



AHD

Software Operating Instructions

VDG-DK Series

2015 DEC V1.0

Notice before use

This authorization agreement of client's software/hardware is legally effective to you(individual or single machine) and our company. This agreement covers components of software/hardware, media, print, online publication and electronic files. All the application through installation, duplication or the other way must be based on this agreement. If you disagree with the terms of this agreement, please don't install or use this product. This product is protected by copyright law, international copyright treaties and other international property laws and treaties. Please note this product authorizes to you, not sold. Through the software/hardware license code on the license certificate indicates you have got the permit of use.

❖ Copyright ❖

The company owns all the headers, including but not subject to the copyright, software/hardware products and any duplicates. The company reserves all the rights not expressed clearly.

❖ Unsecure notes ❖

The company clearly denies warrantee repairmen of any products. Unsecure of warrantee for any kind of expressed or implied, including any documents and software products of no limit, implied warrantee repairmen or marketability, suitable for specific usage or non-infringement.

Terms and Conditions

The overall risk, is that arising out of the use or performance of software and hardware products. This product will be informed, such as when it is used with certain device or other hardware, may enable you to carry out surveillance and data processing, which may be subject to or in violation of applicable law, which includes but is not limited to data privacy, and criminal law. Please check your use to comply with applicable laws is the responsibility of users themselves.

❖ Limitation of liability ❖

The provision of this paragraph is in effect to the maximum extent permitted by applicable law. In any situation Xia, VACRON or its dealer assumed any special, and accidentally of, and indirect of, and or any indirect loss (including but not limited to business profits loss, and business interrupted, and commercial information loss, and or any other money loss of compensation) due to using or cannot using of software products or provides or failed provides appropriate of support, even we of company has is informed this class damage of possibilities. If there is no willful misconduct or gross negligence, under any provision of this agreement, VACRON total liability, shall be limited to the amount actually paid.

❖ Other conventions ❖

(A) Prohibition of reverse engineering, decompilation, splitting or rescind the contract within the scope allowed by the applicable law cannot be waived by, as well as any software and hardware components of the product.

(B) As long as the recipient agrees to the terms of this agreement, you may permanently transfer rights of use of this product.

❖ Closing remarks ❖

Without prejudice to any other rights, the company may terminate this license agreement. If you fail to comply with its terms and conditions, in which case you must destroy all copies of the software product.

Chapters

| | |
|--|----|
| Foreword 【Notices】 | 1 |
| Chapter 1 【Operation】 | 2 |
| 1. Mouse Operating Instructions..... | 2 |
| Chapter 2 【Setting operation】 | 2 |
| 1. Main Screen Operating Instructions..... | 2 |
| 2. System Settings..... | 3 |
| 2.1 Display..... | 3 |
| 2.2 Camera Setting | 4 |
| 2.3 Record Settings | 7 |
| 2.4 Internet | 7 |
| 2.5 System Settings..... | 11 |
| 2.6 Storage Settings..... | 14 |
| 2.7 Backup..... | 14 |
| 2.8 Sound | 15 |
| Chapter 3 【Remote Playback】 | 18 |

Foreword 【Notices】



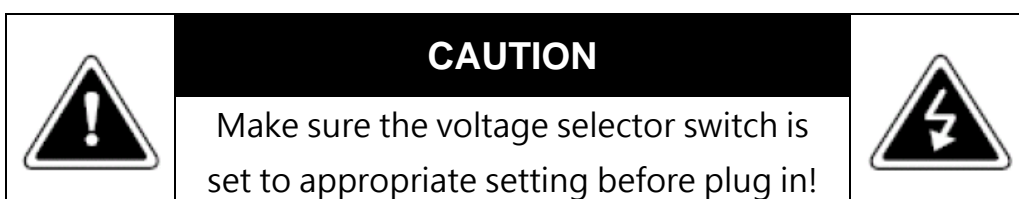
WARNING

- 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.



Chapter 1 【Operation】

The system supports mouse operation

1. Mouse Operating Instructions

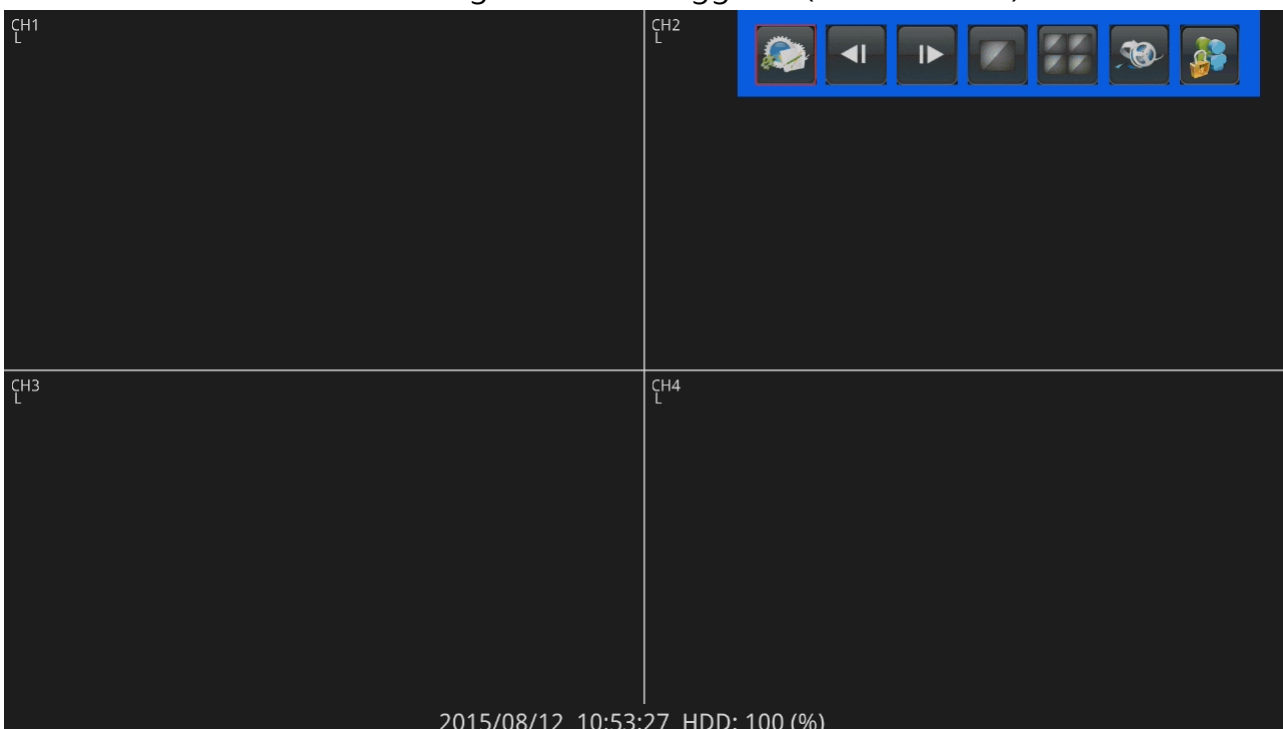
- 1). [Right] click when the screen can be turned on instantly monitor function setting menu.
- 2). In Menu mode [Left] click, you can enter the selected item menu.
- 3). You can use [wheel button] to change setting values.
- 4.) Quick copy and also apply to all, or click right click to show min-keyboard

Chapter 2 【Setting operation】

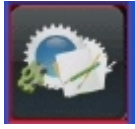
1. Main Screen Operating Instructions

1.1 DVR offers 2 operating areas, please right-click on the viewport to display the control panels (shown below).

1.2 Windows in NVR is designed to be draggable (shown below).



- The monitor screen will appear directly below, monitoring schedule and storage DVR's hard drive usage percentage.

