



NVR

User Manual

VDH-NK

2014 OCT V1.0



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Foreword 【Notices】



WARNING

- Do not expose the DVR under the sunlight, heat or wet environment while installation. As it could decrease the performance of DVR and damage the machine.
- Do not touch the power plug or case with wet hands as this could result electric shock.
- Do not forcedly bend or put heavy object on power cable as this could result in injury to personal or equipment.
- Do not operate with *damaged power cord* or *loose electrical outlet* as this could result in electric shock or accident.
- Please use individual power instead of *share electrical outlets with other electrical equipment as this could result in damage or accident.*
- Do not attempt to service this DVR by yourself as it may expose you to dangerous voltage or other hazards. Please refer all service to the qualified servicing distributor.
- Please do not remove the machine housing during operation.
- It may cause electric shock or accidental injury.



CAUTION

- Do not place the machine on an uneven surface or it would decrease the DVR efficiency or malfunction.
- Avoid any shock or bumping of the DVR while recording.
- Improper handling could damage the system.



CAUTION

Make sure the voltage selector switch is set to appropriate setting before plug in!





Chapter 1 【Operation Options】

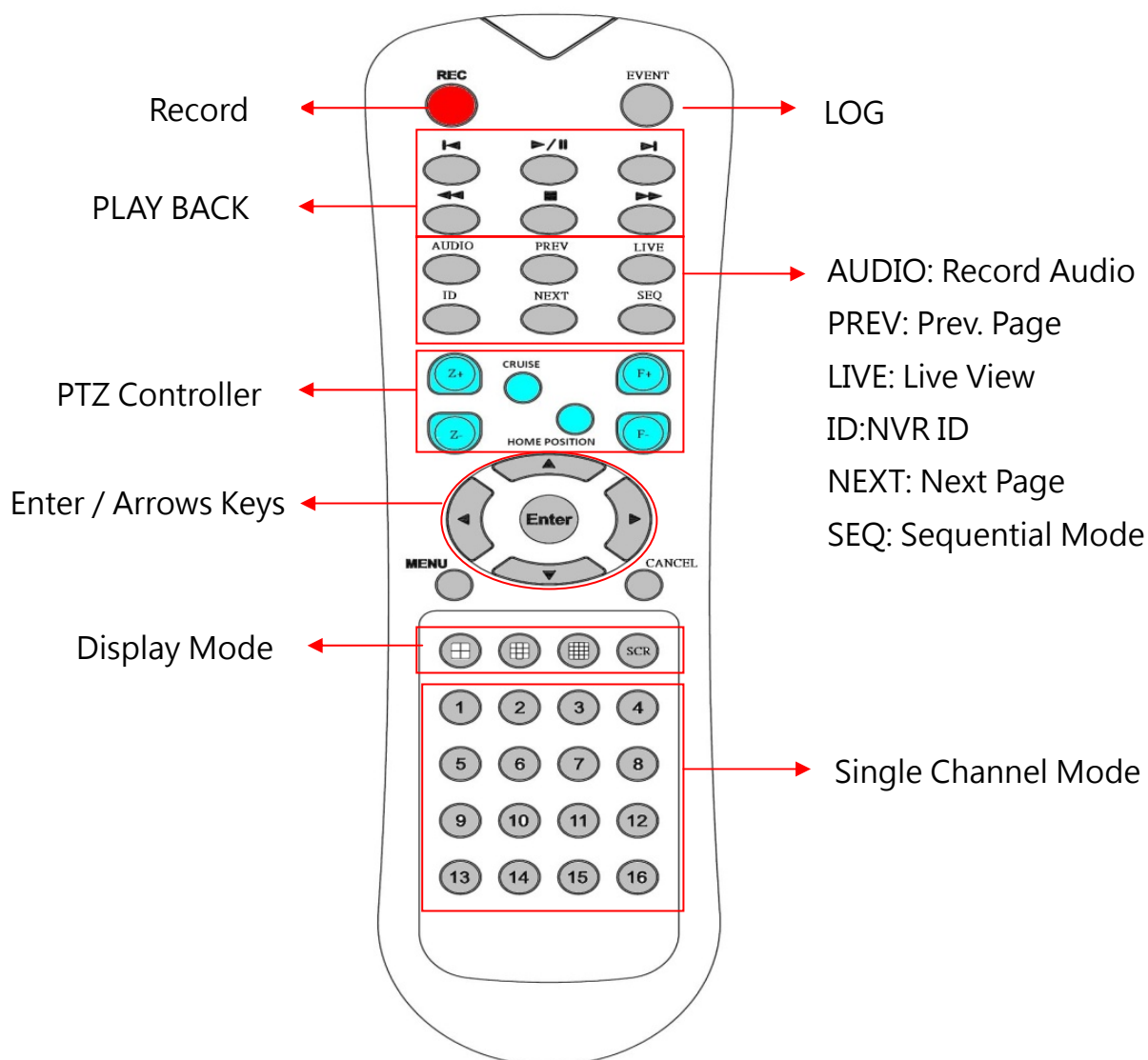
■ Operating with a Mouse and a Remote

1. Operating with a Mouse

- 1) Right click at Live View screen to open system menu.
- 2) Click to enter selected item.
- 3) Scroll mouse wheel to change value at drop down menu.
- 4) Press [APPLY ALL CHANNEL] button to apply current settings to all channels or right click at edit box to enter characters over screen keypad.

2. Operating with a Remote

- 1) Operation of remote controller and front panel are identical. Please refer the diagram of the remote controller below :

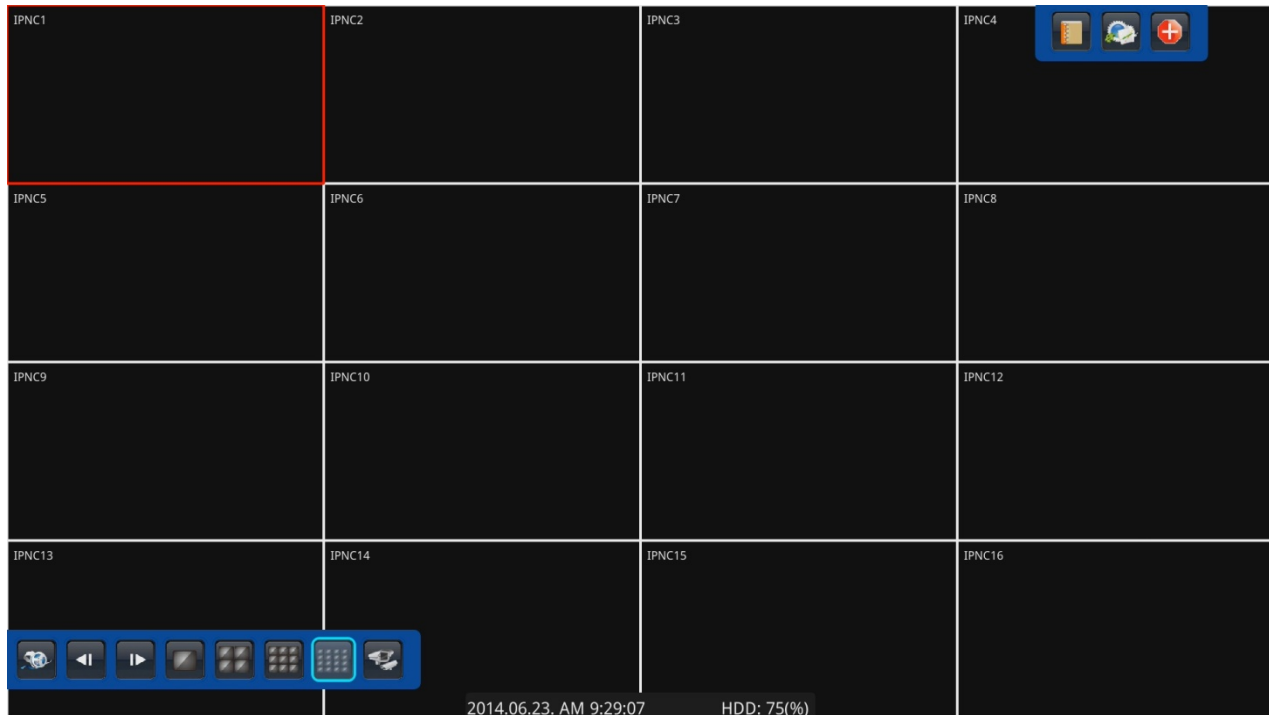




Chapter 2 【Operation Options】

1. Live View and Operation

- 1.1 Right click on the screen, menu bars on top-right and bottom-left will pop up. Right click again to close menu bars.
- 1.2 Viewing channel display may relocate freely on screen. Simply click and hold the left button and drag to desired display channel.



- 1.3 System time and HDD status.
- 1.4 Double click on time display to zoom-in and zoom-out. To move it, click, hold and drag to desire location.
- 1.5 Please format HDD before use. If HDD is not found, please format it again.
To format HDD, go to SETUP and STORAGE menu.

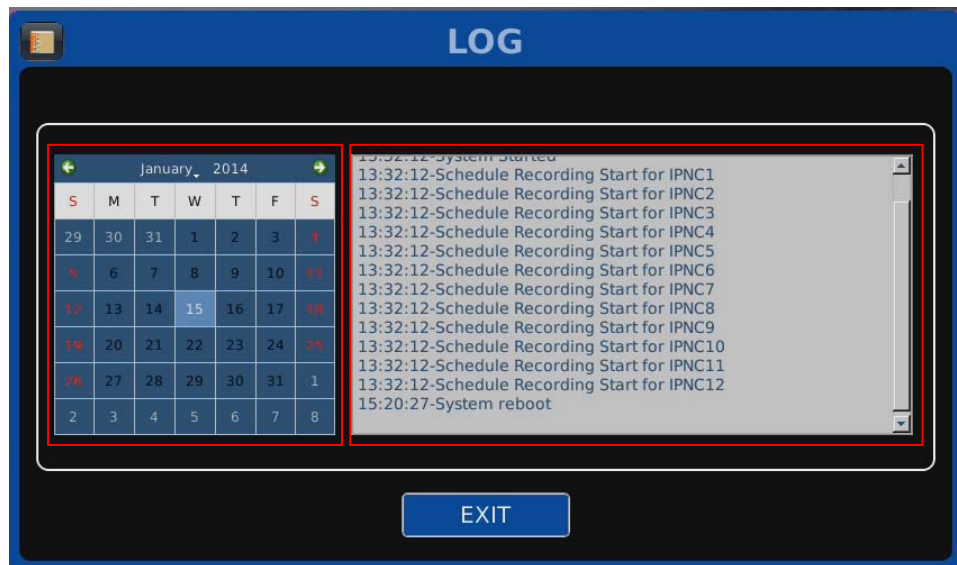


2. LOG

- 2.1 It generates event log of the system that are considered abnormal. Users may click and retrieve the event log on a specific date on the calendar.
- 2.2 Click on [LOG] to open the Log page, click on the date you wish to view, the



event log will appear on the right side of screen.



3. Manual Record

- 3.1 Right click then click on [Emergency] at quick launch bar to record video streaming sent from all IP cameras.
- 3.2 Click it again to stop recording.
- 3.3 After emergency recording, all manual recording channels will be blocked with blue squares.
- 3.4 The data is indicated in blue color on time bar in playback.





4. SETUP

4.1 Right click on live view screen to bring up Quick Launch Bar. Click [SETUP] to bring up SETUP menu as shown below.



■ DISPLAY



- 1) OUTPUT : Support HD Out and VGA2 display simultaneously.
- 2) RESOLUTION : 1080P, 720P, SXGA, XGA.
- 3) CVBS Channel 1: After select this option, single screen image will be



- seen through video output from the back panel, Ch 1~Ch16 are available to be chosen (this option is only available for VDH-NK200/NK300/NK360)
- 4) CVBS Channel 2: After select this option, single screen image will be seen through video output from the back panel, Ch 1~Ch16 are available to be chosen (this option is only available for VDH-NK300/NK360)
 - 5) SEQ INTERVAL : Selections of 5, 10, 20, & 30 seconds; default sequence duration is 5 seconds.
 - 6) Time Display: 8 types of selections.



■ CAMERA

◆ SETUP

- 1) Choose type of the network camera.
- 2) Enable connection and display. Enter title of the camera, IP address, port, login name, and password. Default login name and password of Vacron network camera are admin and admin.

