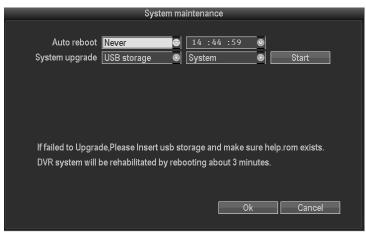
3.8.4.2 HDD management

Click "HDD management"

Overwrite: "☑" earliest recording files will be covered when the disk is full, "□"shows not cover.

Format: "☑" means selected, "□" means not selected. when click "format",there will pop up a confirmation section: click confirm to begin format, or click cancel to return the main interface.

3.8.4.3 System maintenance

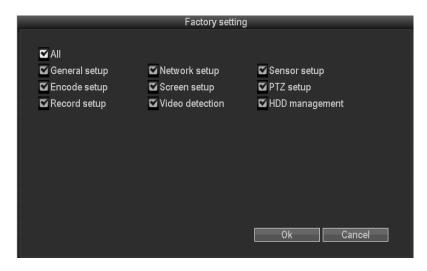In " management tool", click "system maintenance",enter setting interface

Auto reboot: setting automatic reboot time, it can set" Saturday to Sunday" . "Never" means do not reboot automatically

Firmware upgrade: copy firmware to the root USB disk,insert USB,select the USB storage device, then click "start" to upgrade. When upgrade is completed,click"OK" then system automatically reboot.

Note: 1.Firmware name should be: FWHI1504A_***.rom(4ch), FWHI1508A_***.rom (8ch), "***"

means software built time: such as FWHI1504A_20110520.rom

2.During upgrade,do not cut off power to protect from device damage

3.8.4.4 Factory setting

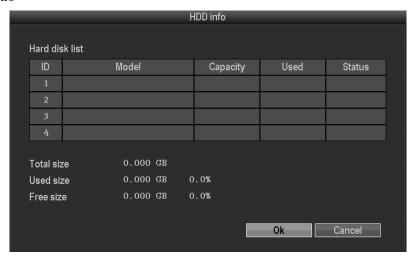In " management tool", click"factory setting",enter setting interface

Select terms which need factory setting, click "OK"to save and exit or click "cancle" to exit without saving

Note: After factory setting, all settings will be the initial setting, please use carefully.
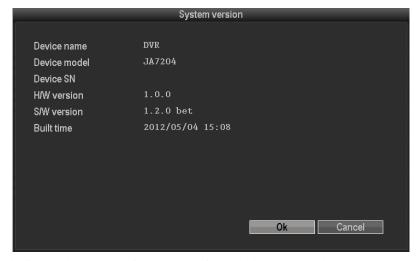
3.9 System info

In main menu,click"system info" to enter setting interface.It include HDD info, system info and log info

3.9.1 HDD info
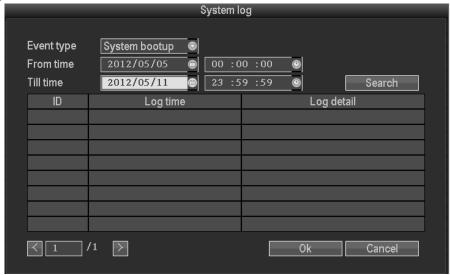

The listbox shows current HDD status info

3.9.2 System version

Device name,device model,H/W version, S/W version could be checked here

3.9.3 System log

Choose log type which need to check from listbox, and input log time in the editbox, then click" search",log detail will showed below, you can turn the page by click " previous" and "next", or input target page to turn
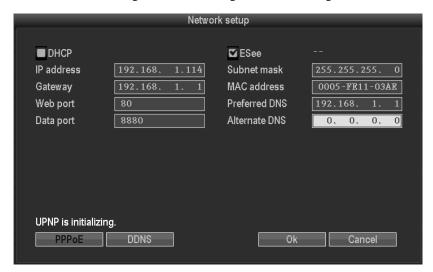

3.10 system logout

In main menu, click"system logout",popup setting interface

User logout:Logout currect user. After logout, if you want to use the device again,need to login

System reboot: It will reboot when click "OK"

Esee User Manual

1. Connect DVR with network,make sure network working fine
2. Enter router to enable UPNP.As below picture,It is TP-LINK router.But for different router,UPNP might in diffent place,pls find it,then enable
3. Enter DVR main menu:Click right mouse---setting---network setting,as below:

IP address:Default 192.168.1.114(User input correct IP according IP actual situation,if in 1 network segment,input 192.168.1.114,if in 0 network segment,input 192.168.0.114).If no IP conflict,do not need to change 114 to other IP

Subnet mask:In order to distinguish subnet segment,default 255.255.255.0

Default gateway:Default 192.168.1.1(Change acoording to actual situation)   In router running status can see gateway

DNS address:Default 192.168.1.1,change your network segment DNS.Enter router can check DNS address
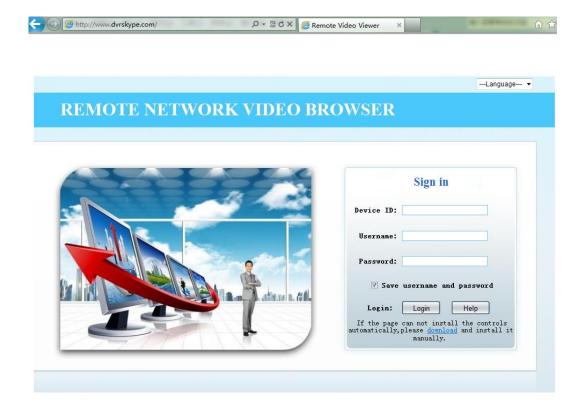
After input all info,click to save,then to preview interface,then enter network setting to see ID

4.For remote view in computer,go to www.dvrskype.com

Do the following setup before you log in Esee on computer

    IE setting, if use it for the first time, the software can't load,then need to make the following setting, Intemet options-> safety-Intemet-> custom options-> pick Actice X and plugin all for opening, click ok

4. Go to www.dvrskype.com ,input Esee ID,user name and password,this user name and password is same with DVR user name and password

Note:Default user name:admin   no password

1.1 Remote Video Viewer

After connecting,remote video viewer includes: preview window, PTZ control,preview mode, stream option,channel on/off,setting,configuration,playback, user logout, as below :

Open preview:In preview window,click left mouse,choose target channel, (If channel frame is red,means select). In channel on/off table,click left mouse,can open or close that channel video, such as:

CHL 1 on; CHL 1 off

Preview mode:In preview mode switch table,can click ▢⊞⊞ to choose mode, or double click channel to singal channel preview mode,or switch to multi-channel mode