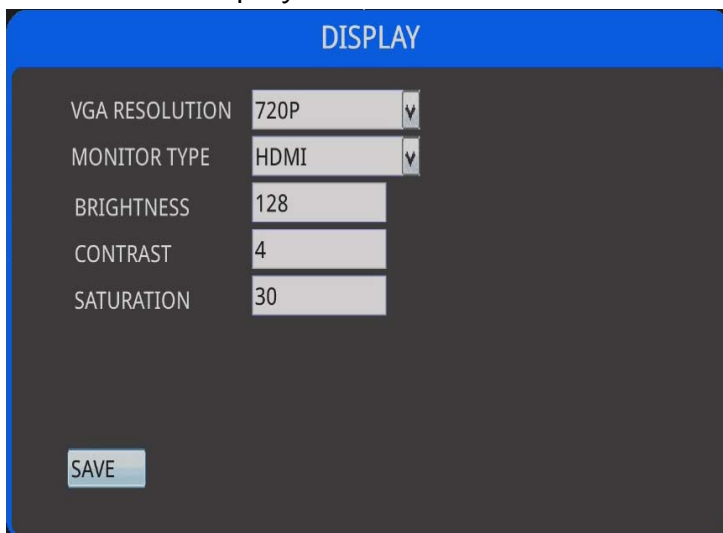


2. System Settings

- In real-time monitoring viewports there are eight main buttons.
- After 60 seconds of no operations it will automatically jump back to the monitor screens



2.1 Display

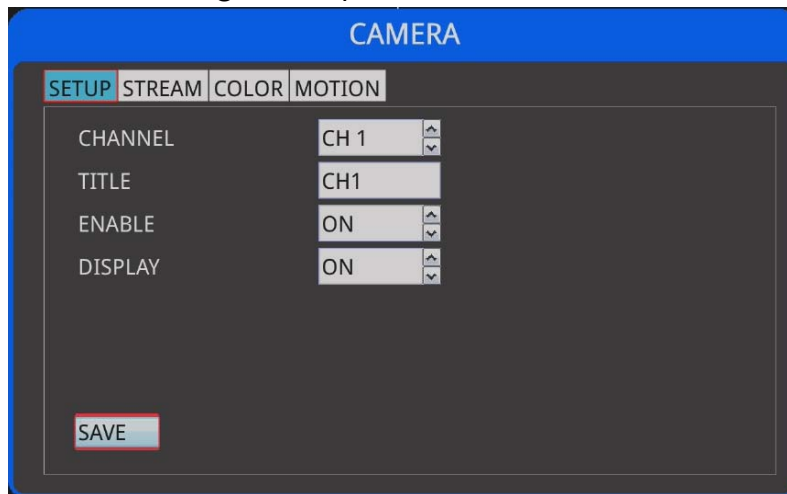


- 1) Resolution: 1080P, 720P, SXGA, XGA.
- 2) Display: Support HDMI or CVBS display simultaneously
- 3) Brightness: adjust the brightness of the screen output.
- 4) Saturation: adjust the screen output saturation.
- 5) Save.



2.2 Camera Setting

- 1) Channel: Use arrow keys to select channels
- 2) Channel Name: The name of the channel
- 3) Enable: ON for recording; OFF is no recording
- 4) Display: Use the arrow keys to turn ON to display, OFF to turn OFF the display
- 5) After setting is completed and saved, it will store the value automatically.

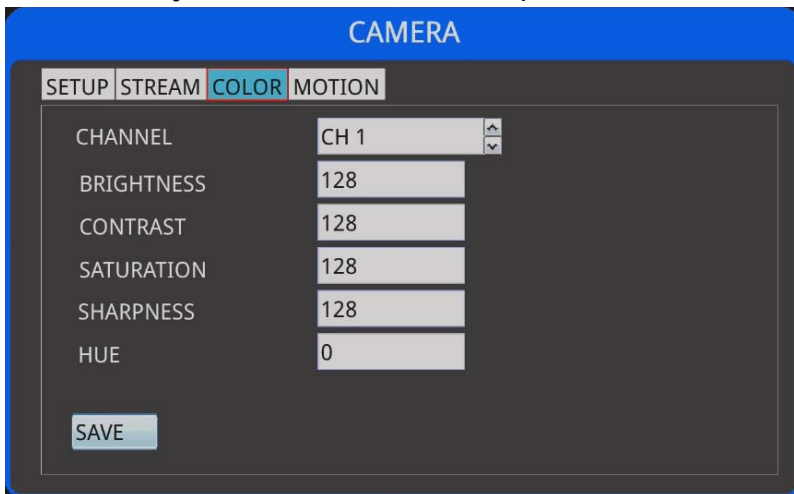


◆ Video :

- 1) Channel: Use arrow keys to select channels
- 2) Main streaming: choose 5,10,15,20,25,30; Default = 15
- 3) Sub-streaming: 15
- 4) Main-stream bit rate : 256Kbps 、 512Kbps 、 1024Kbps 、 2048Kbps.
Default = 2048Kbps
- 5) Sub-streaming : 64Kbps 、 128Kbps 、 192Kbps 、 256Kbps ; Default = 256Kbps
- 6) Save after complete

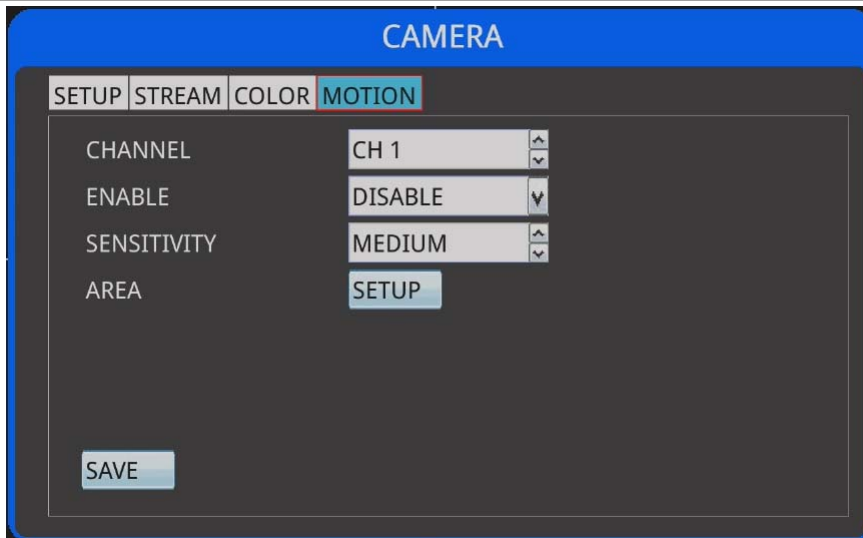


- ◆ Colors : Adjust colors for each output channels then click save to exit.