CAMERA

SETUP | STREAM | COLOR | MOTION | AUDIO | PTZ

TYPE: VIT-SERIES

CONNECT: ENABLE | DISABLE

DISPLAY: ENABLE | DISABLE

TITLE: IPNC1

IP ADDRESS: 0.0.0.0

PORT NUMBER: 80

LOGIN: admin

PASSWORD:

APPLY ALL CHANNEL

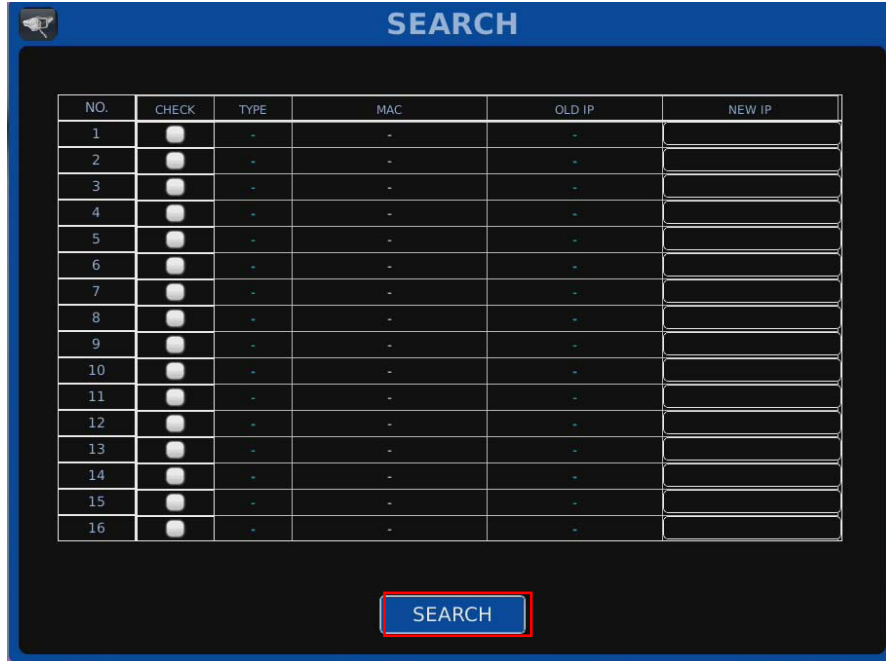
SAVE | EXIT



SEARCH

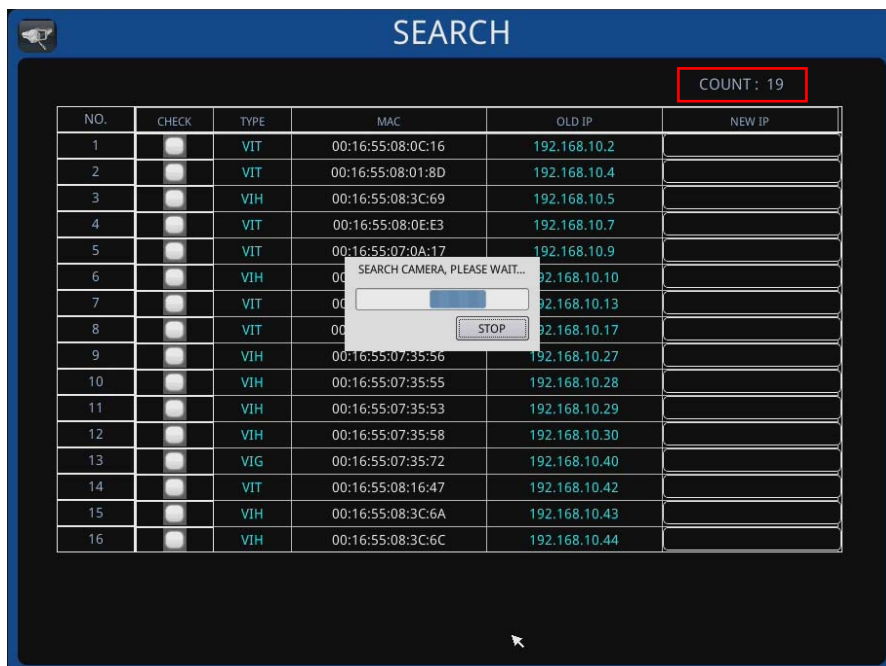
- 1) Enter SEARCH menu, click [SEARCH], the system will generate a list of cameras that are found and connected to the network. The number of cameras that are found in the network is located on the top-right corner.

Note: This does not mean the cameras are connected to the NVR.



NO.	CHECK	TYPE	MAC	OLD IP	NEW IP
1		-	-	-	
2		-	-	-	
3		-	-	-	
4		-	-	-	
5		-	-	-	
6		-	-	-	
7		-	-	-	
8		-	-	-	
9		-	-	-	
10		-	-	-	
11		-	-	-	
12		-	-	-	
13		-	-	-	
14		-	-	-	
15		-	-	-	
16		-	-	-	

SEARCH



NO.	CHECK	TYPE	MAC	OLD IP	NEW IP
1		VIT	00:16:55:08:0C:16	192.168.10.2	
2		VIT	00:16:55:08:01:8D	192.168.10.4	
3		VIH	00:16:55:08:3C:69	192.168.10.5	
4		VIT	00:16:55:08:0E:E3	192.168.10.7	
5		VIT	00:16:55:07:0A:17	192.168.10.9	
6		VIH	00:16:55:07:35:56	192.168.10.10	
7		VIT	00:16:55:07:35:55	192.168.10.13	
8		VIT	00:16:55:07:35:53	192.168.10.17	
9		VIH	00:16:55:07:35:58	192.168.10.27	
10		VIH	00:16:55:07:35:72	192.168.10.28	
11		VIH	00:16:55:08:16:47	192.168.10.29	
12		VIH	00:16:55:08:3C:6A	192.168.10.30	
13		VIG	00:16:55:07:35:72	192.168.10.40	
14		VIT	00:16:55:08:16:47	192.168.10.42	
15		VIH	00:16:55:08:3C:6A	192.168.10.43	
16		VIH	00:16:55:08:3C:6C	192.168.10.44	

COUNT: 19

SEARCH CAMERA, PLEASE WAIT...

STOP



- 2) Important! Click [STOP] to stop searching for cameras and proceed to next step.



SEARCH

SELECT ALL IPCAMCOUNT : 15

NO.	CHECK	TYPE	MAC	OLD IP	NEW IP
1	☐	VIH	00:16:55:05:41:b4	192.168.10.5	192.168.10.5
2	☐	NK360	00:16:55:07:1e:fd	192.168.10.102	-
3	☐	NK700	00:16:55:07:16:c8	192.168.10.105	-
4	☐	VIH	00:16:55:07:0b:37	192.168.10.150	192.168.10.150
5	☐	VIT	00:16:55:07:2F:60	192.168.10.220	192.168.10.220
6	☐	VIT	00:16:55:07:2F:65	192.168.10.221	192.168.10.221
7	☐	VIT	00:16:55:07:34:02	192.168.10.222	192.168.10.222
8	☐	VIT	00:16:55:07:89:EC	192.168.10.223	192.168.10.223
9	☐	VIT	00:16:55:07:31:ED	192.168.10.224	192.168.10.224
10	☐	VIT	00:16:55:08:02:C2	192.168.10.226	192.168.10.226
11	☐	VIT	00:16:55:07:87:D3	192.168.10.227	192.168.10.227
12	☐	VIH	00:16:55:07:2c:4b	192.168.10.228	192.168.10.228
13	☐	VIH	00:16:55:07:85:e1	192.168.10.229	192.168.10.229
14	☐	VIH	00:16:55:07:2f:34	192.168.10.230	192.168.10.230
15	☐	VIT	00:16:55:08:0D:EE	192.168.10.231	192.168.10.231
16	☐	-	-	-	-

SEARCHAPPENDAPPLY

- 3) Check all IP addresses of network cameras and make sure there is no duplication.
- 4) Set new IP addresses manually.
- 5) If the search to 16 or more IP CAM, select Next.
- 6) The user selects IP CAM, meanwhile, in the lower right corner will remind the user has selected IP CAM quantity.
- 7) Point the cursor and click the IP address under new IP that needs to be changed. On-screen keyboard will popup in the screen. Click again to close on-screen keyboard.



NO.	CHECK	TYPE	MAC	OLD IP	NEW IP
1	☐	VIH	00:16:55:05:41:b4	192.168.10.5	192.168.10.5
2	☐	NK360	00:16:55:07:1e:fd	192.168.10.102	-
3	☐	NK700	00:16:55:07:16:c8	192.168.10.105	-
4	☐	VIH	00:16:55:07:0b:37	192.168.10.150	192.168.10.150
5	☐	VIT	00:16:55:07:2F:60	192.168.10.220	192.168.10.220
6	☐	VIT	00:16:55:07:2F:65	192.168.10.221	192.168.10.221
7	☐	VIT	00:16:55:07:34:02	192.168.10.222	192.168.10.222
8	☐	VIT	00:16:55:07:89:EC	192.168.10.223	192.168.10.223
9	☐	VIT	00:16:55:07:31:ED	192.168.10.224	192.168.10.224
10	☐	VIT	00:16:55:08:02:C2	192.168.10.226	192.168.10.226
11	☐	VIT	00:16:55:07:87:D3	192.168.10.227	192.168.10.227
12	☐	VIH	00:16:55:07:2c:4b	192.168.10.228	192.168.10.228
13	☐	VIH	00:16:55:07:85:e1	192.168.10.229	
14	☐	VIH	00:16:55:07:2f:34	192.168.10.230	
15	☐	VIT	00:16:55:08:0D:EE	192.168.10.231	
16	☐	-	-	-	-

- 7) Make sure all NEW IP addresses are correct. Mark the cameras that will connect to the NVR. Click [SELECT ALL IPCAM] on top-left corner to apply to all cameras. (Note: the maximum number of cameras supported is 12 units). Click [APPLY] when ready to connect. Caution! IP addresses of NVR and cameras cannot be the same. Default IP address of NVR is 192.168.1.69.

NO.	CHECK	TYPE	MAC	OLD IP	NEW IP
1	☐	VIH	00:16:55:05:41:b4	192.168.10.5	192.168.10.5
2	☐	NK360	00:16:55:07:1e:fd	192.168.10.102	-
3	☐	NK700	00:16:55:07:16:c8	192.168.10.105	-
4	☐	VIH	00:16:55:07:0b:37	192.168.10.150	192.168.10.150
5	☐	VIT	00:16:55:07:2F:60	192.168.10.220	192.168.10.220
6	☐	VIT	00:16:55:07:2F:65	192.168.10.221	192.168.10.221
7	☐	VIT	00:16:55:07:34:02	192.168.10.222	192.168.10.222
8	☐	VIT	00:16:55:07:89:EC	192.168.10.223	192.168.10.223
9	☐	VIT	00:16:55:07:31:ED	192.168.10.224	192.168.10.224
10	☐	VIT	00:16:55:08:02:C2	192.168.10.226	192.168.10.226
11	☒	VIT	00:16:55:07:87:D3	192.168.10.227	192.168.10.227
12	☒	VIH	00:16:55:07:2c:4b	192.168.10.228	192.168.10.228
13	☒	VIH	00:16:55:07:85:e1	192.168.10.229	192.168.10.229
14	☒	VIH	00:16:55:07:2f:34	192.168.10.230	192.168.10.230
15	☒	VIT	00:16:55:08:0D:EE	192.168.10.231	192.168.10.231
16	☐	-	-	-	-

- 8) Please allow the system apx. 20 seconds to connect the selected cameras. All channels that are connected successfully will show images,



MAC addresses, and ip addresses. Otherwise, the channel will show blank. Click [STOP] when done.