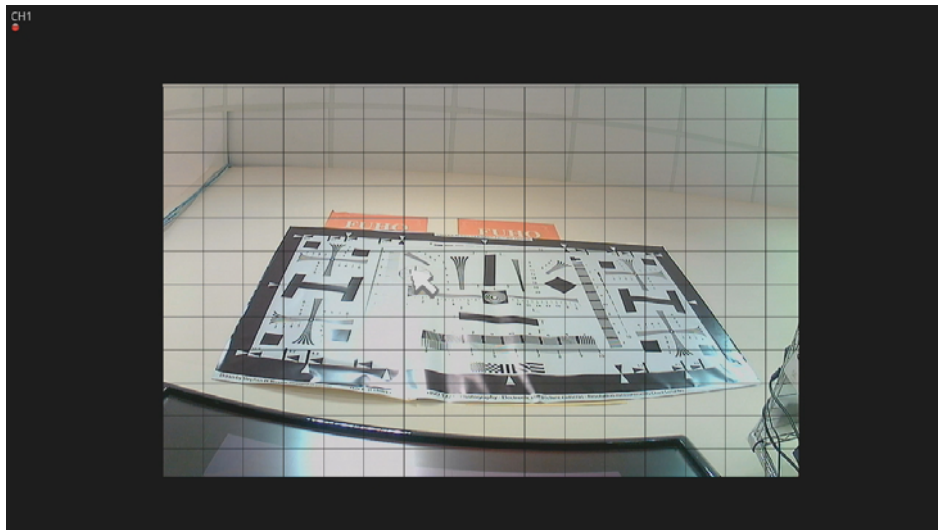


- ◆ Motion Detection :

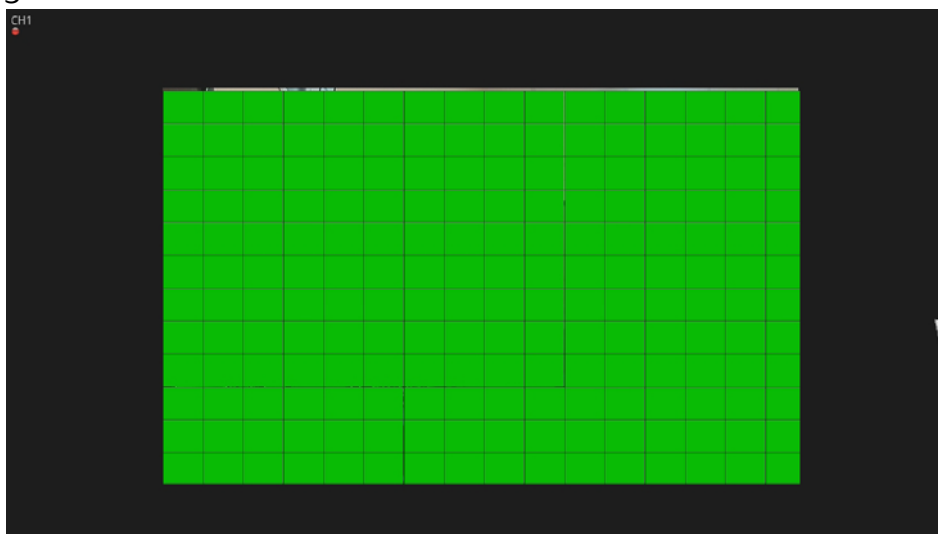
Each frequency can be turned on with motion detection and sensitivity adjustments, click the zone after a pre-set selection to trigger motion detection area



Setting ago :



After setting :





2.3 Record Settings

Each channels can be configured to record, RED means under motion detection mode, where black isn't going to record.

RECORD

CHANNEL: CH 1

VIDEO RECORD: ON

AUDIO RECORD: OFF

| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----|-----|-----|-----|
| MON | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Black | Black | Black | Black | Black | Black | Black | Black | Black | Black | Red | Red | Red | Red |
| TUE | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Black | Black | Black | Black | Black | Black | Black | Black | Black | Black | Red | Red | Red | Red |
| WED | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Black | Black | Black | Black | Black | Black | Black | Black | Black | Black | Red | Red | Red | Red |
| THU | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Black | Black | Black | Black | Black | Black | Black | Black | Black | Black | Red | Red | Red | Red |
| FRI | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Black | Black | Black | Black | Black | Black | Black | Black | Black | Black | Red | Red | Red | Red |
| SAT | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Black | Black | Black | Black | Black | Black | Black | Black | Black | Black | Red | Red | Red | Red |
| SUN | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Black | Black | Black | Black | Black | Black | Black | Black | Black | Black | Red | Red | Red | Red |

SAVE TYPE: MOTION SELECT ALL



2.4 Internet

NETWORK

FUNCTION: CONNECT

HOSTNAME: CONNECT

MODE: DDNS

UPNP: UPNP

IPV4: 192.168.001.111

NETMASK: 255.255.255.000

GATEWAY: 192.168.001.001

DNS1: 008.008.008.008

DNS2: 168.095.001.001

SAVE

- 1) CONNECT

The screenshot shows a 'NETWORK' configuration window with the following fields and values:

| | |
|----------|-----------------|
| FUNCTION | CONNECT |
| HOSTNAME | DK-DVR |
| MODE | STATIC |
| IPV4 | 192.168.001.111 |
| NETMASK | 255.255.255.000 |
| GATEWAY | 192.168.001.001 |
| DNS1 | 008.008.008.008 |
| DNS2 | 168.095.001.001 |

A 'SAVE' button is located at the bottom right of the form.

- a) Functions : CONNECT 、 DDNS 、 UPNP
- b) Server Name : Default is VACRON
- c) Mode : STATIC 、 DHCP 、 PPPOE
- d) IPV4 : Enter your IP address here, default is 192.168.1.111
- e) Subnet Mask : Enter your Subnet Mask here, default is 255.255.255.0
- f) Gateway : Enter your Gateway here, default is 192.168.1.1
- g) Save to exit ◦

2) DDNS

The screenshot shows a 'NETWORK' configuration window with the following fields and values:

| | |
|----------|---------|
| FUNCTION | DDNS |
| DDNS | DISABLE |
| TYPE | CCTVDVR |
| HOST | |
| ACCOUNT | |
| PWD | |

A 'SAVE' button is located at the bottom center of the form.

- a) Function : CONNECT 、 DDNS 、 UPNP
- b) DDNS : Default is off
- c) Type : CCTVDVR 、 NO-IP
- d) Server : Enter your DDNS address
- e) Username : Enter your username from your DDNS provider
- f) PWD : Enter your password from your DDNS provider
- g) Save to exit

3) UPNP

| NETWORK | | | |
|----------|-----------------|------|----|
| FUNCTION | UPNP | | |
| UPNP | DISABLE | | |
| INTIP | 192.168.001.111 | PORT | 80 |
| EXTIP | 000.000.000.000 | PORT | 0 |
| SAVE | | | |

- a) Function : CONNECT 、 DDNS 、 UPNP
- b) UPNP : ON/OFF, you will need a router that supports this function
- c) INTIP : This must be the same as the given IP address you previously set
- d) PORT : Can be configured, default is 80
- e) EXTIP : When UPNP is on · it will be assigned by your router accordingly.
- f) PORT : When UPNP is on · it will be assigned by your router accordingly

Save to exit.

4) DHCP

- 5) You must connect to a router before activating DHCP, this will allow the router to assign an unique IP to your DVR. Save to exit after configuration

| NETWORK | | | |
|----------|-----------------|------|--|
| FUNCTION | CONNECT | | |
| HOSTNAME | DK-DVR | | |
| MODE | DHCP | | |
| IPV4 | 192.168.001.111 | | |
| NETMASK | 255.255.255.000 | | |
| GATEWAY | 192.168.001.001 | | |
| DNS1 | 008.008.008.008 | | |
| DNS2 | 168.095.001.001 | SAVE | |

6) PPPOE :

| | |
|-------|----------------------|
| USER | <input type="text"/> |
| PWD | <input type="text"/> |
| WANIP | 000.000.000.000 |

If you change the mode to PPPOE, the columns below will switch to below accordingly.

Username : Enter your PPPOE user name from your ISP

PWD : Enter your PPPOE password from your ISP

WANIP : This column is self-configurable after you successfully connected to the internet.

| NETWORK | | | |
|----------|-----------------|-------|-------------------------------------|
| FUNCTION | CONNECT | | |
| HOSTNAME | DK-DVR | | |
| MODE | PPPOE | | |
| IPV4 | 192.168.001.111 | USER | <input type="text"/> |
| NETMASK | 255.255.255.000 | PWD | <input type="text"/> |
| GATEWAY | 192.168.001.001 | WANIP | 000.000.000.000 |
| DNS1 | 008.008.008.008 | | |
| DNS2 | 168.095.001.001 | | |
| | | | <input type="button" value="SAVE"/> |



2.5 System Settings

- 1) Info: Display your DVR' s name and firmware number

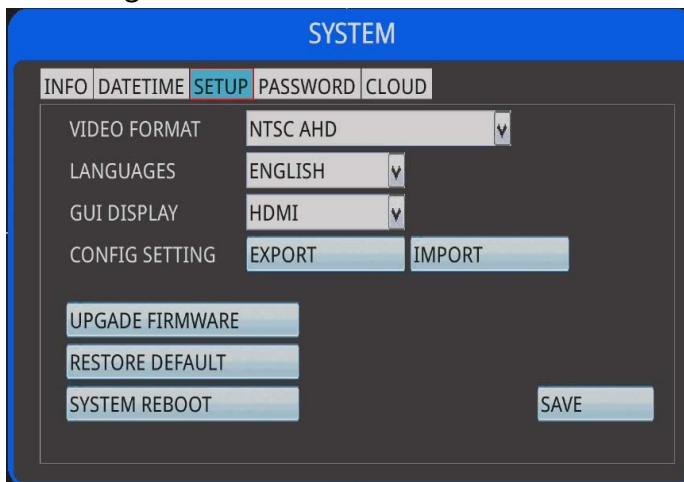
| SYSTEM | |
|--|--|
| INFO DATETIME SETUP PASSWORD CLOUD | |
| HOSTNAME | dk160 |
| KERNEL | 52 PREEMPT Wed Aug 5 14:22:39 CST 2015 |
| MAC ADDRESS | 00:16:55:08:a6:b7 |
| VERSION | 3.11.7 |
| BUILD DATE | 2015/11/27 16:25:40 |

- 2) Date & time

| SYSTEM | |
|--|------------------------|
| INFO DATETIME SETUP PASSWORD CLOUD | |
| CURRENT TIME | 2015-12-2 AM 10:39:56 |
| TIME ADJUST TYPE | MANUAL ▼ |
| CONFIG DATE/TIMI | 2015 /12 /02-10: 39:56 |
| <input type="button" value="SAVE"/> | |

- a) Current time : Your time
- b) Adjustment : MANUAL or NTP.
- c) NTP Server : Enter your NTP server.
- d) Area : Enter your time zone.

3) Settings :



a) Video Formats

NTSC AHD : NTSC AHD

PAL AHD : PAL AHD

NTSC 960H : NTSC 960H

PAL 960H : PAL 960H

NTSC 960H_AHD : Channel 1~2 are NTSC 960H · Channel 3~4 are NTSC AHD

PAL 960H_AHD : Channel 1~2 are PAL · Channel 3~4 are PAL AHD

b) **UPGRADE FIRMWARE** : Update firmware from USB

c) **RESTORE DEFAULT** : Reset to factory defaults

d) **SYSTEM REBOOT** : Restart your DVR

e) GUI DISPLAY:: it can be selected either HDMI or CVBS

4) Password :

| FIELD | VALUE |
|------------|-------|
| ENABLE | ON |
| USER | ADMIN |
| ADMIN NAME | admin |
| ADMIN PWD | ***** |

Activate : ON/OFF

Role : Select ADMIN or from USER1~9

Username : The default ADMIN is admin · default for USER1~9 is user

Password : Default ADMIN is admin · default for USER1~9 is password

Save to exit

5) Cloud :

| FIELD | VALUE |
|---------------|-------------------|
| Cloud Connect | OFF |
| Cloud Ip | 054.250.189.127 |
| Cloud Port | 80 |
| P2P UID | 00:16:55:08:c1:80 |
| CMS Connect | OFF |
| CMS IP | 000.000.000.000 |
| CMS PORT | 8080 |

1) Connect: ON/OFF ◦

2) Cloud address: Connect to your cloud · default is 54.250.189.127

3) Cloud port: Default is 80 ◦

4) P2PID : Designed for APP P2P connections · please refer to mobile apps manuals.