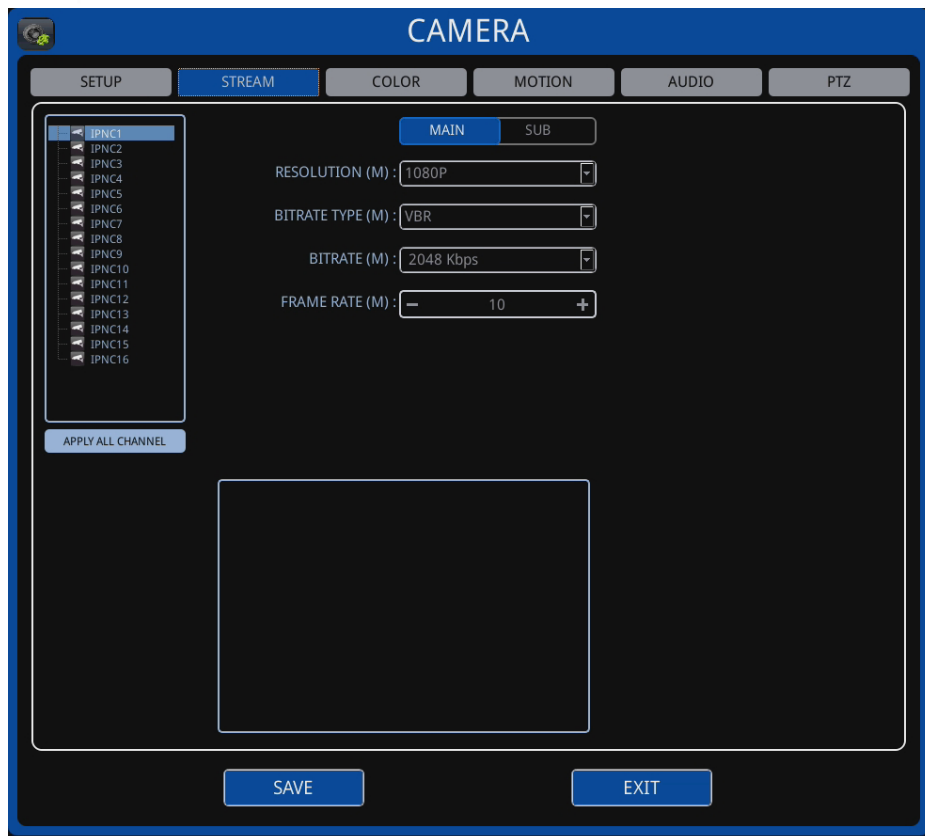
- 9) After adding IPCAM, the system message will appear "Setting Complete", the image will appear on the screen, click OK will return to the search page; continuing to add more IPCAM, please click Add; To leave the search page, then Click any of mouse button on the screen outside of search page.

The screenshot shows the 'SEARCH' interface with a table of camera configurations. A confirmation dialog 'IT'S DONE. 8 / 8' with an 'OK' button is overlaid on the table. The table has columns: NO., CHECK, TYPE, MAC, OLD IP, and NEW IP. The 'CHECK' column contains checkboxes, some of which are checked. The 'TYPE' column lists camera types like VIT, VIH, ONVIF, and HISI-DVS. The 'MAC' column shows MAC addresses. The 'OLD IP' and 'NEW IP' columns show IP addresses. At the bottom, there are buttons for 'SEARCH', 'APPEND', and 'APPLY', along with a 'SELECT: 8' indicator.

NO.	CHECK	TYPE	MAC	OLD IP	NEW IP
1	☒	VIT	00:16:55:08:0C:16	192.168.10.2	192.168.10.2
2	☒	VIT	00:16:55:08:01:8D	192.168.10.4	192.168.10.4
3	☒	VIH	00:16:55:08:3C:69	192.168.10.5	192.168.10.5
4	☒	VIT	00:16:55:08:0E:E3	192.168.10.7	192.168.10.7
5	☒	VIT	00:16:55:07:0A:17	192.168.10.9	192.168.10.9
6	☒	VIH		168.10.10	192.168.10.10
7	☒	VIT		168.10.13	192.168.10.13
8	☒	VIT		168.10.17	192.168.10.17
9	☐	ONVIF		168.10.24	-
10	☐	VIH	00:16:55:07:35:56	192.168.10.27	192.168.10.27
11	☐	VIH	00:16:55:07:35:55	192.168.10.28	192.168.10.28
12	☐	VIH	00:16:55:07:35:53	192.168.10.29	192.168.10.29
13	☐	VIH	00:16:55:07:35:58	192.168.10.30	192.168.10.30
14	☐	VIG	00:16:55:07:35:72	192.168.10.40	192.168.10.40
15	☐	HISI-DVS	00:16:55:08:37:54	192.168.10.41	-
16	☐	VIT	00:16:55:08:16:47	192.168.10.42	192.168.10.42

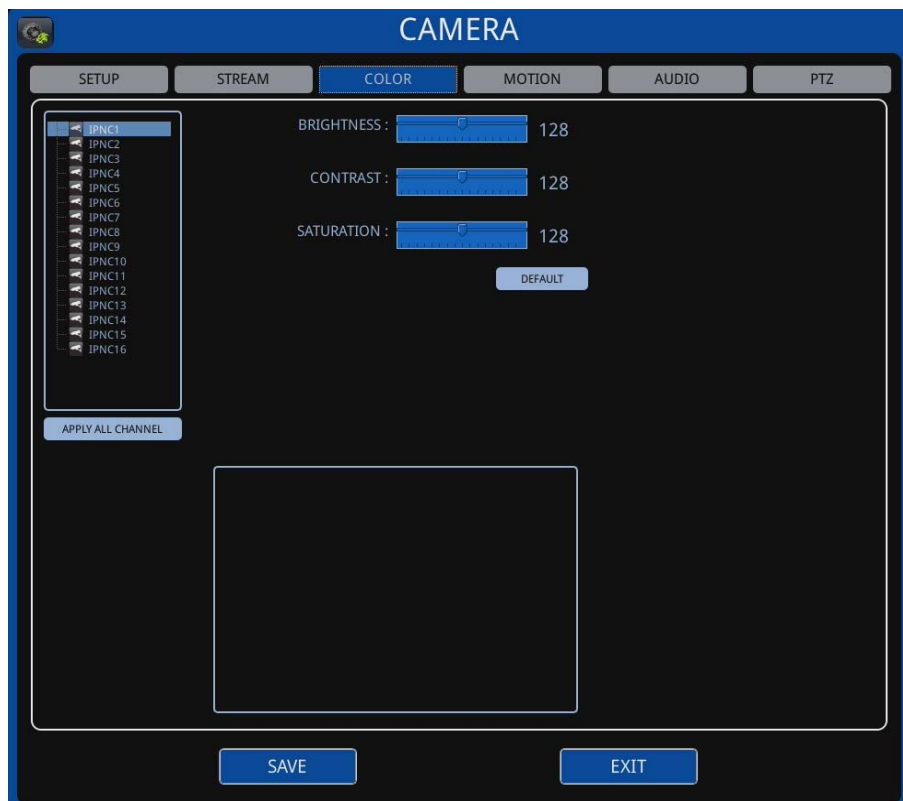
◆ STREAM

The parameters of selected cameras must setup correctly. It includes stream types: main and sub stream; bitrate types: VBR (variable bitrate) and CBR (constant bitrate); frame rate, and bitrate. Click [apply all channel] to apply identical parameters to all cameras.



◆ COLOR

Color of cameras can be adjusted including brightness, contrast and saturation. Click [apply all channel] to apply identical parameters to all cameras.





◆ MOTION

Select [ENABLE] to enable motion detection and set sensitivity level. Click [apply all channel] to apply identical parameters to all cameras.

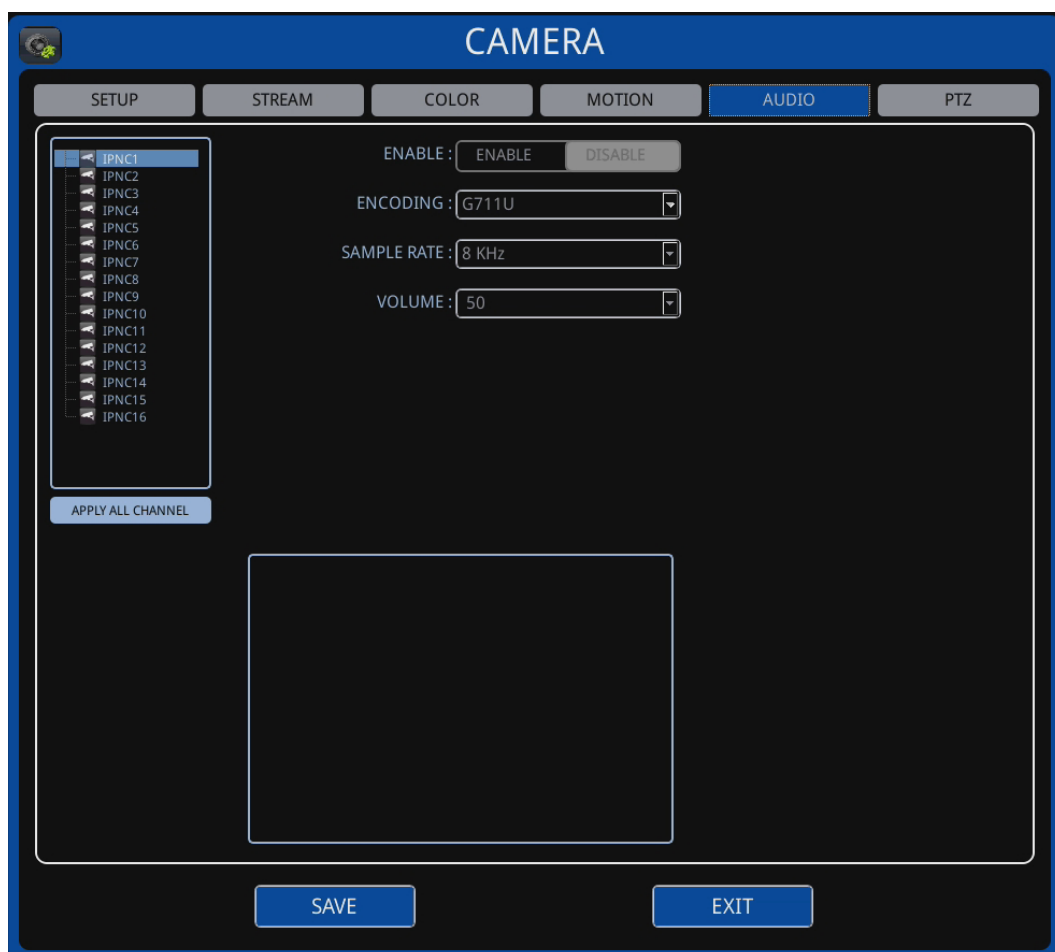
(Note: Motion detection must enable on camera end.)

The screenshot shows the 'CAMERA' configuration window with the 'MOTION' tab selected. On the left, a list of 16 channels (IPNC1 to IPNC16) is shown, with IPNC1 selected. Below the list is an 'APPLY ALL CHANNEL' button. In the center, the 'DETECTION' is set to 'ENABLE' and 'SENSITIVITY' is set to 'LOW'. At the bottom, there is a 3x4 grid of camera preview windows, all currently black. At the very bottom are 'SAVE' and 'EXIT' buttons.

SETUP	STREAM	COLOR	MOTION	AUDIO	PTZ
CAMERA					
DETECTION : ENABLE DISABLE					
SENSITIVITY : LOW					
APPLY ALL CHANNEL					
3x4 Grid of Camera Preview Windows					
SAVE EXIT					



AUDIO :

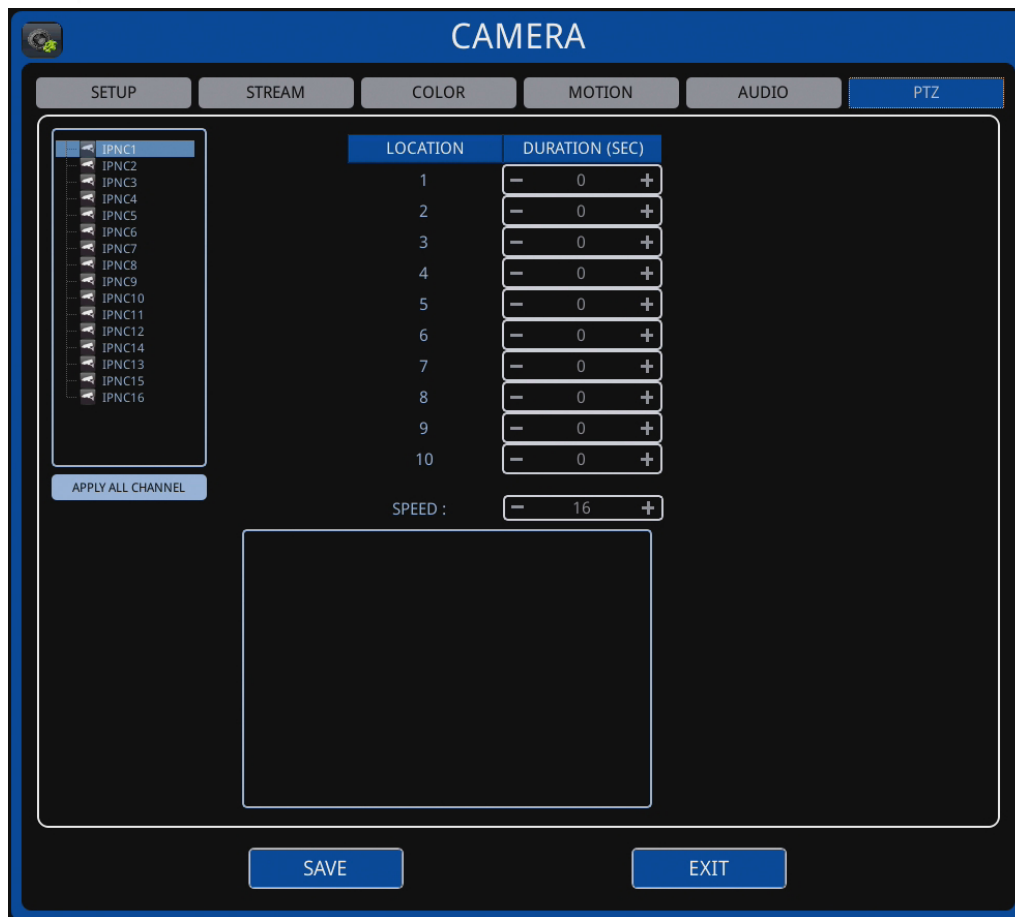


Click [SAVE] and [EXIT] when done.