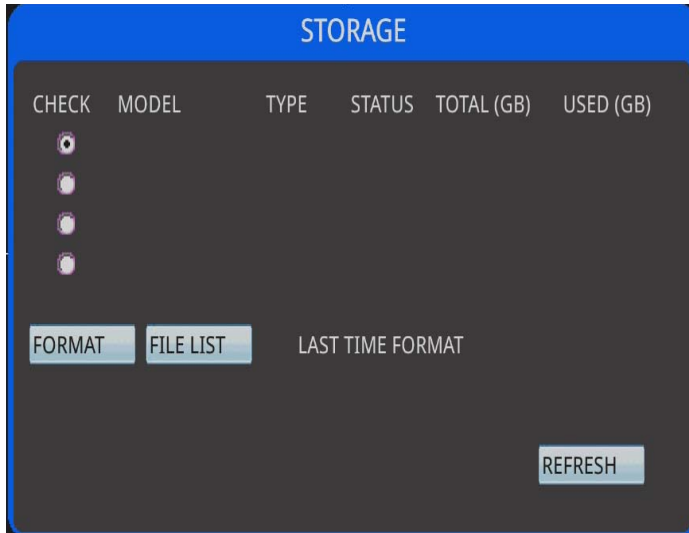
5) CMS Connection: ON/OFF ◦

6) CMS address: Enter your CMS' IP address ◦

7) CMS port: Default is 8080 ◦



2.6 Storage Settings



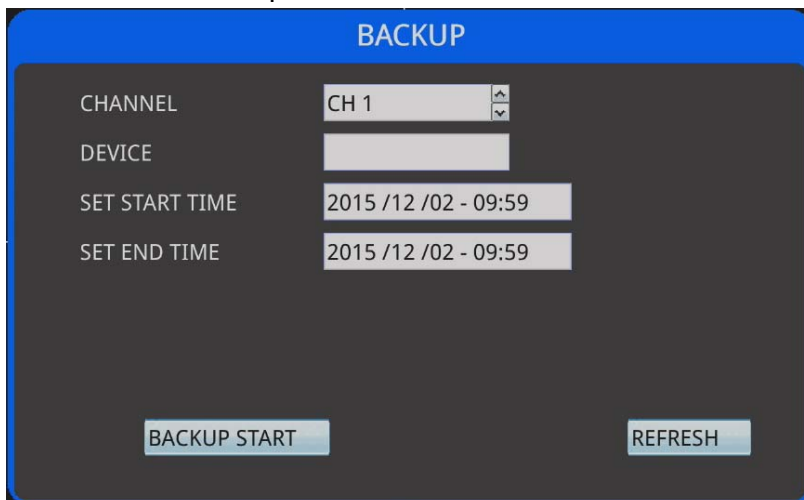
FORMAT : Format

FILE LIST : File List

REFRESH : Refresh



2.7 Backup



BACKUP START : Insert your USB Drive & start to backup

REFRESH : Refresh if your USB drive cannot be found

Note: USB Drive must be in FAT32 format

2.8  Sound

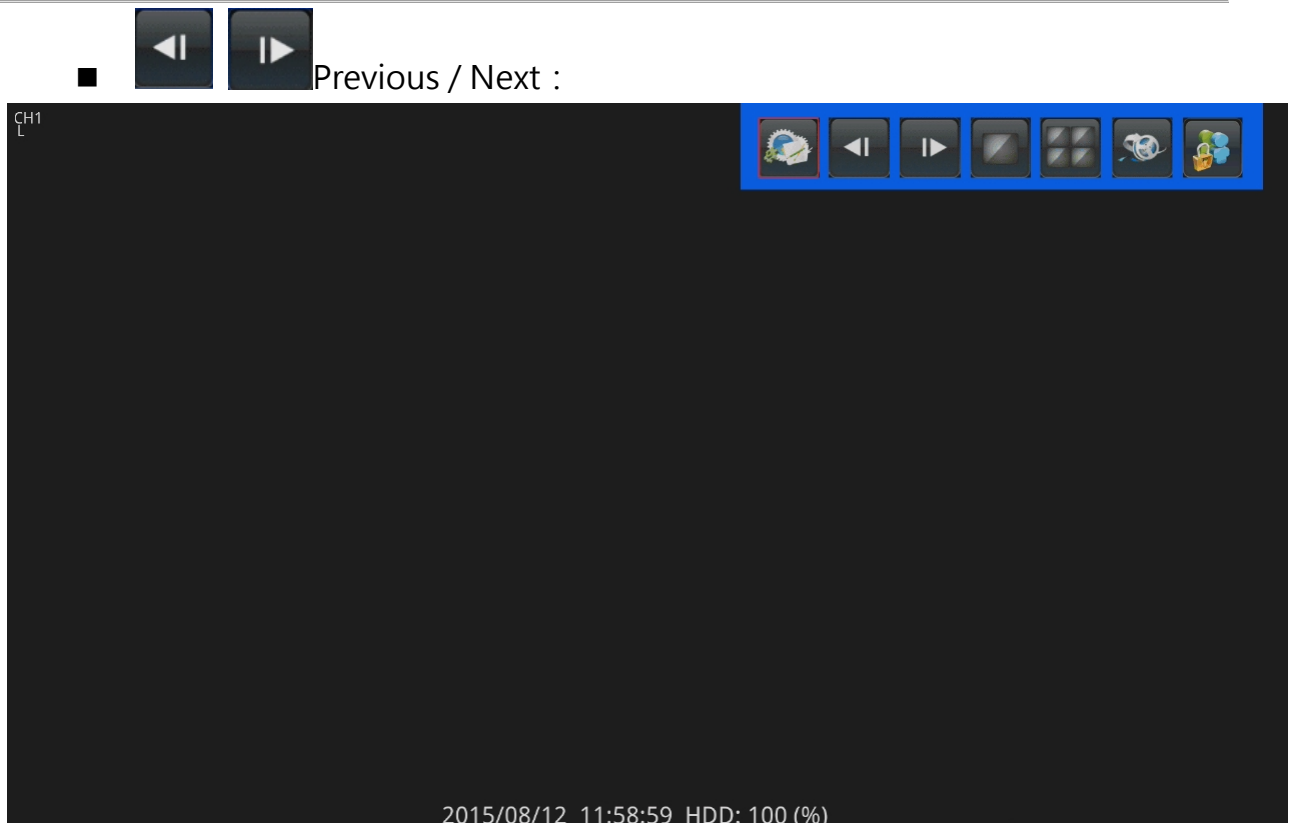


Switch : ON/OFF

Volumn : Could be set to mute (only applies to VGA output)

Device : Can select HD OUT or AIC sound output

SAVE : Save to exit ◦

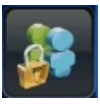



- 1) Click on Previous to switch to previous viewport ◦
- 2) Click on Next to switch to next viewport ◦

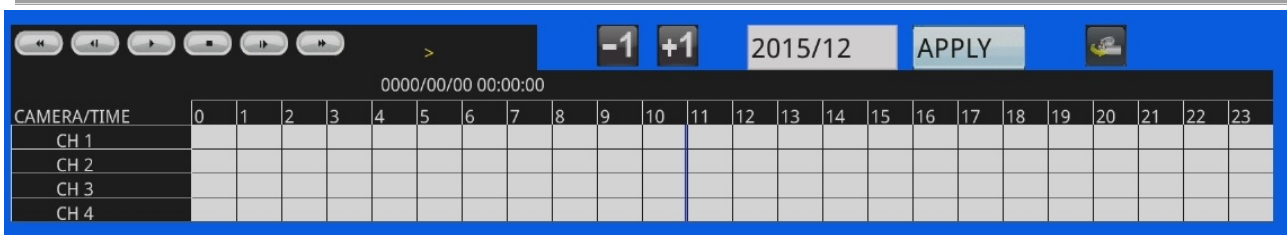
-  Split viewports

- 1) On your bottom left hand side, you can select the amount of viewports you wish to view.
- 2) User friendly multi-viewport interface







-  Playback

-  Login / Logout (password must be enabled)