Sound:

Open the channel you want to record, turned on, in (picture XVI) speaker icon is displayed, the default setting is off.



The duration time of each spot can be controlled by PTZ function, from 0~15 seconds; SEED means the speed of rotation, the maximum numbers of PTZ connectors is 16, remember to click save for complete setting.



RECORD

◆ SETUP

- 1) This menu can be individually set whether the branch IP CAM to start recording sound and video. °
- 2) Providing motion detection settings can also adjust the length of its image movement triggered recording time °
(Alarm recording is only available for VDH-NK300/350/360)
- 3) Click [SELECT ALL IPCAM] to apply to all cameras.
- 4) Click [SAVE] to save and exit schedule record setting.
- 5) Each camera can be set with its own schedule record individually.
- 6) Click record event type drop down list and select record event type. Then click on the cells to schedule record time of the day. Each cell represents an hour.



- 7) Click [SELECT ALL IPCAM] to apply to all cameras.
- 8) Click [SAVE] to save and exit schedule record setting.

The RECORD window is titled "RECORD" and features a list of 16 IPCAMs (IPNC1 to IPNC16) on the left. Below the list is an "APPLY ALL CHANNEL" button. The main area contains settings for VIDEO RECORD (ENABLE/DISABLE) and AUDIO RECORD (ENABLE/DISABLE). It also includes dropdowns for PREV DURATION (NONE) and POST DURATION (03 MIN). A central table shows a 7-day schedule with hours 0-23. The table uses color-coding: green for recording, red for no recording, and orange for a specific duration. The RECORD EVENT TYPE is set to "NO RECORD". At the bottom are "SAVE" and "EXIT" buttons.

DAY \ HOUR	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
SUNDAY																								
MONDAY																								
TUESDAY																								
WEDNESDAY																								
THURSDAY																								
FRIDAY																								
SATURDAY																								

■ EVENT

◆ SETUP

- 1) Click [ENABLE] to enable email notification of an event. Server mail, server port, from email, login name, login password, and to mail must enter correctly as well as interval time between two email notifications.

The EVENT window is titled "EVENT" and has four tabs: SETUP, MOTION, VIDEO LOSS, and SENSOR. The SETUP tab is active, showing an "E-MAIL NOTIFY" section with a "SEND MAIL" toggle (ENABLE/DISABLE). Below this are fields for SERVER MAIL (smtp.gmail.com), SERVER PORT (465), FROM MAIL, LOGIN NAME, LOGIN PASSWORD, TO MAIL, and INTERVAL TIME (60 SEC). There are also "SENSOR" and "ALARM OUT" sections. At the bottom are "SAVE" and "EXIT" buttons.



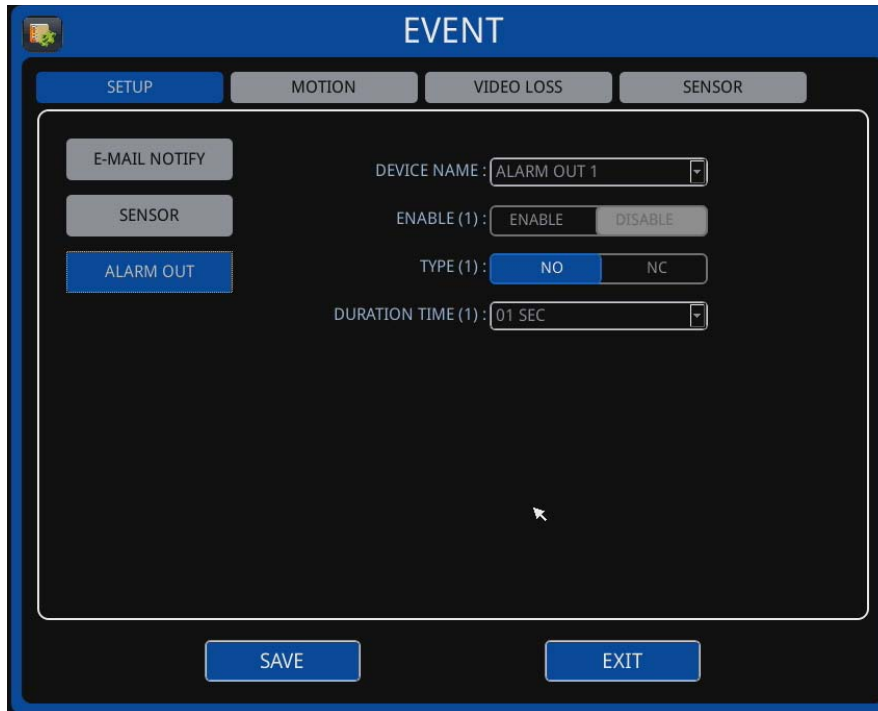
SENSOR :

The screenshot shows the 'EVENT' configuration menu with the 'SENSOR' tab selected. The interface includes a sidebar with 'E-MAIL NOTIFY', 'SENSOR', and 'ALARM OUT' options. The main area displays 'DEVICE NAME' as 'SENSOR 1' and 'ENABLE (01)' with 'ENABLE' and 'DISABLE' buttons. 'SAVE' and 'EXIT' buttons are at the bottom.

Tab	Device Name	Enable (01)
SENSOR	SENSOR 1	ENABLE

Alarm-in detector need to be installed on NVR sensor detector, the maximum support up to 16 sensors input on the host, once it is triggered can simultaneously sending out e-mail notice (VDH-NK350A/NK380/NK385 do not include this feature)

ALARM OUT :



The screenshot shows the 'EVENT' configuration window with the 'ALARM OUT' tab selected. The configuration options are as follows:

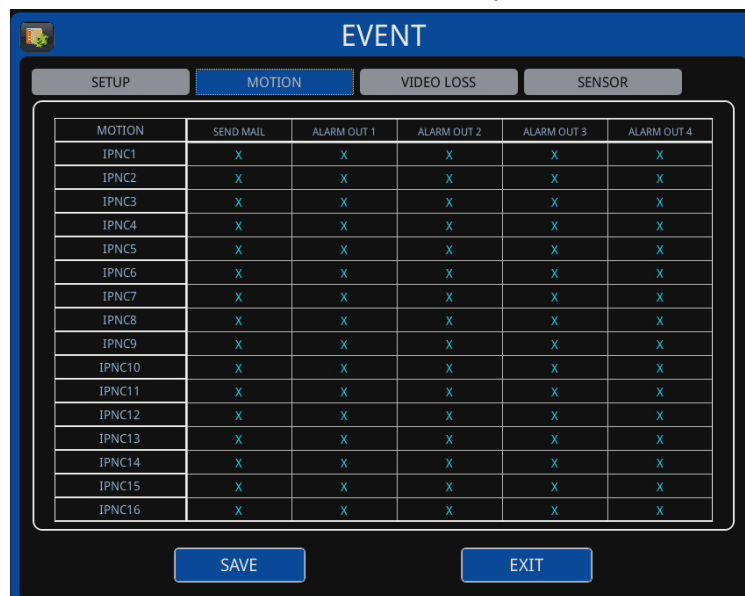
- DEVICES:** E-MAIL NOTIFY, SENSOR, **ALARM OUT**
- DEVICE NAME:** ALARM OUT 1
- ENABLE (1):** ENABLE (DISABLE is greyed out)
- TYPE (1):** NO (NC is greyed out)
- DURATION TIME (1):** 01 SEC

Buttons at the bottom: SAVE, EXIT

Alarm-out function need to be installed on NVR alarm-out terminal, the maximum support up to 4 alarm outputs on the host, motion , video loss, and Ch1~Ch16 sensor detection all can be setup on for the duration time on alarm-out function (VDH-NK350A/NK380/NK385 do not include this feature)

■ Detection Setup

- ◆ **MOTION :** Click on the cell to mark types of notification: email.
 (The function of sending e-mail notice is only available on VDH-NK350A/NK380/NK385)



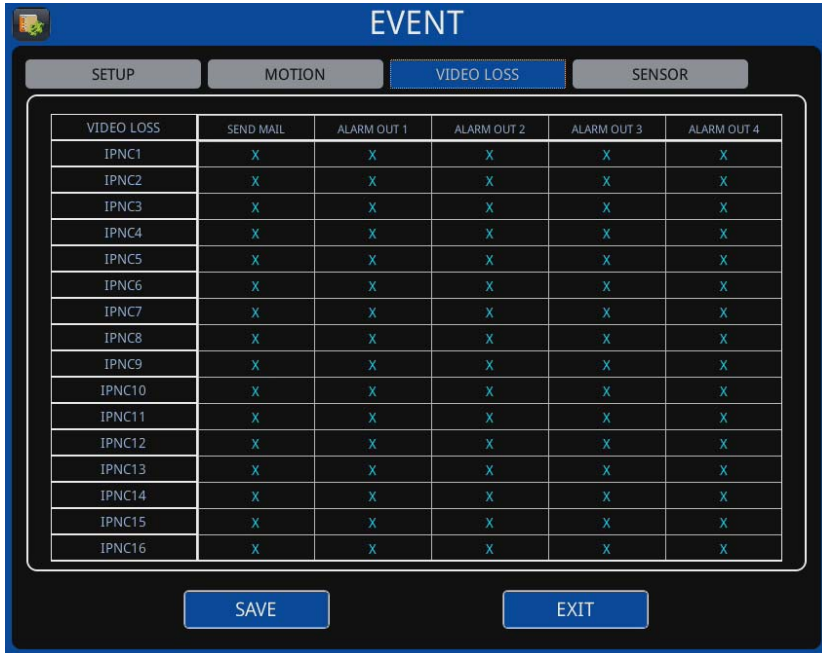
The screenshot shows the 'EVENT' configuration window with the 'MOTION' tab selected. The table below shows the configuration for 16 motion channels (IPNC1 to IPNC16).

MOTION	SEND MAIL	ALARM OUT 1	ALARM OUT 2	ALARM OUT 3	ALARM OUT 4
IPNC1	X	X	X	X	X
IPNC2	X	X	X	X	X
IPNC3	X	X	X	X	X
IPNC4	X	X	X	X	X
IPNC5	X	X	X	X	X
IPNC6	X	X	X	X	X
IPNC7	X	X	X	X	X
IPNC8	X	X	X	X	X
IPNC9	X	X	X	X	X
IPNC10	X	X	X	X	X
IPNC11	X	X	X	X	X
IPNC12	X	X	X	X	X
IPNC13	X	X	X	X	X
IPNC14	X	X	X	X	X
IPNC15	X	X	X	X	X
IPNC16	X	X	X	X	X

Buttons at the bottom: SAVE, EXIT

VDH-NK300
VDH-NK360

- ◆ VIDEO LOSS : click [VIDEO LOSS] to get to VIDEO LOSS page. Click on the cell to mark types of notification: email (The function of sending e-mail notice is only available on VDH-NK350A/NK380/NK385)



VIDEO LOSS	SEND MAIL	ALARM OUT 1	ALARM OUT 2	ALARM OUT 3	ALARM OUT 4
IPNC1	X	X	X	X	X
IPNC2	X	X	X	X	X
IPNC3	X	X	X	X	X
IPNC4	X	X	X	X	X
IPNC5	X	X	X	X	X
IPNC6	X	X	X	X	X
IPNC7	X	X	X	X	X
IPNC8	X	X	X	X	X
IPNC9	X	X	X	X	X
IPNC10	X	X	X	X	X
IPNC11	X	X	X	X	X
IPNC12	X	X	X	X	X
IPNC13	X	X	X	X	X
IPNC14	X	X	X	X	X
IPNC15	X	X	X	X	X
IPNC16	X	X	X	X	X

VDH-NK300

SENSOR :

Under EVENT, the IP cam has its own sensor type including send email and alarm.

(The function is not included on VDH-NK350A/NK380/NK385)



DEVICE	SEND MAIL	ALARM OUT 1	ALARM OUT 2	ALARM OUT 3	ALARM OUT 4
SENSOR 1	X	X	X	X	X
SENSOR 2	X	X	X	X	X
SENSOR 3	X	X	X	X	X
SENSOR 4	X	X	X	X	X
SENSOR 5	X	X	X	X	X
SENSOR 6	X	X	X	X	X
SENSOR 7	X	X	X	X	X
SENSOR 8	X	X	X	X	X
SENSOR 9	X	X	X	X	X
SENSOR 10	X	X	X	X	X
SENSOR 11	X	X	X	X	X
SENSOR 12	X	X	X	X	X
SENSOR 13	X	X	X	X	X
SENSOR 14	X	X	X	X	X
SENSOR 15	X	X	X	X	X
SENSOR 16	X	X	X	X	X



- ◆ Click [SAVE] to save and exit setting.



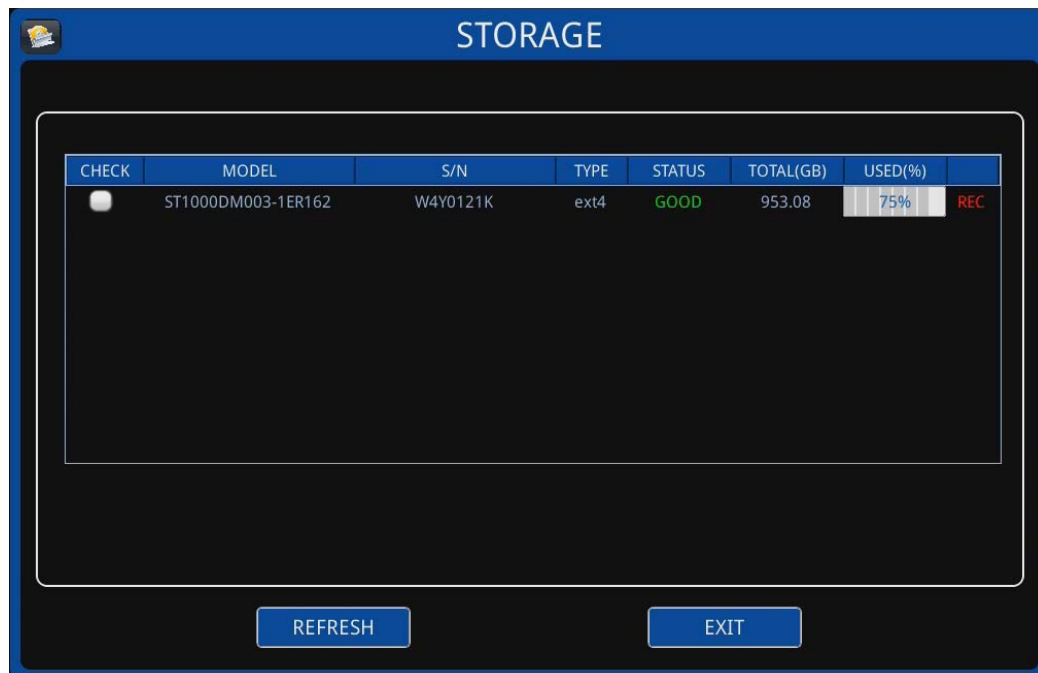
AUDIO

- 1) Click [ENABLE] to enable audio.
- 2) Click VOLUME drop down list and select volume level.
- 3) Select AIC or HD OUT 1 as audio out device.
- 4) Click [SAVE] to save and exit audio out setting.



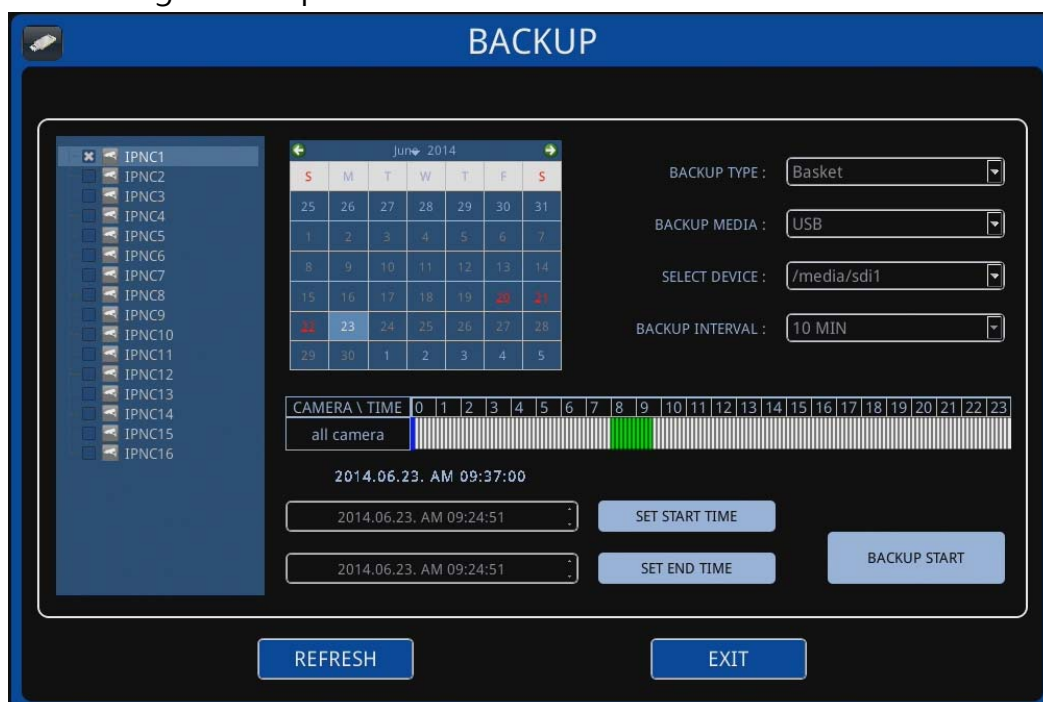
STORAGE

- 1) Click [RECYCLE] for continuous recording and overwrite the old data on storage device. Click [ONCE] to record once and stop recording when storage is full. °
- 2) The hard drives must be formatted sequentially before use to help establish overall storage space.
- 3) New hard drive installed must be formatted by the NVR before use.
- 4) Display REC represents the current data being written to this hard drive.



BACKUP

- 1) Insert USB flash memory device to USB slot on the NVR.
- 2) Select the camera from the list on left you wish to backup. Select the date on the calendar.
- 3) Use up / down arrows to change start and end times.
- 4) Set backup file type to AVI and device. Click [BACKUP START] to begin backup.





SYSTEM

◆ INFORMATION

- 1) Current firmware and hardware versions.
- 2) MAC addresses and build date/time.

The screenshot shows the 'SYSTEM' menu with 'INFORMATION' selected. The left sidebar contains buttons for INFORMATION, DATE / TIME, NETWORK, SETUP, PASSWORD, and CLOUD. The main area displays the following information:

FIRMWARE VERSION :	1.1.1149
HARDWARE VERSION :	ff.ff
MAC ADDRESS #1 :	ff:ff:ff:ff:ff:ff
BUILD DATE / TIME :	BUILD DATE=Jun 20 2014, TIME=19:10:10
BOOT BANK :	0
UBOOT :	ver=U-Boot 2010.06 (Jun 17 2014 - 17:22:00)
KERNEL :	1 SMP Fri May 30 08:59:09 CST 2014 armv7l

At the bottom are 'SAVE' and 'EXIT' buttons.

- 3) UBOOT and KERNAL versions and time released.

The screenshot shows the 'SYSTEM' menu with 'DATE / TIME' selected. The left sidebar contains buttons for INFORMATION, DATE / TIME, NETWORK, SETUP, PASSWORD, and CLOUD. The main area displays the following information:

CURRENT DATE / TIME :	2014.06.23 AM 09:37:53
CONFIG DATE / TIME :	2014.06.23 AM 09:37:53
APPLY TIME	
SYNC CAMERA TIME :	01 HOUR

At the bottom are 'SAVE' and 'EXIT' buttons.

Date and time:

This page offers the user to modify the system time, click on the right side and down keys to make adjustments and setting time after confirmation. Shortcut key



- ◆ NETWORK
- ◆ CONNECT

SYSTEM

INFORMATION | **CONNECT** | DDNS | UPNP

DATE / TIME

NETWORK

SETUP

PASSWORD

CLOUD

HOSTNAME: NK-380

ETHERNET #1: STATIC

IP ADDRESS: 192.168.10.110

NETMASK: 255.255.255.0

GATEWAY: 192.168.10.98

SAVE EXIT

SYSTEM

INFORMATION | **CONNECT** | DDNS | UPNP

DATE / TIME

NETWORK

SETUP

PASSWORD

CLOUD

HOSTNAME: NK-380

ETHERNET #1: PPPoE

IP ADDRESS: 192.168.10.110

NETMASK: 255.255.255.0

GATEWAY: 192.168.10.98

ACCOUNT:

PASSWORD:

WAN IP:

SAVE EXIT

- 1) This page provides network information.
- 2) Click ip address cell to get the on-screen keyboard. Change ip address if needed. Click again to close the on-screen keyboard.
- 3) From the drop-down field of Ethernet , PPPOE option will pop-up, then click on it, the user and password fields will appear on the right side, enter the user name and password provided by telecom company, click save to go online, then IP address will appear.



◆ DDNS

The screenshot shows the 'SYSTEM' configuration window with the 'DDNS' tab selected. On the left is a sidebar with buttons: INFORMATION, DATE / TIME, NETWORK (highlighted), SETUP, PASSWORD, and CLOUD. The main area has sub-tabs: CONNECT, DDNS, and UPNP. Under the DDNS tab, there are fields for 'DDNS' (ENABLE/DISABLE toggle), 'TYPE' (dropdown menu showing 'CCTVDVR'), 'ACCOUNT', and 'PASSWORD'. At the bottom are 'SAVE' and 'EXIT' buttons.

DDNS function is available on ccHDtv, once DDNS had been set, it will be available to connect NVR remotely

◆ UPNP :

The screenshot shows the 'SYSTEM' configuration window with the 'UPNP' tab selected. The sidebar is the same as in the DDNS screen. The main area has sub-tabs: CONNECT, DDNS, and UPNP. Under the UPNP tab, there are fields for 'UPNP' (ENABLE/DISABLE toggle), 'INT IP' (192.168.10.110), 'EXT IP' (0.0.0.0), 'HTTP PORT' (80), and 'HTTP PORT' (0). At the bottom are 'SAVE' and 'EXIT' buttons.

It require IP router with UPNP function, once UPNP function is activated, it will automatically distribute IP for NVR, INT IP for internal, EXT IP for external.