-  : Real-time: Click to return to LIVE view channels

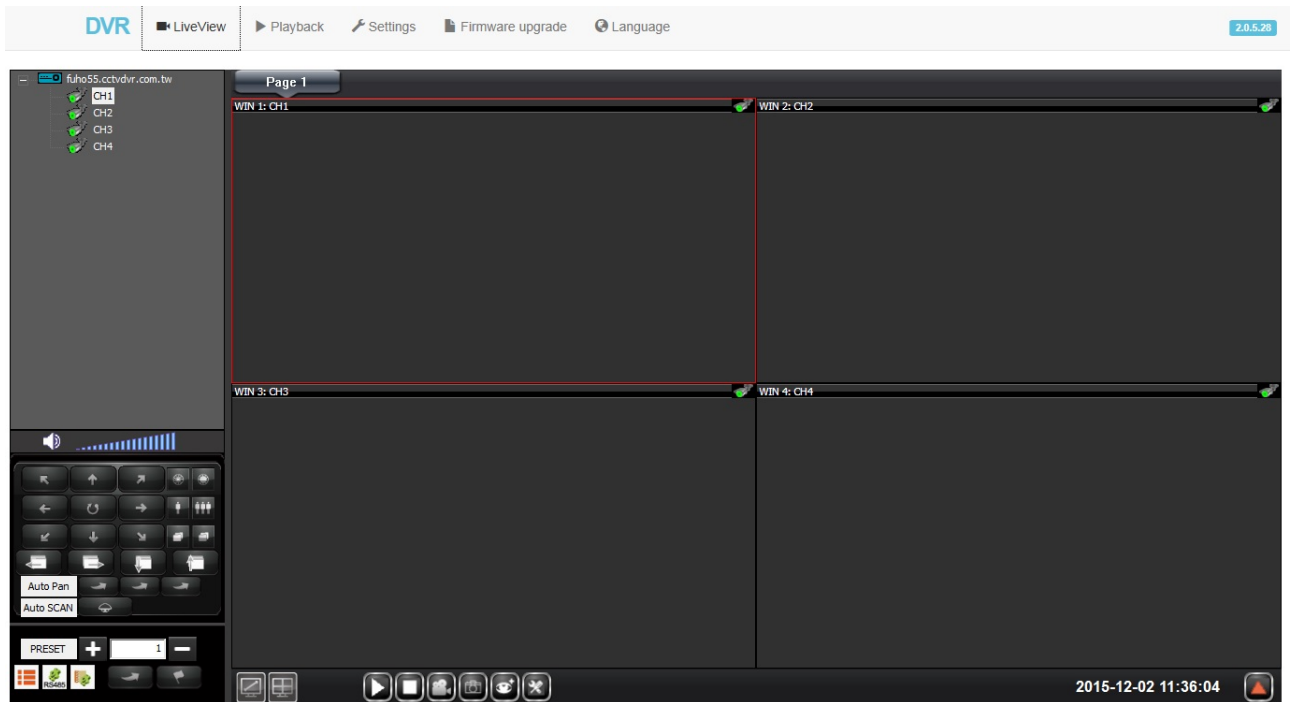


- 1) The dates with recorded videos will appear after selecting a date, hover the mouse over the date will also display hours which you can playback your videos
- 2) You can click on **+1** , **-1** to slight adjust timeline' s accuracy °
- 3) Below is a list of controls you can use °

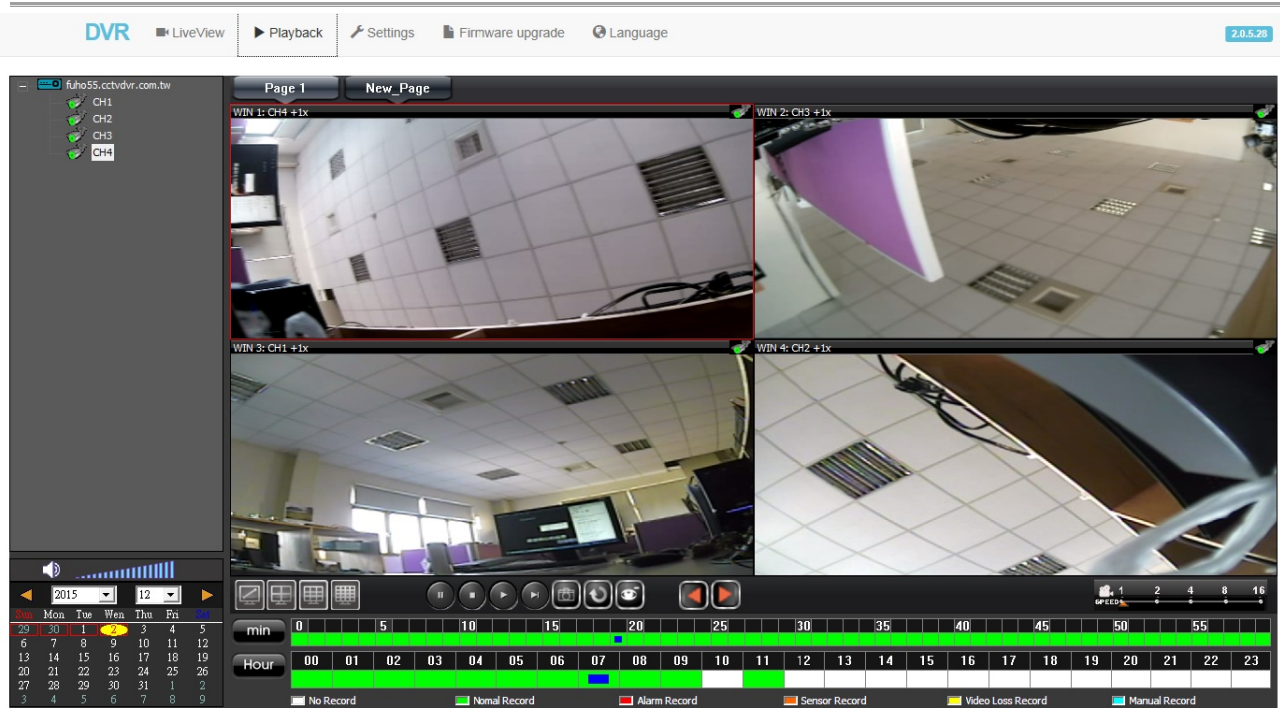
| | | |
|---|--|---|
|  : Play |  : Stop |  : Fast Backward |
|  : Fast Foreward |  : Previous Frame |  : Next Frame |

Chapter 3 【Remote Playback】

1. Open up an IE & enter its IP address
2. Left panel displays a list of available cameras, while on your right displays a viewports of active cameras



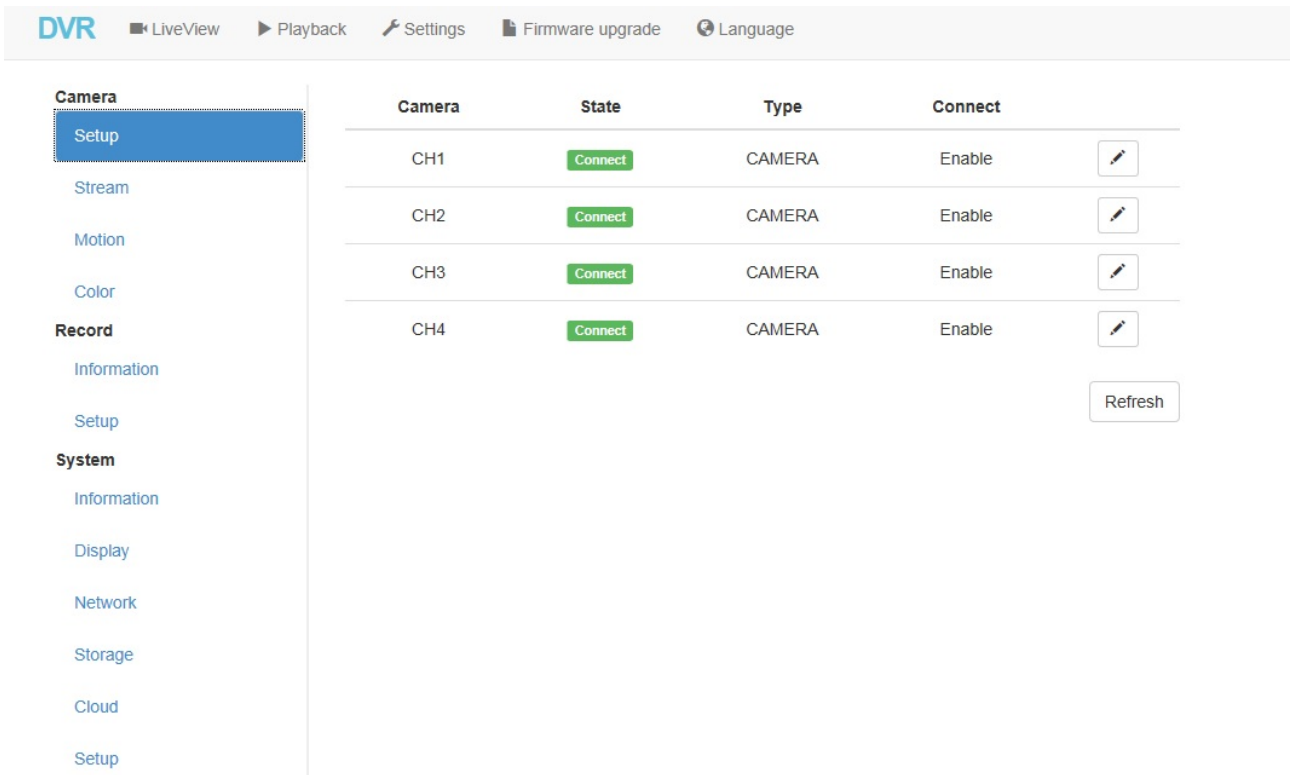
3. Click on Playback, click on the viewport you want to display a timeline of recorded videos
4. Supports maximum 4 channels playback simultaneously , you can also use fast forward to speed up the playback.