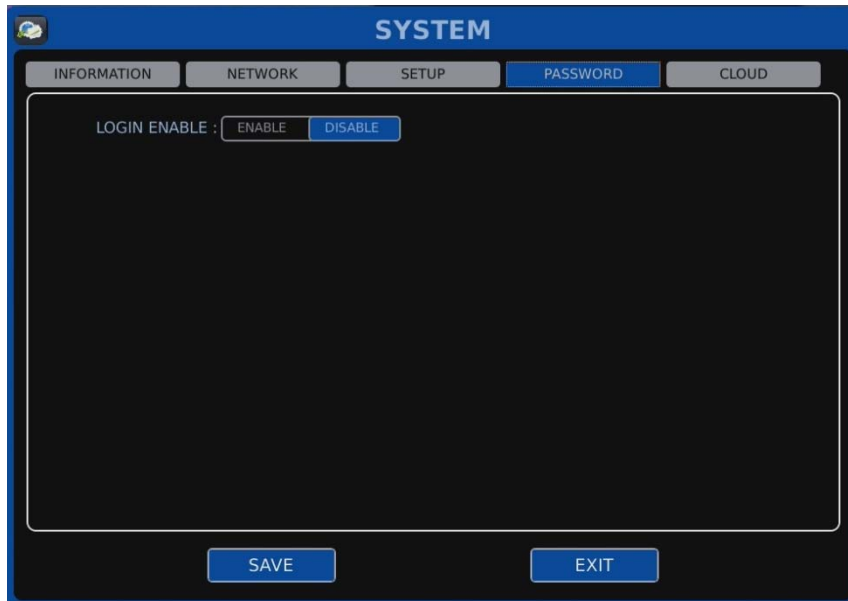


◆ SETUP

- 1) Select language. System must reboot to change to the set language.
- 2) SYNC IPCAM PARA : Can set whether to start synchronization, you can configure this interval.
- 3) Can be set whether to open the map function.
- 4) Firmware update: Save updated firmware on a USB and insert it to the USB slot on the front panel. Click [USB UPDATE]. (Note: the updated firmware must save on top layer on the USB).
- 5) Config Initialize: Click [CONFIG INIT] to reset the system to factory default setting.
- 6) System Reboot: Click [REBOOT] to reboot the system.



◆ PASSWORD



Click [ENABLE] to enable password setting. Administrator has highest authority of operation. Administrator can authorize USERS different features by enabling/disabling playback, setup, and PTZ. Enter user name, password, and confirm password. Click [SAVE] to save and exit setting.



5. Playback

5.1 Playback



1) Live Viewing: Click to go back to 12 channel live viewing.



2) Previous Page: Click to go back to previous viewing page.



3) Next Page: Click to go to next viewing page.



4) Single Channel: Click to single channel viewing.



5) Two-Split Screen: For two-split screen playback mode

(This function is only available for VDH-NK/200N/K300/NK350/NK360)

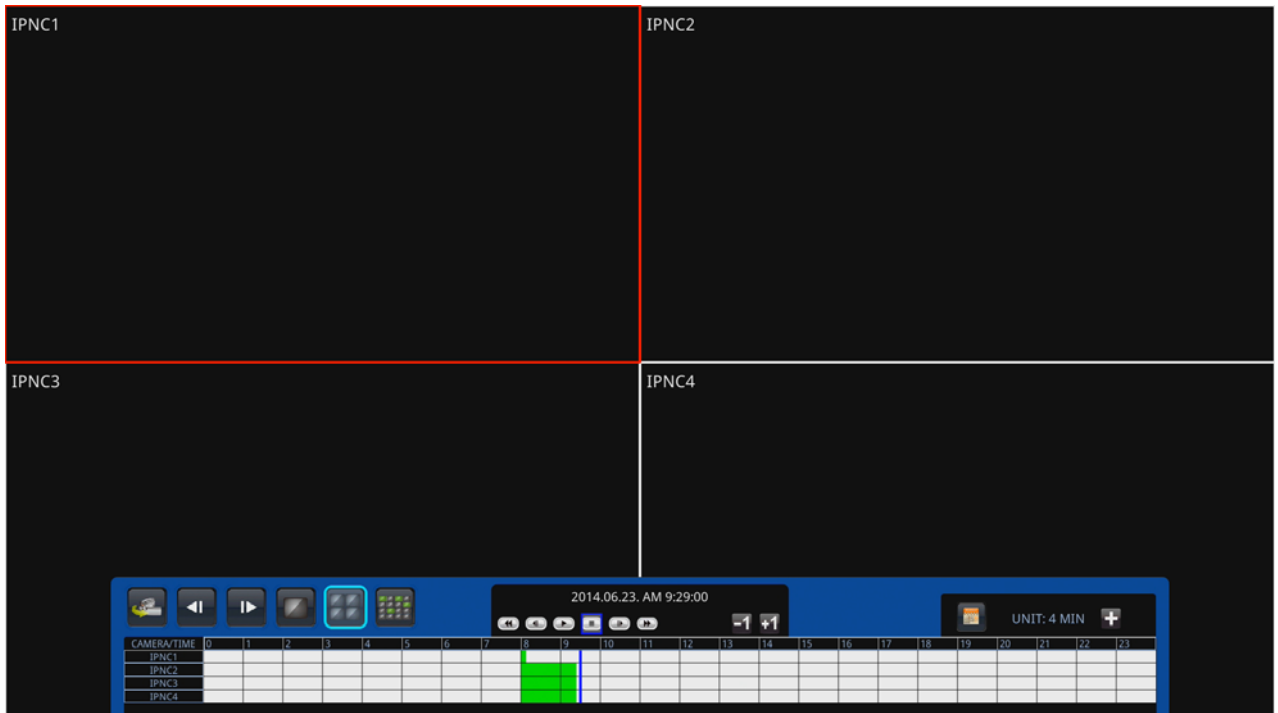


6) Four split screen: Let playback monitor video split into four channels mode. ° (This function is not included on VDH-NK200/NK300/NK350/NK360)



- 7) Optionally four-channel: Users can quickly tap required four-channels to do four channels simultaneously playback (This function is not included on VDH-NK300/NK350/NK360)

5.2 Search



- 1) Find the month and date on the calendar to view.
- 2) After selecting the date to view, click on the specific time of the day to view.
- 3) Each cell represents time of recording. It can be set from one to four minutes (default) per cell. (The unit indicator on top-left corner within the playback control screen shows recording time per cell). Click  to enlarge the time bar. Maximum one minute per cell.
- 4) After enlarging the time bar, it may not display the entire day in screen. Click  to move to the specific time to view.
- 5) Click  ·  to move to the specific time to view.



6) Use the playback control buttons as chart below after finding the specific time to view.

 : Play	 : Stop	 : Pause
 : Reverse Playback (max. 32X)	 : Fast Forward Playback (max. 32X)	 : Reverse Playback by Frame
 : Forward Playback by Frame		

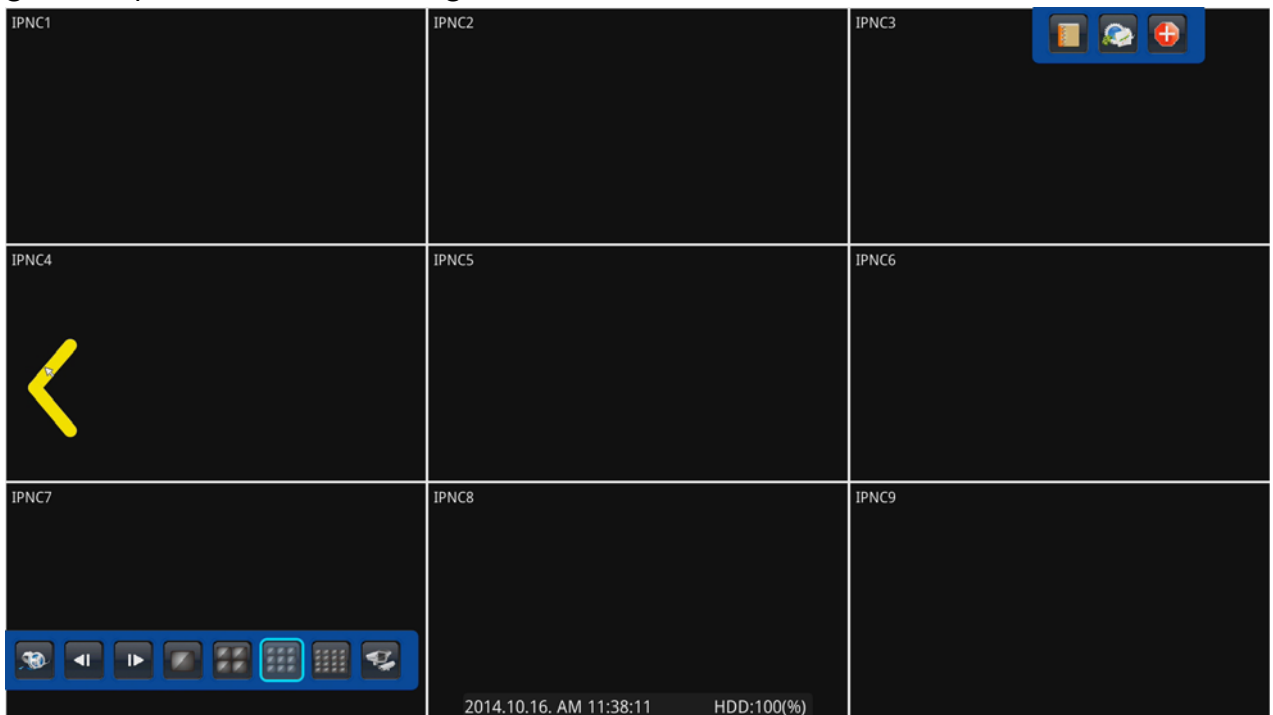
6.  Previous and Next Page

6.1 Click   to go to previous / next viewing page.

6.2 Click  to go to previous viewing page.

6.3 Click  to go to next viewing page.

6.4 Click the yellow arrows on center point of left and right side of screen to go to previous/next viewing channel.





7. Display Mode

(Only Two-Split screen not Quad-Split screen option is available on VDH-NK200/300/350/360)

Click  for 1, 2, 9, or 16 channel viewing(Single, Two-Split, Nine-Split, and Sixteen-Split screen are available

7.1 for VDH-NK300/350/360; Single, Two-Split, and Nine-Split screen are available for VDH-NK200)

8. Sequence

8.1 Sequence feature is available in 2 and 9 channel viewing.

(Single, Two-Split, and Nine-Split screen are available for VDH-NK300/350/360; Single, Two-Split, and Quad-Split screen are available for VDH-NK200)



Chapter 3 【Advanced Features】

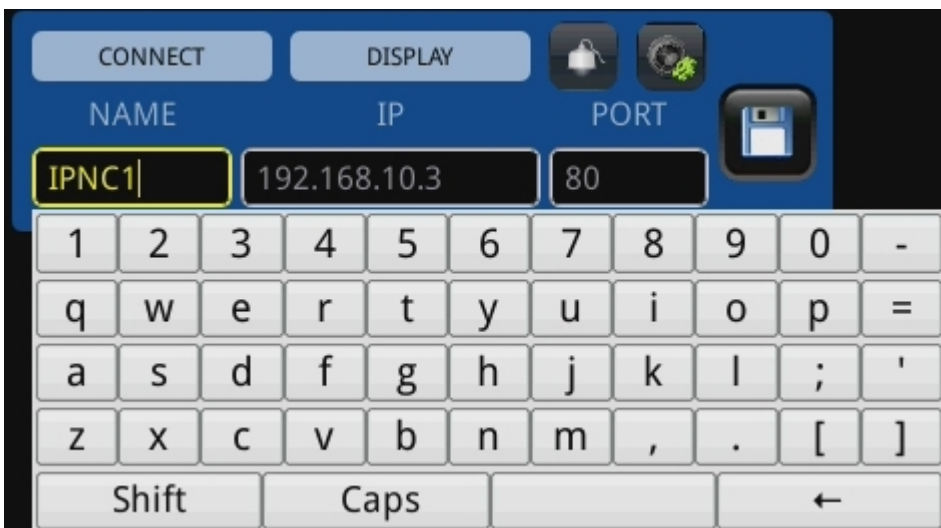
1. Quick Adjustment Viewing Channel Layout

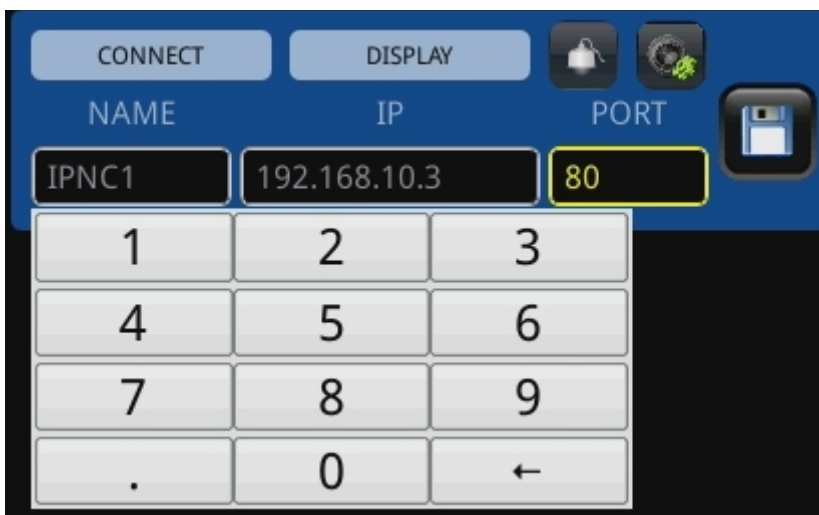
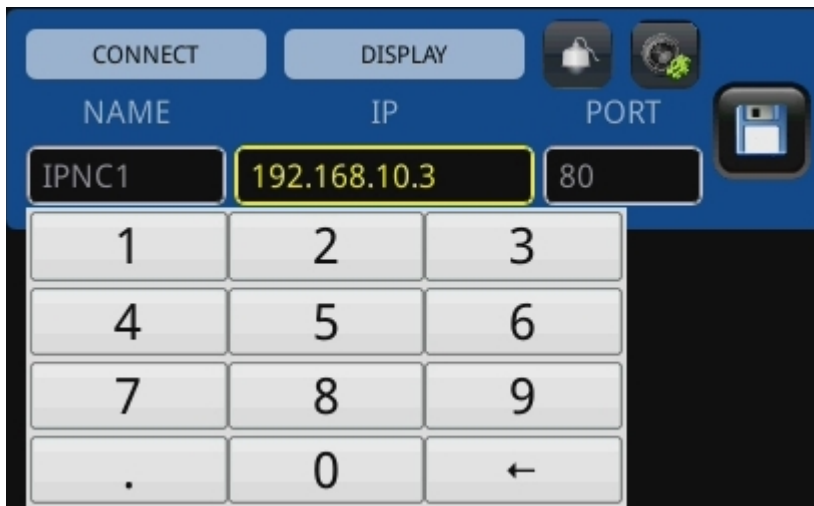
- 1.1 The viewing channels are displayed in the order of IP address (e.g. xxx.xxx.xxx.001 is displayed before xxx.xxx.xxx.002).
- 1.2 Two viewing channels may be swapped viewing squares.
- 1.3 Click, hold, (the edge of the viewing channel turns green), drag and drop the channel to the desired position.



2 Quick Camera Info Display and Modification

- 2.1 Click the viewing channel for on-screen keyboard.
- 2.2 Right click on the cell to change parameter of the camera including camera name, ip address, and port. It also allows you to copy, paste, and delete.



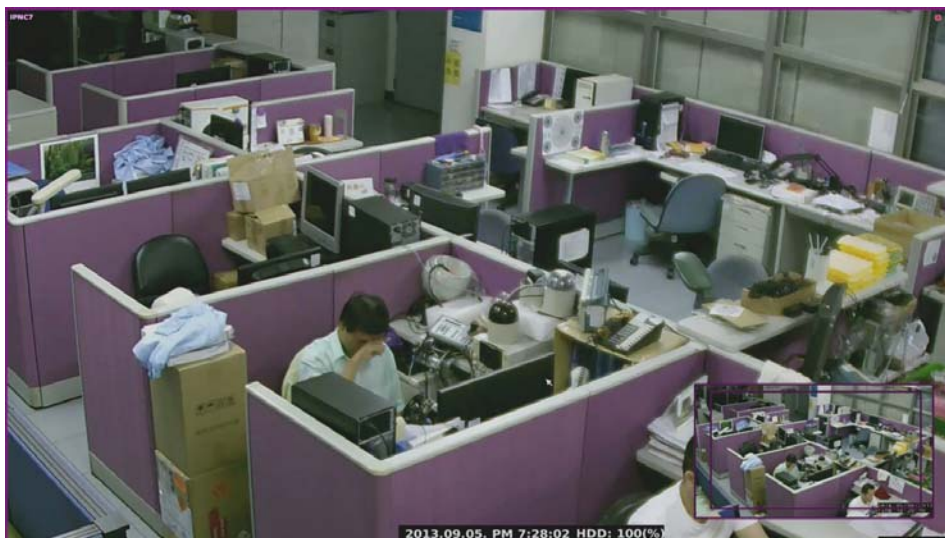


- 3 Quick Search for IP Address and Name Change
 - 3.1 Click top-left corner of the camera.
 - 3.2 The parameter of the camera will appear on screen. Click on the cell for on-screen keyboard.
 - 3.3 If changing ip address of a camera is needed, go to camera setup. Right click to close on-screen keyboard.
 - 3.4 The parameters and status of connection shown are identical to the actual the camera. Status of connection can be switched ON/OFF.
 - 3.5 This does not mean change the setting on actual camera. This feature is only for quick viewing of already-known cameras that has been setup properly.



4. Digital Zoom-in on Single Channel Display

- 4.1 Double click a channel, the live viewing will change to single channel viewing.
- 4.2 The yellow arrow for changing channel is located on the center of left/right side of the channel. Click left arrow for previous channel and right arrow for next channel.
- 4.3 Hold and mark the spot to zoom-in the area.
- 4.4 Release the left button on the mouse to see the zoomed-in area. Press, hold and maneuver the zoomed-in area.
- 4.5 This allows users to monitor the area easier. Click right button to end zoom-in function.



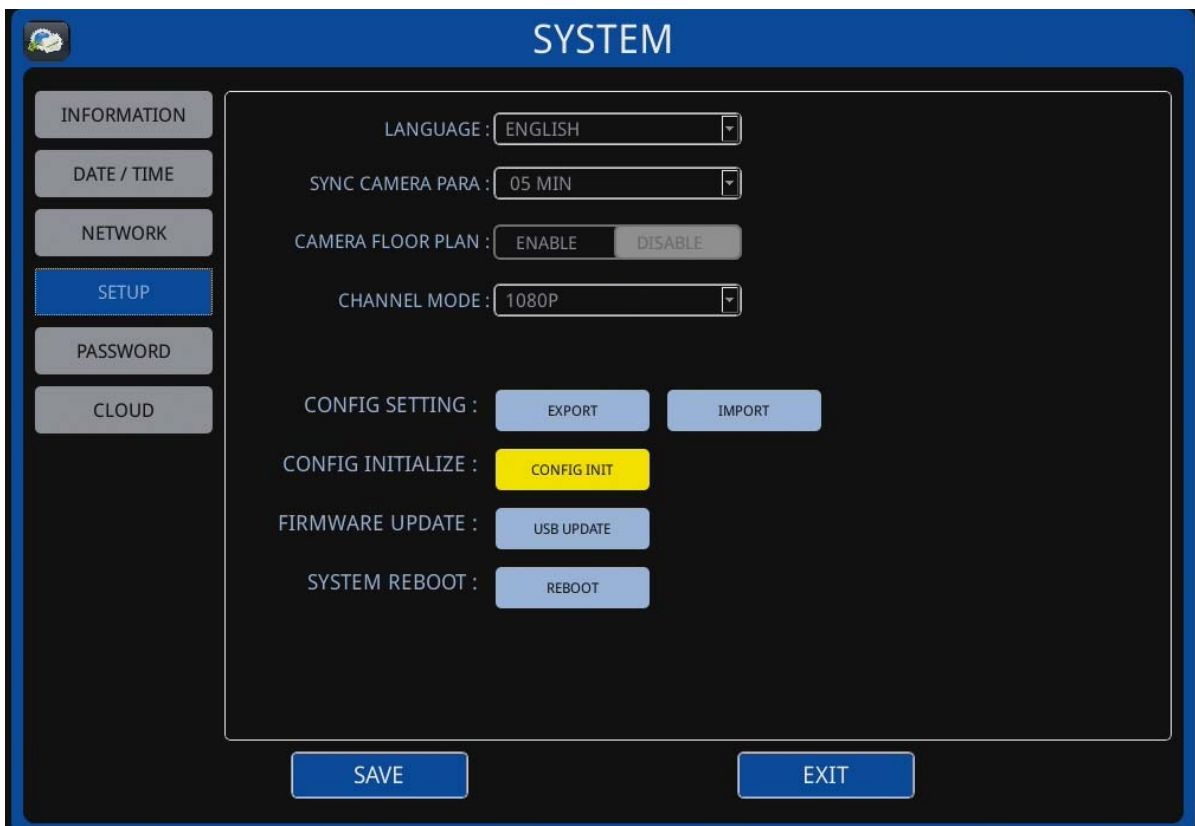
5 Firmware Upgrade

- 5.1 Enter the ip address of the NVR via network browser. (Default NVR IP



address is 192.168.1.69).

- 5.2 Click [Firmware Upgrade]. Click [Browse] to locate new firmware on PC.
- 5.3 Click [upgrade] to begin firmware upgrade. Pay attention on the timer on screen.
- 5.4 When complete, the system will reboot and show live viewing automatically. The original setting of parameter remains unchanged.



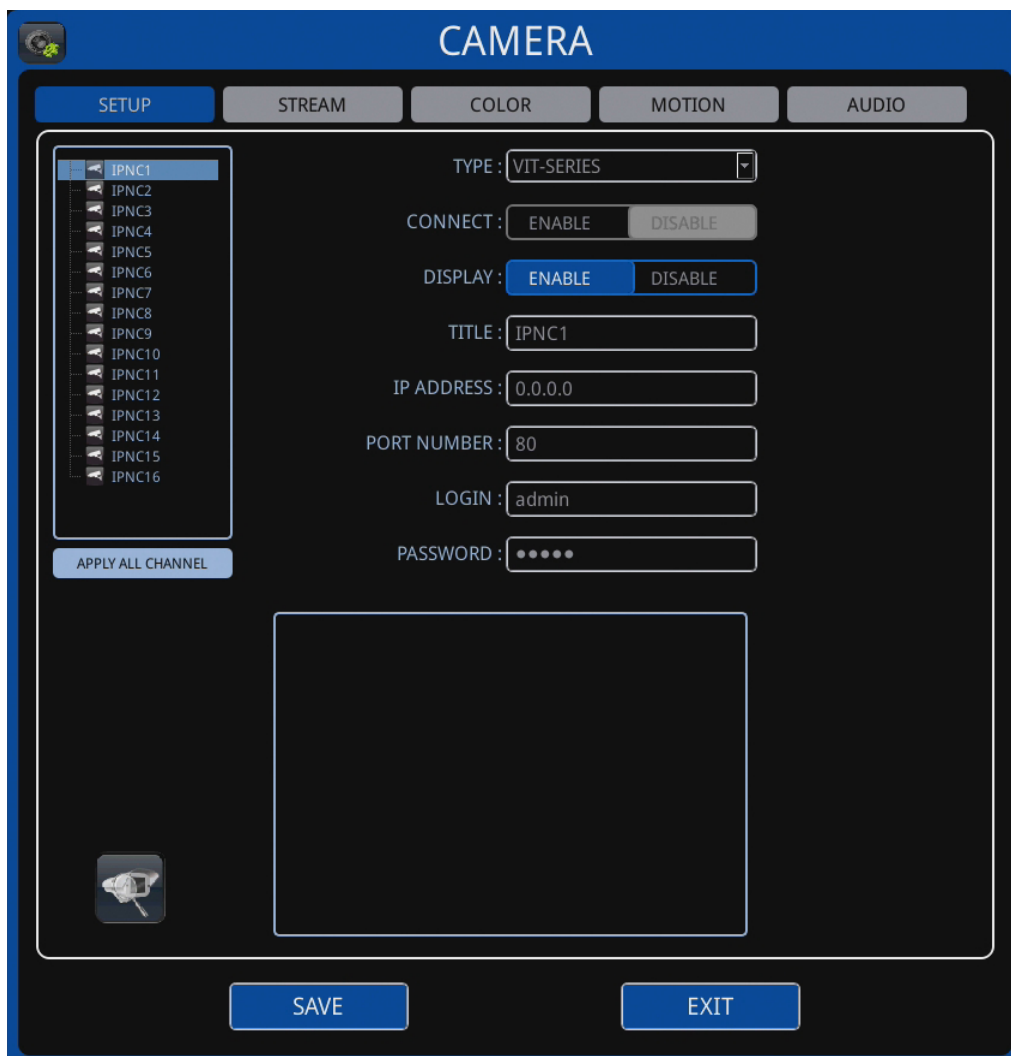
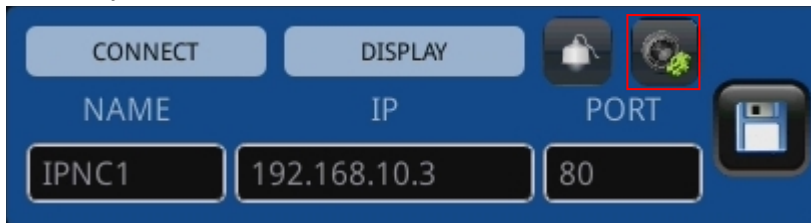
6 PTZ

- 6.1 Click top-left corner of a camera to bring up parameter of camera info.
- 6.2 Click PTZ icon on top-right corner for on-screen directional control panel.
- 6.3 On-screen PTZ directional control panel stays on screen during live viewing.