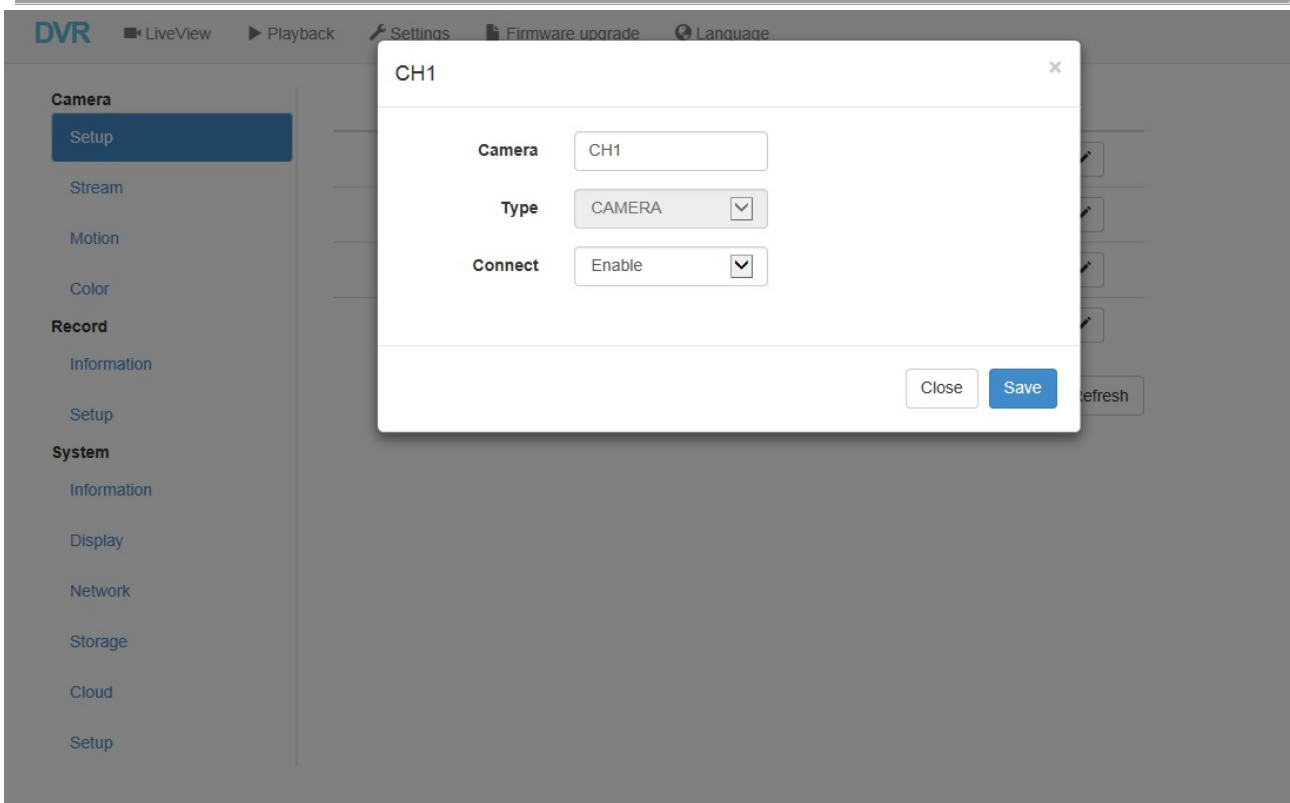
Click on the Settings to modify DVR settings

■ Camera :

Click on the  on IMAGE1 will display IMAGE2 , you can pick which cameras should be active respectively on this page



(IMAGE1)



(IMAGE2)

Video streams: It will display the resolution of each channel

| Camera | State | Bitrate Type | Bitrate (MAIN) | Frame Rate (MAIN) | Bitrate (SUB) | Frame Rate (SUB) |
|--------|---------|--------------|----------------|-------------------|---------------|------------------|
| CH1 | Connect | VBR | 1024 Kbps | 15 | 128 Kbps | 5 |
| CH2 | Connect | VBR | 1024 Kbps | 15 | 128 Kbps | 5 |
| CH3 | Connect | VBR | 1024 Kbps | 15 | 128 Kbps | 5 |
| CH4 | Connect | VBR | 1024 Kbps | 15 | 128 Kbps | 5 |

[Refresh](#)

Motion Detection :

The screenshot shows the Motion Detection configuration page in a DVR web interface. At the top, there is a navigation bar with 'DVR' and menu items: 'LiveView', 'Playback', 'Settings', 'Firmware upgrade', and 'Language'. On the left, a sidebar menu is organized into sections: 'Camera' (Setup, Stream, Motion, Color), 'Record' (Information, Setup), and 'System' (Information, Display, Network, Storage, Cloud, Setup). The 'Motion' option under 'Camera' is selected. The main content area features a channel list on the left with 'CH1' highlighted. To the right of the list are two dropdown menus: 'Detection' set to 'Disable' and 'Sensitivity' set to 'Medium'. Below these is a large green grid representing the camera's field of view. At the bottom of the grid are 'Select all' and 'Clear all' buttons. A 'Save' button is located in the bottom right corner of the interface.

You can turn on or off Motion Detection for each channels

Color Correction: You can adjust brightness / contrast /saturation/ sharpness/tone on this page

DVR LiveView Playback Settings Firmware upgrade Language

Camera

- Setup
- Stream
- Motion
- Color**

Record

- Information
- Setup

System

- Information
- Display
- Network
- Storage
- Cloud
- Setup

| Camera | State | Brightness | Saturation | Contrast | Sharpness | Hue |
|--------|---------|------------|------------|----------|-----------|-----|
| CH1 | Connect | 128 | 128 | 128 | 128 | 0 |
| CH2 | Connect | 128 | 128 | 128 | 128 | 0 |
| CH3 | Connect | 128 | 128 | 128 | 128 | 0 |
| CH4 | Connect | 128 | 128 | 128 | 128 | 0 |

Refresh Save

Recording

● : Recording × : Not recording  : Recording sound

DVR LiveView Playback Settings Firmware upgrade Language


Camera

- Setup
- Stream
- Motion
- Color
- Record**

- Information**
- Setup

System

- Information
- Display
- Network
- Storage
- Cloud
- Setup

| Camera | State | Video Recording Status | Audio Recording Status |
|--------|---------|------------------------|---|
| CH1 | Connect | ● |  |
| CH2 | Connect | ● | × |
| CH3 | Connect | ● | × |
| CH4 | Connect | ● | × |

Refresh

Setting

You can schedule recording for each channel

Green: Normal recording

Red: Motion detect recording

White: No Recording

■ System

Display system' s name & version

| Information | |
|--------------------------|--------------------------|
| Hostname | dk160 |
| Firmware version | 3.11.6 |
| Mac address | 00:16:55:99:a3:15 |
| Build date / time | 2015/11/26 11:22:38 |
| Boot bank | 0 |
| Uboot | wait uboot patch version |
| Kernel | 52 PREEMPT Wed Aug 5 14: |

Display: Adjust the resolution output from the web

The screenshot shows the DVR web interface with the 'Display' settings page selected in the left sidebar. The main content area is titled 'Display' and contains a 'Resolution' dropdown menu currently set to '1280 x 720 - 720P'. A blue 'Save' button is located to the right of the dropdown.