Fast Key Function :

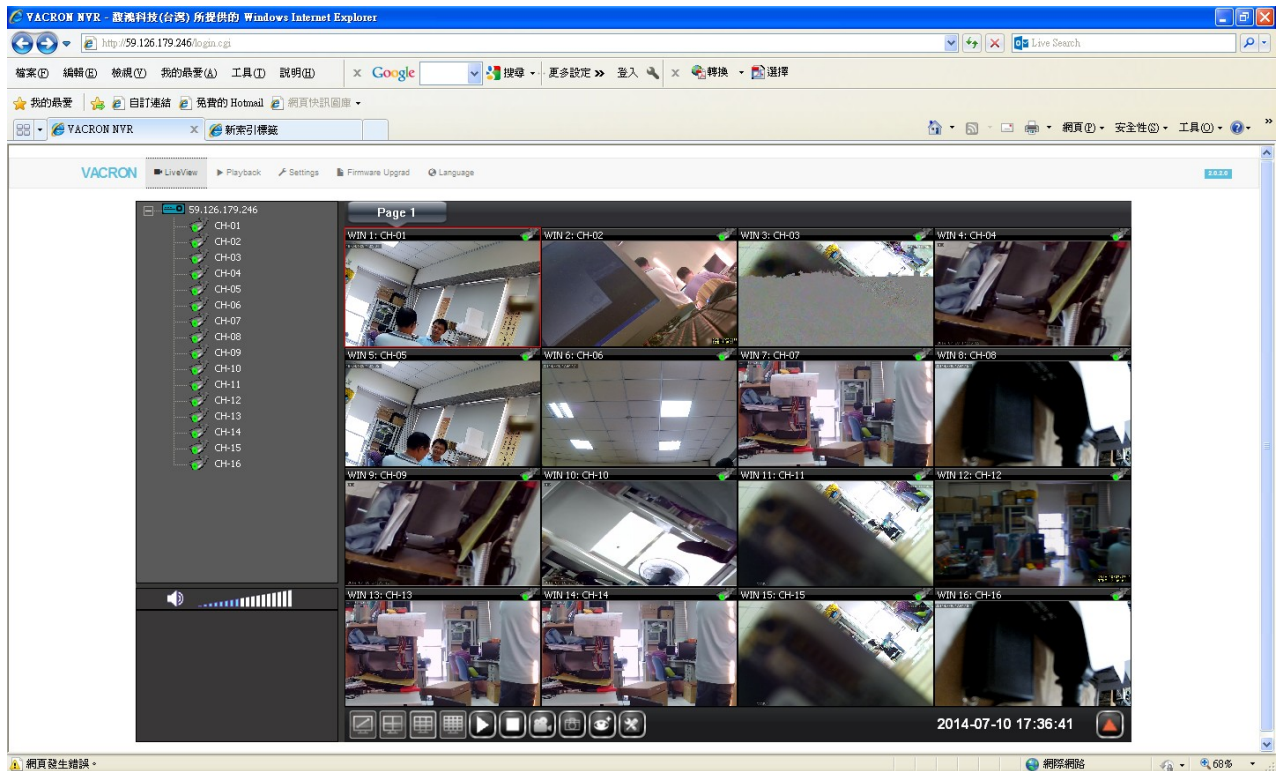


Tap Settings link, can enter the camera settings page

7. Remote Monitoring and Playback



- 7.1 To live view remotely on VDH-NK380, enter its IP address on IE to connect.
- 7.2 Click on the channels located on left side of screen to connect and view.



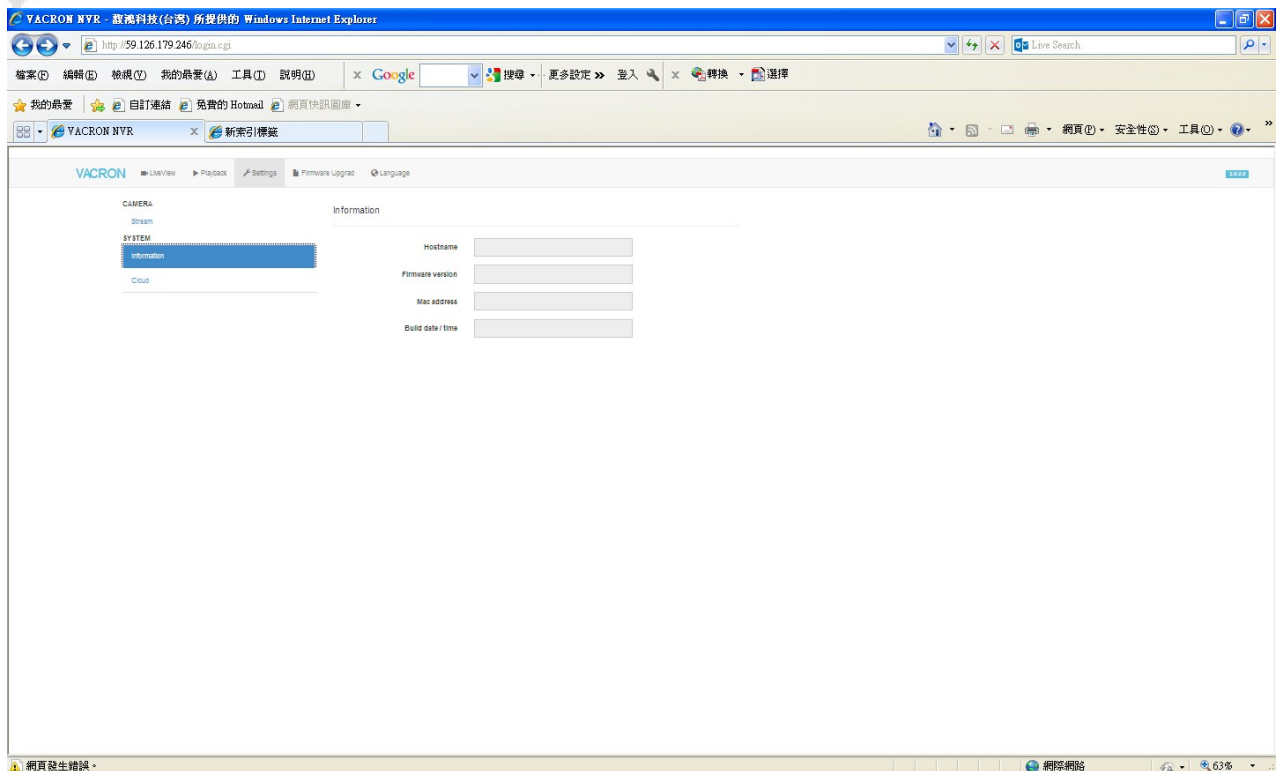
- 7.3 To playback remotely, click on the channels located on left side of screen. The time bar and calendar will appear on bottom of screen.
- 7.4 Click on the specific time you wish to view. The maximum number and resolution to view simultaneously is 4 channels on 1080P. Operating keys such as fast forward is located on bottom-right side of screen.



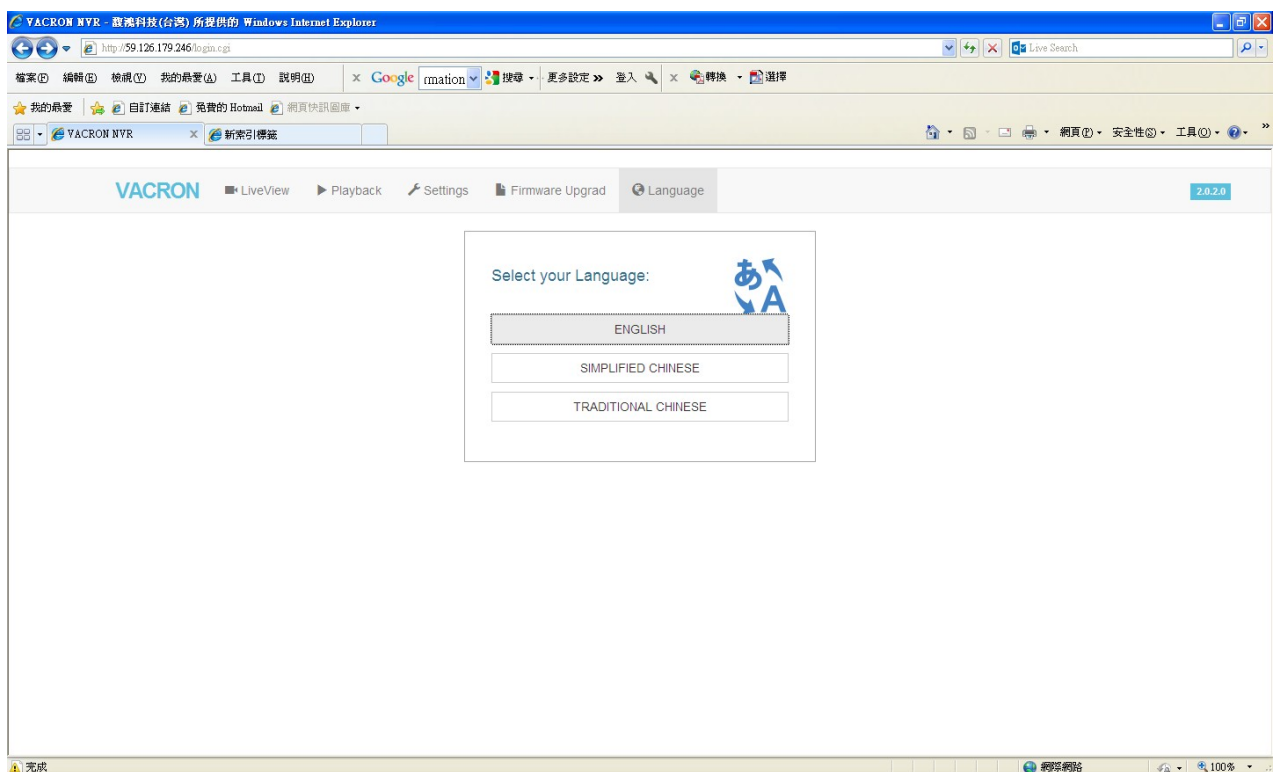
The screenshot shows the VACRON NVR web interface in a Windows Internet Explorer browser. The address bar shows the URL <http://59.126.179.246/login.cgi>. The interface includes a navigation bar with options like 'LiveView', 'Playback', 'Settings', 'Firmware Upgrade', and 'Language'. On the left, there is a list of cameras (CH-01 to CH-16). The main area displays four camera feeds in a 2x2 grid, labeled 'WIN 1: CH-01 +1x', 'WIN 2: CH-02 +1x', 'WIN 3: CH-03 +1x', and 'WIN 4: CH-04 +1x'. Below the feeds is a playback timeline with a calendar view for July 2014 and a time range selector from 00:00 to 23:59. The status bar at the bottom indicates '網頁發生錯誤' (Web page error).

The screenshot shows the 'Settings' page for the camera stream in the VACRON NVR web interface. The left sidebar has a 'CAMERA' section with a 'Stream' sub-section. The main area contains a table with columns for 'Camera', 'State', 'Bitrate Type', 'Frame Rate (FPS)', 'Bitrate (Kbps)', 'Frame Rate (FPS)', and 'Bitrate (Kbps)'. The table lists 16 cameras, all with a 'State' of 'Online'. The 'Bitrate Type' is set to 'VBR' for all cameras. The 'Frame Rate (FPS)' is set to '25' for all cameras. The 'Bitrate (Kbps)' is set to '15' for all cameras. The 'Frame Rate (FPS)' and 'Bitrate (Kbps)' columns have dropdown menus for selection. At the bottom right, there are 'REFRESH' and 'SAVE' buttons. The status bar at the bottom indicates '完成' (Completed).

Tap the settings stream page, enter the settings by remote setting IPCAM of NVR



Tap the settings Information page will appear the current model name, MAC code and version information.



Click the language page, change the OCX language, currently supports English, Simplified/ Traditional Chinese, Three Languages.



For More Information
Please check VACRON Website
<http://www.vacron.com>

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