Network : Internet

Supports Static 、 DHCP & PPPOE

Static : Enter IP address manually

DHCP : Accepts assigned IP address from the router

PPPOE: Type the IP address you obtained from ISP, WAN IP address will be displayed accordingly.

The screenshot shows the DVR web interface with the 'Network' settings page selected in the left sidebar. The main content area is titled 'Network' and has tabs for 'Connect', 'DDNS', and 'UPNP'. The 'Connect' tab is active, showing a form with the following fields: 'Ethernet' (dropdown set to 'PPPoE'), 'IP Address' (192.168.1.111), 'Netmask' (255.255.255.0), 'Gateway' (192.168.1.1), 'DNS #0' (8.8.8.8), 'DNS #1' (168.95.1.1), 'Account' (74767720@hine), 'Password' (masked with dots), and 'Wan IP' (114.46.16.101). A blue 'Save' button is located at the bottom right.

DDNS :

You can enter a DDNS account in case if you have dynamic IP
Currently we support cctvdvr & NO-IP

The screenshot shows the DDNS configuration page. The left sidebar has 'Network' selected under the 'System' category. The main content area has three tabs: 'Connect', 'DDNS', and 'UPNP'. The 'DDNS' tab is active, showing the following fields:

- DDNS**: Enable (dropdown menu)
- Type**: CCTVDVR (dropdown menu)
- Host**: (empty text input)
- Account**: fuho55 (text input)
- Password**: (password input field with 6 dots)

A blue 'Save' button is located at the bottom right of the configuration area.

◆ UPNP :

Your router must supports uPNP before this functon would work

The screenshot shows the UPNP configuration page. The left sidebar has 'Network' selected under the 'System' category. The main content area has three tabs: 'Connect', 'DDNS', and 'UPNP'. The 'UPNP' tab is active, showing the following fields:

- UPNP**: Disable (dropdown menu)
- Internal IP**: 192.168.1.111 (text input)
- Internal HTTP port**: 80 (text input)
- External IP**: (disabled text input)
- External HTTP port**: 0 (text input)

A blue 'Save' button is located at the bottom right of the configuration area.

Storage

Display current HDD' s status

| Model | S/N | Type | status | Size(GB) |
|----------|-----|------|--------|----------|
| W6A03KTR | | ext4 | GOOD | 2858.38 |

Cloud :

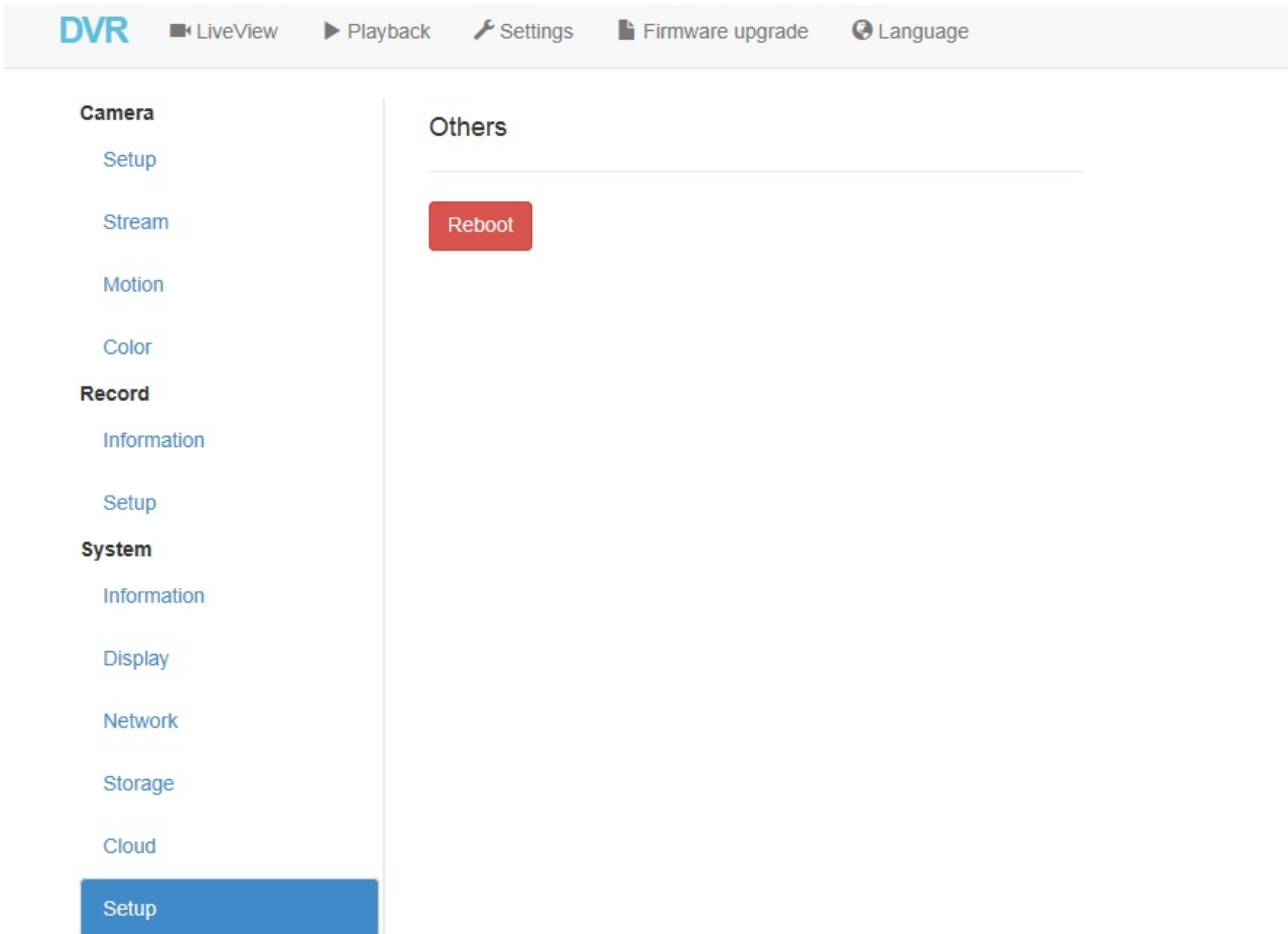
Cloud

Cloud must be configured via mobile apps, please refer to your manual book for more info.

CMS

CMS must be configured via PC, please refer to your manual book for more info

Setting :



Other :

Reboot to restart your DVR

Click on Update Firmware to update your firmware



Refers that the update is successfully.

DVR LiveView Playback Settings Firmware upgrade Language

Please select upgrade file

瀏覽...

upgrade

You can select the language from English, Simplified Chinese & Traditional Chinese

DVR LiveView Playback Settings Firmware upgrade Language



- English
- 简体中文
- 正體中文
- 日本語



Manufacturer :
Vacron
Jinma Rd, Sec. 3, Chang Hua City,
Taiwan04-751-2881